



Master Plan & Environmental Impact Report

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Volume I

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CAL POLY MASTER PLAN AND EIR

March 21, 2001

Master Plan Team

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EXECUTIVE SUMMARY i

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Cal Poly

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Cal Poly

Senior Administrators Campus Planning Committee Landscape Advisory Committee Biological Sciences Advisory Committee College of Agriculture Land Use Committee Housing and Residential Life University Police Intercollegiate Athletics Cal Poly Foundation Associated Students, Inc. Student and Faculty projects in all academic colleges

Campus/Community Task Force members

City of San Luis Obispo County of San Luis Obispo Cuesta Community College San Luis Obispo Council of Governments

The Master Plan team would like to thank the Department of Landscape Architecture and the Department of Natural Resources Management for their contributions to the Geographic Information System database and analysis for Cal Poly lands.

EXECUTIVE **S**UMMARY

Cal Poly

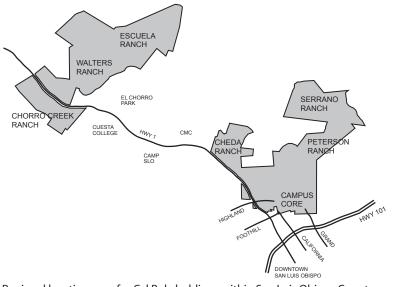
California Polytechnic State University, founded in 1901, is a predominately undergraduate, teaching university specializing in applied technical and professional fields. With its unique tradition of "learn-by-doing" education, Cal Poly students receive both theoretical knowledge in the classroom and practical experience in laboratories and fields, ensuring that graduates are prepared for careers in the 21st century.

About 70 percent of Cal Poly's students major in engineering, agriculture, business, architecture or related fields. Programs in the liberal arts, science and mathematics, and teacher-education build on the University's polytechnic character. More than 90 percent are undergraduates; the rest are in master's degree or teaching credential programs.

The campus occupies over 6,000 acres in San Luis Obispo County and 3,200 acres in Santa Cruz County. These lands provide hands-on opportunities for students, especially those studying agriculture, biological sciences, architecture, and engineering, to apply their classroom knowledge to real-life situations.

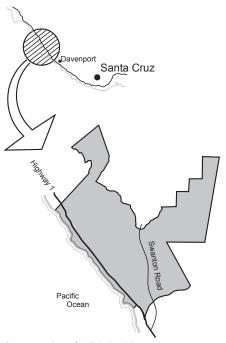
Cal Poly, with its national reputation for excellence and its desirable location on the Central Coast, receives many more student applications than can be accommodated. The University is only able to enroll about one in five undergraduate applicants.





Regional location map for Cal Poly holdings within San Luis Obispo County

Executive SUMMARY



Swanton Ranch Vicinity Map

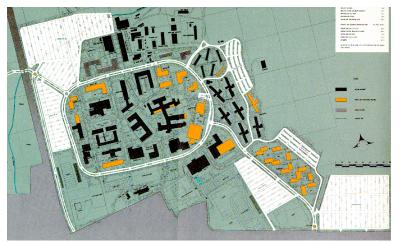
At this time the Master Plan focuses on Cal Poly's lands in San Luis Obispo County. Detailed Master Planning for Swanton Pacific Ranch in Santa Cruz County will occur subsequently. Cal Poly is regularly included in "best colleges" lists. In its past eight surveys, U.S. News and World Report has ranked Cal Poly as the top public undergraduate university in the western United States. The magazine rates the College of Engineering's Computer Science Department as the best in the country.

Master Plan Background

Cal Poly's new Master Plan provides principles and guidelines for the physical development of Cal Poly so that the University can sustain its distinctive mission as a polytechnic university into the 21st century. The Plan is designed to meet the educational needs of the campus, respond to the growing demand for higher education - particularly in scientific and technical fields - and address the role of the University as a member of its larger community.

The architectural firm of Allison and Rible prepared the first formal Master Plan for Cal Poly in 1949, based on a projected enrollment of 4,080. In 1958 the California Department of Education dictated that all non-metropolitan state college campuses plan for an enrollment of 12,000 Full-Time Equivalent Students (FTES). This led to the next Master Plan, prepared by the architectural firm of Falk and Booth in 1962, and approved by the California State University Board of Trustees in May 1963. In 1970, the 4th revision to this Master Plan increased the enrollment capacity to 15,000 FTES. Subsequent revisions to add or change building sites resulted from piecemeal planning for new projects thus, a major review was long overdue.

The projected increase in college-bound students in California referred to as 'Tidal Wave II' expands the need for higher education. The high



1963 Campus Master Plan

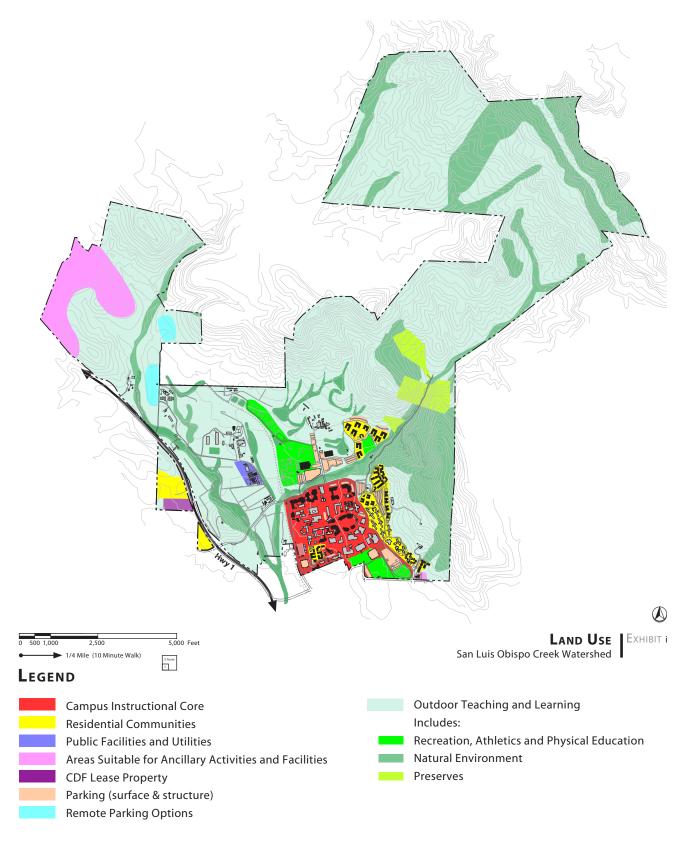
demand for a Cal Poly education, particularly in programs not generally available at other public universities in California, brings that pressure to San Luis Obispo. The existing investment in specialized programs, the number and quality of applications, and the economic and societal contributions of graduates all contribute to the perception of Cal Poly as a candidate for growth.

This Master Plan update represents the culmination of a four-year planning process at Cal Poly. The process began with academic strategic planning in the 1997-1998 academic year; involved campus and community task forces in identifying issues during 1998-1999; and invited public comment on a Preliminary Draft in the spring of 2000 and on the Master Plan and Draft Environmental Impact Report in fall 2000. The concluding step will be submission of the Master Plan and Final Environmental Impact Report for approval by the California State University Board of Trustees.

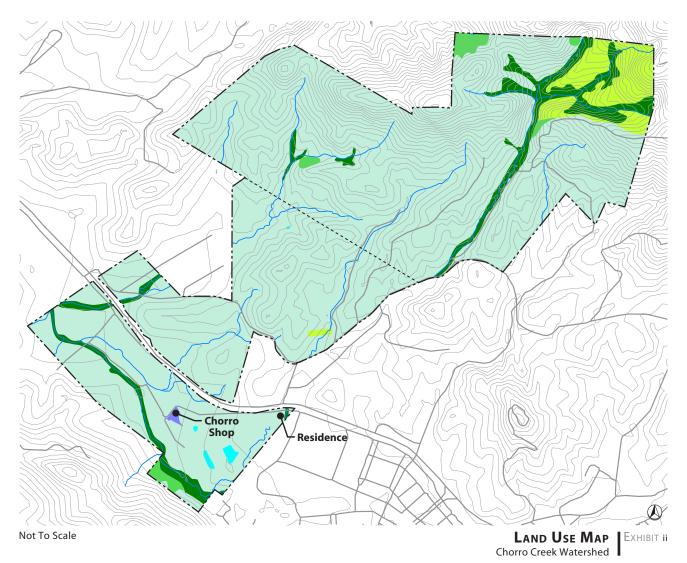
Master Plan Summary

As guidance for approximately the next 20 years, the Master Plan addresses academic program demand, physical and environmental constraints and opportunities, and capital and operating budget requirements to support a future enrollment of 17,500 net academic year and 2,500 summer full-time equivalent students (FTES). The Plan also anticipates a modest increase in technology-supported instruction and enhancements to curricula and advising to accelerate student progress to degree completion. Together these operational changes designed to increase summer enrollment, apply technology and facilitate student progress are expected to increase college year enrollment by about 9 percent without increasing fall headcount.

The physical development portion of the Master Plan focuses on land use and circulation issues associated with increasing enrollment during the academic year, as this scenario involves the most extensive change on campus. Enrollment growth projections translate into a Fall headcount of approximately 20,900 students and about 3,200 regular faculty and staff - an increase of about 17 percent over present capacity - to be accomplished in phases over approximately 20 years. Because demographers expect the demand for higher education to increase rapidly through about 2010, the earlier phases of the Master Plan may need to accommodate more enrollment than later phases.







Legend



- Existing Agriculture Facilities Outdoor Teaching and Learning
- Roadways

Environmentally Sensitive Areas



Executive Summary vii The Master Plan redevelops and consolidates academic facilities within an expanded instructional core south of Brizzolara Creek. At the same time, the Plan is designed to protect natural environmental features and prime agricultural lands that form the character of the campus. A central feature of the plan involves creating new student residential communities accommodating approximately 3,000 additional students and provision of faculty and staff housing. Student services and recreational facilities will be expanded commensurate with increased enrollment. Although parking will increase over existing numbers, the ratio of parking to students is planned to decrease during the planning period.

University Land Uses

The Master Plan takes a broad approach to the analysis of the most suitable future use of all Cal Poly's lands in San Luis Obispo County, including management practices to protect the University's unique natural environment. The Master Plan team has applied principles from campus and community task forces that met during Spring 1999 to designate future land uses and develop the following physical plan elements.

Natural Environment

Environmentally sensitive areas and assets are designated as an overlay, determined by physical and biological features of the land. Principles focus on stewardship, protection, enhancement and sustainability.

Outdoor Teaching and Learning

"Living laboratories" (e.g., agricultural fields and units, ecological study areas, and design village) are central to Cal Poly's mission and must remain integrated with the campus.

Campus Instructional Core

Additional enrollment requires about 250,000 s.f. of new instructional space in the campus core. Principles focus on creating a compact, "student-friendly, learner-centered" area with more open space and better pedestrian and bicycle circulation, and which is energy and resourceefficient.





View looking west toward future campus core (circa, 1906) University Archives, Cal Poly

Residential Communities

New student housing complexes are conceived as living/learning communities, directly accessible to the campus instructional core. New undergraduate student housing for 3.000 students on campus will reduce community impacts of enrollment growth.

Recreation

Flexible outdoor recreational fields and indoor facilities will serve the changing student population.

Circulation, Alternative Transportation, and Parking

Circulation systems both provide access to the campus and movement within it. The Master Plan encourages alternative forms of transportation to reduce congestion and parking. Internal circulation focuses on "user-friendly" pedestrian access and increasing vehicle access efficiency. Parking ratios are decreased.

Public Facilities and Utilities

Essential support facilities can be located outside the campus instructional core unless they require a central location to function effectively. The Master Plan encourages a responsible approach to resource and energy use in planning and design.

Support Activities and Services

A wide array of academic and support activities must be available to serve Cal Poly's diverse student, faculty, staff and visitor populations - in both the instructional core and new residential communities. A summary of changes drawn from comments on the Master Plan and Draft Environmental Impact Report has been added.

Ancillary Activities and Facilities

A number of activities that serve the broader community as well as Cal Poly are complementary to the University's instructional mission. However, not all of these facilities need to be provided within the campus instructional core.

Key Modifications in Master Plan and Draft EIR published in October 2000

The University circulated the Master Plan and Draft Environmental Impact Report for review and comment from October 10 through December 8, 2000. Nearly sixty individuals and organizations offered comments and suggestions. Many of them are included as editorial changes; others are discussed in the formal response to the EIR as required by the California Environmental Quality Act. In some instances, the Master Plan Team made significant additions to the Plan these are summarized below, and noted in the margins of the appropriate pages.

- The current approved Master Plan map and a technical map showing the proposed new Master Plan have been added.
- The Introduction adds a section describing the organization of the document.
- The Existing Conditions chapter provides more detail about environmental constraints and opportunities on portions of Cheda Ranch. It also contains a revised analysis of soil conditions using the Natural Resources Conservation Service (NRCS) Capability Classification system rather than the Storie Index.
- The University Land Use element now includes a section on Building and Landscape Design Guidelines.
- The Outdoor Teaching and Learning element includes further discussion of the importance of protecting these lands for instruction and applied research.
- The Residential Communities element contains new sections providing more information on housing conditions in the San Luis Obispo area and expanding on Cal Poly's commitment to student housing.
- The Public Facilities and Utilities element addresses Sustainable Campus Planning and Design.
- The Alternative Transportation element clarifies campus support for encouraging students, faculty and staff to place less dependence on the private automobile.



- The Parking element shows the net change in parking supply and demand and how reductions in parking demand may be achieved.
- The Support Activities and Services element addresses Commercial Retail Services in more detail.
- The Ancillary Activities and Facilities element defines likely future activities more clearly.
- The Implementation chapter contains new sections on Land Use and Project Review Procedures and Master Plan Monitoring and Review. It also has an expanded list of implementation studies to be completed.
- The Master Plan and Final EIR become Volume I, and the Comments and Responses to the EIR become Volume II.

Environmental Impact Summary

The development of the Master Plan occurred in the context of campus environmental constraints and opportunities. Environmental planners were part of the Master Plan Team from the outset and provided guidance that influenced the location and approach to all of the Master Plan components. This process allowed the team to evaluate a number of alternatives and choose, in most instances, the environmentally superior approach prior to inclusion in the Plan. Throughout the text of the Master Plan marginal notes indicate these choices.

Chapter 6 of the Plan is the draft Environmental Impact Report required by the California Environmental Quality Act (CEQA). It describes in detail the environmental consequences of the Plan and mitigation measures to reduce the severity of the impact. Table 6.1 summarizes impacts and mitigation measures.

Additional information regarding the Master Plan process is available at the following web site:

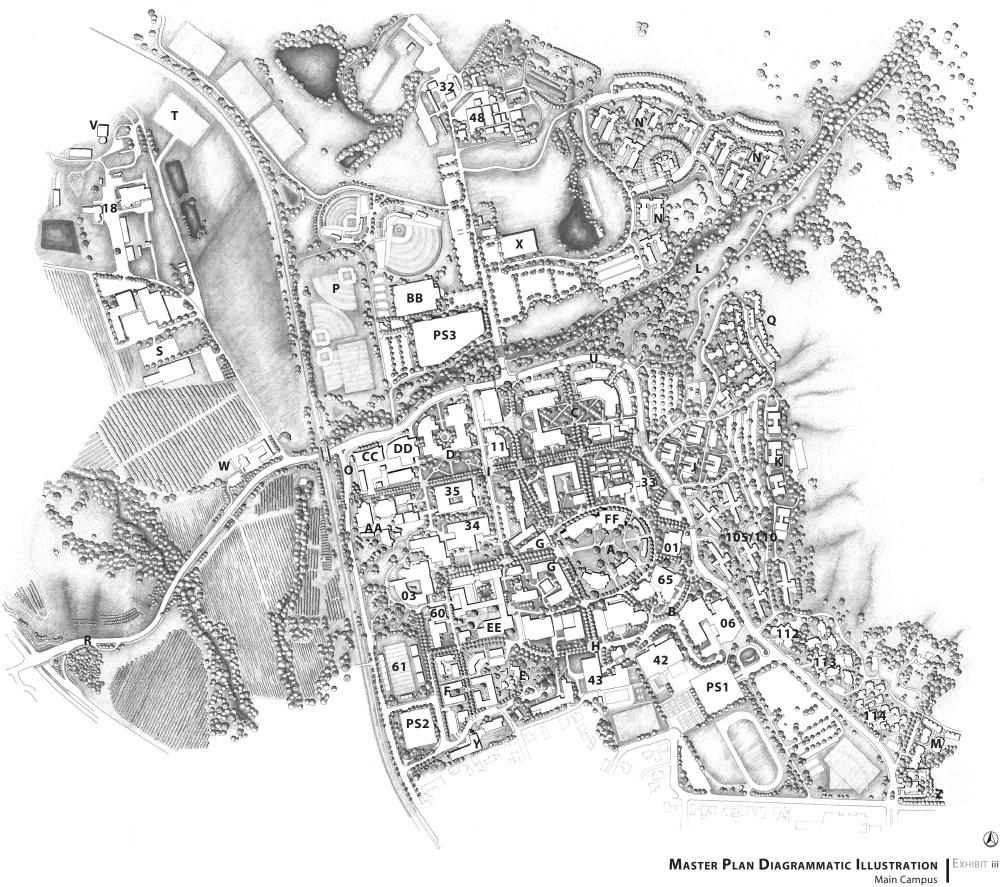
www.facilities.calpoly.edu/Facilities_Planning/FPDB/mp/

This website is also linked directly from:

www.campusprojects.calpoly.edu







Legend

Key Master Plan Elements

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z A BB C D EE FF BB	Centennial Green University Union Plaza Northeast Green Alumni Center/Retreat New Residence Apartments Engineering East Redevelopment South Perimeter Pedestrian Way North Perimeter Pedestrian Way North Mountain Residence New Residence Halls Brizzolara Creek Enhancement Project New Residence Apartments California Boulevard Extension New Sports Complex Residence Apartments (Underway) Highland Drive Entrance New Corporation Yard and Farm Shop Rodeo New Highland Drive Alignment Feed Mill Crops Unit Agriculture Pavilion Child Care Center Addition Visitor Center Student Research Facilities Athletic Field House Engineering 3 Engineering 3 Addition Architecture 2 Science Center Athletic Field House
PS1	Parking Structure 1
PS2	Parking Structure 2
PS3	
422	Parking Structure 3

Existing Key Buildings

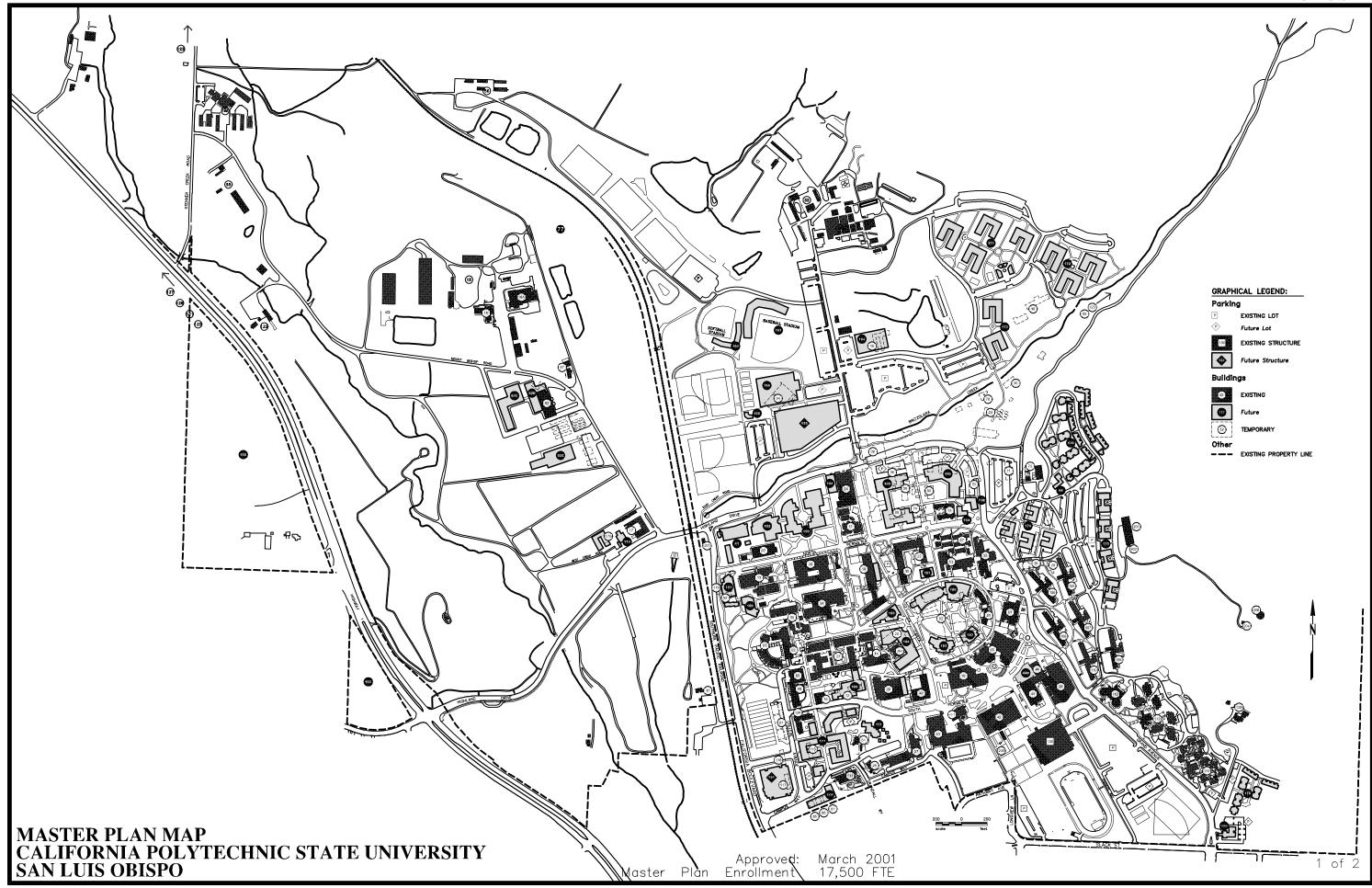
- Administration3Business and Education6Performing Arts Center1Agricultural Sciences18Dariy Science32Equine Unit34Dexter Building35Kennedy Library42Mott Gymnasium43Recreation Center48Environmental Horticulture60Crandall Gymnasium61Mustang Stadium65University Union105-110Red Brick Residential Halls112Vista Grande113Sierra Madre Hall

- 113
- Sierra Madre Hall Yosemite Hall
- 114



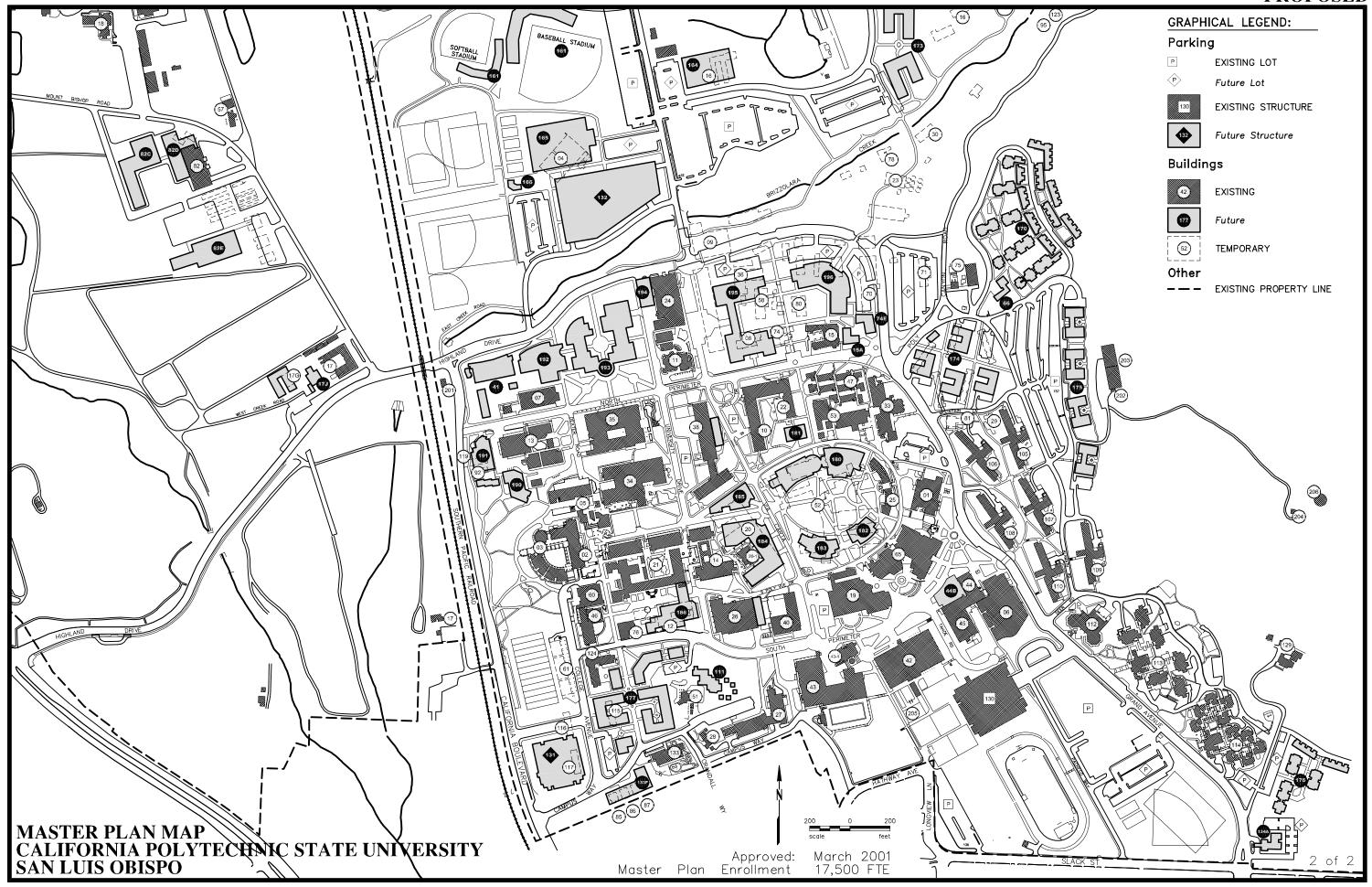






PROPOSED





PROPOSED



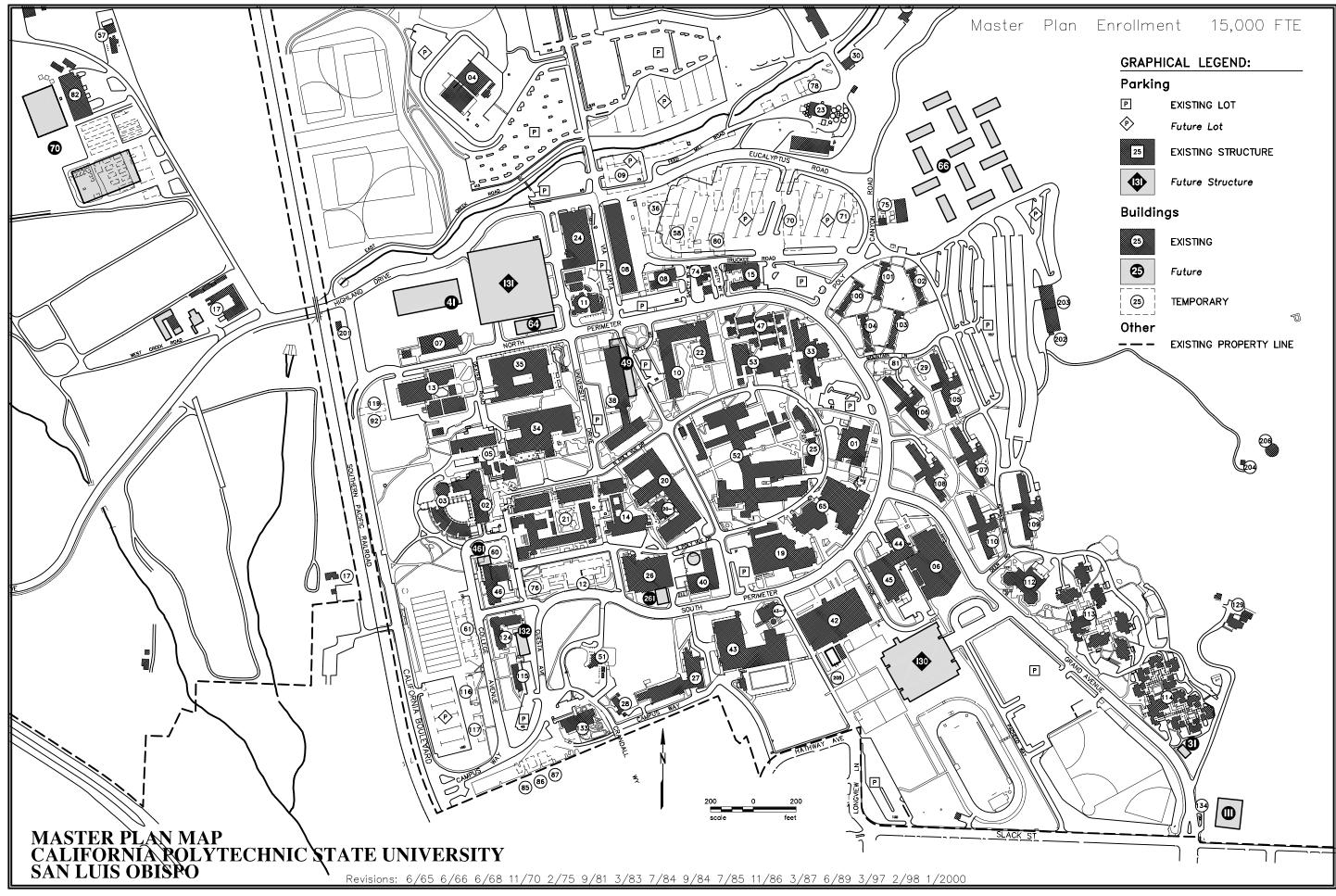
California Polytechnic State University, San Luis Obispo

Master Plan Enrollment: 17,500 FTE

Master Plan Approved by the Board of Trustees: March 2001

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2	English	75	Mustang Substation	129	Avila Residence		
3	Feed Mill	76	Old Power Plant	130	Grand Avenue Parking		
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89 10	Engineering South	96	Hobby Garage	165	<athletic field="" house=""></athletic>		







ACKNOWLEDGEMENTS

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Implementation

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C H A P T E R

Who are we and why are we doing the Master Plan update? How did we get here? How did we put this document together?



PLAN PURPOSE

Master Plan Statement

The review of Cal Poly's Master Plan is a process that both reveals and prepares. Demanding candid self-examination, the review compels the University to reveal its values and its defining characteristics. The process also challenges us to consider how Cal Poly's mission and identity have prepared the University to meet the needs of an increasingly complex workplace and pluralistic society. Thus, a successful planning effort is simultaneously both retrospective and future-focused for it underscores the connections between what we have achieved and what we are, and what we seek to become. Whether examining the historical record or considering the University's next century, we must ensure that our sense of mission is clear and compelling both for those within the University and for our several external constituencies. Such clarity is essential to developing a sense of shared purpose, promoting institutional community, and gaining the resources to support our high standards and aspirations.



View of campus - looking east

Vision, Values, Identity

Cal Poly's vision and values focus on our identity as a predominantly undergraduate, largely residential, public, polytechnic university that measures its worth and success primarily in terms of academic excellence, student learning and service to the State of California.

Student learning and service connect through an educational approach captured in the phrase "learn by doing." More than a slogan, "learn by doing" is a guide to educating students to do what they study, to apply the principles that they learn, to act on their ideas in a world that requires action to solve problems and advance society, and to reflect on the consequences of their actions. The very development of this new Master Plan affords the University an opportunity to apply its learning philosophy to itself. Student projects, campus participation in task forces, the Provost's seminar, and seminars celebrating Cal Poly's centennial year all have engaged the campus community in formulating the Master Plan.

Cal Poly promotes a healthy dialogue between its polytechnic programs and the liberal arts and sciences. The University aims to enable its students "to see life whole," to gain an appreciation not only for the basic knowledge and aptitudes that the liberal arts and sciences develop,



View of campus - looking east

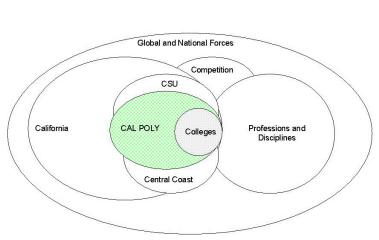


but also for their social, ethical and environmental dimensions, that is, the habits of heart and mind that contribute to the development of a well-informed and responsible citizenry.

The distinctly residential character of the University underscores an institutional obligation to promote learning and service beyond the formal settings of instruction through student clubs and organizations, the performing arts, athletics, internship and co-op programs, and community service. These activities enrich the lives of our students, enliven the campus, foster a culture of connected learning, and encourage civil engagement.

The University recognizes the relationship between the physical spaces where student learning and life occur and the spirit of learning. Both built and natural environments should complement each other and foster the educational goals of the University. The University's commitment to the education of the whole person requires that our campus facilities and spaces support the social and physical developmental needs of our students in addition to their intellectual growth.

As a public university, Cal Poly recognizes its special obligations to serve public interests and gain public trust. The quality of our graduates and the integrity of our mission are the strongest ways with which we fulfill this obligation. The University recognizes the responsibilities of its mission and statewide service mandate to grow enrollments particularly in those polytechnic and professional areas that are not broadly available in the State.



Cal Poly's Geographical and Institutional Context

NTRODUCTION

As a highly selective University with a strong national reputation, Cal Poly acknowledges the exemplary obligation of leadership and seeks to participate in and shape the critical conversations regarding higher education in the State and nation.

Characteristics of the Cal Poly Mission

Cal Poly Mission Statement

(adopted as part of the University's Strategic Plan, as amended through 1995)

As a predominantly undergraduate, comprehensive, polytechnic university serving California, the mission of Cal Poly is to discover, integrate, articulate, and apply knowledge. This it does by emphasizing teaching; engaging in research; participating in the various communities, local, state, national, and international, with which it pursues common interests; and where appropriate, providing students with the unique experience of direct involvement with the actual challenges of their disciplines in the United States and abroad.

Cal Poly is dedicated to complete respect for human rights and the development of the full potential of each of its individual members. Cal Poly is committed to providing an environment where all share in the common responsibility to safeguard each other's rights, encourage a mutual concern for individual growth and appreciate the benefits of a diverse campus community.

Mission

- Polytechnic
- "Learn by doing"
- Primarily undergraduate
- Student-centered community
- State-of-the art education (programs, practice, pedagogy and services)
- Social and intellectual diversity
- Statewide service area
- Technological currency



"Learn By Doing"



Applied research project



These attributes have been restated as values Cal Poly espouses.

Key Institutional Characteristics

- Public
- Selective admissions
- Residential campus
- Major at entrance
- National reputation

Aspiration

• Model for public higher education

Values

The following set of values can be applied to academic, budget, human resource, information technology and physical planning and development.

- 1. A student-centered, learner-directed culture, where teaching and learning resources systematically foster active learning.
- 2. A flexible institution that can sustain its unique polytechnic character and "learn-by-doing" tradition as well as anticipate and adapt to changes in the 21st century environment.
- 3. A confident community where all campus constituents work together to create the future.
- 4. A supportive environment that is physically comfortable and attractive, personally safe, culturally diverse, and intellectually stimulating.
- 5. A socially responsible university that meets public needs (e.g., access, affordability, diversity, community and State needs).
- 6. An environmentally responsible campus that demonstrates high regard for biodiversity as well as energy and resource conservation and long-term sustainability.
- 7. An effectively managed organization that values quality and responsiveness in instruction, service, and support activities.



PLANNING PROCESS

Integration of the Plan and CEQA

At the outset, the University chose to integrate environmental analysis into the development of the Master Plan. During the development of the Master Plan, analysis of environmental constraints and opportunities informed the plan-making process. Resulting findings guided and, to some extent, limited the alternatives considered under the Master Plan. For example, prime agricultural lands were identified early in the planning process so that no development would be proposed in those areas.

Land use, housing and transportation policies were designed to reduce the likelihood of impacts from the many proposals considered. Recent experience with other campus projects, as well as input from Master Plan Task Forces, reminded the Master Plan team of sensitivities in adjoining neighborhoods.

Program Environmental Impact Report (EIR)

The EIR is set forth in Chapter 6 of the Master Plan. The EIR is a "program" document, as compared to a "project-specific" document, and focuses on identifying and mitigating broad impacts associated with the implementation of the Master Plan rather than detailing the impacts of each Plan component.

Mitigation for impacts in this EIR is also more general; measures either provide standard operating procedures (such as for construction) or they aim to guide future planning. The implementation of mitigation measures will be monitored under CEQA. The mitigation monitoring plan is attached as Appendix E.

Implementation, Monitoring, and Review of the Master Plan

Following adoption of the Master Plan, Cal Poly will engage in a series of implementation studies (specified in Chapter 7). As projects are planned and built, they will be reviewed and monitored for compliance with the environmental mitigation requirements as well as with meeting plan expectations to reinforce the academic quality of the University. The Campus Planning Committee will review the Master Plan annually so as to advise the campus whether conditions have changed sufficiently to warrant a major update.

New section - Plan implementation and review; see Chapter 7 for more detail regarding this process.



Cal Poly Master Plan



Master Plan team problem solving



Issue identification at public workshops

Master Plan Calendar

College Year 1997-98

Task

• Unit strategic plans, building on University strategic plan, Cal Poly Plan, and disciplinary environmental scans ~ COMPLETED

Responsible Group: Colleges, divisions

College Year 1998-99

Summer

Task

 Draft discussion paper; prepare draft process; identify Master Plan format; clarify interim process and pending projects; identify stakeholders ~ COMPLETED

Responsible Group: Master Plan team (Administrative staff with consultants)

• Review draft process and identify initial issues ~ COMPLETED

Responsible Group: Campus Planning Committee

Prepare talking points for public discussion (President Baker, others)
 ~ COMPLETED

Responsible Group: Master Plan team

 Meet with campus and community leaders to discuss process and issues ~ COMPLETED

Responsible Group: Campus Representatives (President Baker with key community leaders)

Fall

Task

• Establish Web site; assemble data, including additional needs; establish scope of Master Plan ~ COMPLETED

Responsible Group: Master Plan team

• Synthesize issues to be addressed by planning process and refine scope; identify task force topics; identify opportunities for faculty and student involvement ~ COMPLETED

Responsible Group: Master Plan team



Cal Poly Master Plan

Fall-Winter

Task

 Brief campus groups, including deans, college councils, ASI, Senate Budget and Long-Range Planning Committee regarding process ~ COMPLETED

Responsible Group: Master Plan team

 Develop and review alternative enrollment scenarios ~ COM-PLETED

Responsible Group: Deans' Enrollment Planning Advisory Committee

Winter

Task

• Hold public meetings on and off campus ~ COMPLETED

Responsible Group: Master Plan team

• Confirm task forces and charges ~ COMPLETED

Responsible Group: Campus Planning Committee

Spring

Task

 Recommend principles to guide development of Master Plan ~ COMPLETED

Responsible Group: Campus/community task forces

College Year 1999-2000

Summer

Task

 Translate enrollment analysis into initial facility requirements; begin analysis of physical planning elements and their inter-relationships, including initial environmental analysis for Master Plan ~ COM-PLETED

Responsible Group: Master Plan team, with advice from Campus/ community task forces

Summer-Fall

Task

• Discuss policy issues and preliminary Master Plan concepts ~

COMPLETED

Responsible Group: President and vice presidents



President Baker discusses key issues at strategic planning sessions



Fall

Task

Conduct follow-up analysis ~ COMPLETED

Responsible Group: Master Plan team

Fall-Winter

Task

 Brief campus groups - e.g., Campus Planning Committee, Strategic Management Group, University Planning and Budget Advisory Committee, Senate Budget and Long-Range Planning committee, College councils, CAGR Land Use Committee, Biological Sciences Advisory Committee, ASI, Foundation, and faculty and students involved with class projects ~ COMPLETED

Responsible Group: Master Plan team

 Develop preliminary draft, including physical planning alternatives (for main campus and ranches in San Luis Obispo County) ~ COMPLETED

Responsible Group: Master Plan team

Spring

Task

Review preliminary draft, including physical planning alternatives ~
 COMPLETED

Responsible Group: Campus/community task forces; City and County representatives

 Coordinate review of preliminary Draft Master Plan and Initial Environmental Study by campus and community. ~ COMPLETED

Responsible Group: Master Plan team, Facilitator

College Year 2000-01 Summer

Task

 Develop Draft Environmental Impact Report, including environmental mitigation measures ~ COMPLETED

Responsible Group: Master Plan team, informed by review of Draft Master Plan and Initial Study



Fall

Task

Coordinate review of Draft EIR on and off campus ~ COMPLETED
 Responsible Group: Master Plan team

Winter

Task

• Final review and adoption of Master Plan on campus - PENDING

Responsible Group: Campus Planning Committee; Strategic Management Group

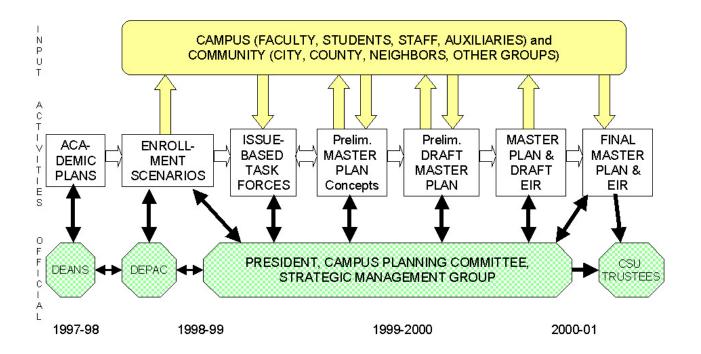
Spring

Task

• Submit Master Plan to Board of Trustees for approval ~ PENDING

Responsible Group: President Baker, Master Plan team

CAL POLY MASTER PLAN UPDATE PROCESS



New section - explains the organization of the Master Plan document.

ORGANIZATION OF THE **M**ASTER **P**LAN

Volume I

Volume I of the Cal Poly Master Plan presents the guiding framework, enrollment assumptions, and development suitability analysis upon which a series of physical plan proposals are built. In addition, it contains the environmental impact analysis for the plan and a chapter on implementation.

Introduction

The Introduction explains how the plan is based in the University's academic mission, the planning process, and the organization of the document. The Plan presents the Planning Process in some detail, as it is important to document the kinds of analysis, public involvement and deliberations involved in creating the Plan.

Chapter 2

Chapter 2, Guiding Framework, summarizes the context and challenges we face in creating the Master Plan. In addition, it sets the general direction or approach the Plan takes in addressing key challenges. These comprise the goals of the Master Plan. Further, the document indicates how the campus and community has advised Cal Poly in making critical decisions about the direction of Plan.

Chapter 3

The chapter on Long-Range Enrollment Scenarios (Chapter 3) establishes the options the University has considered regarding future growth. Based on work from the Deans' Enrollment Planning Advisory Committee, it both provides numerical projections and an analysis of which academic programs might grow in the future.

Chapter 4

Next, the Existing Conditions chapter (4) presents a summary of the geographic and environmental characteristics of Cal Poly's lands in San Luis Obispo County. This analysis provides the basis for assessing physical constraints and opportunities, identifying areas that are suitable for future development.



Chapter 5

Chapter 5, Physical Plan Elements, presents the land use, housing and transportation proposals that stem from the guiding framework, enrollment scenarios and development suitability analysis in chapters 2, 3 and 4. The Master Plan team organized the physical portion of the plan using the concept of plan elements. This terminology follows the convention established by the State of California for preparing community plans. However, it differs in identifying a particular set of elements pertinent to Cal Poly. It includes a Support Activities and Services element to ensure that the physical plan addresses locational issues associated with providing such services. Each physical plan element provides information on Background and Issues, a set of Principles that apply to that element, and then a discussion of Plan Components that represent the actions the University is proposing to fulfill the goals of the Master Plan.

Chapter 6

Next, Chapter 6 constitutes the Environmental Impact Report for the Master Plan. While each physical plan element includes a brief summary of Environmental Consequences in Chapter 5, Chapter 6 includes all information required to comply with the California Environmental Quality Act (CEQA). The comments on the October 10, 2000 publication of the Master Plan and Draft Environmental Impact Report and responses to them are contained in Volume II.

Chapter 7

Finally, the Implementation chapter (7) describes the next steps in achieving the Master Plan. It includes a discussion of Phasing, identifies additional studies necessary to achieve the Plan, and establishes future Communication and Consultation practices to guide both the implementation of the Master Plan. This chapter also provides for monitoring of plan implementation and for future review and revision of the Plan to ensure that it meets expectations and remains current in meeting University needs.



Cal Poly Master Plan

C H A P T E R

What challenges do we face as we develop this plan? How have we used advice from the campus and community to make the Master Plan?



CONTEXT AND CHALLENGES

Context

Cal Poly's Long-Range Enrollment Plan and Master Plan Update emerge from the following context:

- Cal Poly mission and statewide charter from Title V, emphasizing academic excellence in polytechnic curricula and applied "learn-by-doing" instruction.
- Student learning outcomes developed in the "Commitment to Visionary Pragmatism" report as the desired characteristics of a Cal Poly graduate.

http://www.calpoly.edu/~communic/univ/visionary.html

- Responsibility to the State of California as a member of the California State University system with a unique role.
- Contribution as a member of the community in the Central Coast of California.

Several reports and resolutions published in the past 15 years contributed to the guiding framework for the Master Plan Update:

 The Academic Senate Long-Range Planning Committee report (1988) discussed possible growth to 17,400 FTES with proper planning. The Academic Senate adopted an additional resolution on "Principles to Govern Enrollment Growth at Cal Poly" in May 1999 and two additional resolutions in June 2000: "Resolution on the Growth Component of the Proposed Master Plan Revision," and "Operational Measures to Monitor and Maintain Academic Quality in the Face of Potential Enrollment Growth."

http://www.calpoly.edu/~acadsen/

• The University Strategic Plan (1990-1994, amended through 1995) includes the concept that institutional size should be commensurate with planning, resources, and impacts.

http://www.calpoly.edu/~communic/univ/stratplan.html

- The Land Use Diagram (1993) identified possible future sites for campus core expansion, outdoor agricultural labs, and recreational facilities.
- The Cal Poly Plan (1996) emphasized modest growth during the academic year and significant expansion of Summer Quarter, and



established principles for balanced development of the University focusing on educational quality, student learning and progress, institutional productivity, assessment and accountability.

http://www.calpoly.edu/~inststdy/cp_plan/index.html

- College and unit strategic plans (1997-98) identified academic and other programmatic factors critical to the future of the University.
- President Baker's statement, The Future of the University (1998), underscored the continuing importance of Cal Poly's polytechnic, "learn-by-doing" mission, focusing on state-of-the-art undergraduate education in a residential setting.

http://www.president.calpoly.edu/articles/outlook4.98.html

• The campus self-study for the Western Association of Schools and Colleges (WASC) accreditation review (1999-2000) underscored the importance of the intellectual, social, and physical environments to Cal Poly as a "Center for Learning."

http://wasc.calpoly.edu/innovative/innovative.html

• Ten campus and community task forces met during Spring 1999 and recommended over 500 principles to guide the Master Plan Update.

http://www.facilities.calpoly.edu/Facilities_Planning/FPDB/mp/ task_forces.htm

Challenges and Directions

Within this context, the Long-Range Enrollment Plan and Master Plan Update seeks to address the following questions. Statements in *Italics* indicate the general approach being applied to address each challenge.

Question 1

Given Cal Poly's mission and commitment to academic quality as well as an increasing demand for higher education in California, <u>how can</u> <u>the University educate more students</u>, with or without increasing the <u>physical capacity of the campus?</u>

- a. Student Progress Develop advising, streamline curriculum development, etc. per Cal Poly Plan, WASC self-study, and Advising Task Force to facilitate progress to degree completion.
- b. Distributed Teaching and Learning Increase off-site and technology-mediated instruction to enhance student learning.



- c. Year-Round Operations (YRO), particularly expansion of Summer quarter - Increase Summer enrollment to 40 percent of Academic Year Full-time Equivalent Student (AY FTES) level.
- d. Increase Academic Year Full-Time Equivalent Students (AY FTES) Increase campus instructional capacity to a level that can be supported by an oncampus residential learning community for all new undergraduate enrollment. Analysis of land potentially suitable for on-campus housing capacity indicates that Cal Poly may be able to house an additional 3,000 undergraduates, which translates to an increase in instructional capacity to about 17,500 net AY FTES.

Question 2

Given Cal Poly's mission and the need for academic programs not broadly available in the State of California, <u>what should be the future</u> <u>composition of academic programs and student enrollments?</u>

e. Expand curricula and student enrollment in strategic academic programs, particularly biotechnology, engineering, and other advanced technology programs. [See more detailed discussion in Chapter 3, under Academic Plan for Enrollment Growth.]

Question 3

Given Cal Poly's setting on the Central Coast of California, <u>how can</u> the University balance external pressures for enrollment growth with the character and resource capacity of the surrounding communities?

- f. Make the Master Plan self-mitigating with respect to major environmental and community impacts. For example:
 - Providing housing on campus for new undergraduate enrollment growth will help to avoid additional housing and traffic impacts on the community of San Luis Obispo.
 - Encouraging students, faculty and staff to shift away from automobiles toward alternative transportation systems will reduce traffic congestion, improve air quality and limit the need to supply parking.
 - Planning future campus facilities and support services so as to minimize and mitigate environmental impacts on and off campus to the full extent feasible as part of project design.

Question 4

Given Cal Poly's mission, academic programs and land holdings, how

A number of comments regarding the Preliminary Draft suggested more detail in this section of the Master Plan. However, as the Guiding Framework sets out general principles, the detailed application appears later in the document, particularly in the various Physical Plan Elements (Chapter 5).



can the University create and enhance its natural and built environment and provide technological support for both indoor and outdoor facilities that meet student learning needs and faculty and staff needs for scholarly and professional development?

g. Land use - overall direction

- Define and designate land uses consistent with University mission: environmental assets (as an overlay), instructional core and support, outdoor teaching and learning, student residential community, recreation, parking, and ancillary activities. Such designations will be used for all lands on the main campus, San Luis Obispo Creek Watershed ranches and Chorro Creek Watershed ranches in San Luis Obispo County.
- Apply six basic principles to land use planning: balance among land uses that serve the University's academic mission, environmental suitability and sustainability, compatibility between adjacent uses, proximity among related uses, compactness in the instructional core, and community-building.
- Acknowledge that active learning can and should happen anywhere. To accomplish this, develop Design Guidelines that stress flexible facilities that provide space for interactions among faculty, students and staff, enable the use of different pedagogical styles, and are supported by state-of-the-art technology.

Question 5

Given Cal Poly's predominantly undergraduate, residential character, <u>how can the University provide facilities and services that integrate</u> <u>diverse student needs for physical and social development with intel-</u><u>lectual development?</u>

- h. Establish a natural and built environment that reflects the way that students are expected to learn in the 21st century. This implies full access to information technology as well as opportunities for collaborative and active learning, teamwork, leadership development, and working with diverse populations, consistent with the desired characteristics of a Cal Poly graduate.
- i. Provide for a full range of academic and student services in support of expanded instructional facilities and new residential learning communities. This implies programming for curriculum, advising, recreation, social, and other student services and auxiliary services, concurrent with physical Master Plan development and phasing.



Question 6

Given Cal Poly's mission, character, and physical setting, <u>how can the</u> <u>University create and enhance a visual image through the Master Plan</u> <u>that reflects the University's identity - that is, through land use patterns,</u> <u>and the form of structures and spaces?</u>

j. Reinforce a "student-friendly/learner-centered" physical environment that reflects Cal Poly's core academic programs and pedagogy. Design and landscape guidelines will supplement the Master Plan to provide detailed guidance regarding such design issues as way-finding, architectural vocabulary, open space-systems, and sense of place and purpose. Support and auxiliary services will reinforce this image and follow the design guidelines.

Question 7

Given academic program needs and limited operating budgets and capital resources, <u>how can Cal Poly redevelop selected areas within the</u> <u>instructional core and expand academic and support facilities so as to</u> <u>avoid disruption of existing academic activities?</u>

- k. Sequence redevelopment and new development to take advantage of available land first. Then, phase so as to relocate activities to make additional land available concurrently for residential development and new instructional facilities.
- I. To the extent feasible, schedule each phase to include a balance of instructional and support facilities, student housing, and parking, subject to analysis as to the timing and feasibility of obtaining funds, incurring debt and/or establishing partnerships to finance facilities.
- m. Explore innovative project financing and delivery options such as public-private partnerships, Foundation support, enterprise partnerships and "design-build" project development.

Question 8

Given Cal Poly's context and role in its community, <u>what processes</u> <u>should the University adopt and implement to communicate with the</u> <u>campus and broader community regarding planning and project develop-</u> <u>ment issues?</u>

n. Recognize that the University belongs both to the community of higher education and to its local community, sharing the same regional environment with many neighbors. To this end, the University will broaden its communication and consultation both on and off campus with respect to campus planning issues. A number of comments on the Preliminary Draft expressed concern about the resources required for Master Plan implementation. Both the Academic Senate and Deans' Enrollment Planning Advisory Committee urged Cal Poly to make any growth in enrollment contingent on achieving a more equitable operating budget to support the University's polytechnic programs and maintain academic quality.



The Master Plan Task Forces reconvened in March 2000 and provided comments that helped to refine the Preliminary Draft of the Master Plan.

Approximately 50 individuals and organizations suggested additions and modifications to the Preliminary Draft. The Master Plan team was able to accommodate many of them in preparing the October 10 publication. Key changes that resulted from campus and community input included the following:

- Relocation of student housing further away from Brizzolara Creek;
- Establishment of a Brizzolara Creek enhancement area;
- Incorporation of findings from University Union planning process;
- Refinement of circulation, alternative transportation and parking proposals;
- Identification of key impacts of concern to neighbors.

Then, about 60 individuals and organizations commented on the Master Plan and Draft Environmental Impact Report issued on October 10. Again, the Master Plan incorporated most of the suggestions for strengthening the Plan and environmental impact analysis. Comments on the Master Plan and Draft EIR contributed to the following additions:

- · Revision of the soils analysis;
- Reinforcement of the importance of Outdoor Teaching and Learning lands to the University's mission;
- Elaboration on the local housing market and Cal Poly's commitment to student housing;
- Specification of sustainable campus planning and design expectations;
- Clarification of support for parking reduction and alternative transportation policies and incentives;
- Addition of a section on master plan monitoring and review.

MASTER PLAN TASK FORCE RECOMMENDATIONS

Overview

Following two general public meetings on and off campus during Winter 1999, the Master Plan team invited students, faculty, staff, and members of the larger community to recommend principles to guide the development of the Master Plan. Ten campus and community task forces met extensively through Spring quarter 1999 to develop their recommendations. Campus Planning Committee members as well as representatives of the professional planning team attended these meetings and facilitated the discussion. Task force members were not reticent to express their views and their reports reflect a number of explicit concerns, particularly with respect to neighborhood impacts, environmental issues, and Cal Poly's planning and project review processes.

The resulting reports contained over 500 recommendations, many of which were very specific. Further, a number of the task forces included detailed examples to illustrate their recommendations. The professional planning team kept the complete list of recommendations as a reference, and published the task force reports on the Master Plan Web site. Then, the team consolidated the task force recommendations into a set of more general principles to guide the development of the Master Plan. These principles appear at a general level as part of the Guiding Framework for the Master Plan, and in more detail in each physical planning element and in the section on plan implementation.

Document Incorporation

The following sections indicate where the Master Plan team incorporated each task force's recommendations in the physical planning elements of the draft Master Plan.

Land Use Task Force

See Master Plan Elements Land Use, Natural Environment, Outdoor Teaching and Learning, Campus Instructional Core, Residential Communities, Recreation, Athletics and Physical Education,



Public Facilities and Utilities, Circulation, Parking, Support Activities and Services Ancillary Activities and Facilities

Comments

Additional details to be reflected in Land Use and Project Review Procedures as part of Master Plan implementation.

Natural Environment Task Force

See Master Plan Elements Land Use Natural Environment Outdoor Teaching and Learning Campus Instructional Core

Comments

Additional details to be reflected in Best Management Practices as part of Master Plan implementation; Process principles at general level in Guiding Framework; Additional details to be reflected in Land Use and Project Review Procedures as part of Master Plan implementation.

Built Environment and Technology Task Force

See Master Plan Elements Land Use, Natural Environment, Outdoor Teaching and Learning, Campus Instructional Core, Public Facilities and Utilities, Circulation, Alternative Transportation, Support Activities and Services

Comments

Additional details to be reflected in Land Use and Project Review Procedures, Design Guidelines and Landscape Plan as part of Master Plan implementation



Housing Task Force

See Master Plan Elements Land Use, Campus Instructional Core, Residential Communities, Recreation, Athletics and Physical Education, Alternative Transportation, Support Activities and Services

Circulation Task Force

See Master Plan Elements Land Use, Campus Instructional Core, Circulation, Alternative Transportation, Parking

Utilities and Resources Task Force

See Master Plan Elements Land Use, Natural Environment, Outdoor Teaching and Learning, Public Facilities and Utilities, Ancillary Activities and Facilities

Public and Support Services Task Force

See Master Plan Elements Land Use, Campus Instructional Core, Residential Communities, Recreation, Athletics and Physical Education, Public Facilities and Utilities, Circulation Support Activities and Services

Neighborhood Relations Task Force

See Master Plan Elements Land Use, Natural Environment, Campus Instructional Core,



Residential Communities, Alternative Transportation, Parking, Support Activities and Services, Ancillary Activities and Facilities

Comments

Process principles at general level in Guiding Framework; Additional details to be reflected in Land Use and Project Review Procedures as part of Master Plan implementation.

Intergovernmental Relations Task Force

See Master Plan Elements Land Use

Comments

Process principles at general level in Guiding Framework; Additional details to be reflected in Land Use and Project Review Procedures as part of Master Plan implementation.

Economic Impacts Task Force

See Master Plan Elements

Land Use Campus Instructional Core Residential Communities Support Activities and Services

Comments

Community impacts also addressed as part of Master Plan implementation.

Refer to the Master Plan web site for a complete version of task force principles.

www.campusprojects.calpoly.edu

Refer to the Master Plan web site for a matrix showing how the Master Plan team responded to comments on the Preliminary Draft (May 1) and October 10 publication of the Master Plan and Draft Environmental Impact Report.



Cal Poly Master Plan

C H A P T E R

3 | Long-Range Enrollment Scenarios

How do we measure enrollment? How might the campus change to enhance education in California? What assumptions are we making about Cal Poly's growth? What are the mixes for enrollment?

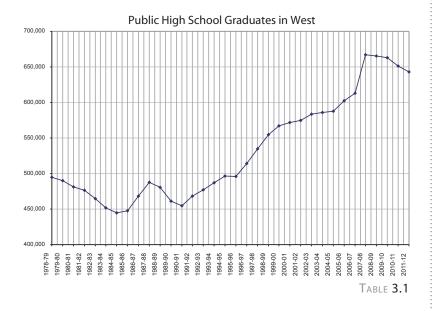
ENROLLMENT GROWTH FACTORS

Background

Comparative Data - Growth Projections

A number of recent reports have used different methods to estimate the demand for higher education in the next decade. However, none of the enrollment projections for the CSU go beyond 2010-11, whereas population projections for California and San Luis Obispo communities extend to 2020-21. Western Interstate Commission on Higher Education (WICHE) projections show that the number of high school graduates - the primary source of increased demand for higher education known as "Tidal Wave II" - would peak in 2007 or 2008. This means that higher education impacts would peak over the following four to six years.

The WICHE data and projections shown below illustrate how the traditional college-age population declined after the end of the World War II baby boom. However, by the mid-1990's the number of high school graduates had exceeded the earlier peak, and is projected to grow until about 2007 - 2008. Then, WICHE projects a decline for the subsequent five years. After that, however, the U.S. Bureau of the Census projects that the population under age 18 in California will increase again by 2015, generating additional demand for higher education.



The following table summarizes comparative growth rates as a reference for long-range enrollment planning at Cal Poly.

	Recent Annual Rate	Projected Annual Rate	Policy	Source
CA population	1.5%	1.1 - 1.7 %		CA Dept. of Finance (1999)
SLO County pop.	1.8%	1.8 - 2.9 %	2.3%	CA Dept. of Finance (1999)
SLO City pop.	0.7%	1.0%	1.0%	City of SLO (1999)
Cuesta College	5.0%			Cuesta College (1998)
CSU	2.5%	2.4 - 3.9 %		CA Dept. of Finance (1998)
CSU		1.4 - 2.2 %		RAND (1996)
CSU		2.4 - 2.8 %		CSU (1998)
CSU		2.5 - 2.9 %		CPEC (1999)
				TABLE 3.2

Critical Enrollment Measures

Enrollment and master planning must address three critical enrollment measures because each affects the University and the community in different ways.

College-Year Full-Time Equivalent Students (CY FTES)

The total amount of instruction offered during four academic quarters is represented by College-Year FTES. For example, any significant increase in Summer enrollment could add to instruction, support student progress, and help meet the demands of "Tidal Wave II" without significant changes in physical capacity. However, growth in CY FTES would require proportionate increases in the campus operating budget. CY FTES is also the basis for determining appropriate levels of instructional support - e.g., library and information resources, student:faculty and student:staff ratios.

Net Academic Year Full-Time Equivalent Students (Net AY FTES)

For instructional space planning, the critical measure is the amount of instruction that actually uses classrooms and laboratories on campus. Thus, to calculate net AY FTES we subtract all instruction that is not scheduled in a classroom or laboratory on campus. The exclusion covers all supervision courses (senior project, master's thesis) and other instruction listed as "to be arranged." However, even this "other" on-site instruction requires campus support from faculty and administrative services. Cal Poly's present physical capacity is 15,000 net AY FTES.

Fall Head Count

Many campus programs and services, as well as most community impacts, are based on number of students. For example, recruitment, admissions, orientation, advising, record-keeping, most services offered by Student Affairs, and fee revenues all are based on head count. We use full-time head count to calculate retention and graduation rates. Further, housing (on or off-campus), commuting, and other community impacts derive from the number of students enrolled. Analysis focuses on Fall head count as Fall is the peak term - and most new students enter in Fall quarter. These scenarios informed the discussion of enrollment growth in the next section of this chapter. Because these scenarios are not mutually exclusive, the Master Plan calls for combining several elements of each.

LONG-RANGE ENROLLMENT SCENARIOS

Introduction

During the 1998-99 academic year, the Deans' Enrollment Planning Advisory Committee (DEPAC)¹ developed four general scenarios to illustrate different ways in which Cal Poly might be able to educate more students - with or without expanding the physical capacity of the campus.

Student Progress

In addition to curricular and administrative support, increase student course load to 15 for full-time undergraduates.

Distributed Teaching and Learning

Double or triple the present enrollment in off-site programs, whether traditional study abroad, media-assisted, or internships and coops.

Increase Academic Year Full-Time Equivalent Students (AY FTES)

Consider a range of annual growth rates varying from 1 % to 2.8 %.

No Growth in Academic Year Enrollment

Consider the potential for Summer enrollment to reach the CSU goal of 40 % of an average term during the academic year.

Year-Round Operations (YRO)

Rather than consider Year-Round Operations as a separate scenario, DEPAC addressed how scheduling changes might support each other scenario. Further, DEPAC focused on the expansion of Summer Quarter as a way to educate more students without increasing enrollment during the academic year.

Principles

These scenarios stemmed from discussions of the University's academic mission, stressing the following principles:

¹ For 1998-99 the Provost named the following to DEPAC: Bob Clover (for Jerry Hanley), Information Technology Services; Linda Dalton, Institutional Planning and Analysis; Juan Gonzalez, Student Affairs; Martin Harms, College of Architecture and Environmental Design; Steve Kaminaka, Academic Senate Budget and Long-Range Planning Committee; Euel Kennedy, Enrollment Support Services; Bob Kitamura, Facilities Planning; Bonnie Krupp, Institutional Planning and Analysis; Susan Opava, Research and Graduate Programs; Rick Ramirez, Budget and Analytic Business Services; Walter Rice, College of Business; and Harry Sharp, Chair, Extended University Programs and Services. Kimi Ikeda, Office of the Provost, frequently contributed. The following text draws directly from the DEPAC "Report on Long-Range Enrollment Scenarios," dated March 1, 1999.

The University will be informed and guided by its mission.

Cal Poly will remain <u>polytechnic</u> with a strong majority of our enrollments in "polytechnic" programs within which <u>"learn by doing,"</u> the "hands-on" approach to education, will characterize the lives of our <u>primarily undergraduate</u> student body. Across the campus these students will engage in <u>state-of-the-art</u> programs, pedagogy, and practices in the environment of a <u>student-centered community</u> where the faculty and staff serve students in a context of <u>social and intellectual diversity</u>, a learning community that is diverse in every sense with a <u>statewide</u> <u>mandate</u> to educate highly qualified and motivated citizens from all over California.

In addition, Cal Poly currently incorporates and will continue to incorporate the following characteristics for the forseeable future:

- <u>Selective</u> admission is sought by far more qualified applicants than can be accommodated.
- <u>Residential</u> meaning that more than 80% of students move to the campus or the immediate surrounding community for the purpose of obtaining their education. They are not "commuters."
- <u>Major at Entrance</u> the students matriculate directly to a degree program.

The University's very name, CALIFORNIA POLYTECHNIC STATE UNIVERSITY, SAN LUIS OBISPO, lengthy to be sure, proclaims much. Cal Poly is a public institution with a statewide mandate to emphasize higher education in "polytechnic" subjects. Simultaneously, the University adjoins the City and is in the County of San Luis Obispo. Cal Poly is "special" not only to its own residents, but to other Californians, thousands of whom would, if they had the opportunity, literally "trade places." It follows that the changes in enrollment, facilities, faculty, and staff should be in the best interests of both the University's local and statewide constituencies.

Within the context summarized above, DEPAC offered four basic enrollment scenarios as a starting place for discussion. In doing so the committee noted that the University may choose particular elements of any (or all) of these or other possible models for campus development over the next decade or two.



Alternative Futures: Four Scenarios

Student Progress: Students Graduating Sooner and Cal Poly Educating More Citizens (but not at any one moment)

The substance of this scenario is a group of suggestions that aim at (1) increasing the percentage of students who graduate and (2) decreasing the time they take to do so. Some suggestions (e.g., more evening classes, courses and modules of courses offered via the Internet) echo elements of other scenarios. Almost all of the suggestions (such as improved advising by department faculty and advising centers, automated on-demand degree audits, curriculum streamlining, devising effective techniques that enable more students to finish their senior projects) could be pursued regardless of what other direction the University takes on enrollment.

Presently, Cal Poly's retention and graduation rates, although the highest in the CSU, are substantially lower than comparable figures for University of California campuses with which we effectively compete for entering freshmen. The scenario calls for research, including "exit interviews," with students who leave without graduating to understand the causes of this problem and identify potential remedies.

Distributed Teaching and Learning: Off-Site and/or 'Virtual' Enrollment

In this scenario University enrollment grows but the headcount of students on campus may not. At any moment an increasing percentage of students will temporarily reside elsewhere. Science majors, for example, can spend a quarter on board the California Maritime Academy's training ship, The Golden Bear. At present, six to ten faculty and up to 150 students take the Spring quarter in London Study, a program that could operate year-round. Smaller numbers, usually accompanied by a couple of faculty, have spent terms in Mexico, Japan, Thailand and similar remote locations, as well as in nearby urban areas such as San Francisco. Scores - sometimes hundreds - of students may be away from the campus for a term and sometimes as long as a year. The numbers could increase, and simultaneously these students may augment off-campus learning by enrolling for classes offered here. They would communicate with instructors through e-mail and hold discussions with classmates around the world via two-way on-line video on the Internet. The campus is making plans that will enable dozens of students to enroll for a quarter in residence on the Swanton Pacific Ranch in Santa Cruz County. While there, they will simultaneously enroll for on-campus courses by two-way video.

Other Cal Poly students may use "distance education" technology to enroll for campus-based courses during the quarters (usually summer) they are "at home" rather than in San Luis Obispo. One example: community college students who are transferring into Cal Poly's professional programs as juniors might take one or more essential "prerequisite courses" via the World Wide Web in the quarter(s) just before they move here. That could mean cutting a year off the time they would otherwise be in residence to obtain degrees.

Although most students could benefit from participation in one or more "distributed learning" experience, Cal Poly is residential.² There are authentic intellectual, social, and personal benefits in the residential student life. The University wants undergraduates to spend most of their educational careers on or in the immediate vicinity of the campus. Therefore, this University does not anticipate offering "external degrees" at the undergraduate level. Nevertheless, the expanded use of "distance learning" in varied forms can increase Cal Poly's FTES enrollment without increasing the local headcount at any given time.

More On-Campus Academic Year Enrollment

In this scenario both headcount and FTES (full-time equivalent students) on campus during the academic year would increase to a figure beyond the campus's current physical Master Plan capacity of 15,000 AY FTES. Capacity can be increased by the construction of additional facilities: classrooms, laboratories, offices for faculty, etc. on the campus or by the leasing of instructional space elsewhere in the community.

"Capacity" could also be redefined upward (e.g., by increasing the number of hours per week that the campus schedules instructional space). That would mean more classes offered in the very late afternoon, evenings and/or on the weekends. Also, a few of our academic programs presently operate below "program capacity." Small enrollment increases in those (mostly graduate) programs could be accomplished with modest impact on the physical and fiscal resources of the campus.

² For Cal Poly "residential" means the great majority of students have homes elsewhere. They moved to San Luis Obispo and took up temporary residence in a campus housing unit (or perhaps an apartment complex nearby that is populated almost entirely by other students) for the purpose of obtaining a Cal Poly education. The great majority will leave the community upon graduation. The committee recognizes that at some small liberal arts colleges the term "residential" means almost every student resides literally on the campus, but that the meaning of "residential" at Cal Poly is the one in general use in higher education today.

DEPAC observed that in recent years the CSU has funded all enrollment growth on a "CSU average" basis. That funding method, unlike the "mode and level" formula the state used in prior decades, fails to recognize higher costs inherent to this University's polytechnic emphasis. As a result, State-assisted enrollment growth at the current "average" level will gradually, but inevitably, diminish the quality of the programs that give the University its strong reputation.³ DEPAC also assumed that any substantial increase in the <u>headcount</u> of students enrolling at San Luis Obispo during the academic year would be expected to have more or less proportionate impacts (positive and negative) on the local community.

No More On-Campus Academic Year Enrollment

The essence of this scenario is that AY (Academic Year) FTES on campus would not change significantly. Under this scenario, "College Year" enrollment, which includes enrollment in the summer term, might increase substantially.⁴ (Prior to budget cuts summer headcount enrollment in 1990 was 6464, or 37% of the Fall Quarter headcount. FTES that summer equaled 27% of fall figure. Students who enroll for the summer also carry lighter loads than during the academic year.)

If this scenario were adopted in isolation - without elements of other scenarios - and if the State of California continues to grow as predicted, the University's share of all CSU students could be somewhat smaller than at present. Cal Poly is the only CSU campus (or one of only a few) that offers several polytechnic programs (e.g., architecture, graphic communication). Hence under this scenario, industry and State pressures could lead to increased enrollments in those "hard to find" programs. With "steady state" total enrollment on the campus as a whole, that would mean enrollments in other programs would have to be reduced. Such enrollment shifts would exacerbate the financial squeeze that derives from the CSU's "average cost" funding.

³ This observation concerning the CSU's current practice for distribution of state general funds poses a challenge for any growth; however, the difficulty may be particularly acute for the "More AY FTES Scenario."

⁴ Very few of Cal Poly's academic facilities are air-conditioned, so all day summer use would be difficult (and in selected instances dangerous) unless and until ventilation is much improved or air-conditioning installed and used. What's more, each summer some facilities are presently closed for major maintenance. As a result, plant capacity in the summer is less than during the academic year. More troublesome obstacles to a very large summer quarter derive from generations of student and faculty practice. Even if the state provided additional funding, it is not clear that faculty would be available or that students would enroll in significantly larger numbers.

ALTERNATIVE FUTURE GROWTH ASSUMPTIONS AND RATES

Overview

The Master Plan team used a range of annual growth rates from comparative communities and institutions to illustrate their implications for Cal Poly. In order to make these alternative projections, the team drew on the long-range enrollment scenarios to make a set of assumptions about the variables that affect both headcount and full-time equivalent enrollment:

- Average student load will increase slightly (from the Student Progress scenario);
- Summer enrollment will increase significantly (from the discussion of Year-Round Operations); and
- Off-site instruction will increase modestly (from the Distributed Teaching and Learning scenario).

Changes in any of these require both campus policy and the means for implementation.

The following table projects enrollment to 2020-21 for several different growth rates. Cal Poly expects future enrollment growth to occur in phases rather than follow a smooth rate of increase. Nevertheless, an increase in summer and the addition of 3,000 students in fall over twenty years would be approximately equivalent to a 1.5 percent annual increase.

	CY FTES	Net AY FTES	Fall Headcount		
Past and Present		1125	muucoum		
Highest Enrollment, 1990-91	16,892		17,758		
Most Recent Year, 1999-00	15,565	14,031	16,470		
Enrollment Targets for 2000-01	16,010	16,010 14,506			
Current Master Plan Capacity No Increase in 15,000 AY FTES	16,870	15,000	17,900		
Alternative Future Growth Rates	Projections to the Year 2020-21*				
1.0% Growth Rate	19,342	15,855	19,040		
1.5% Growth Rate Moderate Growth	21,244	17,414	20,912		
1.75% Growth Rate	22,261	18,247	21,913		
2.0 % Growth Rate	23,324	19,119	22,960		
2.3% Growth Rate	24,662	20,216	24,277		
2.8 Growth Rate CSU High	27,056	22,178	26,634		
Note: Projections calculated from 2000-01 targets					
			TADLE 2		

TABLE 3.3

Two additional factors affect the enrollment capacity of the University and facility requirements.

First, campus policy regarding the number or proportion of students to be housed on campus contributes directly to the continuation and reinforcement of Cal Poly's character as a residential university. The assumption guiding the Master Plan is the principle that Cal Poly should provide housing on campus for all additional undergraduate students. This principle includes provision of appropriate housing types, support services and amenities to enhance the residential environment as a place for learning.

Second, as space needs vary by discipline, program mix affects both the amount and character of campus space. Thus, an essential next step in enrollment planning is the determination of the demand for and appropriate size of majors in programs critical to the State of California that are not generally available elsewhere.

Table 3.4 shows the implications of adding 3,000 additional students. Columns A and B provide historical data for comparison. Column C shows current capacity. Then column D shows the proposed increase, and column E calculates future capacity. The first four rows show these changes in terms of full-time equivalent student (FTES) enrollment used for budget and space planning. The lower four rows translate these into head counts for Fall Quarter (when enrollment is largest).

The cumulative effect of these projections would be to increase the campus capacity as follows: Fall student, faculty and staff head count and net Academic Year FTES would increase approximately 17 percent over present capacity. In addition, operational changes to increase summer term and to take advantage of distributed teaching and learning opportunities would enable the campus to increase College-Year FTES by an additional 9 percent with no corresponding increase in head count.

ONG-RANGE ENROLLMENT SCENARIOS

Summary of Proposed Change in Capacity			0	5	_
	A	В	С	D	E
	Highest				
	Previous			Proposed	Proposed
	Enrollment	Past Year	Current	Growth over	Future
	(1990-91)	(1999-2000)	Capacity	20 Years	Capacity
Full-Time Equivalent Student Enrollment (FTES)					
Academic Year Enrollment (net AY FTES)	14,584	14,031	15,000	2,500	17,500
Summer Enrollment	1,408	805	850	1,650	2,500
Estimated Off-site and Other Instruction Not Requiring Campus Facilities	900	729	1,020	211	1,231
Total Enrollment (CY FTES)	16,892	15,565	16,870	4,361	21,231
Fall Head Counts					
Fall Student Head Count	17,758	16,470	17,900	3,000	20,900
Fall Faculty Head Count	1,251	1,107	1,193	200	1,393
Fall Staff & Administration Head Count*	1,133	1,500	1,581	265	1,846
Total Head Count (Students, Faculty, Staff and Administration)	20,142	19,077	20,674	3,465	24,139

* Note: 1990-91 Data does not include Cal Poly Foundation and ASI employees. Together, these units now employ about 300 regular staff.

TABLE 3.4

ACADEMIC PLAN FOR ENROLLMENT GROWTH

The most compelling reasons for Cal Poly to increase enrollment derive from the statewide demand for higher education associated with fulfilling the University's academic mission - both from applicants seeking admission and from employers and graduate schools accepting graduates. Presently, Cal Poly has to turn away nearly 8,000 applicants for Fall undergraduate admissions who meet California State University (CSU) eligibility requirements. With such unmet demand, Cal Poly could fill the proposed enrollment increase of 3,000 headcount from the existing applicant pool. When the University considers the additional demand for higher education in general associated with Tidal Wave II, we can expect that Cal Poly's applicant pool will continue to grow.

At the same time, the University is well aware that the characteristics of the traditional college age group are shifting with demographic changes in California. For example, two growing population groups have had different college participation patterns. The Asian American population has high college attendance rates whereas the Latino population has had a lower rate of college attendance. In addition, State investments in and standards for primary and secondary education will affect the nature and level of academic preparation of college-bound students. Cal Poly's recruitment and outreach strategies can reinforce continuing campus efforts to attract a diverse, qualified applicant pool.

Enrollment Growth by Discipline

The Deans' Enrollment Planning Advisory Committee (DEPAC) set out a number of premises and principles for determining how enrollment growth should occur at Cal Poly.¹ These principles as well as the Guiding Framework for the Master Plan imply that enrollment growth will not be distributed evenly, or proportionately across the campus.

 Create, maintain, expand, reconfigure or phase out academic programs based primarily on fit with the Cal Poly mission as a comprehensive, polytechnic state university, program quality, and State needs.

¹ Deans' Enrollment Planning Advisory Committee, "Final Report for 1999-2000" (June 2, 2000).

- Increase enrollment particularly in those polytechnic and professional areas that are not broadly available in the State.
- Incorporate improvements in retention, progress to degree, and graduation rates in planning enrollment growth.
- Set college size by appropriate sizes of individual degree programs, not the reverse.
- Increase the percentage of students in post-baccalaureate programs, particularly "niche" master's degrees that build on Cal Poly's polytechnic and professional strengths.
- Phase enrollment growth, allowing some flexibility to address future needs and opportunities.

At the college level, each offers different strengths that support some enrollment growth following these principles as well as the recommendations of other campus committees.²

- The College of Agriculture offers programs that are clearly within the polytechnic, applied learning mission, and that are not otherwise generally available in California.
- The College of Architecture and Environmental Design also offers programs that are clearly within the polytechnic, applied learning mission, and that are not otherwise available. It contributes to social diversity with a relatively large proportion of non-white students.
- The College of Business offers professional programs that attract strong applicants who go on to graduate at high rates. 'Niche" master's degree programs link the MBA with professional work in other colleges. Program costs tend to be lower than in other colleges.
- The College of Engineering offers programs that are clearly within the polytechnic, applied learning mission and with clear contributions to computer technology fields. It contributes to social diversity with a relatively large proportion of non-white students.
- The College of Liberal Arts offers programs that attract strong

¹ Other critical contributions include the Western Association of Schools and Colleges accreditation review during 1999-2000, including the campus self-study, site visit team report, and letter reaffirming accreditation.

applicants who go on to graduate at high rates. It contributes to social diversity with a relatively large proportion of women students. Program costs tend to be lower than in other colleges.

- The College of Science and Mathematics offers programs that connect with the polytechnic, applied learning mission, and attract strong applicants. Program costs tend to be lower than in other colleges.
- The University Center for Teacher Education offers professional post-baccalaureate programs that contribute to a critical State need, building on Cal Poly's strength in science and technology. It contributes to social diversity with a relatively large proportion of women students.

Or, to assess the relative strengths of the colleges another way:

Mission

The professional colleges most clearly meet the criteria associated with the polytechnic mission, applied learning, and limited program availability - Agriculture, Architecture and Environmental Design, Engineering, and to a lesser extent, Business and the University Center for Teacher Education (UCTE).

Diversity

The professional colleges contribute to social diversity in contrasting ways. While Architecture and Environmental Design and Engineering have relatively more non-white students; their proportion of women students is low. In contrast, Agriculture and the UCTE enroll more women, but relatively few non-white students.

Applicant Pool

The strongest undergraduate applicant demand and quality are concentrated in some professional colleges - Business and Engineering - as well as in Liberal Arts and in Science and Mathematics.

Student Progress

The colleges of Business and Liberal Arts not only retain and graduate more of their entering undergraduate students but also receive significant numbers of students who change major out of the other colleges.

Future Prospects

The professional colleges - Agriculture, Architecture and Environmental

Design, Business, Engineering, and the UCTE - offer the most direct job prospects for their graduates. In contrast, more undergraduate students from Liberal Arts and from Science and Mathematics continue their studies in graduate programs after completing Cal Poly degrees.

Resource Requirements

Not surprisingly, the polytechnic programs in all colleges require a higher investment in faculty, staff, equipment and facilities. Some of these programs are able to obtain significant supplementary support for their academic activities from grants, contracts and donations.

Critical Mass

Some specialized facilities and activities are necessary to support polytechnic education, but would not require expansion with enrollment growth - examples include the Campus Farm as well as facilities and equipment such as galleries, printing presses, wind tunnels, materials testing labs, outdoor labs, and field study areas. In some instances the campus chooses to limit the size of unique programs despite demand, due to the specialized faculty, facilities and equipment or higher costs associated with such programs.

Thus, consistent with the principle that college size should be a function of program size, the University has worked with each college to identify programs that meet the enrollment growth criteria and offer the most promise to fulfill Cal Poly's mission as a comprehensive, polytechnic university. Please note that the following tables illustrate the application of the principles for enrollment growth, but do not constitute a list of all programs that might grow. They have been identified from the data developed by DEPAC and from input provided by each college, including college strategic plans.

Undergraduate Programs

The following table shows programs with significant potential for future growth based on current demand and program performance (student progress to degree completion). The first group consists of programs that are already large (with more than 300 students currently enrolled in the major), yet have additional demand, applicant quality, and relatively strong retention and graduation rates. One resulting dilemma is that expanding such programs may make it difficult for a college to balance program size among different disciplines. The second group consists of programs that currently enroll more than 100 students, and that have additional demand, applicant quality, and relatively strong retention and graduation rates. This list also includes new and proposed programs that have not yet been fully implemented.

Undergraduate programs not listed in Table 3.5 may also have potential for growth, but most are currently constrained by limited applicant pools and/or low retention and graduation rates. Demand for some of these programs may grow in proportion to the broader demand for higher education. However, where colleges feel that these programs should grow further to sustain the college mission and meet future societal needs, commitments will need to be made to enhance their visibility and performance. In a few instances these are small, specialized programs that might be converted to areas of concentration within a larger major. In other instances, 'name recognition' among applicants may be low, which could be counterbalanced by more focused recruiting. The campus strategic plan also encourages colleges to admit students initially into a more generic program in a college and then guide them into more specialized majors as they learn more about the opportunities available.

Undergraduate Enrollment Growth Potential

Demand	Moderate-Size Programs with Potential Demand		
Agribusiness Animal Science Nutrition Science	Agriculture Science Recreation Administration* Earth Science (new program)		
Architecture*	Architectural Engineering* Construction Management Landscape Architecture		
Business*	Industrial Technology*		
Civil Engineering Computer Engineering* Computer Science* Electrical Engineering* Mechanical Engineering*	Aeronautical Engineering* General Engineering Software Engineering (proposed) Bioengineering (proposed) Mechatronics (proposed) Microelectronics (proposed)		
Liberal Studies*	Art and Design* Child Development* Graphic Communications Journalism* Psychology* Social Science* Speech Communication*		
Biology* Kinesiology*	Biochemistry* Ecology & Systemic Biology* Microbiology*		
	Animal Science Nutrition Science Architecture* Business* Civil Engineering Computer Engineering* Computer Science* Electrical Engineering* Mechanical Engineering* Liberal Studies*		

ONG-RANGE ENROLLMENT SCENARIOS

TABLE 3.5

Yet another option is for colleges to consolidate, redesign or replace existing programs in order to add new programs designed to meet emerging needs in their disciplines, professions or industries.

Another enrollment planning issue associated with undergraduate education is fluctuation in the size and composition of the entering class each fall. Over the past decade, the total number of new undergraduate students has varied from about 2500 to 4000; and freshmen/women have accounted for an increasing percentage. In addition, the proportion of freshmen varies from college to college. The Master Plan calls for stabilization of the proportion of freshmen as compared to transfer students from community colleges to facilitate curriculum planning and course scheduling by both the major departments and those providing general education and support courses.

Post-Baccalaureate Programs

Consistent with the DEPAC criteria, post-baccalaureate programs should build on Cal Poly's polytechnic and professional strengths. As recommended by the Task Force on Graduate Education, Cal Poly should:

- Develop new interdisciplinary graduate programs across departments and colleges in areas of cross-disciplinary strength, and
- Continue to develop new integrated bachelor's and master's degree programs (4 + 1 and 5 + 1).

The following fields and interdisciplinary areas have potential beyond present levels. Currently, Cal Poly offers few relatively large post-baccalaureate programs - primarily in Business (MBA) and Teacher Education (credential programs). Growth prospects for most master's degree programs may depend on achieving a critical mass of students and faculty to sustain the level of advanced study required.³

Post-Baccalaureate Enrollment Growth Potential

College of Agriculture Forestry Sciences (MS) (new program)

³ This challenge is exacerbated by the lack of differential funding for post-baccalaureate education in the California State University system. See also the Report of the Task Force on Graduate Education (January 2000).

College of Architecture and Environmental Design

City and Regional Planning (MCRP), MS degrees in other CAED fields with interdisciplinary elements (proposed)

College of Business

Business (MBA), Joint MBA/MS programs with other professional colleges, Accounting (MS) (new program), MS in Information Systems; MS in Financial Engineering; MS in Marketing/Packaging (all proposed)

College of Engineering

Joint MS degrees with other professional colleges, Integrated bachelor's and master's degree programs (4 + 1)

College of Liberal Arts

Public Policy (MPP) (new program), Media Arts (interdisciplinary MA) (proposed)

College of Science and Mathmatics Biotechnology (MS) (proposed), Polymers and Coatings (MS) (proposed)

College of Teacher Education

Single-Subject Credential program, "4 + 1" B.A./Multiple-Subject Credential program for Liberal Studies undergraduates (new program)

Phasing

While the Master Plan focuses on a 20-year planning period, enrollment growth will not likely occur at an even rate during the next two decades. Indeed, careful planning calls for development to occur in phases (discussed later in the Implementation chapter) that link new instructional and residential capacity together. The consequence of phasing is that academic programs will grow at different points. Thus, based on mission and societal demand, Cal Poly may build instructional facilities to accommodate growth in a particular group of related disciplines. This will involve increasing instructional capacity - facilities, equipment, faculty, and staff support - for the support and general courses required as well as for the major courses involved.

Cal Poly Master Plan



Cal Poly Master Plan

4 EXISTING CONDITIONS

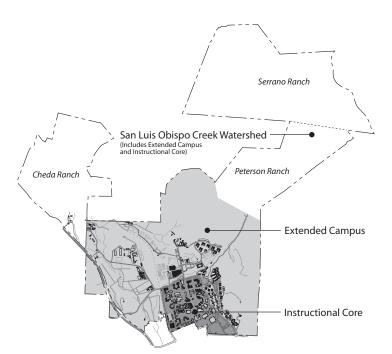
What do we look like now? What are the existing constraints and resources?



EXISTING CONDITIONS

Definitions of Geographical Areas

Cal Poly occupies approximately 3,000 acres in each of three sites - two in San Luis Obispo County and one in Santa Cruz County. The planning team has developed the following designations for each area.



Cal Poly Land Holdings Within the San Luis Obispo Creek Watershed - Geographical Definitions

3,000 Contiguous Acres Adjacent to the City of San Luis Obispo

Campus Instructional Core

The 155-acre Instructional Core is the area bounded on the south by the property line on the edge of the City of San Luis Obispo, on the west by the Union Pacific Railroad tracks, on the north by Highland Drive and the extension of Highland Drive easterly to a point due north of the present Building 70, and on the east by a portion of Perimeter Road and Grand Avenue. (Note: the northeast boundary is based on the realignment of Highland Drive proposed in the Master Plan.) The Campus Instructional Core is the academic and administrative center of the University.

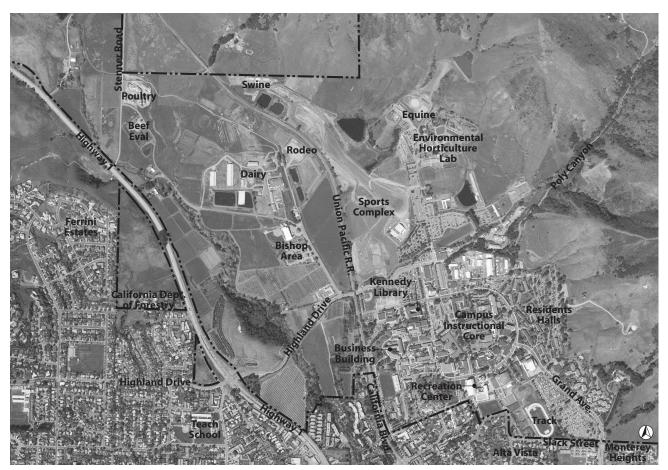


Extended Campus

This area surrounds the campus Instructional Core on three sides, extending on the west from the Union Pacific Railroad along the Cal Poly property line to Highway 1, west across Highway 1 to include two parcels adjacent to the City of San Luis Obispo, then north along Stenner Creek Road to the Cal Poly property line. The northern boundary goes east, then north and east along the property line to the intersection with the Peterson Ranch property, then southeast across Brizzolara Creek to the Cal Poly property line, and south to the City of San Luis Obispo limits. The Extended Campus includes educational facilities associated with the campus farm, some parking, the on-campus student residential community and recreational facilities as well as some rangelands, creeks and foothills.

Main Campus

Together the Campus Instructional Core and Extended Campus comprise the Main Campus. The Master Plan does not use the term "campus" to refer to any other properties.



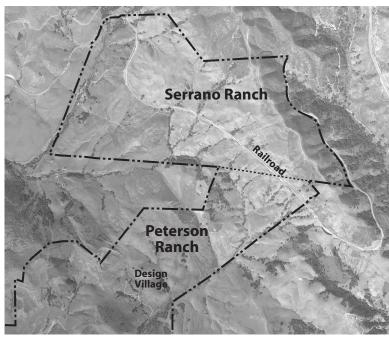
 IDENTIFYING FEATURES
 EXHIBIT 4.1

 Main Campus
 EXHIBIT 4.1



San Luis Obispo Creek Watershed Ranches

Cheda Ranch, Peterson Ranch, and Serrano Ranch are contiguous to the Main Campus. When appropriate, the Master Plan refers to them together as the San Luis Obispo Creek watershed ranches (even though a small portion of Cheda Ranch drains into the Chorro Creek watershed).



Serrano and Peterson Ranches

		Acres
Main Campus		1321.0
	Campus Instructional Core	155.0
	Extended Campus Total	1166.0
	Extended Campus w/o Highland Parcels	1130.0
	Highland Parcel 1	33.0
	Highland Parcel 2	3.0
SLO Creek Wa	tershed Ranches	1613.9
	Cheda Ranch	442.8
	Peterson Ranch	425.8
	Ecological Study Area (1975)	4.
	Botanical Garden (1953)	39.1
	Architecture Study Area (1965)	16.
	Serrano Ranch	745.3
Chorro Creek	Vatershed Ranches	3042.9
	Chorro Creek Ranch	534.5
	Walters Ranch	712.
	SLO Co. School & Calif Archeological Site 544 (1971)	2.5
	Escuela Ranch	
	Biological Science Preserve (1967)	211.0
	Total University Acres	5977.8
	a was provided by the Natural Resources Management Depart GIS from aerial photographs based on existing fencing. This da	ment and was





Cheda Ranch





Cal Poly Land Holdings within the Chorro Creek Watershed - Geographic Description

3,000 Acres North and West of Cuesta College in San Luis Obispo County

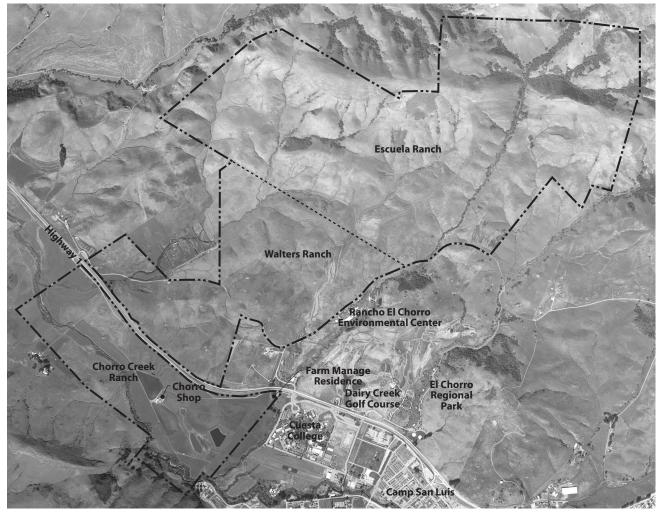
Chorro Creek Watershed Ranches

Chorro Creek Ranch is southwest of Highway 1 and north of Cuesta College. Walters Ranch and Escuela Ranch are northeast of Highway 1, west of Cuesta College. When appropriate, the Master Plan refers to them together as the Chorro Creek watershed ranches.

3,200 Acres in Santa Cruz County

Swanton Pacific Ranch

Swanton Pacific Ranch is located north of Davenport and occupies approximately 3,200 acres east of Highway 1 that is primarily in the Scotts Creek watershed. This area will be addressed in a spearate Master Plan.



IDENTIFYING FEATURES Chorro Creek Watershed



Summary of Existing Conditions

Cal Poly's land holdings in San Luis Obispo county include unique and valuable environmental resources, which provide a dramatic setting for the University and support its educational programs. Students and faculty alike enjoy access to diverse ecosystems, rich farmland and productive rangeland. The Master Plan depends on an improved and expanded understanding of these valuable assets as a basis for its recommendations. This section of the Master Plan provides an overview of Cal Poly's existing physical conditions and a summary of the principal constraints and opportunities associated with land utilization.

An in depth analysis of the Main Campus' physical conditions is available on the Cal Poly Master Plan Web site. The following overview focuses on seven critical Existing Conditions:

Intergovernmental context, circulation, biological and water resources, slopes, soils, agriculture facilities and resources, and the built environment in the instructional core.

Intergovernmental Context

The intergovernmental context map depicts Cal Poly's relationship to the surrounding jurisdictions and urban uses. The Main Campus and surrounding lands to the north are in San Luis Obispo County. The surrounding lands include foothills of the Santa Lucia range and are primarily designated for rural and agricultural uses. This scenic setting provides the backdrop for views of the campus from various locations in the City and along Highway 1.

The Main Campus is adjacent to the City of San Luis Obispo on the south and west. The Alta Vista and Monterey Heights single-family neighborhoods border the southern edge of the campus, while the Bishop's Peak single-family neighborhood lies to the west. The City, including these neighborhoods in particular, is concerned with traffic generated by the campus, parking on local streets, impacts of Cal Poly and Cuesta Community College students and faculty on the local housing market, noise from campus operations and activities and visual impacts such as night lighting.

Apartment complexes along Santa Rosa Street, California Boulevard and Foothill Boulevard house many students from Cal Poly and Cuesta Community College. The commercial areas closest to campus are along Foothill Boulevard and Monterey Street. Students, faculty and staff travel





A detailed discussion of the environmental setting is contained in chapter 6 for the purposes of CEQA.



to these commercial areas as well as other parts of the City for services not provided on campus.

Circulation and Parking

The existing circulation map shows the primary circulation routes, average daily trip totals, campus access points and critical intersections. The hilly terrain to the north and east of the campus and the Union Pacific railroad limit vehicular access to Cal Poly from off campus. While multifamily housing is closest to the California Boulevard entrance, the atgrade railroad crossing on Foothill Boulevard complicates access to the southwestern portion of campus for vehicles, bicycles, and pedestrians. Further, the campus currently provides only limited parking near the California Boulevard entrance. The Grand Avenue and Highland Drive entrances offer more direct access to parking on campus. Nevertheless, as most of the daily-use parking areas are located on the campus' north side, drivers must travel through the campus to gain access.

Faculty and staff generally arrive during a traditional morning commute period while students arrive at and depart from the campus many times each day to fit their class schedules. This varied commuting pattern affects internal and surrounding circulation by creating multiple "peakhour" cycles each day. Each time classes change, the campus experiences vehicular congestion and pedestrian and vehicle conflicts along Highland Drive, Perimeter Road, and Grand Avenue.

Biological and Water Resources

Cal Poly's land holdings in the San Luis Obispo Creek watershed include a wide range of valuable natural resources immediately adjacent to the instructional core. Cal Poly's academic programs take advantage of these natural areas for teaching and research. They include unique landforms, geological formations, plant and animal communities, streams, ponds, reservoirs, and wetlands.

Two streams offer unique opportunities to link the campus to a valuable natural feature. Brizzolara Creek descends from the Santa Lucia foothills on the northeast through Poly Canyon then traverses the northern edge of the instructional core westward to the Union Pacific railroad crossing. At that point it goes underground and re-emerges flowing south to join Stenner Creek. Stenner Creek winds its way south under the railroad trestles in Stenner Canyon then runs parallel to Highway 1. It continues south after crossing Highland Drive before joining Brizzolara Creek.



Slopes

As shown on the slopes map, steep hillsides and canyons bound the instructional core on the northeast. Much of the land to the north and west of the instructional core exhibits gentle slopes. This area is dedicated primarily to agricultural uses. The instructional core itself contains numerous slope banks and has an average cross slope of approximately 7%. These topographic features contribute to Cal Poly's unique setting and provide spectacular views of the City of San Luis Obispo, the surrounding Morros and hillsides. At the same time, the same topographic features present serious constraints to development due to grading impacts, costs and visibility issues.

Soils

Cal Poly's setting is greatly influenced by the amount of productive farmland proximate to the instructional core. This resource has enabled Cal Poly's College of Agriculture to establish and maintain a broad range of agricultural practices. Within the main campus area there are approximately 248 acres of class 1 soils according to the Natural Resources Conservation Service (NRCS) soil capability class system. These soils are present on slopes between 0-5%, are among the most productive in the County, and support a variety of irrigated and non-irrigated crops, orchards and pastureland. There are approximately 17 acres of class II soils within the extended campus area that are also important. The class II soils are present on slightly steeper slopes between 5-10% and contain soil types that place moderate limits on the range of crops that can be grown. In addition, classes III-VI represent progressively worse soil conditions for agricultural productivity, with class VI not being suited for any type of agricultural use. The Master Plan seeks to protect all remaining class I prime soils for future agricultural use.

Agriculture Facilities and Resources

Agriculture facilities and fields surround the instructional core on the west and north, establishing Cal Poly's agricultural setting. West of the railroad tracks, rich soils between Brizzolara and Stenner Creeks provide fertile ground for a variety of orchards, row crops, experimental crops and pastures. North of the instructional core, the campus farm contains animal units, environmental horticulture facilities, the arboretum, and Irrigation Training and Research Center. Multiple reservoirs and ponds provide water for livestock, irrigation and agricultural wastewater treatment. Cal Poly faculty and students require continued access to these extensive outdoor teaching and learning facilities, consistent with the University's "learn-by-doing" approach to education.

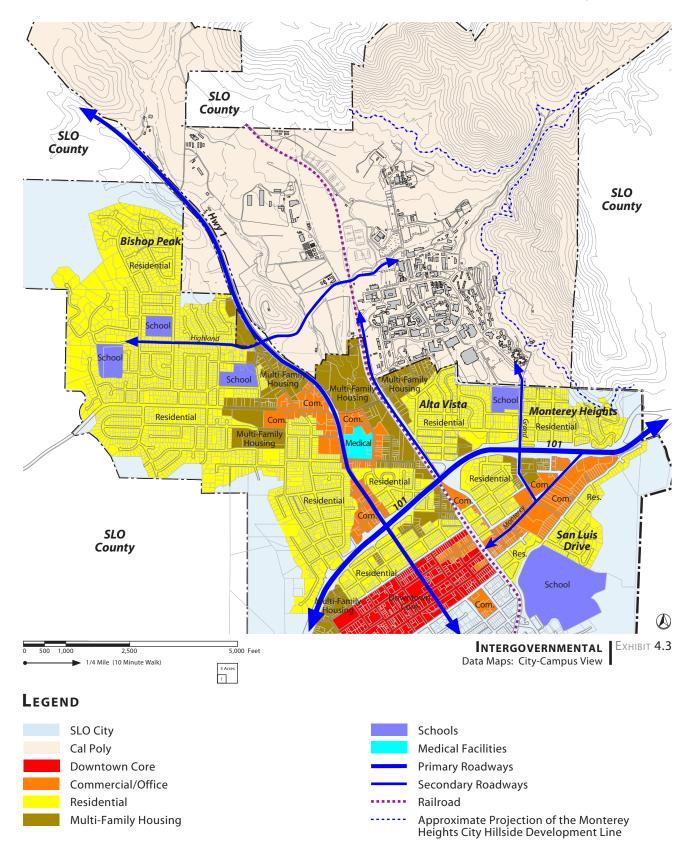
The Soils Analysis has been changed to use the NRCS Capability classification system.



Built Environment in the Instructional Core

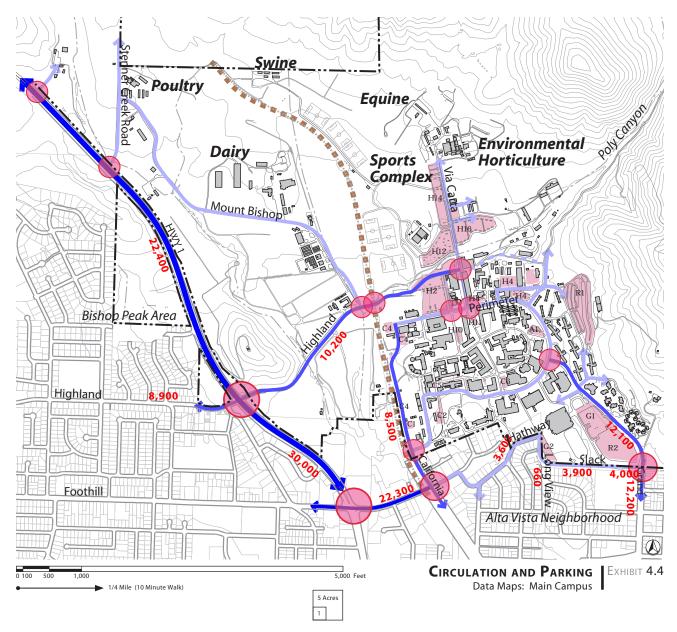
Within the instructional core, an historical range of structures, landmarks and memorials enrich the physical environment of the campus. The Built Environment map illustrates the age, quality, and life expectancy of the existing facilities within the Campus Instructional Core. Because the original campus structures were located near the California Boulevard entrance buildings in this area of the campus are among the oldest remaining on campus. In other areas, site layout, building footprint, and floor plans no longer meet campus instructional needs. They also have the greatest incidence of structural deficiency and functional obsolescence. Three general areas show potential for redevelopment within the instructional core: the Science Building area (building 52) in the center of the campus core, the corporation yard area to the northeast, and the southwest corner of campus where many of the buildings have far exceeded their life expectancy. These three areas provide opportunities for redevelopment to accommodate needed instructional space for new enrollment, improve pedestrian circulation, establish more sustainable development and gain green space without encroaching on valuable farmland and environmentally sensitive lands.





Existing Conditions

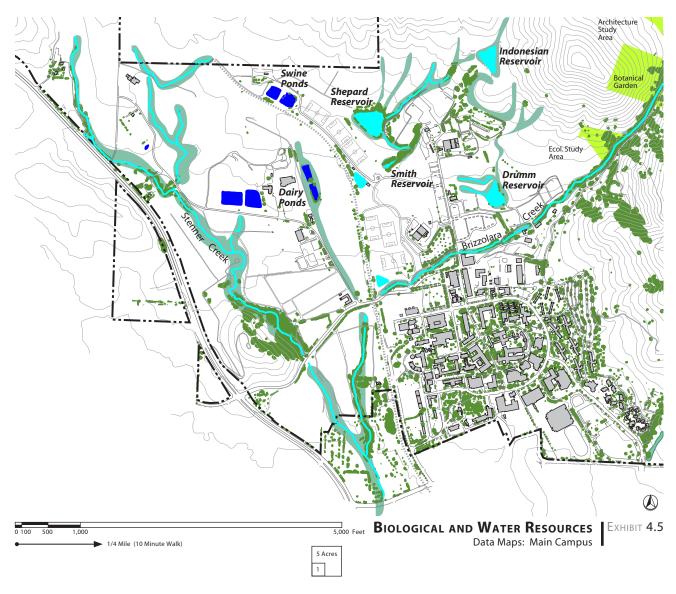
Cal Poly Master Plan



Legend

- Existing Parking
- Primary Circulation Heavy Use
- Primary Circulation Medium Use
- Primary Circulation Light Use
- Railroad
 - Important Intersections
- 22,300 Traffic Volumes

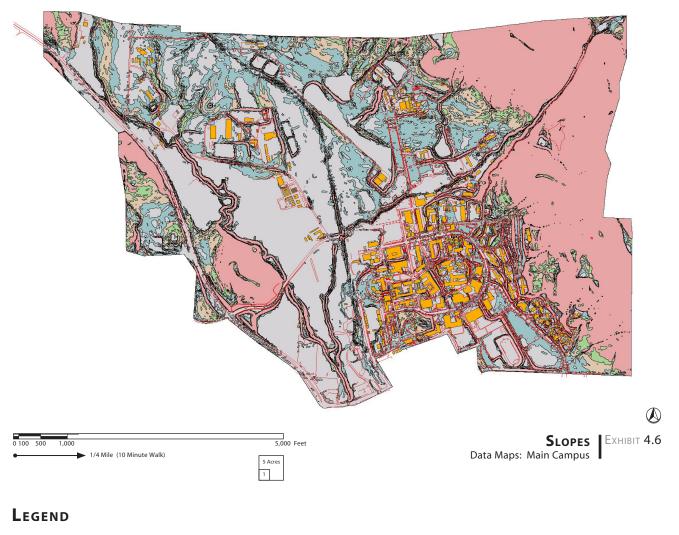


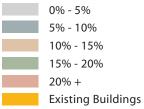


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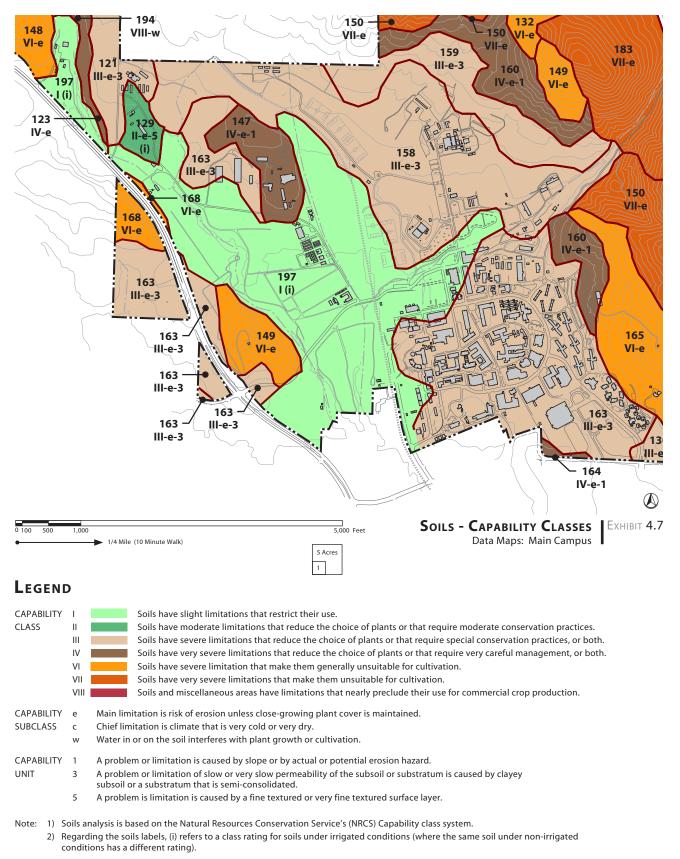
- Preserves
- Water Retention Ponds
- Agricultural Wastewater Treatment Ponds
- Riparian Areas
- Trees
 - Streams





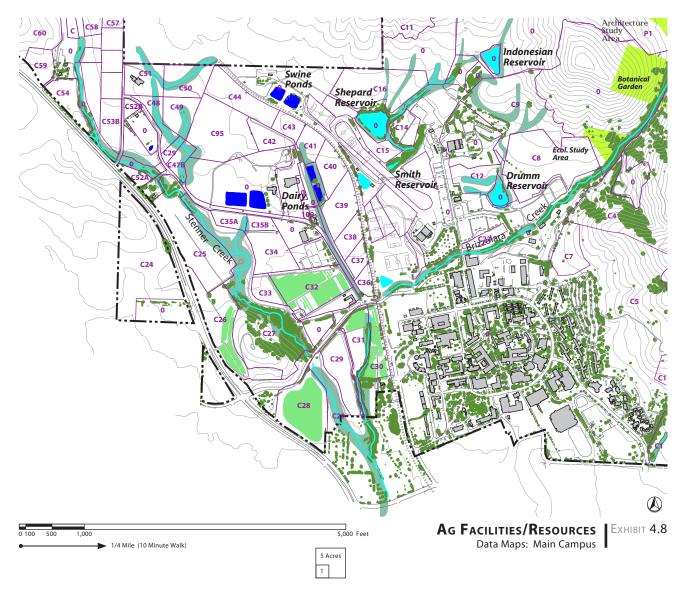








Cal Poly Master Plan

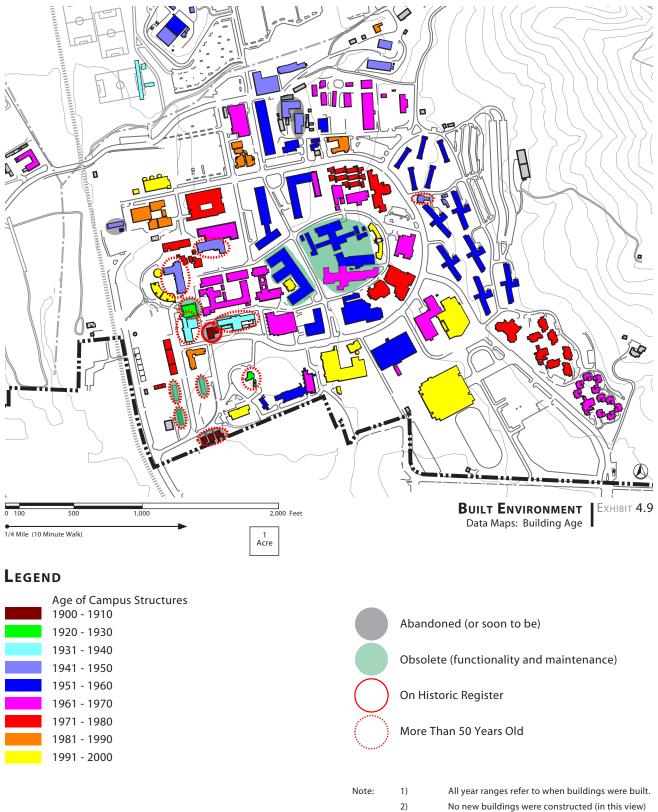


Legend

- Agricultural Field Lines
 Agricultural Field Numbers
 Orchards
 Preserves
 Water Retention Ponds
 Agricultural Wastewater Treatment Ponds
 Riparian Areas
 Trees
 - Streams
- Note: The agricultural field lines shown above represent those depicted on the 1991 Steckman maps and may not represent current condi tions, as they may change.

4.... Existing Conditions

Cal Poly Master Plan



No new buildings were constructed (in this view) between 1910 and 1920.



Riparian refers to the vegetation and habitat in and near our creeks.

CONSTRAINTS AND OPPORTUNITIES ANALYSIS

Introduction

Thorough examination of the data regarding existing conditions provides insight into the factors that shape the development of the campus. On one hand, a number of unique physical features call for protection and enhancement for their intrinsic value as well as for their contribution to the Cal Poly mission. These include the outlying scenic hills and ridges, environmentally sensitive areas, and unique agricultural lands in both the San Luis Obispo Creek and Chorro Creek watersheds. On the other hand, lands close to the existing campus core must be studied closely as to their suitability for new instructional and support activities.

Constraints

The Master Plan team grouped constraints into three categories or "tiers": regulatory, cost, and policy, with different degrees of flexibility. The Constraints Summary map in this section of the Master Plan shows how the three kinds of constraints combine to limit the areas suitable for additional facility development.

Regulatory Constraints

Land use activities are rarely prohibited absolutely. Rather some uses, especially when proposed on environmentally sensitive lands, require review by a permitting agency and incorporation of conditions and mitigation measures. Some of the following are not strictly regulatory, but carry similar intent.

Biological Resources

The campus has numerous wetlands, riparian areas (Stenner and Brizzolara creeks), ponds (10 on campus), wet meadows and drainages. Some of these fall under the jurisdiction of the US Army Corps of Engineers as "waters of the US." Filling or alteration requires permits. Portions of the campus also support a number of rare and endangered species, including steelhead in some waterways and rare plants on serpentine rock formations which are regulated by the California Department of Fish and Game (CDFG) and US Fish and Wildlife Service (USFWS).

Railroad

Union Pacific and the Public Utilities Commission control land along the railroad right-of-way and rarely allow new, at-grade crossings. This limits options for new entrances to campus. Union Pacific may consider moving or "trading" an existing at-grade crossing (e.g., the one on California Boulevard by Poly Grove) for a new location.



Agricultural Soils

The conversion of prime agricultural land for facilities development would be a significant impact under the California Environmental Quality Act (CEQA), only permitted if unavoidable, and would require an Environmental Impact Report and acquiescence of the California State University Board of Trustees.

Cost Constraints

These include site development, relocating and razing existing structures, and infrastructure provision or modification.

Slope

Development on steeper parts of campus, especially the eastern foothills, would cost more because of site preparation and foundation requirements. There is an increased risk of instability. The city and county both have restrictions on development on steeper slopes and may oppose Cal Poly's developing too far up the hills, principally on aesthetic grounds. Maps for the constraints analysis show slopes greater than 20% which may result in increased development costs.

Existing Development

The campus has made relatively recent capital investments in a number of facilities both within the campus core and in the extended campus. Proposed new development patterns need to respect both the factors determining the locations of these facilities and their life expectancy. In parts of the campus where redevelopment is appropriate, relocation costs need to be covered. Costs of razing or renovating buildings that are out of date or functionally obsolete include meeting regulatory requirements with respect to hazardous materials, such as asbestos and lead paint removal.

Infrastructure

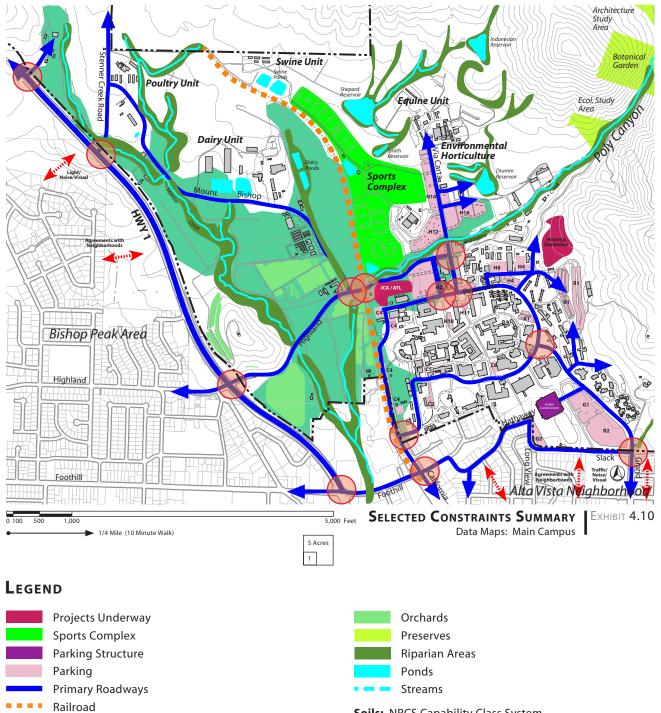
The Utilidor project defined the core provision of services. Growth at any significant distance from the campus instructional core will require more expensive utility extensions. Water and sewer capacities are not present limitations to growth.

Policy Constraints

This category includes areas where campus or California State University policy differs from city and county regulations and practices, neighborhood disputes, and issues of concern to students, staff and faculty. Dealing with these issues on the sports complex and parking structure has resulted in agreements between Cal Poly and adjacent neighborhoods to mitigate impacts.



Cal Poly Master Plan



Soils: NRCS Capability Class System

Class I Soils have slight limitations that restrict their use.



Important Intersections

Potential Neighborhood Conflicts

Light and Glare

This issue was important with the sports complex and parking structure, but impacts can be mitigated by appropriate design.

Traffic

Added enrollment will increase campus and off-campus traffic. CalTrans and the city will be looking to Cal Poly to contribute to resolution of congestion problems, especially at Grand Avenue, along Santa Rosa/ Highway 1, at Foothill and California Boulevard, and at Highland Drive. The Alta Vista neighborhood will insist on maintaining current (or less) traffic on their roads. Traffic also affects air quality.

Aesthetics

Several areas of campus, especially in the extended campus, are visible to neighbors on the hillsides; they will be concerned with the appearance of campus expansion.

Noise

Noise is more a function of specific activities rather than campus growth. This issue was important with the sports complex, but impacts can be mitigated by appropriate design.

Opportunities - Development Suitability

The analysis of existing conditions, constraints and opportunities provides the basis for the Development Suitability map. This map shows what areas on campus may be suitable for various types of new development. Using data entered in a Geographical Information System (GIS) the Master Plan Team mapped natural environmental systems, existing facilities and built environments, surrounding community issues, circulation, access and visual issues, infrastructure, and academic programs needs. The analysis focused principally on the extended campus planning area and Cal Poly's San Luis Obispo Creek Watershed ranches.

The constraints and opportunities analysis found that most of the land outside the existing instructional core was limited for new facility development due to environmental constraints. Indeed, the only areas available for development are the following:

- Drumm Reservoir area north of Brizzolara Creek;
- Feed Mill and Hay Barn Terrace area south of Brizzolara Creek;
- Slack Street and Grand Avenue area;
- Dairy Unit area;
- Old Poultry Unit;

A number of comments in the Preliminary Draft suggested more detailed analysis in this section. This is a summary of the overall constraints and opportunities analysis; readers will find more detailed discussion of proposals in the individual Physical Plan Elements. In addition, the Draft Environmental Impact Report (chapter 6) addresses implications of these development proposals.



- Stenner Creek Road and Mount Bishop Road intersection area;
- Properties west of Highway 1 near Highland Drive; and
- Portions of Cheda Ranch including the area known as Goldtree.

These areas are characterized by gentle slopes, relatively good vehicular access and availability of infrastructure, compatibility with surrounding uses, and the absence of class I soils and major biological and environmental issues. The only sites beyond the main campus are the properties west of Highway 1 and Cheda Ranch.

For each of the areas identified above the Master Plan team conducted a more detailed site analysis regarding their suitability to support various university activities. Concept plans were based on an analysis of the microclimate, biological resources and habitat, visual impacts, site access, parking, circulation and traffic, infrastructure, land uses and other site characteristics. The various Physical Plan Elements of the Master Plan describe the proposed facilities. The Master Plan EIR contains the environmental analysis for facility development in these areas.

Potential Redevelopment Areas

A number of areas on campus contain older buildings in poor condition and with inefficient building footprints and floor plans. These include the Corporation Yards area and the area in the southwest corner of the campus. Redevelopment of these areas would take advantage of existing infrastructure.

Intensification of the Campus Core

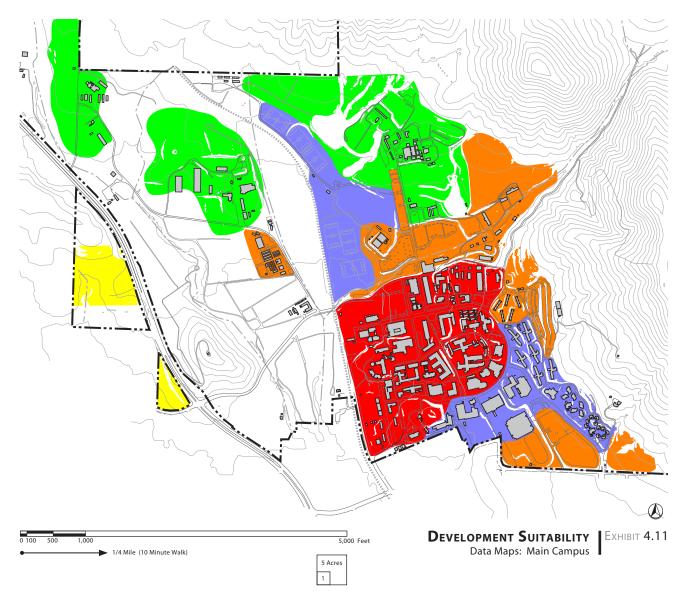
Several areas in the core contain older and sometimes functionally obsolete buildings, which are the most obvious candidates for redevelopment. The area around Science building (52) at the center of the core offers the opportunity to develop a much higher density of classroom, office, and support. Redesign of this area could also provide more green space and improve pedestrian circulation. Replacing one-story buildings with multiple-story structures will allow the campus to accommodate more instructional and support space withing the campus core and redevelopment areas.



Cal Poly Master Plan

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Existing Conditions 63



Legend

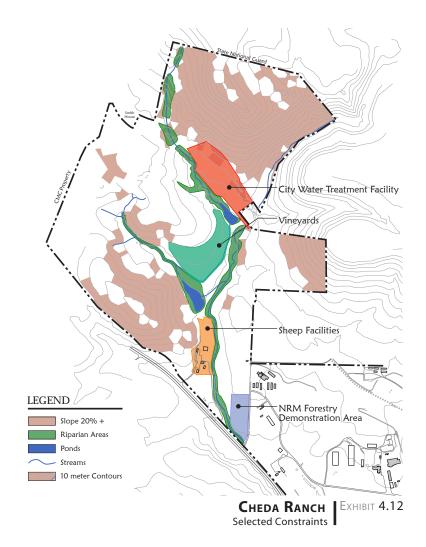
- Opportunities for Intensification and/or Redevelopment
- Suitable for Facilities Expansion
 - Suitable for Specialty Housing
 - Suitable for Agriculture Facilities Enhancement (or possible remote parking near Stenner Creek Road)
- Developed Areas for Which No Changes Are Proposed
- White Areas Within the Colored Areas Represent Areas From the Constraints Summary Which Have Limitations for Development

New discussion - Goldtree area and Cheda Ranch.

Satellite Development

Rather than expanding out from the existing core of campus, another option would be to establish a separate center of building and activity at a satellite location. This option would require investment in the delivery of services and infrastructure, but could provide opportunities for consolidation and other efficiencies for the activities that would move.

The northwest corner of Cheda Ranch includes an area known as Goldtree. Traditionally, this area has consisted of three fields (C62, C63, C64), totaling about 52 acres. In conducting feasibility studies for



ancillary activities at a satellite location, the Master Plan team examined a slightly larger area (including fields C65 and part of C61, but excluding C64 as too steep) to determine which land might be more suitable, con-



sidering environmental, regulatory, cost and policy constraints. Based on soil type, slope, and current condition, an approximately 60-acre area was identified as most suitable for potential development, and became known as the Goldtree project area or site. It is close to the Union Pacific Railroad and has access to water, sewage treatment and electricity. Access could be provided from Highway 1 (perhaps from an improved intersection near the site or at Stenner Creek Road) and/or internally from Mount Bishop Road.



University Land Uses
Natural Environment
Outdoor Teaching and Learning
Campus Instructional Core
Residential Communities
Recreation, Athletics and Physical Education
Public Facilities and Utilities
Circulation
Alternative Transportation
Parking
Support Activities and Services
Ancillary Activities and Facilities

5 PHYSICAL PLAN ELEMENTS What might we look like in the future?



UNIVERSITY LAND USES

Introduction

Cal Poly presently manages over 9,000 acres for instructional and related uses in three major locations. Cal Poly's lands adjacent to the City of San Luis Obispo consist of the intensely used campus core and contiguous acreage to the northeast and northwest in the San Luis Obispo Creek watershed. In addition, the campus has three ranches (Chorro Creek, Walters and Escuela) in the Chorro Creek watershed on both sides of Highway 1 north and west of Cuesta College in San Luis Obispo County. Further, the campus manages about 3,200 additional acres at Swanton Pacific Ranch in Santa Cruz County just inland from the coast, north of the community of Davenport (discussed in a section of the Plan to be prepared later). In addition to these three sites, Cal Poly also is involved in leases, consortia, and other research arrangements at off-campus sites, such as a research station in the Carrizo Plain.¹

This element provides an overview of the Master Plan in terms of the balance among different activities that occur in all three locations. It establishes the broadest level of policies and principles and sets the stage for the more specific elements that follow.

Environmental Consequences

Environmental issues have been identified for plan components and are found throughout this chapter in these boxes. The issues identified consist of long-term effects of each component; temporary impacts associated with construction activity are discussed in Chapter 6 of this document. More detail regarding the environmental setting, the quantification of impacts and applicable mitigation is also located in Chapter 6. Chapter 6 constitutes the environmental impact report (EIR) for the Master Plan Update.



¹ The Master Plan focuses on lands used for instruction and related purposes. Therefore, it does not address any lands managed by the Cal Poly Foundation as part of the University's investment or endowment portfolio, nor the 600 acres in timber at Valencia Creek in central Santa Cruz County.

Background and Issues

The use of Cal Poly's lands has emerged historically without a detailed plan for all its property in San Luis Obispo. Previous master plans have focused on the campus core and agricultural facilities in the extended campus to the north of Brizzolara Creek.

Issues²

- Lack of clearly designated existing or future land uses, leading to ambiguous expectations and tensions regarding competing demands.
- Inconsistent density and intensity of activity in the campus core.
- Lack of access between campus core and outdoor teaching and learning sites.
- Impacts such as view obstruction, noise, light and odors caused by changes in land uses adjacent to, or visible from, nearby neighborhoods.
- Impacts on the economy, housing market, circulation and transportation systems, public services and environmental resources associated with any increases in enrollment.
- Concern about compatibility of Cal Poly land uses with City and County land use policies.

Principles

The land use element of the Master Plan recognizes that all property has one or more existing or future uses. The land use map designates all these uses. In some instances, one use is an overlay over another for example, environmentally sensitive areas overlap some lands used for outdoor teaching and learning.

Cal Poly's approach to land use planning recognizes seven basic principles: balance among land uses that serve the University's academic mission, environmental suitability and sustainability, compatibility between adjacent uses, proximity among related uses, compactness in the instructional core, protection and provision of green space, and communitybuilding. Consistent with these principles, the land use diagrams in



² Issues include items identified by campus and community members during Fall 1998, at public meetings during Winter 1999, during task force discussions in Spring 1999, and at subsequent meetings with campus and community groups in Fall 1999 and Winter 2000.

the Master Plan provide designations for all Cal Poly lands in San Luis Obispo County.³

Balance

This principle recognizes that all uses of Cal Poly's lands must be balanced in support of the University's academic mission - both within the existing campus core and in surrounding lands. To serve instructional uses, sufficient amounts of land must also be identified for support facilities and services, student housing, recreation, parking and ancillary activities. This principle also stresses foresight in designating future land uses to meet emerging academic needs and to take advantage of promising land management practices.

Environmental Suitability and Sustainability

The Master Plan seeks the best fit of instructional and supporting land uses to the widely varying character of Cal Poly's lands - geology, topography, soils, watersheds, plant and animal communities and scenic views. Following this principle, the Master Plan designates environmentally sensitive areas for protection and retains all currently available prime agricultural soils for agricultural use. Further, the Master Plan recognizes that land use as well as site and building design can take advantage of Cal Poly's environmental assets, such as its climate and surrounding hills. Thus, the principle of environmental suitability calls for upgrading buildings and grounds within the campus instructional core, for limiting future development to those areas least affected by regulatory and/or high cost environmental constraints, and for enhancing environmentally sensitive areas that have become degraded. The principle of environmental suitability and sustainability also encompasses resource and energy efficient planning and design.

Compatibility

Cal Poly recognizes that the institutional nature of a campus is different in scale and intensity from other urban, suburban and rural activities. Thus, this principle calls for establishing and maintaining a buffer between such uses as undergraduate student housing and single-family residential neighborhoods adjacent to campus. At the same time, faculty and staff housing might be built near existing single-family residential neighborhoods. This principle also recognizes that some instructional and related activities generate traffic, noise, light, odors, and other impacts that may affect surrounding neighborhoods as well as other instructional and related activities on campus. Prime agricultural soils refer to the most valuable soils for farming.



³ The Master Plan team synthesized this list of principles from meetings with the President and senior campus executives and from recommendations provided by the campus/community Land Use, Natural Environment and other task forces during Spring 1999.

Proximity

The Master Plan seeks to connect related activities to facilitate student learning - e.g., access between classrooms and laboratories and faculty offices, access to outdoor learning sites, access to academic and support services such as advising, student organizations, and recreation. Thus, new undergraduate housing should be near existing residence halls, and support services should be integrated within the instructional and residential communities. In contrast, activities that need not/cannot be provided within a 10-minute walking radius can be located at more remote sites - i.e., ancillary activities connected less directly to core instructional programs and/or activities that require significant land area.

Compactness

Cal Poly can use its land more effectively by maintaining and expanding the campus core within a 10-minute walking radius for instructional activities. A compact core can integrate multiple instructional and support functions in three-to-four story buildings and simultaneously provide open space for outdoor learning, passive recreation, and social functions. Compactness also makes it possible to consolidate related activities into "one-stop" service areas for students, faculty and staff. Making the campus core more compact calls for the relocation of some present uses to more optimal sites and redevelopment of selected areas.

Green Space

Green space is an integral part of the environment and is essential to the physical and social well-being of the campus. Cal Poly uses its lands in many different ways, ranging from passive recreation and study, and rural, agricultural uses to intense residential, recreational, and instructional activities. Green space plays a different role for each use, depending on the level of activity. Thus, this principle calls for planning, protecting and managing scenic and environmentally sensitive areas on the main campus, San Luis Obispo Creek watershed ranches and Chorro Creek watershed ranches, consistent and complementary with outdoor learning, and the maintenance of environmental quality to sustain an attractive and resource efficient campus. In addition, it calls for the provision and design of green space as a component of each land use in the extended campus - including agricultural units as well as new residential complexes. The Campus Instructional Core element of the Master Plan addresses the design of a system of green spaces as central to creating a sense of place and visual continuity. Finally, campus green spaces should form links (spaces and corridors) at all scales to provide connections that help orient people throughout the campus.



Community

The Master Plan seeks to create a sense of community and identity on campus through its land use patterns. Centrally, the Master Plan integrates a range of teaching and learning activities within the campus core - active instruction, technology-enhanced learning, small and large group discussion areas. Further, consistent with the principle of proximity, the Master Plan calls for a mixed-use residential community with a range of support services, as well as concentrated activity centers in the campus core that can provide a more intense community center.

Plan Components - Land Use Designations

In order to serve the University's academic mission, the Master Plan proposes a set of land use categories. Two features of this classification scheme merit comment. First, Cal Poly has developed a set of designations that connect directly to integrated teaching and learning. Thus, the categories do not follow traditional city planning designations, such as housing, commercial, office, and the like. Second, Cal Poly recognizes that all lands have one or more present and future uses. Thus, the Master Plan uses specific terminology, such as "outdoor teaching and learning" and "environmentally sensitive areas" rather than a more generic "open space" designation.

Natural Environment

Existing physical features, policies and regulations determine the environmentally sensitive areas and assets on campus. Recognizing that other activities may also occur in these areas, the Master Plan designates environmentally sensitive areas as an overlay on the land use diagram. The Master Plan also recognizes that the appropriateness of other activities depends on the relative sensitivity of each area. Thus, the Natural Environment section of the Master Plan distinguishes areas for protection, enhancement, and study.

Outdoor Teaching and Learning

With Cal Poly's polytechnic programs and applied "learn-by-doing" approach to education, a significant amount of teaching and learning occurs outside traditional classrooms and laboratories. The College of Agriculture depends on a wide range of fields, animal units, and research centers as "living laboratories" to support its programs. In addition, students and faculty in the College of Science and Mathematics study different geologic, biological, and botanical features of the campus. Design Village offers experimental design and construction opportunities for the College of Architecture and Environmental Design. The College This section of the Plan defines each land use designation. Subsequent elements of the Master Plan develop the detailed policies and components for each of these land uses and activities.



of Engineering uses outdoor facilities in such disciplines as transportation engineering. Finally, faculty in the University Center for Teacher Education and College of Liberal Arts take advantage of the campus setting to connect literature and culture with nature. The discussion of Outdoor Teaching and Learning designates land that regularly supports instruction, both within and outside the campus core. The Master Plan calls for Outdoor Teaching and Learning facilities that are designed and managed to promote an integrated teaching and learning environment where both buildings and spaces are central to the learning experience.

Campus Instructional Core

The instructional and support activities in the campus core define the life of the campus community. This land use encompasses the facilities and outdoor spaces east of the Union Pacific Railroad, south of Brizzolara Creek, and west of Perimeter Road/Grand Avenue. This 200-acre area concentrates an intense mixture of activity - classrooms, teaching and research laboratories, media support, study areas, advising centers, student organizations, committee meetings, food service, social interaction and recreation. The Master Plan focuses on making the campus core more "student-friendly and learner-centered." In order to use land more effectively, increase open space, and improve pedestrian and bicycle circulation, the Master Plan calls for expansion and redevelopment of selected areas within the campus core.

Residential Communities

The Master Plan designates several areas for residential communities. The most prominent is the expansion of undergraduate student housing to accommodate enrollment growth. Both new residential complexes as well as the existing student residence halls are being redesigned as living/learning communities, with a range of services integrated within them - including study, food service, and personal services. In addition, the Plan designates potential areas for married student housing, and faculty and staff housing, accompanied by appropriate services.

Recreation, Athletics and Physical Education

Any change in the number and composition of students affects the amount of land needed for sports and recreation. While the Plan calls for consolidating new athletic facilities north of Brizzolara Creek, other recreational opportunities will remain focused around the Recreation Center south of Perimeter Road, and new facilities will be included as part of the new residential communities.



Public Facilities and Utilities

This land use category recognizes the critical role of public facilities to support the campus, while acknowledging that not all of them need to be proximate to the campus core. Thus, this section of the Master Plan designates land for such functions as the campus warehouse, transportation services, farm shop, and University Police. The Master Plan does not designate infrastructure as a land use. Rather, the discussion focuses on the capacity of these physical and utility systems to serve campus land use activities.

Circulation, Alternative Transportation and Parking

The Master Plan recognizes that parking is a major land use because most students, faculty and staff continue to commute by car. Related elements of the Plan address access and circulation issues and alternative transportation policies, which are designed to reduce parking demand. Nevertheless, the Master Plan must designate some land for surface lots and proposed parking structures to replace parking areas identified for other uses (e.g., in the expanded campus core) and meet projected parking needs.

Support Activities and Services

The Master Plan discusses the nature and extent of academic and support services required to support student enrollment, instruction, and an expanded residential community. However, because these services are designed to be integrated within the campus core and residential communities, the Master Plan does not designate support services as a separate land use.

Ancillary Activities and Facilities

A campus often attracts ancillary activities that contribute to the life of the campus and surrounding community and complement the University's academic mission. To allow for such future possibilities, the Master Plan identifies areas appropriate for such activities within the instructional core and at satellite locations, such as a portion of Cheda Ranch known as Goldtree. Realization of such possibilities is likely to be tied to opportunities for partnerships with donors and other interested parties.

Plan Components - Overall Future Land Use

This section of the Land Use element provides an overview of the arrangement of future land uses at Cal Poly. Please refer to Chapter 7 for a discussion of campus procedures for considering any proposal to change these definitions or map designations.



Main Campus

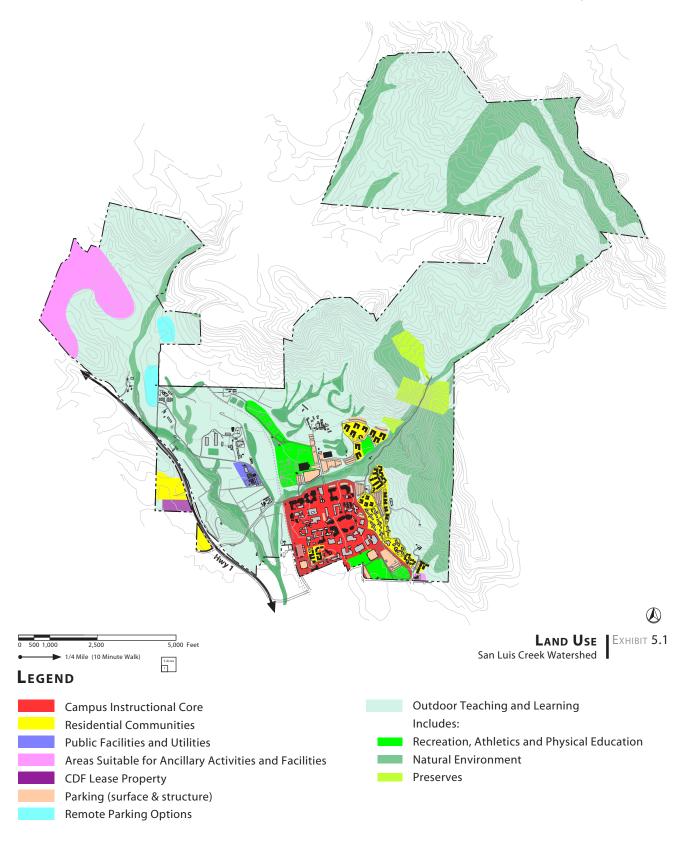
The land use map shows that portions of the Campus Instructional Core will be redeveloped and expanded north to Brizzolara Creek, and that new regular instruction and support activities required to meet future enrollment needs will be concentrated within this area. This will require relocating some current facilities, such as the Corporation Yards and Farm Shop to provide additional land for academic use within the core.

The Master Plan continues to designate most lands in the Extended Campus beyond the Instructional Core for outdoor teaching and learning. In addition, the Plan relocates some facilities to provide land for future residential and recreational needs close to the campus core. The map provides an overlay indicating environmentally sensitive areas requiring careful protection, management, and, in some instances, restoration.

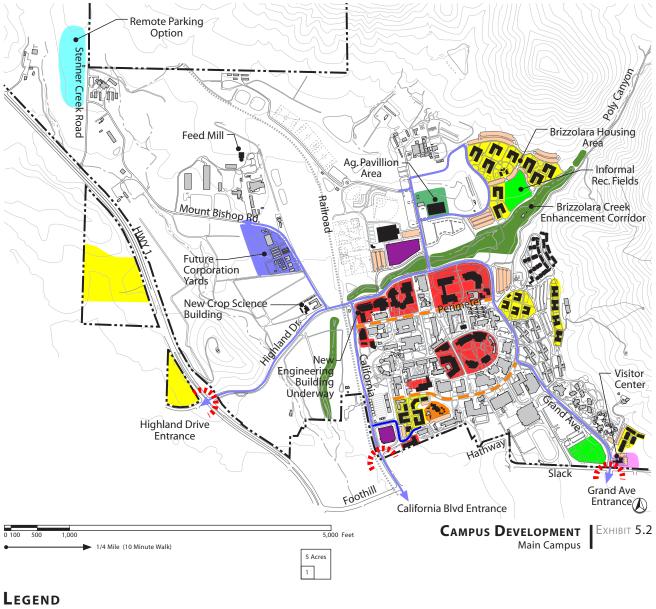
The main additions to student housing involve the creation of residential communities that extend north from the present residence halls into the area currently occupied by the beef unit. A smaller student residential complex may be built in the southwest corner of campus. Future faculty and staff housing may be constructed west of Santa Rosa Street (Highway 1). Future athletic facilities would be grouped north of Brizzolara Creek around the Sports Complex, except for some recreation fields within student residential communities. The map identifies one potential area for ancillary activities and facilities in the Extended Campus: the site in the southeast corner near Grand Avenue and Slack Street.

Circulation improvements include connecting California Boulevard to Highland Drive, and extending Highland Drive south of Brizzolara Creek to join an extension of Grand Avenue - all of these with commensurate improvements in intersections and public transportation, pedestrian and bicycle routes. Within the campus core, through traffic will be removed from both North and South Perimeter roads. The Master Plan accommodates parking by adding some additional capacity, but also by reducing the demand through policy alternatives. The Plan replaces surface parking that would be displaced by redevelopment and expansion of the campus core and by new student housing. In addition, the Master Plan provides for two additional parking structures - one near the California entrance in the Campus Instructional Core and one north of Brizzolara Creek in the Extended Campus.











Agricultural Pavillion Area **Optional Anicillary Facility** Retreat/Alumni Center **New Housing Areas** New Recreation Areas Potential Enhancement Areas **Remote Parking Options**

	Instructional Core Redevelopment Areas
	New Parking Structures
	New Surface Parking Lots
11 M	Gateway Entrances
	Primary Roadways
	Facilities Services, Facilities Planning, Farm Shop, Transportation Services and Support Shops
	North and South Perimeter Pedestrian Ways



Cheda, Peterson and Serrano Ranches in the San Luis Obispo Creek Watershed, and Chorro Creek, Walters and Escuela Ranches in the Chorro Creek Watershed

Future land use at the ranches in both the San Luis Obispo Creek watershed contiguous to the Main Campus and in the Chorro Creek watershed west of Cuesta College will continue to be rural, focusing on outdoor teaching and learning, except as noted below. As on the main campus, an overlay will designate environmentally sensitive areas for protection. Some specific areas will change to accommodate facilities from the Animal Science Department that will be moved away from the main campus to Chorro Creek or Walters ranch. In addition, the land use map identifies an area for ancillary activities and facilities at the Goldtree area on the northwest portion of Cheda Ranch.

Plan Components - Alternative Land Use and Circulation Patterns for Main Campus

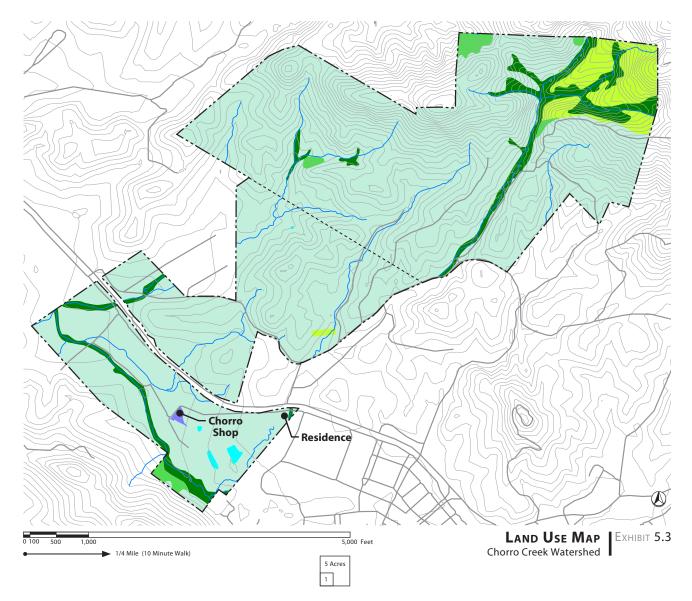
The Campus Development map reflects the outcome of a process of weighing different land use and circulation alternatives for the main campus. The Master Plan team explored a variety of options for providing additional instructional and support space, housing additional students, moving sports and recreation facilities, adding parking, and improving circulation. As the team weighed different choices, the principles enumerated above (and in the more detailed plan elements) guided the refinement of the land use and circulation plan.

Analysis of environmental suitability and outdoor teaching and learning requirements limited the area under consideration for expansion of instructional capacity and provision of additional student housing. At the same time, the principles of proximity and compactness called for those activities to be close to the existing campus core. Balancing these requirements led to the plan to remove uses like the warehouse from the core and to relocate selected animal science facilities to simultaneously improve their academic quality and allow for environmental restoration. Environmental analysis of the Goldtree area in the northwest portion of the main campus showed development potential. However, the remoteness of the site (about 2 miles from the campus core), along with access and infrastructure limitations, suggested that it would be more appropriate for future ancillary facilities.

The principles of compatibility and proximity strongly influenced the consolidation of athletic facilities north of Brizzolara Creek. In addition, the configuration of new student housing to form distinct residential communities contiguous to existing residence halls, with a full range of support services, activities and programs, followed these principles along with the principle of community.



Cal Poly Master Plan



Legend



- **Existing Agriculture Facilities** Outdoor Teaching and Learning
- Roadways

Environmentally Sensitive Areas



Biologically Sensitive Areas Significant Riparian Areas Reservoirs

Streams



The desire for compatibility and compactness also guided plans for vehicular circulation on campus. Extensions to California Boulevard and Highland Drive permit the removal of regular through traffic on North and South Perimeter roads so as to reinforce a compact campus core and make it more pedestrian and bicycle friendly.

Finding land for parking proved most challenging. The principle of proximity calls for making the campus core readily accessible from parking lots, yet the amount of land required for parking (and/or cost of additional parking structures) at present parking ratios was formidable. Further, the same proximate lands are in demand for outdoor teaching and learning, campus instructional core uses and student residential communities. These considerations required a balanced approach - increasing access via alternative transportation, reducing parking demand, and still providing some additional parking. A remote vehicle storage site with shuttle service remains a potential option to balance parking demands with limited parking space in the instructional core.

Plan Components - Building and Landscape Design Guidelines

Several of the plan elements that follow contain principles and recommendations to guide future building and landscape design so as to achieve healthy, productive and comfortable indoor and outdoor environments. The Campus Instructional Core element provides the most direction with respect to design principles such as Sense of Place, Compactness, and Visual Continuity. It also includes a section specifying how a green space plan and a landscape plan should be developed as implementation studies. In addition to establishing aesthetic and user-sensitive design, the Master Plan is concerned with energy efficiency and resource conservation. The Public Facilities and Utilities element covers these characteristics of campus development. Other plan elements that involve development, such as Outdoor Teaching and Learning, Residential Communities, Parking, and Ancillary Activities and Facilities, do not repeat either these aesthetic or sustainability principles. Nevertheless, it is the intention of the Master Plan that they be applied to all campus development, including projects undertaken by campus auxiliaries, the Foundation and Associated Students, Inc. As the building and landscape design guidelines are developed, they will take into account the different features of different parts of campus, particularly, the Campus Instructional Core, agricultural facilities in the extended campus, and residential communities.

New section - discussion of Building and Landscape Design Guidelines.



Please see the description of Existing Conditions in the Draft Environmental Impact Report (Chapter 6) for additional descriptive information about Cal Poly's environmental setting.

Serpentinite refers to a rocky geologic formation of a greenish hue that supports a number of rare plant species.

Riparian refers to the vegetation and habitat in and near our creeks.

NATURAL ENVIRONMENT

Introduction

This element recognizes the land at Cal Poly that remains in a relatively natural condition. Of the 6,000 acres held in San Luis Obispo County, only a small percentage constitutes the developed campus. A larger percentage is devoted to agriculture, much of which is grazing land that adds to the region's natural beauty. The balance is part of California's very unique coastal landscape, one of only a handful of Mediterranean climates found in the world.

Background and Issues

Cal Poly's natural environment may be viewed as several "landscapes," each with qualities meriting conservation and offering numerous academic assets.

San Luis Obispo Creek Watershed Ranches and Main Campus

Many of the area's natural resources infiltrate from the surrounding ranches into the Main Campus. These include the Brizzolara and Stenner Creek riparian corridors, the Santa Lucia hillside range and the entrance to Poly Canyon. The Master Plan recognizes these features and responds to the need for an appropriate balance between the urban and natural environments.

Ridges and Foothills

The Santa Lucia range and volcanic morros form the setting of Cal Poly and the city of San Luis Obispo. The eastern edge of the extended campus is built against the foothills of the Santa Lucia range. These features create a dramatic natural setting for the campus with panoramic views. Some of the steep slopes are studded with rare serpentinite rock formations. Steep slopes on these hillsides are subject to erosion and other forms of degradation from grazing and human activity.

Plant and Animal Communities

The vegetated habitats of the campus include oak woodlands, chaparral, coastal scrub, serpentine grasslands, riparian woodlands and other habitats. Although non-native annual grasses have intruded into much of the area, important ecological study areas remain relatively undisturbed.



Water Resources

The campus also has numerous reservoirs, many of which function as wildlife habitat as well as irrigation water resources.

Poly Canyon including Peterson Ranch

Poly Canyon provides a direct route up Brizzolara Creek into the relatively undeveloped areas northeast of the campus instructional core. The steep walls and rolling hillsides protect a rich variety of flora and fauna. This area is used extensively by biology students, natural resource management classes, Design Village, and ROTC. The Canyon offers a serene setting for studies using this natural resource and also for those that come for active and passive recreation.

Stenner Canyon

Farther from the core than Poly Canyon, Stenner Canyon on the northwest side of the campus core offers examples of coastal scrub and, eventually, an avenue to the rare serpentine ridge with endemic species not yet degraded by non-native grasses from Europe and Africa. This area is a natural laboratory adjacent to the Los Padres National Forest and is close enough for field study within regular class periods.

Chorro Creek, Walters and Escuela Ranches

Cal Poly's ranches west of Cuesta College occupy approximately 3,000 acres situated above the Chorro Valley and across from the Hollister Peak. They offer valuable agricultural and biological resources typical of the original California coastal landscape. The ranches are used for various agricultural studies such as vineyards, grazing and dry farming. A 211-acre biological preserve is located north of Highway 1 on Escuela Ranch. Several creeks and drainages traverse the ranches and eventually flow into Chorro creek and on to the Pacific Ocean.

Issues¹

- Lack of a complete inventory and understanding of Cal Poly's natural and biological resources
- Inconsistent recognition of natural areas as valuable instructional assets

"Preserve" refers to areas on campus with high biological value that are not appropriate for development, grazing or other activities that would degrade their quality.



¹ Issues include items identified by campus and community members during Fall 1998, at public meetings during Winter 1999, during task force discussions in Spring 1999, and at subsequent meetings with campus and community groups in Fall 1999 and Winter 2000, including the Biological Sciences Advisory Committee.

Several comments on the Preliminary Draft raised questions about environmentally sensitive area around the "P" above the residence halls. Issues such as this will be addressed as part of the Land Management practices being established to implement the Master Plan.

- Degradation of natural areas, especially riparian corridors
- Water quality in creeks
- Erosion on steep slopes, including the vicinity of the Cal Poly "P"
- Intrusion of campus development on some plant communities and wildlife habitats
- Air quality

Principles

Cal Poly's natural resources are no less a vital component of its academic mission than its classrooms and croplands. Students from nearly every college study, explore, restore and enjoy the environment surrounding our campus. Using these resources wisely, and sustaining them, is a message that sometimes only a university can adequately convey through the generations. The principles that guide Cal Poly in the future include developing ways to better understand, sustain and conserve our natural resources. Implementation of the Master Plan provides Cal Poly with a unique opportunity to maintain and improve its leadership role as a steward of the land.²

Stewardship

In addition to carrying out its primary mission of education and research through academic programs, the University functions as a prestigious and powerful institutional citizen. Within the overall context of its mission, the University will adopt management practices that protect and enhance the natural resources within its boundaries. Cal Poly's 6,000 acres in San Luis Obispo County constitute a large portion of the Chorro Valley and are recognized by many as one of the region's most important natural areas, especially given its role as a watershed for the Morro Bay National Estuary. The principle of stewardship includes permanent protection of environmentally sensitive areas as open, undeveloped lands.

Understanding

Cal Poly, as one of the premier educational institutions of the western United States, should offer education, insight and understanding of



² The Master Plan team synthesized this list of principles from meetings with the President and senior campus executives and from recommendations provided by the campus/community Land Use, Natural Environment and other task forces during Spring 1999. In addition, the Landscape Advisory Committee and Biological Sciences Advisory Committee provided guidance for the development of this element.

our natural environment to the greater community. Various colleges, through study and research, should continue to expand our knowledge of the rare coastal and related ecosystems that exist here and which are threatened in so many areas elsewhere. The natural and biological resources on the campus must be inventoried and studied as to how they can be managed and conserved so that future generations of students can use these relatively undisturbed, natural outdoor laboratories as part of their educational experience at Cal Poly. Please see the Outdoor Teaching and Learning element regarding the educational importance of Cal Poly's natural environment.

Conservation and Sustainability

Managing coastal ecosystems is a valued academic endeavor. San Luis Obispo County receives national attention and funding for protection of its natural resources including prime agricultural lands. Cal Poly should participate in these opportunities through education in the use and protection of our resources that perpetuate their existence.

Biodiversity

Cal Poly has a high biodiversity and variety of native biotic communities within walking distance of the Campus Instructional Core. This feature needs to be recognized and addressed in the Master Plan. Typically, these sites are of value or interest because of their particular physical features, wildlife habitat, and/or vegetation which are valuable for education and research in resources management. For example, there are several rare or endangered species and sensitive habitats on the campus that need to be protected for the long-term. Thus, Cal Poly will respect such study areas - e.g., relatively undisturbed native biotic communities, areas of past or current disturbance that need to be restored, areas of managed grazing, or harvest of agricultural crops.

Viability

Natural systems, plant communities and wildlife habitats typically require a minimum size - i.e., land area, density, or width - in order to maintain their integrity and ability to support a diversity of species. Riparian corridors require linear continuity as well as breadth. Through the Master Plan, Cal Poly should enhance the viability of natural systems and communities on campus. Further, because non-native plants can intrude across transition zones, ecological study areas require buffers from adjacent land uses.



Enhancement

Degraded areas of Cal Poly's natural resources should be enhanced both as an act of stewardship and as an academic opportunity to conduct research, and implement actions to incorporate appropriate management and enhancement practices.

Aesthetics

Cal Poly has many native ecosystems as a backdrop for the campus. Not only are they used by students, but many visitors from all over the world and members of the community visit and appreciate the beauty of Cal Poly and recognize the importance of protecting these open space areas for future generations. Development and redevelopment stemming from this Master Plan will be sensitive to, and take advantage of, the campus' visual resources.

Access

Cal Poly should provide access to its natural resources to enhance recreation and education, but trails and roads should be carefully designed and managed to avoid degradation of natural areas.

Plan Components

The Master Plan designates areas of land that are environmentally sensitive. These are generally shown as shaded areas on the land use maps. Some areas overlap with outdoor learning and other designations, and these areas should be coordinated with policies listed in their respective Master Plan elements. (*refer to land use maps in the University Land Uses section*)

The Master Plan proposes actions for the following environmentally sensitive lands on the 3,000 contiguous acres of the San Luis Obispo Creek Watershed ranches, and the Chorro Creek, Walters and Escuela ranches in San Luis Obispo County.

Ecological and Biological Study Areas and Preserves

The College of Science and Mathematics has designated several preserves and study areas for long-term research and protection on both the main campus and at the Escuela Ranch. In addition, class field trips and research activities use other outdoor lands regularly. These areas will need to be protected from activities, including grazing, that may degrade their value as excellent biological and botanical educational resources.



Environmental Consequences

Preservation of ecological and biological study areas will have a beneficial effect on the environment (Class IV).

Protection and Enhancement of Stream Systems

Brizzolara Creek flows through Poly Canyon and along the northern edge of the campus core. The section that flows alongside the feed mill site and other animal science facilities has been degraded. Sections of the creek banks have been reinforced or filled in. Existing facilities close to the creek need to be removed to allow for sufficient setback for creek enhancement and protection of the habitat and riparian-woodland community. Stenner Creek emerges from Stenner Canyon, passes near Cheda Ranch and crosses Highland Avenue where it is joined by Brizzolara Creek. Cal Poly has begun to restore and enhance these riparian corridors along Brizzolara Creek. Seasonal creeks exist on campus lands at the Chorro Creek Watershed ranches. Future development should provide buffers, include enhancement, and ensure there will be no further degradation of riparian areas. (*refer to the campus development map in the University Land Uses section*)

Environmental Consequences

Creek enhancement will generally have positive effects on the environment, enhancing habitat and aesthetic values. Although enhancement of riparian corridors is designed to result in overall improvements to biologic and hydrologic quality, immediate impacts of excavation, vegetation removal, and other activities may be adverse. Mitigation is recommended to aid in the reduction of impact significance.

Serpentine Protection

County maps as well as conservation organizations show where Cal Poly lands contain rare plant species endemic to serpentinite rock formations. The Nature Conservancy recognizes Cal Poly's serpentine endemics as one of California's most important rare habitats. These areas should be protected and designated as botanical reserves with instruction and conservation as the only allowed uses. See the Outdoor Teaching and Learning element for a discussion of the Brizzolara Creek Enhancement project.



Environmental Consequences

Serpentine protection will have a beneficial impact on visual resources (rock outcrops), sensitive plants which are associated with serpentine soils, and will protect a unique geologic feature (Class IV).

Water Reservoirs and Other Impoundments

Over the years a number of ponds have been established as water supply and retention and detention facilities for campus agricultural lands. Many of these ponds have developed wetland habitat qualities that support western pond turtles, fish and numerous waterfowl and other bird species. Protection of these qualities and various wildlife species should be incorporated where practical into Cal Poly's pond maintenance practices. The ponds should also receive an edge buffer treatment from any nearby development.

Environmental Consequences

Required maintenance (other than emergency repairs) for Cal Poly's ponds can be disruptive to wildlife and wetland values. Maintenance work shall minimize effects on vegetative communities surrounding the edge of the resource. Activities near the ponds should be sensitive to the wildlife that use the waters and nearby vegetation. Regulatory agencies shall be contacted where necessary.

Steep Slopes

The Extended Campus's eastern edge is built against the foothills of the Santa Lucia range. The City and the County have developed regulations to protect hillsides and to reduce damage to structures from steep slopes and poor building conditions. Development costs and slope failure risks are considerably higher when buildings are placed higher up on the hillsides. Hillside views are also degraded as a result of this condition. The Master Plan considers slope limitations in the selection of potential development sites. A special set of management practices need to be developed for the area around the Cal Poly "P" east of campus in order to reduce erosion and protect the fragile slope around this landmark.



Environmental Consequences

Limitation of development from steep slopes will protect highly visible and scenic areas around the campus. Protection of these hillsides will also protect native grassland, populations of *Calochortus obispoensis* (a sensitive plant species), and rare plants associated with serpentine soils as well as reducing the likelihood of erosion and sedimentation of riparian areas. The restriction is beneficial (Class IV).

Vegetated Habitats

As part of the implementation of the Master Plan, Cal Poly should maintain an inventory of oak woodlands, chaparral, coastal scrub, serpentine communities, native grasslands and other habitats. Further delineation of campus plant communities will be undertaken as an implementation action. Additional areas should be evaluated as botanical preserves.

Environmental Consequences

A thorough investigation and inventory of sensitive plant species and communities on the property will provide not only Cal Poly, but also the populace at large, with a better understanding of the resources present. This will be beneficial (Class IV).

Habitat for Rare and Endangered Species

Implementation of the Master Plan should include maintaining an inventory of any rare and endangered plants and animals on campus lands and a set of management practices for their protection and to maintain the viability of their habitats.

Environmental Consequences

Inventorying the habitat of rare and endangered species will prevent adverse effects or modifications of their environment or habitat. Management practices enacted for protection of these species will help to prevent further population loss. This action will be considered beneficial (Class IV).



Grazing

Many areas of Cal Poly are rich with natural resources, and are also used for grazing sheep and cattle. These areas should be managed to realize the best practices for grazing while maintaining their ecological values.

Environmental Consequences

Protection of biological resources in the grazing land management program will benefit plant and animal species currently impacted by grazing activities (Class IV). Implementation of the proposed policy may also benefit soils if proposed grazing management include measures to limit slope and soil disturbance.

Trails

Rural roads and trails provide access to agricultural and natural areas outside the campus core for recreation and study. To protect those assets, trails should be improved, and new trails should be designed and managed to be sensitive to ecological resources. Some areas should be designated as suitable for foot trails only; other areas should permit horseback riding and mountain bikes. Trail standards need to be designed to address security as well as environmental issues - for example, stiles can provide access where appropriate over fences or locked gates. The County of San Luis Obispo has a Trails Plan (1991) which identifies portions of Cal Poly property as suitable for expansion of the trails system. The implementation of the Master Plan will include consultation with the County regarding placement of these trails on site.

Environmental Consequences

Trail development can create modifications to drainage patterns, inducing erosion to hillsides, which increases sediment loading in surface waters. The plan component is explicit in its directive to site trails in an ecologically sensitive manner; impacts are less than significant (Class III).

Vehicular Access

Poly Canyon Road and other rural roads provide vehicular access to agricultural lands, Design Village, and other sites away from the campus instructional core. Vehicular access on these roads, including Poly Canyon Road, should be limited to campus service, maintenance and



emergency vehicles. Rural road maintenance should be sensitive to the natural environment - particularly erosion and water quality at stream crossings.

Environmental Consequences

Environmentally sensitive maintenance of roads will result in beneficial impacts to riparian areas and vegetation. Proper maintenance may also reduce soils erosion and consequently, sedimentation of riparian areas. These impacts are beneficial (Class IV).

Extended Campus

The Extended Campus's natural resources include habitats along its edge, the Brizzolara Creek riparian corridor, and Smith, Shepard and other nearby reservoirs. These areas will be enhanced and buffered during redevelopment of the campus core.

Environmental Consequences

Enhancement of visible natural resources will have a beneficial impact on aesthetics. Enhancement of modified habitats will have a beneficial impact on plant and animal species and will suppress soil erosion and reduce the potential for landslides. Enhancement of degraded reservoirs and riparian corridors will benefit hydrologic processes and water quality where those functions and qualities are impaired. These impacts are considered beneficial (Class IV).

Land Management

Implementation of the Master Plan will include the development of a set of "best management practices" or management measures to protect and restore Cal Poly's natural environment. Details will be designed to fit individual circumstances. For example, rather than establish a set breadth as buffers for ponds and riparian corridors, management practices will be determined by such features as steepness of banks and extent of vegetation.



OUTDOOR **T**EACHING AND LEARNING

Introduction

Cal Poly recognizes that student learning occurs throughout the campus. With Cal Poly's polytechnic programs and applied, "learn-by-doing" approach to education, a significant amount of teaching and learning occurs outside traditional classrooms and laboratories. For example, the College of Agriculture operates a working farm with a wide range of fields, animal units, and research centers to support its programs. In addition, students and faculty in the College of Science and Mathematics study different geologic, biological, and botanical features of the campus. Design Village offers experimental design and construction opportunities for the College of Architecture and Environmental Design. The College of Engineering uses outdoor facilities for such programs as transportation engineering. Specific courses in these and other colleges, including Liberal Arts, are frequently designed to focus on different aspects of campus lands. Finally, faculty in all colleges may assign field trips and student projects that take advantage of the campus setting.

Background and Issues

The campus devotes most of its land to its "living laboratories." Further, the campus is involved in a number of research stations and projects away from the main campus. The following table depicts agricultural use of Cal Poly Lands in San Luis Obispo County:

Agricultural Activity	Acres
Irrigated Crops	
Vegetable, ornamentals	65
Orchard, vineyards	245
Grain	35
Alfalfa	10
Permanent pasture	70
Dryland Crops	
Hayland	135
Seeded pasture	131
Rangeland	4,107
Farmsteads, Instructional and Research Units	100
Sub-total	4,898
TABLE 5.1	



Source: College of Agriculture, "1999/2000 Summary of Land Utilization" (February 25, 2000)

Outdoor teaching and learning lands consist of the following (discussed in further detail below):

- The campus farm, which includes agricultural facilities in the Extended Campus surrounding the campus core, the Cheda, Peterson, and Serrano ranches in the San Luis Obispo Creek watershed, and the Chorro Creek, Walters, and Escuela ranches in the Chorro Creek watershed in San Luis Obispo County
- Ecological and biological study areas and preserves in the Extended Campus, at Peterson Ranch and at Escuela Ranch
- Discipline-specific outdoor facilities such as Design Village at the head of Poly Canyon
- Campus core
- Swanton Pacific Ranch (to be addressed in a subsequent document)
- Other off-campus research stations and projects¹

Campus Farm (in the Extended Campus)

The College of Agriculture (CAGR) actively manages the following lands and facilities as production units for regular field laboratory instruction, research and student enterprise projects.

- Crop lands generally on prime agricultural soils
- Orchards and vineyards designated as Unique Agricultural Lands generally on prime and secondary agricultural soils
- Grasslands/pastures/forage areas generally on secondary agricultural soils designated as Farmlands of Local Importance and used for grazing, forage crop production and as wildlife habitat
- Animal units and pens e.g., Dairy Instructional Unit, Horse Unit, Swine Unit, Poultry Unit, Beef Unit

Prime agricultural soils are usually the most valuable soils for farming.



¹ Off-campus research stations occupy a variety of locations, and may change from time to time depending upon the nature of specific applied research projects. Some examples at the time of this writing include the following: Chumash Creek watershed project in coordination with the Morro Bay Estuary Plan, Walters Creek watershed project in coordination with the Morro Bay Estuary Plan, Carizzo Plain and Guadalupe Dunes. The Master Plan does not address these arrangements as they are managed individually by the disciplines or centers directly involved.

Cal Poly Master Plan



Ехнівіт **5.4 EXISTING AGRICULTURE FACILITIES** Main Campus

- Other instructional units e.g., Crop Science, Environmental Horti-• culture
- Leaning Pine Arboretum

PHYSICAL PLAN ELEMENTS 92 Outdoor Teaching and Learning

- Research units e.g., Dairy Products Technology Center; Irrigation Training and Research Center
- Special CAGR teaching and research areas and projects: e.g., • tree farm; logging sports complex; survey field; farm tractor and equipment safety demonstration and practice field; controlled traffic farming system field; Merriam irrigation practices field; student experimental farm and composting facility; weed research field
- Special CAGR enterprise project areas not included above: veg-• etable and agronomic crop fields.
- Water supply, delivery and treatment systems, facilities and ponds;

LEGEND

Facilities

- Animal Science А
- В **Beef Evaluation**
- BRAE Irrigation Training Research Center С Corporation Yards (future)
- D
- Е Crops F Dairy
- G Equestrian
- н **Environmental Horticulture Science**
- Equipment
- Poultry J
- Residential Housing (Ag) Κ
- Rodeo L Μ Swine

Fields

- Crops 2
- Composting 3
 - Experimental Farm (certified organic) Irrigation Study Field
- 4 5 ITRC Expansion
- 6 NRM Logging
- 7 Pasture
- Rangeland/Grazing 8
- Red Rock Pit 9
- 10 Tractor Safety and Electric Farming System

nutrient and waste management - These facilities are not only necessary to support agricultural operations, but they are also subjects of research and analysis themselves - e.g., by Bioresource and Agricultural Engineering, Natural Resources Management and Biological Sciences students and faculty. Examples include the methane recovery lagoon.

- Support facilities, sheds, equipment, etc. Production agriculture requires a range of outbuildings and equipment to support safe and efficient production. Many of these facilities are also central to instruction for Bioresource and Agricultural Engineering students and faculty. Examples include the Agricultural Safety Institute.
- Note: Students and faculty in CAGR departments without assigned fields or units, such as Agribusiness, Agricultural Education and Communication, Food Science and Nutrition and Soil Science use the other lands and production facilities as part of their curriculum. Activities involving soil research, surveying, global positioning systems, geographic information systems, and various field inventory exercises also use a variety of agricultural lands.

On the campus ranches in both watersheds in San Luis Obispo County, outdoor teaching and learning lands related to agriculture currently include the following:

- Grasslands/pastures/forage areas -generally on Class II soils, some designated as Farmlands of Local Importance, and used for grazing, forage crop production and as wildlife habitat on all six campus ranches in both watersheds
- Sheep unit Cheda Ranch
- Crop lands Chorro Creek Ranch
- Vineyards Chorro Creek Ranch

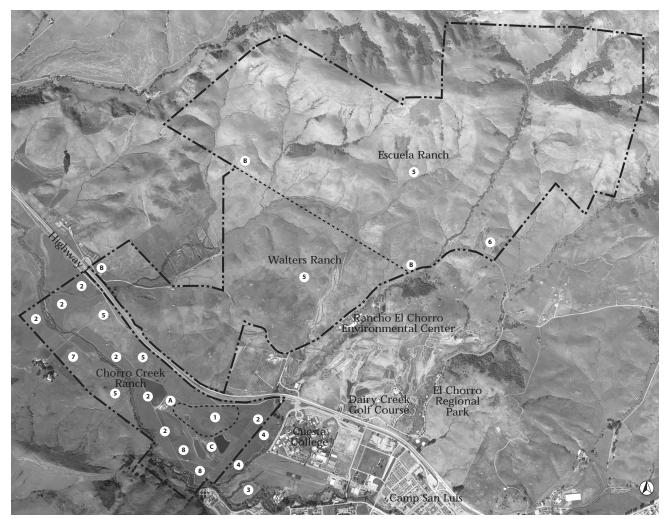
Ecological and Biological Study Areas and Preserves

The College of Science and Mathematics manages several preserves and study areas for long-term research and protection on both the main campus and at the ranches in both the San Luis Obispo Creek and Chorro Creek watersheds. In addition, class field trips and research activities use other outdoor lands regularly (*refer to land use maps in the University Land Uses section*).

• Botanical Garden east of the head of Poly Canyon, partly in Peterson Ranch

The sheep unit and sheep operations occupy approximately 144 acres, or about one-third of Cheda Ranch, including some of the area known as Goldtree.





EXISTING AGRICULTURE FACILITIES EXHIBIT 5.5 Chorro Creek Watershed

- Ecological Preserve on the north side of Brizzolara Creek above the entrance to Poly Canyon in the Extended Campus
- Ecological Preserve on the Escuela Ranch (211 acres) .
- Riparian corridors, ponds, grasslands, woodlands, and serpentine slopes represent additional areas of interest to faculty and students in the sciences. Thus, scientific study is an overlapping activity in many environmentally sensitive areas and on some agricultural lands (especially rangelands). Further, faculty and students in other colleges, such as Liberal Arts take advantage of these areas to connect literature and culture with nature, or for nature sketching and photography.

LEGEND

- Facilities
- Chorro Shop А В Corrals
- С EFR

5

- Fields Bull Test (future location)
- 2 Crops
- Crops (Army) 3 4
 - Crops (Cuesta) Grazing
 - Grazing/Biomass Tree Plantation
- б Vineyard (Gallo 1)



Discipline-Specific Outdoor Facilities

Design Village

The College of Architecture and Environmental Design has sponsored experimental building in the area west of the head of Poly Canyon and is responsible for maintaining structures in this area known as Design Village at the boundary between the Extended Campus and Peterson Ranch.

Other Outdoor Teaching and Learning Facilities

Examples of other activities that require outdoor space include the following: College of Engineering's smart highway pavement testing area; and student organizations and clubs: e.g., rodeo.

Campus Instructional Core

The Campus Instructional Core accommodates some outdoor teaching and learning activities that do not require large areas of land. Examples include a diversity of plant specimens, plant communities and plant arrangements of interest to such fields as botany, landscape architecture, and environmental and ornamental horticulture. In addition, the campus core offers subject matter for art, design, photography, and environmental design classes.

Issues²

- Pressure to expand instructional core, sports and recreation activities and student housing into agricultural lands
- Environmental degradation of some areas, in part due to past agricultural practices and some recreational uses (e.g., mountain bikes)
- Need for more sustainable approach to land and resource management
- Overlapping outdoor teaching and learning uses in some areas, leading to tensions over access and management practices, including conversion of one broad agricultural use to another
- Ambiguous boundaries or limits for some activities, such as grazing, Design Village, etc.
- Lack of clarity regarding responsibility for lands beyond those clearly defined as the campus farm



² Issues include items identified by campus and community members during Fall 1998, at public meetings during Winter 1999, during task force discussions in Spring 1999, and at subsequent meetings with campus and community groups in Fall 1999 and Winter 2000.

Principles

The Outdoor Teaching and Learning element of the Master Plan recognizes the centrality of outdoor "living laboratories" to Cal Poly's mission and "learn-by-doing" approach to education. Thus, in addition to traditional indoor facilities such as classrooms, teaching laboratories, computer labs, and libraries, the Master Plan identifies, protects and clarifies responsibility for outdoor lands and facilities that contribute to student learning, both within and outside the campus core.

Each college and program should address its outdoor teaching and learning needs in its strategic and academic planning.

Nine principles guide the location of outdoor teaching and learning lands and facilities: foresight, suitability, critical size, investment, preservation, continuity, accessibility, visibility, and integration.³

Foresight

In order to provide "state-of-the-art" learning opportunities, the campus must not simply sustain lands and facilities for outdoor teaching and learning, but more importantly, the campus must envision how these lands and facilities can meet emerging academic program needs. For example, campus agricultural lands can be used to experiment with multi-purpose facilities and exemplify applications of new technologies such as global positioning systems, sustainable yield timber harvesting, etc.

Suitability

Many outdoor teaching and learning activities depend on particular physical or environmental features, such as soil type, drainage, exposure, wildlife habitat or plant community. For example, prime soils are a critical resource for agriculture.

Critical Size

Many Outdoor Teaching and Learning activities, particularly agriculture, require a minimum size in order to operate efficiently and effectively. This size is a function of teaching needs as well as staffing requirements, resource management and land features. Thus, the amount of land



³ The Master Plan team synthesized this list of principles from meetings with the President and senior campus executives, from meetings with interested colleges and units - particularly, the College of Agriculture Land Use Committee and the Biological Sciences Advisory Committee - and from recommendations provided by the campus/community Land Use and other task forces during Spring 1999. The Natural Environment Task Force pointed out the centrality of outdoor teaching and learning to all colleges at Cal Poly.

needed for sheep operations, for example, is determined by how many students need to take related field courses and the quality of grazing lands. Agricultural production practices are best demonstrated when at least a minimum scale of operation is available. Below a certain sized cropping or livestock operation, the complexities and interactions of various crop or livestock production factors are not easily learned. Cal Poly needs to be able to show how to properly manage our resources to produce better habitat, cleaner water, healthier food, etc. Further, because agricultural operations are expected to support themselves financially, the size of the identified unit becomes very critical to economic viability. It is easier to demonstrate superior resource management practices and maintain financial viability with larger units, particularly for grazing livestock operations.

Investment

Some outdoor teaching and learning activities involve significant past investments in plants, soil preparation, facilities, equipment, and/or supporting infrastructure. The Master Plan recognizes not only this capital investment, but also that such activities may need land for expansion to continue research projects.

Protection and Management

Outdoor teaching and learning activities depend on the continuous use of the same site over an extended period of time for research and/or experimentation. Typically, these sites are valuable or interesting because of their particular physical features or vegetation. Thus, the Master Plan respects such study areas - e.g., relatively undisturbed biotic communities as well as areas being studied with respect to a succession of disturbances or restoration activities, or managed grazing or harvest.

Continuity

Where the Master Plan calls for moving an outdoor teaching activity, the principle of continuity calls for the identification and development of a new site and facilities first, so as to minimize disruption of teaching and learning. Obviously, biological or geological resource study areas and significantly disturbed areas that need to be restored cannot be moved and need to be protected and managed properly to assure sustainability and long term survival.

Accessibility

Many courses use outdoor teaching and learning lands and facilities routinely, and these activities must be accessible to students and faculty



within a normal laboratory schedule. In some instances, transportation for students (or animals) may be substituted for proximity, so long as such a service provides for access within normal laboratory teaching schedules.

Visibility

The centrality of outdoor teaching and learning also calls for these lands and facilities to be a highly visible, even tangible, part of the main campus image - not just on outlying lands.

Integration

Outdoor teaching and learning activities that do not require extensive amounts of land should be integrated within the campus core as well as in outlying areas. For example, landscaped areas around buildings can also serve as study areas for different types of plants. All campus users should have the opportunity to experience outdoor teaching and learning lands and facilities.

Plan Components

The Master Plan designates a range of outdoor teaching and learning lands and facilities. Some areas overlap with environmental designations and are subject to the policies in the Natural Environment element of the Master Plan. Others involve multiple users, and thus must be managed to accommodate students and faculty from more than one discipline or college. (*refer to maps in the University Land Uses section*)

The Master Plan reinforces outdoor teaching and learning lands and facilities on the main campus and campus ranches in San Luis Obispo County by the following programs:

Outdoor Teaching and Learning includes agricultural facilities as well as fields, grazing lands and study areas used by multiple colleges. Thus, some of these lands are "developed" in the sense that they are fenced, graded, plowed, and/or irrigated. In addition, both agricultural lands and Design Village contain structures - and some of these may be relocated or replaced as part of the Master Plan. The Development Suitability map (Exhibit 4.11) shows areas within the main campus that are appropriate for agricultural units and accessory structures. The ranches in both the San Luis Obispo Creek and Chorro Creek watersheds may also include agricultural and accessory structures to support applied research and educational uses.

New discussion - regarding the importance of protecting Outdoor Teaching and Learning lands for instruction and applied research.



Preservation and Enhancement of Campus Farm and Ranches

The Master Plan calls for the continuation of College of Agriculture outdoor teaching and learning uses, as shown on the land use maps for the Extended Campus and campus ranches. However, some adjustments in these lands are necessary to balance other campus needs. These changes are discussed below as part of the Farm Shop relocation and Animal Science facility redevelopment projects.

- Prime agricultural soils (class I) will be retained in agricultural use.
- The land use maps in the University Land Uses section clearly define the boundaries of (a) the main campus working farm, and (b) grazing lands on the campus ranches. The College of Agriculture has primary responsibility for the management of these lands and facilities.
- The road and fencing system should be more clearly defined and provisions made for maintenance.
- Where agricultural uses occur in environmentally sensitive areas, they should be managed to protect or enhance environmental quality, sustainability and productivity of these sensitive areas.
- Please refer to Chapter 7 for a discussion of procedures and responsibilities with respect to any proposed changes or conversions of one broad agricultural use to another (e.g., from grasslands to crops).
- Farm Shop relocation to the old Poultry Unit will be covered in more detail in conjunction with plans to relocate the campus corporation yards. (See Public Facilities and Utilities element.)

Environmental Consequences

The Master Plan specifically protects prime agricultural soils from further development, and specifies inclusion of ecological value in the scope of the agricultural program. Impacts are beneficial (Class IV). Cal Poly has prepared a Water Quality Management Plan that addresses the water quality issues associated with agriculture.

Animal Science Facility Redevelopment

The Master Plan calls for relocation and redevelopment of Animal Science facilities in order to provide more "state-of-the-art" facilities for that department, to allow for environmental enhancement in the area around Brizzolara Creek and to provide sites for additional student housing. A fundamental premise is that agricultural lands and other outdoor Teaching and Learning lands are not undesignated space available for future development. Rather, they are to be protected as a distinct land use that supports the academic mission of the University.



Cal Poly Master Plan

The Bull Test location was chosen over another site on Walters Ranch which would have been prone to flooding and water quality impacts to Chorro Creek.

Bull Test

The current bull test area will be relocated to a 30-acre site at Chorro Creek Ranch.

Environmental Consequences

The proposed site for the Bull Test is proximate to Chorro Creek, a major tributary to the Morro Bay National Estuary. Development of the facility will include BMPs designed to manage runoff and prevent cattle intrusion into the creek. Biological impacts are less than significant because of mitigation incorporated (Class II). Visual impacts (e.g., lighting) are considered less than significant (Class III).

Feedlot

The existing facility will be decommissioned. Its functions will be incorporated into a reconfigured Beef Cattle Evaluation Center.

Environmental Consequences

The feedlot is currently located adjacent to Brizzolara Creek; movement to the northwest will be a beneficial impact (Class IV).

New Agriculture Pavilion

A multi-purpose agriculture pavilion within walking distance of the campus core on the site currently occupied by the old Beef Unit, Live-stock Pavilion and Herdsman Hall will accommodate lost access due to relocating the bull test to Chorro Creek Ranch and will improve access from other animal units on the main campus. This facility will replace the existing old Beef Unit, Beef Pavilion, Herdsman Hall and abattoir functions.

Environmental Consequences

Temporary noise and air quality impacts associated with the redevelopment will be significant, but mitigable (Class II). Other impacts are considered less than significant (Class III).

Harvest/Post-Harvest Facility

The abattoir will be replaced as part of the Agriculture Pavilion project.



Feed Mill

This facility should be relocated and redesigned for future needs (Sites under consideration on the main campus include the Old Poultry Unit and a site proximate to the Dairy Unit feed storage area.)

Environmental Consequences

The Feed Mill may be visible from Highway 1 in its new location, but its apparent size will be diminished by the Sports Complex. Reflective materials should be avoided. Impacts are less than significant (Class III). Movement of the Feed Mill away from Brizzolara Creek will remove pollution risks.

Horseshoeing Facility

A scaled down facility with a small arena-type classroom to serve the educational and practical needs of the equine activity will be located on the existing Horse Unit.

Preservation of Ecological and Biological Study Areas and Preserves

To support long-term research as well as field trips and other nature study activities, the Master Plan identifies and protects ecological study areas on both the main campus and campus ranches in San Luis Obispo County.

- <u>Designated Preserves and Study Areas</u> Areas within specified boundaries on the land use maps should be fully protected from any human activity except for hiking trails. Motorized vehicles, mountain bikes, horseback riding and grazing are prohibited in these areas. (See Natural Environment element.) Please refer to Chapter 7 for a discussion of policies with respect to removing rocks, vegetation or animals for scientific study and procedures for reviewing any changes proposed in these areas, including trail improvements.
- <u>Botanical Garden</u> Please refer to Chapter 7 for a discussion of policies and procedures for management of the Botanical Garden to the east of the head of Poly Canyon.
- Scientific study is an overlapping activity in many environmentally sensitive areas (such as riparian corridors, ponds, grasslands, wood-lands, and serpentine slopes), and it should be conducted consistent with the policies and principles in the Natural Environment element of the Master Plan.

Preserves are chosen for both their academic value and the need to protect the land.



The draft plan had programmed a 540 bed housing project in this area ~ the creek enhancement project has superseded that proposal.

The boundaries, stream set backs and site plan for the Enhancement area are being refined in consultation with the Biological Sciences Advisory Committee and Landscape Advisory Committee.

See Appendix F after Chapter 7 for "Goals and Guiding Principles for the Cal Poly Creek Management and Enhancement Plan." • Scientific study is an overlapping activity on some agricultural lands (e.g., grasslands that serve as wildlife habitat). Thus, the management of those lands will recognize ongoing field research by faculty and students, particularly in the College of Agriculture and the College of Science and Mathematics. Please refer to Chapter 7 for a discussion of procedures and responsibilities for managing mixed use areas.

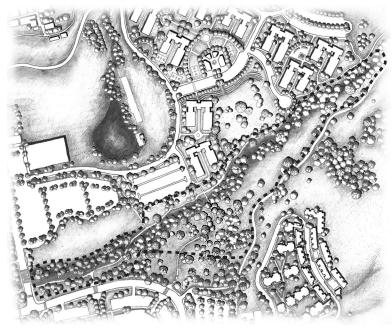
Environmental Consequences

The identification of ecological preserves will have a positive effect on the environment (Class IV).

Creek Enhancement Projects

Brizzolara Creek Enhancement Project

Brizzolara Creek flows through Poly Canyon and along the northern edge of the campus core. The section that flows alongside the feed mill site and other animal science facilities has been degraded. Sections of the creek banks have been reinforced or filled in. Existing facilities close to the creek need to be removed to allow for sufficient setback for enhancement and protection of the creek and its associated habitat. The area near the feed mill has been designated for this Enhancement Project. This will include removal of buildings and other structures between the entrance to Poly Canyon and Via Carta. Creek banks will be improved for the benefit of fish and other wildlife. An enhancement project program will be developed as an implementation action.



Brizzolara Creek Enhancement Project Area



Stenner Creek

Stenner Creek emerges from Stenner Canyon, passes near Cheda Ranch and crosses Highland Avenue where it is joined by Brizzolara Creek. Future activities should provide buffers, include enhancement, and ensure there will be no further degradation of this area.

"Guiding Principles and Goals for the Cal Poly Creek Management and Enhancement Plan" are located in Appendix F. The principles and goals will apply to all creeks on Cal Poly lands, including Stenner Creek. In addition, Cal Poly has partnered with the Land Conservancy of San Luis Obispo County. The Land Conservancy has undertaken several projects on Stenner Creek to reduce erosion and improve fisheries habitat, especially for the endangered steelhead. This enhancement work will continue with other reaches of the creek.

Environmental Consequences

Protection, enhancement and buffering of riparian corridors will have a beneficial impact on the visual quality of creekside areas, and will eventually benefit plants and animals dependent on such resources. The enhancement and protection may result in an overall decrease in erosion and improvement in hydrologic processes. The policy will have significant short-term impacts to animal and plant species, however, as well as increasing erosion potential. Mitigation is recommended to reduce impacts.

Design Village

The College of Architecture and Environmental Design is responsible for maintaining structures in the area known as Design Village.

- As much of the Design Village area is environmentally sensitive (particularly with respect to erosion), future development in Design Village should be designed and managed to protect or enhance environmental quality (including water quality).
- Future development should adhere to the environmental sensitivity principles and guidelines contained in the Master Plan and its implementation guidelines.
- The natural and biological resources inventory of the campus should include detailed analysis of the Design Village area in order to identify any rare and endangered plant species associated with the adjacent serpentinite rock formations.



• Please refer to Chapter 7 for a discussion of procedures and responsibilities for managing the Design Village area.

Environmental Consequences

The Design Village is located in a biologically and culturally sensitive area. Mitigation will help to reduce impacts from further development to a less than significant level (Class III).

Other Discipline-Specific Outdoor Teaching and Learning Facilities

The San Luis Obispo Creek Watershed land use map designates areas for outdoor teaching and learning, including: College of Engineering (smart highway pavement test track); rodeo arena; and other club or organization activities.

Campus Core

The Campus Instructional Core can accommodate some outdoor teaching and learning activities that do not require large areas of land. (See Campus Instructional Core element.)

- Landscape guidelines should address planting to provide for a diversity of specimens, plant communities and arrangements of interest to such fields as botany, landscape architecture, environmental and ornamental horticulture, and the general campus population.
- Exhibit and demonstration areas in the campus core should be established to represent Cal Poly's teaching, learning and research activities on a regular basis, rather than only during special events such as Open House.

Environmental Consequences

Development and redevelopment of small landscaped areas within the campus core will not have a significant effect on the environment.



CAMPUS INSTRUCTIONAL CORE

Introduction

The Campus Instructional Core is bounded by Slack Street on the south, Union Pacific Railroad on the west, Highland Drive on the north and Perimeter Road and Grand Avenue on the east. The instructional core, along with the surrounding outdoor teaching and learning facilities, is the heart of the University and contains its primary institutional and support service facilities, but not the existing campus student residence halls.

Background and Issues

The campus core has a range of building types, sizes and ages, varying from small wood frame cottages and former dormitories to recent reinforced concrete structures. (*refer to the building age map in the Existing Conditions section*) Several areas and individual buildings within the core are functionally obsolete. These include the existing corporation yard, Building 52 area, southwest corner including the Air Conditioning building, the northwest area including the Modoc building and the parking lot west of Kennedy Library. (*refer to the campus redevelopment map in this section*) Currently, the campus is connected with a web of pedestrian walkways and random gathering spaces. Vehicle and pedestrian conflicts occur in many locations.

Issues

- Lack of hierarchy among urban spaces
- Lack of a clearly defined system of pedestrian thoroughfares, bikeways and wayfinding
- Limited campus green space
- Lack of a design theme that integrates the built environment with the natural environment
- Sprawling one-story buildings in the center of campus
- Underutilized land in the Science Building (52) area and corporation yards



¹ Issues include items identified by campus and community members during Fall 1998, at public meetings during Winter 1999, during task force discussions in Spring 1999, and at subsequent meetings with campus and community groups in Fall 1999 and Winter 2000.

- Outdated instructional spaces and laboratory spaces
- Lack of flexibility in classroom technology and spatial arrangements
- Lack of continuity in architectural styles, building materials, scale, massing or orientation.
- Lack of architectural design that exemplifies energy efficiency and resource conservation for teaching, research and operational efficiency
- Inconsistent use of materials in paving, urban furnishings, signs, graphics, lighting etc.
- Lack of an organized and cohesive campus landscape that supports the campus' urban environment and teaching mission
- Poor connection between the campus core and adjacent residential and parking areas
- Building designs generally lacking in human orientation and connection to comfortable outdoor spaces
- Inconsistent and confusing building signage and references

Principles

In an effort to maintain a compact instructional core and to avoid unnecessary conversion of surrounding agricultural and natural lands to urban uses, a predominant goal of the Master Plan is to reorganize and intensify the built environment within the existing campus core. A careful analysis of existing facilities and selective redevelopment of marginal resources make intensification of the core area possible. Redevelopment areas provide the opportunity to create a net gain of both instructional, support and green space. Redevelopment provides significant opportunities to modernize facilities and create an organized system of pedestrian ways and urban spaces. Historically lacking a consistent urban design treatment, the campus should benefit from a concerted effort to identify a hierarchy of gathering spaces and landscapes.²

Student Centered and Learner Friendly

A student-centered and learner-directed philosophy is at the core of the



² The Master Plan team synthesized this list of principles from meetings with the President and senior campus executives and from recommendations provided by the campus/community Built Environment, Circulation and other task forces during Spring 1999. The Landscape Advisory Committee also recommended a set of principles that apply to the campus core.

University's academic mission, and it embodies itself in the University's culture, intellectual diversity, teaching resources and social opportunities. The campus physical design plays a vital role in achieving this mission. The Master Plan seizes this opportunity to evaluate and reform the campus physical framework to create an environment that should meet this objective. Design of the campus core should enable learning and foster intellectual inquiry so it should be a delightful place to study, work and visit. Active learning happens everywhere.

Flexibility

Learning spaces should be kept as flexible as possible to ensure viability long into the future. It is critical to ensure that investments made in academic space can respond functionally to changing student needs, technology and instructional methods. New facilities proposed by the Master Plan need to be designed for diverse user groups, both in composition and size, to maintain this flexibility. A variety of learning spaces should be available to support different types of interactions, i.e. private (individual) study, small groups, large groups, formal and informal meetings.

Sense of Place

Cal Poly is blessed by its unique natural setting, community surroundings and climate. The Master Plan proposes to capitalize on this unique "sense of place" by providing direction for enhancing the physical environment of campus. Campus planning, including the placement and massing of buildings, circulation paths, entries and landscaping should reflect and enhance connections to the surrounding landscape. Creating an organized series of campus green spaces, a clear system of pathways, a cohesive urban design treatment, and a variety of University facilities provides an environment where all forms of learning and living experiences can enrich student, faculty and staff life. A mix of gathering places should encourage conversation and interaction. Campus design should enable people to know where they are, wherever they are on the campus and enable them to find any destination with ease. The campus should also offer a variety of climate-adapted indoor and outdoor spaces.

Compactness

Spatial efficiency and accessibility are principles that emphasize compactness within the instructional core. This quality enables facilities for additional enrollment and support structures to be placed within the existing campus core and within a 10-minute walking distance of most core destinations. Some areas of campus offer "infill" opportunities for



the addition of a building or a new wing on an existing building to expand instructional capacity and contribute to a compact campus core.

Redevelopment

Making the best use of the University's resources is important for many reasons. It is especially significant for promoting a compact instructional core and for creating a campus "sense of place" through urban design. While redevelopment of existing facilities within the campus core enables preservation of adjacent lands, it also provides opportunities to create a dynamic mix of educational, social and service spaces. Replacing existing one-story buildings with new multiple-story buildings can increase open space in the core and improve the quality of outdoor spaces and pedestrian and bike circulation.

Visual continuity

Campus buildings should incorporate the best design elements regarding massing, human scale, materials, articulation, architectural interest, and a connection with surrounding urban spaces. Outdoor spaces should have a sense of boundary and "sense of space" that help to define them as specific campus areas. Landscaping should tie these spaces together through a unifying visual design. Common design themes should connect all areas of the campus to provide a sense of continuity between entrances and the heart of the campus. The overall design of campus lighting standards, trash and recycling receptacles, street and directional signs, continuity of paved surface materials, plant materials, benches, seating, etc. should all contribute to and reinforce this continuity. At the same time, campus design should recognize the distinct character of different sections of campus, such as the early California architecture in the southwest corner of campus. Landmarks and place-making elements that identify special campus locations and clarify directions should be created. Design of the built environment (interior and exterior) should take full advantage of the Central Coast's Mediterranean climate for health, environmental, energy efficiency, and aesthetic reasons.

Circulation

Gateway entrances to Cal Poly should reflect its mission as an institution of higher learning. Campus pathways should provide an efficient and effective means of pedestrian circulation and orientation, whether people arrive by car, foot, bike or wheelchair. (*refer to Circulation element*, too)



Multidisciplinary Districts

The Master Plan creates opportunities for districts that consolidate connected disciplines rather than college-based districts per se. Each district should include instructional facilities for a group of related disciplines, general-purpose classrooms, student and faculty research space, offices, and support functions. Campus buildings and spaces should be designed appropriately with regard to their respective district, and also connect with adjacent districts. For example, buildings may need multiple fronts and entrances. Landscape design should reinforce the identity of each district as well as tie the campus together visually.

Integration of Support Activities

The campus core should provide a variety of support service centers where informal learning, interaction and socialization can occur as well as formal instruction. New buildings should integrate these activities within a single structure.

Social Environment

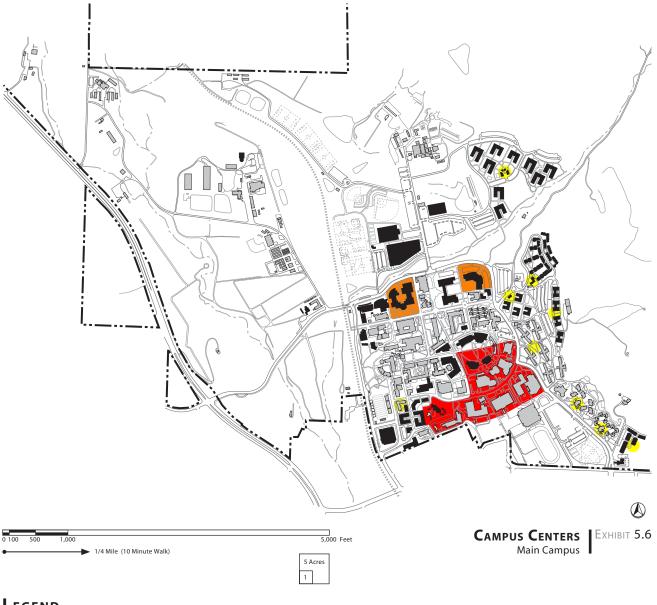
As Cal Poly's residential community grows, the campus should offer entertainment and social facilities to support 24-hour activities. Residential villages should contain centers that provide needed residential services including groceries, housekeeping and personal services. It is critical that Cal Poly provide innovative, intriguing, dynamic and exciting campus spaces to meet future student needs.

Plan Components

Campus Centers

As the campus continues to evolve as an institution of higher learning, the range of services and activities made available to the campus population must be expanded to support changing needs. The unique physical spaces where these services and activities will be located need to be planned carefully. A primary goal of the Master Plan is to create a primary center on the campus that offers a diverse mix of support and social services. This center should represent the very heart of the campus where students, staff, faculty and visitors are drawn to experience the essence of Cal Poly's University culture. The Master Plan also recognizes the need for other activity centers on the campus that provide support services and functions associated with a particular area on the campus. For example the northwest center may contain a bookstore and supply outlet oriented primarily to the students and faculty in Architecture and Environmental Design, Engineering, and Art and Design. These satellite activity centers should be focused in their scope and function so as not to





Legend



Northwest Satellite Center Northeast Satellite Center

Residential Centers



dilute the importance and attractiveness of the primary campus center. The location, primary functions and list of allowed uses for each of these four activity centers are discussed below.

Primary Campus Activity Center

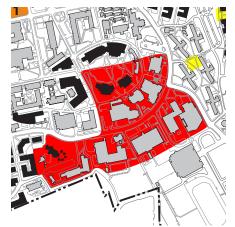
The primary campus activity center will be located as shown on the campus centers map in this element. This student-focused area includes the University Student Union, food serving facilities, Mott Gym and the Student Recreation Center. The larger activity center extends to encompass the Administration building (1) to the north, the Performing Arts Center to the east and the Health Center (27) to the south. The functions of this space will include a variety of day and evening services and activities designed in an attractive outdoor setting capturing the unique campus environment. The following table identifies the types of activities and uses appropriate in this area.

<u>Uses</u>

Student Government Student Clubs University Central Administration Foundation Services Student Services (registrar, cashier) University Union Meeting Rooms Cyber Cafe (on-demand authenticated web access) Outdoor Recreational Equipment and Supplies, Rental and Repair Bicycle Rental and Repair Performing Arts Indoor Recreation (Rec. Center) Personal Services (travel, hair salons, nails, dry cleaning, video etc.) Banking Postal Services Prepared Food and Beverages Franchise Food Outlets General Retail (books, music, technology, clothes, copying) Film Theater Informal Study Areas & Technology Access Outdoor Gathering Spaces (greens, courtyards, plazas)

Northwest Satellite Center

The northwest satellite center will be located as shown on the campus centers map in this element. It is generally bounded by Kennedy Library (35) on the south, the Advanced Technology Laboratory building to

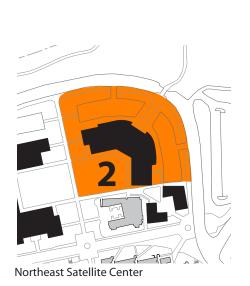


Primary Campus Activity Center (Central Disrict)

The University Union planning process identified the need for expanded facilities and programs, both in the current location and elsewhere on campus. Facilities in satellite and residential centers should be designed to accommodate these uses.









the west, Highland Drive on the north, and the Agricultural Sciences building (11) to the east. This center is just across Brizzolara Creek from the new sports complex and major parking lots, so it is wellpositioned to provide services and functions that will be needed in this area of campus. Uses may be located in one or more buildings and may contain a mix of the following: expanded library space including media labs, satellite bookstore with a focus on the colleges of Architecture and Environmental Design, Engineering and the department of Applied Art and Design; limited food services such as a café and vending; informal study areas and technology access, and outdoor gathering and study spaces in the form of greens, courtyards and plazas to encourage interaction and to link this area together. This satellite will be linked to the new North Perimeter Pedestrian Way and to the Dexter Green providing an important connection to other centers on campus. The following table identifies the types of activities and uses appropriate in this area.

<u>Uses</u>

Kennedy Library Expansion (includes media labs) Satellite Bookstore (limited to supplies demanded by surrounding colleges) Cyber Cafe (on-demand authenticated web access) Café, Specialty Foods and Food Vending Services Informal Study Areas and Technology Access Outdoor Gathering Spaces

Northeast Satellite Center

The northeast satellite area will be located as shown on the campus centers map in this element. It is generally bounded by the extension of Highland Drive to the north and east, North Perimeter Pedestrian Way to the south, the Agricultural Engineering building (8) to the west. This satellite center will be located in one of the largest redevelopment areas on the campus and will be directly between the new student housing areas north of Brizzolara Creek and the Campus Instructional Core. The Master Plan specifies a large green area surrounded by numerous buildings with strong connections to the "central district," the northwest center and the North Perimeter Pedestrian Way. Thus this center should contain services and functions designed primarily to serve the campus residential population such as the campus market with groceries, home supplies and a small café and food vending services. The following table identifies the types of activities and uses appropriate in this area.

<u>Uses</u>

Campus Market (includes retial foods, school supplies, home supplies, conve nience parking) Café, Specialty Foods and Food Vending Services Informal Study Areas and Technology Access Cyber Cafe (on-demand authenticated web access) Outdoor Gathering Spaces Audio/Video Rentals ATM Locker Rental (bicycle-size and temporary small lockers)

Residential Centers

The Master Plan further specifies residential centers be located within new student housing neighborhoods. Residential centers will generally be located as shown on the campus centers map in this element. The purpose of the residential centers is to provide social gathering spaces and support services directly relating to on-campus housing. The centers will be located in each new student housing complex and offer recreation amenities, formal and informal gathering space, study areas and lounges, and services such as self-service laundry. Residential centers should be designed to create desirable outdoor spaces with convenient access to the housing neighborhood it is intended to serve. The following table identifies the types of activities and uses appropriate in these areas.

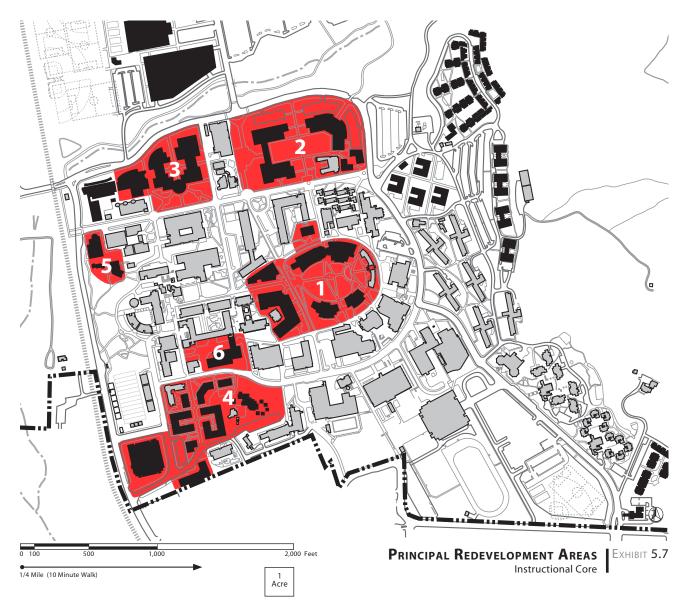
<u>Uses</u>

Self-Serve Laundry Food Vending Services Mail Center Common Gathering Space (indoor and outdoor) Informal Recreation (indoor and outdoor) Informal Study Areas and Technology Access Computer Lab/Cyber Cafe (on-demand authenticated web access)

Specific Redevelopment Areas

The Master Plan reorganizes existing spaces within the campus core so that new facilities can offer an increase in academic and support space that respects Cal Poly's "sense of place." The Plan includes a series of new and enhanced urban spaces linked to the redevelopment areas and a system of pedestrian thoroughfares connecting these spaces. These urban spaces take advantage of Cal Poly's unique setting and spectacular views from the campus to the surrounding hills. The Centennial Green, located in the Science building (52) area adjacent to the University Union, should be a key central space within the instructional core. It should not only function as the geographic and physical center of campus, but it should serve, along with the student union, as the social





Legend





heart of the campus and as a central student gathering space. Three other primary urban spaces in other redevelopment areas should work together with the Centennial Green to create a structure of interconnected districts and open spaces on the campus.

Total Net Gain in Facility Capacity	755,470 SI
Enrollment-Based Facility Requirements*	
Instructional Space	252,500 S
Library/Media Resources	63,770 S
Faculty Offices	30,470 SI
General Administration	32,380 SI
	379,120 SI
Additional Capacity Available for Student Support Services, Applied	376,350 SI
Research, Cal Poly Foundation and Funding-Dependent Projects	
NOTES:	
* SF calculated for 2500 FTES based on CSU ASF/FTE model.	

TABLE 5.2

Environmental Consequences

The instructional core is a developed, urban environment, and many of the natural resource impacts from new development are not applicable (e.g., biology). Construction activities in any of the redevelopment areas will disrupt pedestrian and vehicular flows, and produce noise and dust that could be a nuisance to students, faculty and staff, as well as nearby neighborhoods. Mitigation will reduce these impacts. Construction in areas near Brizzolara Creek could result in erosion and sedimentation. Implementation of Best Management Policies (BMPs) would reduce the significance of these impacts. A detailed discussion of constructionrelated impacts and mitigation measures is at the end of Chapter 6.

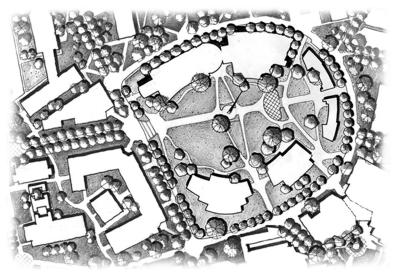
Centennial Green Area

The Centennial Green area offers a unique opportunity to capture Cal Poly's unique "sense of place" and to create a central University focal point in the area presently occupied by Building 52. Its close proximity to the University Union, El Corral Bookstore, the Administration building, the recreation center and the PAC provides the opportunity to unite these uses and provide additional social and academic functions in a dynamic mixed-use environment (*see campus centers discussion*). The Green should provide a wonderful setting for new buildings and activities that are linked together around a series of new outdoor plazas and green spaces. The conversion of Perimeter Road to a broad pedestrian mall should also aid in connecting the campus's cultural and recreational



functions with this new student friendly and learning-centered core. The principal features of this new central space include:

- Redeveloping the Science building (52) from single-story facilities to multi-story facilities.
- Redeveloping the Engineering East building (20) west of Via Carta from a single-story facility to multi-story buildings with the second floor oriented toward Via Carta for enhanced pedestrian access.
- Redesigning the building 52 area to provide a large, central green space (the Centennial Green) that takes advantage of the wonderful scenic views of the surrounding morros. A series of new multi-story buildings should front onto the Centennial Green and provide additional space for instructional and support uses, including technology-enhanced learning and student services.
- Connecting the campus pedestrian pathway system to the Centennial Green while integrating the following facilities and their surrounding spaces: the Student Union (65), the Administration Building (01), El Corral Bookstore (65), Fisher Science Building (33), Science North (53), Faculty Offices East (25), and Erhart Agriculture (10).
- Incorporating a mix of new facilities that provide food, retail and student services. These facilities should be ground floor, urban-oriented locations with instructional, administrative and office spaces on upper floors.
- Within this area the Master Plan anticipates a potential net gain of approximately 220,000 square feet of new building space.



Diagrammatic Illustration of Centennial Green Area



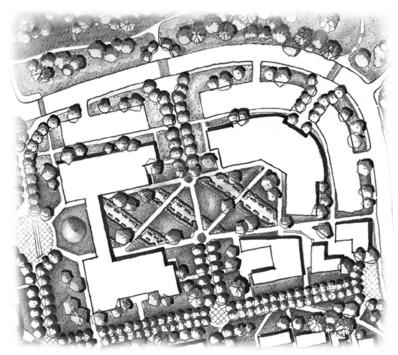
Redevelopment of this area will improve visual quality in the campus core, and may reduce the number of off-campus vehicle trips by offering more on-campus services. These impacts are considered beneficial (Class IV).

Northeast Area

This campus area currently accommodates the corporation yards and facilities which will be relocated outside the campus core to the old poultry unit. Other facilities currently supporting the College of Engineering will be included in the new Engineering Building in the northwest corner. Some of the existing uses in this area will remain in the same location, such as the Foundation Building (15), and others should be replaced and incorporated within the new layout. The latter uses include the agricultural facilities and the public safety facility. The principal elements of this new space include:

- Agriculture instructional complex to replace present Bio-resource (08) and Agricultural Engineering Building (08) to maintain a connection with agriculture instructional facilities in Erhart Agriculture (10) and Agricultural Sciences (11). Site design for new agricultural facilities will accommodate delivery of materials and equipment for student labs, including access by large trucks.
- New multi-story instructional facilities, student services, faculty offices and administrative spaces located in a series of buildings oriented towards a central green.
- A strong orientation to Highland Drive and the new north Perimeter Road pedestrian way
- A small amount of service, visitor and public parking incorporated into the design.
- A wide landscaped linear green with a broad pedestrian sidewalk along the Highland Drive frontage.
- The location for a transit stop adjacent to this area
- A new at-grade and/or grade separated pedestrian crossing connecting this area to the new eastern residential area.
- Within this area the Master Plan anticipates a potential net gain of approximately 225,000 square feet of new building space.





Diagrammatic Illustration of the Northeast Area

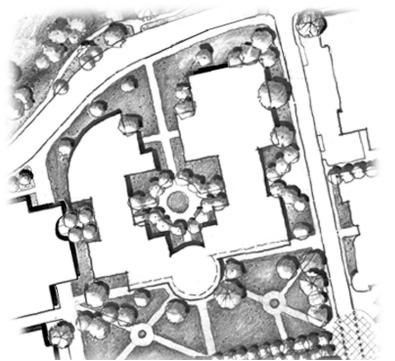
New structures and landscaping will be an improvement in this area, which currently houses maintenance and operations facilities. Development of improved pedestrian walkways and crossings at Highland Drive will improve circulation while reducing conflicts with vehicles. These impacts are considered beneficial (Class IV).

Northwest Area

Situated adjacent to Kennedy Library, this area offers opportunities to serve students and faculty alike by providing a mix of instructional activities, expanded library facilities, student services, offices and satellite retail and food services. This area is proximate to the new sports complex, the agricultural facilities north of the core, the existing and new campus parking, and the expanded residential village along Brizzolara Creek. As a result, it becomes key to creating a satellite center in this area. The northwest area should include new engineering facilities adjacent to Highland Drive and should link a new University green space to the North Perimeter Road pedestrian way and Kennedy Library. The principal elements of this new space include:



- An effective connection between the Engineering facilities, the North Perimeter pedestrian way and the new green spaces.
- The replacement of the Modoc faculty offices building (119) with a new instructional facility
- The presentation of a stately, high quality image to pedestrians and motorists traveling along Highland Drive as this location should continue to serve as a primary campus entrance.
- A small amount of service, visitor and public parking incorporated into the design
- A wide, landscaped linear green with a broad pedestrian sidewalk occupying the frontage along Highland Drive.
- A transit stop located adjacent to this area.
- A new at-grade pedestrian crossing linking this area to the Brizzolara Creek path and recreation sports field to the north.
- Within this area the Master Plan anticipates a potential net gain of approximately 260,000 square feet of new building space.



Diagrammatic Illustration of the Northwest Area

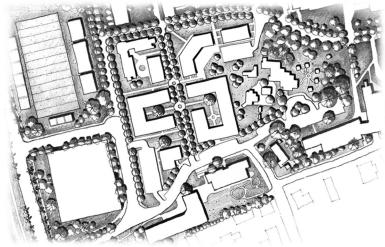


The intersection of Highland Drive with the proposed extension of California Boulevard is discussed further under the Circulation Element. The Modoc Building is more than 50 years old. An assessment of the building's historical significance prior to demolition is warranted.

Southwest Area

The Southwest area of campus has a rich history. Crandall Gym, the Business building, the Powerhouse, Mustang Stadium, and other structures formed the early Cal Poly campus. Heron, Jesperson, and Chase halls were built as dormitories (refer to Existing Conditions section for age of structures). California Boulevard was once the primary gateway and access to the campus. Today, much instructional space and campus activity has moved away from this area, rendering it somewhat unconnected to the campus. The Master Plan proposes to redevelop this area with new uses that are architecturally consistent with the historic character. When California Boulevard is extended to Highland Drive this area should once again become a major entrance to the university.

A new student housing complex is proposed for this area to help balance the location of new residential communities and to help reinvigorate this portion of campus with additional student life activities. The Master paln shows Mustang Stadium remaining in its present location; however, should the stadium be relocated in the future, this area will be available for recreation facilities.



Diagrammatic Illustration of the Southwest Area



Several structures in the southwest area are potentially eligible for listing on the NRHP, including Crandall Gym, several of the office buildings (e.g. Jespersen) the powerhouse and the President's Residence. Prior to any redevelopment in this area, analyses should be performed to ascertain the significance of the older structures. The Powerhouse is currently listed on the National Register of Historic Buildings.

The principal elements of this new redeveloped area include:

• A new 700-800-space parking structure near the corner of Campus Way and California Blvd.

Environmental Consequences

See the Parking Element for a discussion of the environmental consequences of developing parking structures.

• The redesign of campus vehicular access in the Campus Way area, including a major public transit stop or hub and closure of South Perimeter Road to regular traffic.

Environmental Consequences

Phasing of traffic improvements, as suggested in Chapter 6, will ensure smooth transition of traffic to other routes.

• A new residential complex for upper-division students adjacent to the parking structure and an expanded Campus Child Care Center.

Environmental Consequences

See Residential Communities Element for a discussion of the environmental consequences of developing new student housing.



- Redevelopment of the Air Conditioning Building for new instructional space.
- Renovation of Crandall Gym for possible additional instructional space and/or recreation and support services.
- A new Alumni Center and University Retreat situated near the current President's Residence (51).

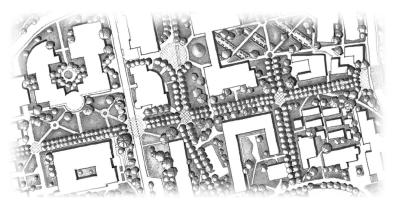
The redevelopment of the President's Residence will intensify uses in the southwest portion of campus. The project will result in increased traffic, noise and lighting in the area. The President's Residence also may be eligible for lising on the NRHP and will require analysis prior to redevelopment.

• Within this area the Master Plan anticipates a potential net gain of approximately 50,000 square feet of new instructional building space.

North Perimeter Pedestrian Way

North Perimeter Drive should become a human-scale pedestrian way as vehicle traffic is removed from the core and shifted to Highland Drive. This area should serve as one of the primary pedestrian circulation routes linking the Kennedy Library/Northwest redevelopment area with the Northeast redevelopment area and also the expanded campus residential community adjacent to Poly Canyon. The way should be re-paved with a more pedestrian-friendly surface (as described in the Circulation element under the Pedestrian System section) and planted with trees to form a landscaped area complete with selected urban furnishings. Service and emergency vehicles and vehicles for the disabled should have access along this route. The way should form a "spine" connected to a series of pedestrian plazas accessing various campus destinations.





Diagrammatic Illustration of North Perimeter Pedestrian Way

South Perimeter Pedestrian Way

Similar to North Perimeter Drive, South Perimeter Drive should also become a broad pedestrian way when regular vehicular traffic is eliminated. This new pedestrian way should provide a key opportunity to link together the Cal Poly Theatre, Performing Arts Center and Recreation Center/Mott Gym with the University Union and campus core. At the eastern end of the new pedestrian way, where Highland Boulevard and Grand Avenue should connect, a new grade-separated crossing should connect the residence halls south and east of the core with the new Centennial Green and other core destinations. This way should also be re-paved with a more pedestrian-friendly surface (as described in the Circulation element under the pedestrian system section) and planted with trees to form a landscaped area complete with selected urban furnishings. Service and emergency vehicles and vehicles for the disabled should have access along this route. In addition, it should be open for egress from the Grand Avenue Parking Structure after events at the Performing Arts Center. The pedestrian way should form another "spine" which is also connected to a series of pedestrian paths accessing various campus destinations.

A number of comments on the Preliminary Draft raised concerns about access to activities on the south side of campus if South Perimeter Road is closed. The analysis for the DEIR shows that traffic circulation can be handled by opening California Boulevard to Highland Drive and by providing more parking at the southwest corner of campus. For users of buildings along South Perimeter, the campus will maintain service and emergency access. Egress from the Grand Avenue parking structure will also be provided for major events as provided in the plan for this parking structure.



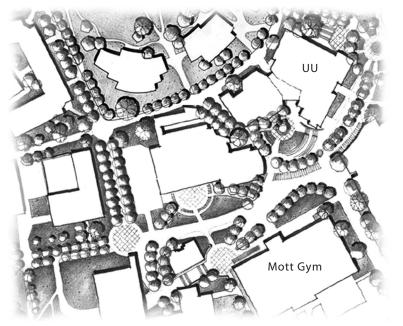
Cal Poly Master Plan



Legend







Diagrammatic Illustration of South Perimeter Pedestrian Way and UU Area

The development of more uniform and convenient pedestrian ways should have a beneficial impact on circulation, and may encourage more students to walk (Class IV).

Campus Infill

In addition to specific redevelopment areas described above, the Master Plan promotes strategic infill redevelopment within the instructional core. While the principal redevelopment areas provide opportunities to replace larger areas of campus with new facilities and urban spaces, smaller building additions and remodels can be accomodated in many areas. Selective infill presents unique opportunities to create renewed campus spaces in support of campus redevelopment and urban design goals.

Campus Green Space Plan

The Master Plan update attempts to create a clearly defined and beautiful urban open space system. Given the nature of past campus development, and absence of architecture design guidelines, most improvements and buildings lack a cohesive design. It is critical that the broad mix



of building styles, types and forms be united with a strong urban fabric consisting of pedestrian thoroughfares, urban open spaces, consistent use of urban furnishings, graphics, signs and landscaping. Using a system of urban spaces, the Master Plan proposes a hierarchy of plazas and gathering spaces with both formal and informal functions. In support of many planning principles, the arrangement of campus open space should provide a fertile landscape for enhanced learning and interaction in a variety of settings. The principal features of the campus urban open space plan include the following:

- Establishing a series of campus green spaces at the following key locations: Centennial Green, Dexter Green, California Boulevard Green and new courtyards in the northwest and northeast redevelopment areas
- Linking these key open spaces with a clearly defined pedestrian and bikeway system (*refer to the Circulation element*)
- Providing a rich campus landscape that unites the various architectural styles in a cohesive manner
- Identifying strategically located campus structures that serve as campus landmarks and represent places of importance

Campus Landscape Plan

Campus landscape design, development and maintenance are integral to the University's educational mission. In addition to enriching the campus's aesthetic beauty, the landscape plan also provides a cohesive treatment of exterior space and a living laboratory for study. Continued development and redevelopment of the campus landscape should incorporate the following features:

- Creating and maintaining a living, educational landscape for teaching and learning
- Capture and enhance Cal Poly's unique "sense of place"
- Exhibit best practices of resource management and environmental stewardship and sustainability

The Master Plan proposes to develop a campus landscape plan as an implementation action. The landscape plan should advance the vision for the campus landscape. It should also provide guidance and standards that ensure that each project should contribute to the common vision



for development of the campus landscape. The proposed landscape plan should address the following elements:

Memorials

Memorials should be planned as a part of the campus landscape. To the highest degree possible, the memorials program should create outdoor spaces that include seating, walls, benches, walkways, lighting and special paving. The memorials program should encourage the establishment of tree groves rather than individual tree plantings.

Safety

The landscape plan should address safety insofar as planting groupings might inhibit visibility or security lighting.

Planting

The campus landscape plan should incorporate compatible planting and landscape components including a diversity of plant species with Mediterranean and California species predominant. Acceptable plant lists should be developed to assist project designers in creating continuity within the campus landscape. Plantings should be based on appropriate plant communities and should be composed of compatible plant groups for energy and water conservation. In addition, plantings within the campus core contribute to the University's educational mission (see Outdoor Teaching and Learning element).

Grading and Drainage

Best management practices should be developed in the landscape plan and for the campus built environment to guide grading and drainage. Topics to address include: protecting native plantings and waterways, minimizing erosion, preventing siltation, ensuring proper re-vegetation, and establishing natural methods to drain and filter run-off water.

Hardscape/Paving

The landscape plan should address the following specifics for paving materials:

- Provide continuity with regard to paving materials and patterns.
- Improve paved surfaces with regard to safety, aesthetics and functional capacity
- Replace asphalt paving in the instructional core



- Increase the amount of green space in the instructional core
- Create a cohesive palette of urban furnishings, including signs, benches, trash receptacles, lighting, walls, fences, kiosks, bike racks and storage

Outdoor Art

The landscape plan should include guidelines for public art, including permanent displays as well as short-term student work.

Outdoor Exhibit Areas

The landscape plan needs to establish areas and standards for exhibits year-round, rather than only during special events like Open House.

Maintenance

The landscape plan should include a comprehensive campus landscape maintenance program that takes into account the following issues:

- Long-term costs including manpower, operations and energy use
- Tree maintenance
- Identification of priority landscapes and campus spaces where extra attention and funds are focused
- Clear communication between campus advisory bodies and maintenance staff

Water

The campus landscape plan should include the standards for water conservation.

Environmental Consequences

Unified landscaping should improve visual quality, protection of water quality, etc. (Class IV).

Energy

The campus landscape plan should consider the impact of vegetation on building energy efficiency and the creation of comfortable outdoor space.

New topic - energy considerations have been added to Campus Landscape Plan standards.



RESIDENTIAL COMMUNITIES

Introduction

As a result of its statewide educational mission, Cal Poly accepts over three-fourths of its undergraduate students from outside California's Central Coast. As a result, most students who choose to attend Cal Poly require housing. Presently, about 17 percent of the students live in campus residence halls and nearly 40 percent live in student-oriented apartments and fraternity houses within a mile of campus. Thus, the University assumes a residential character with about 55 percent of its students living on or near campus.

The other 45 percent of Cal Poly's students, including married and graduate students, either find housing elsewhere in the City of San Luis Obispo or other communities in the County. (Currently, over one-fourth of Cal Poly' students live more than 2.5 miles from campus.)

The University recruits most support staff from San Luis Obispo and Santa Barbara counties. In contrast, most new faculty and administrators come from outside the immediate area. However, when faculty retire, they typically remain in the San Luis Obispo area.

Background and Issues

The San Luis Obispo area has the dubious distinction of being one of the least affordable housing markets in the United States. The 1999 Regional Profile published by the San Luis Obispo Council of Governments showed a median selling price in 1999 of \$184,300 in the county and \$231,500 in the City of San Luis Obispo for single-family homes. The Profile also revealed that 6.5 percent of the housing units in the City of San Luis Obispo are considered over crowded. The 2000 San Luis Obispo County Economic Outlook showed a vacancy rate of only 0.3 percent for rental apartments in the City of San Luis Obispo in September 1999.

Thus, there is a shortage of suitable housing in the community and it seems to be getting worse. Cal Poly faculty and staff hear stories about students engaged in bidding wars for available apartments and students crowded into off-campus homes and apartments. Companies looking to San Luis Obispo as a possible location indicate concerns about the lack of affordable housing in our area. Cal Poly recognizes that housing impacts are a major community concern related to enrollment growth. With the increasing demand for higher education in California, Cal Poly is expected to remain predominately undergraduate - with about 90 percent of its students continuing to be young, full-time undergraduates. (The Fall 1999 average undergraduate age is 21.3 years.)

New discussion - additional background information on housing in the San Luis Obispo area has been provided.



Existing Residence Halls	Beds
North Mountain	315
South Mountain (red bricks) (six @ 215)	1290
Sierra Madre	588
Yosemite	590
Sub-Total	2783
CAGR units & Design Village	55
Total current student housing on campus	2838
Apartment-style addition being designed	800

3638 TABLE **5.3**

Total by 2002

While Cal Poly's student population makes a very real impact on San Luis Obispo County, it is not the only factor contributing to the local housing shortage. Cal Poly's enrollment in Fall 2000 is about 900 students below in Fall 1990, when it reached 17,758 students. During the 1990's Cal Poly deliberately cut enrollment when State funding was reduced. Since then enrollment has been slowly building back, but Cal Poly's growth rate has been slower than that of the City of San Luis Obispo. Cuesta College's Student Characteristics and Enrollment Trends report for Fall 2000 shows that the community college's enrollment has increased by about 5 percent annually in recent years. Further, over 40 percent of the new students attending Cuesta's San Luis Obispo campus come from outside the County, and about 45 percent of all students at the San Luis Obispo campus live in the City of San Luis Obispo. Thus, families and households not associated with Cal Poly represent an increasing share of the local housing market.

To exacerbate the housing situation, during the past decade housing supply has not kept pace with demand, particularly for rental housing. The 1999 Regional Profile published by the San Luis Obispo Council of Governments indicates that multi-family units represented only 5 percent of the new housing authorized for construction in 1997 in San Luis Obispo County (as compared with about 20 percent in Monterey County and 40 percent in Santa Barbara County). Some residential complexes formerly rented to students have been converted for other appropriate purposes, such as housing for senior citizens. Further, the City of San Luis Obispo's General Plan does not designate significant amounts of land for multi-family housing; and market studies have shown little near-term development potential in the area close to campus.

The present main campus residential community consists of a series of residence halls banding the lower slope of the campus's eastern hills. The residential complexes include full infrastructure to support computing, modest recreation facilities and Vista Grande Cafe, one of the several dining facilities where students may use their meal cards. The campus provides additional food service within the campus core which include the Avenue, Back Stage Pizza, the Lighthouse, the Sandwich Factory, the Campus Market near the Library and various vending machines. The South Mountain residence halls are organized as living-learning communities around student majors or disciplines. Sierra Madre and Yosemite are the "First Year Connection" halls designed to provide incoming students with information, resources and support needed to be successful at Cal Poly. The North Mountain Halls house



the returning student program. The present residence halls accommodate nearly 17% of Cal Poly's students. (*refer to the residential communities map in this element*)

In addition, approximately 55 students live in small agricultural housing units or buildings in Design Village. These students provide direct supervision and security for animals and facilities in partial exchange for their housing.

All present residence halls except for the North Mountain Halls are traditional corridor-oriented dormitories, and residents are required to participate in one of several campus meal plans. With changing student housing markets, the campus is developing an additional 800-bed complex that will offer apartment-style units with food preparation facilities.

Са	Poly Residential Locations, 199	97 and 199	9				
		faculty and staff			stuc	lents	
		1997	1999		1997	1999	
	Number of respondents =	997	594		422	414	
Re	sidential location						
	San Luis Obispo & Cal Poly	45.8%	39.7%		88.4%	88.4%	
	North County	17.5%	19.0%		1.4%	2.4%	
	North Coast	16.0%	17.3%		4.0%	4.8%	
	South County & Santa Maria	19.4%	22.3%		5.0%	3.8%	
	Sub-total outside SLO	52.9%	58.6%		10.4%	11.0%	
		98.7%	98.3%		98.8%	99.4%	
So	urce: Cal Poly, Average Vehicle	Ridership S	Survey, 199	7 and 1999).		
No	te: Analysis of student addresse	es for Fall 1	999 shows	that of thos	e with kno	wn resident	ial
	addresses, about 17 % live on campus, 67 % in San Luis Obispo, and 15 % elsewhere						
	in the Central Coast.						

TABLE 5.4

The campus presently provides no faculty or staff housing except for the President's residence and eight apartments within the residence halls for professional Resident Director staff.

Issues¹

Housing issues can be grouped with respect to their location and occupants:



¹ Issues include items identified by campus and community members during Fall 1998, at public meetings during Winter 1999, during task force discussions in Spring 1999, and at subsequent meetings with campus and community groups in Fall 1999 and Winter 2000.

On-campus student housing

- Mainly corridor-style design and required meal plan limit student options.
- Present demand exceeds capacity a typical waiting list during the summer has 400-600 students seeking to live on campus.

Off-campus student housing

- Low vacancy rate in rental housing market
- Variable quality and affordability in rental housing market
- Competition for housing with students who attend Cuesta College
- Competition for housing with families and non-student households in San Luis Obispo
- Neighborhood concerns regarding student behavior including social functions and property maintenance
- Access to campus
- Location of fraternities and sororities

Faculty and staff housing

- High costs in sales and rental market
- Commuting distance to campus

Principles

San Luis Obispo County and its incorporated cities offer only a limited housing market for students, faculty and staff. Thus, the Master Plan allocates areas for housing additional members of the campus community. Cal Poly's primary responsibility with respect to housing is to enhance student learning.

Seven principles guide the Residential Communities element of the Master Plan: student learning, housing type, support services, accessibility, affordable quality, feasibility, and community impact.²



² The Master Plan team synthesized this list of principles from meetings with the President and senior campus executives, from student and faculty-staff housing studies, and from recommendations provided by the campus/community Housing, Neighborhood and other task forces during Spring 1999.

Student Learning

A central reason for Cal Poly to consider providing more student housing is the opportunity to create residential environments that support learning, including study space, internet infrastructure and learning support within residential complexes. Such environments are particularly important to undergraduate students living away from home for the first time. Thus, the Master Plan also includes a policy requiring new freshmen to live on campus so as to be able to take advantage of this residential opportunity.

Housing Types

Traditional corridor-style student dormitories are no longer sufficient to meet all student housing needs. While freshmen may continue to prefer this form of accommodation, market analysis shows that upperdivision students prefer the greater privacy and flexibility associated with apartment-style living. Furthermore, some students prefer living with others in the same discipline. Thus, the Master Plan includes a range of student housing types including traditional dormitories, discipline-based living and learning facilities, apartment complexes and married student housing. Cal Poly expects that some students will continue to select fraternity housing, and that many students will prefer making their own off-campus housing arrangements. In addition, the Master Plan allocates areas for detached or attached single-family housing as well as rental units for faculty and staff.

Support Services

To ensure that students living on campus have access to a full range of support services, the proposed residential communities include space for such activities in or proximate to future housing complexes. Examples include personal services, retail food, meeting rooms, recreation and entertainment. The range of services will be geared to each housing type. For example, child care is important to some married students, faculty and staff, but not relevant to most undergraduates. (See the Support Services element of the Master Plan for more detail.)

Accessibility

Cal Poly anticipates that future students will enhance their learning through use of emerging "virtual" means such as Web-based instruction, research and administrative procedures. Thus, student housing must be electronically accessible. At the same time, however, the University expects face-to-face interactions to continue to dominate both curricular and co-curricular learning. Some of this will be intentional - organized seminars, labs, organizational meetings and team activities. Some will



be serendipitous - the unplanned conversation at the bookstore, food court, library, or on one of the campus greens. Thus, student residential communities must enable students to be accessible to one another as well as to campus instructional facilities. This includes barrier-free ADA access to all new student residential units. Faculty and staff housing should not only be compatible with adjacent single-family residential neighborhoods, but it should also benefit from the same amenities.

Affordable Quality

Student learning can be inhibited when students live in over-crowded and/or sub-standard housing conditions. Sometimes this occurs as a result of the tight local housing market: as demand increases, landlords increase rents and some students end up living in less than desirable spaces. By providing more on-campus housing, Cal Poly intends to ease these market conditions. The University will continue to provide housing assistance services for students, faculty and staff to enter knowledgeably and responsibly into the rental (or purchase) markets.

Feasibility

Because housing is not funded by the State, any housing provided by the University must be self-supporting. Thus, the University must be able to finance student, faculty or staff housing through mechanisms that will return sufficient rents to offset capital and operating costs. To implement the Master Plan, Cal Poly is exploring a variety of such means, including partnerships, to balance costs and risks with the potential benefits of providing on-campus housing.

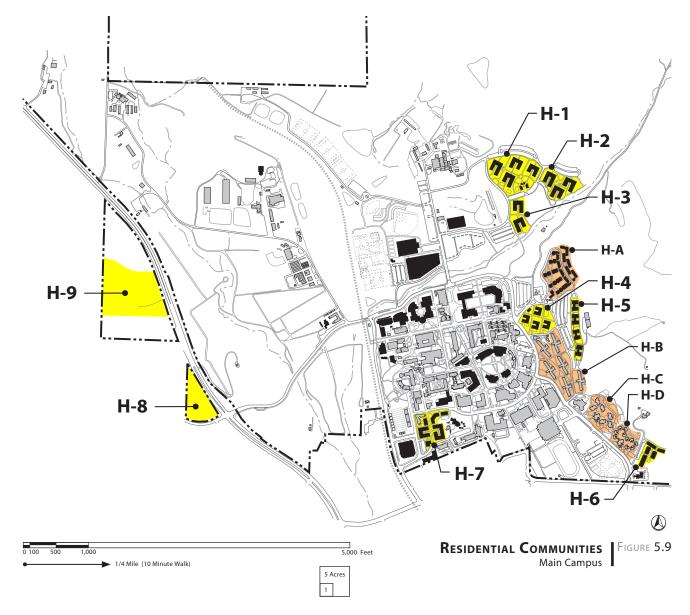
External Community Impact

The campus recognizes its impact on the San Luis Obispo community with respect to the housing market and traffic circulation. Additional housing on campus should mitigate immediate impacts on the local housing market for students, faculty and staff. At the same time, new on-campus housing communities will draw on both local services and resources and also contribute to the local economy and tax base.

Plan Components

The Residential Communities element of the Master Plan focuses on providing additional undergraduate student housing on campus in a variety of housing types. In addition, the Plan addresses married students, faculty and staff, and off-campus housing programs.





Legend

- New Residential Communities
- H-1 Apartment Style Residences 720 Beds
- H-2 Apartment Style Residences 540 Beds
- H-3 Apartment Style Residences 360 Beds
- H-4 North Mountain Housing Redevopment Apartment Style Residences - 420 Beds (120 beds net)
- H-5 Dormitory Style Residences 512 Beds
- H-6 Apartment Style Residences 136 Beds
- H-7 Apartment Style Residences 612 Beds
- H-8,9 Off-Campus Housing Faculty and Staff

	Existing Residential Communities
H-A	New Housing - Underway
H-B	South Mountain (Red Brick) Residence Halls
H-C	Sierra Madre Hall
H-D	Yosemite Hall

Note: Apartment Style Residences will accommodate returning students



New sections - Housing Market Analysis and Cal Poly's Commitment to Student Housing have been added.

Housing Market Analysis

Cal Poly has sponsored two recent studies of the housing market as it affects students, faculty and staff. In 1998, the Division of Student Affairs retained Gordon Chong and Partners and the Sedway Group to analyze the student housing market and explore the potential for new student housing on campus. The findings from this study contributed to the University's decision to build apartment-style units to house an additional 800 students on campus. The Cal Poly Foundation contracted with Anderson Strickler, LLC, to investigate the need and potential for University-sponsored housing for faculty and staff. Their 2000 Employee Housing Study found that housing cost is a significant factor in faculty recruitment and retention. Their report is guiding the development of faculty and staff housing on two sites west of Highway 1, as identified in the Master Plan.

Cal Poly will review and revise these market studies to inform each phase of Master Plan housing development and enrollment growth. Relevant comparative data includes vacancy rates, rents, land available for housing, financing options, and the nature and importance of amenities. Studies will also address student housing preferences and challenges in locating suitable off-campus housing.

Commitment to Student Housing on Campus

The Master Plan takes the local housing situation into account and proposes measures that will help alleviate a portion of it. The Guiding Framework of the Master Plan calls for adding student housing to accommodate all new enrollment growth. The campus will be breaking ground in Spring 2001 to build apartment-style housing for 800 students. This facility is scheduled to be ready for occupancy in Fall 2002. The next phase calls for housing from 1150 to 1300 additional students by 2004 or 2005. In sum, Cal Poly expects to add 1950 to 2100 student beds in the next five years, but only about 1250 additional students during that same time period. Over the next two decades Cal Poly will increase the proportion of students who live on campus from about 17 percent today to over 30 percent in the future.

Further, Cal Poly will monitor the local market closely, and, if continuing students are not able to find suitable housing, the campus will develop a strategy to house a larger proportion of the University's students in the future. Strategies may involve working with off-campus partners to identify suitable housing locations and provide financing. Cal Poly and Cuesta College are also exploring ways to cooperate in assuring appropriate housing for their students. Finally, Cal Poly will



participate with non-profit organizations in seeking broader solutions to community housing needs.

Undergraduate Student Residential Communities on Campus

The Master Plan identifies areas on campus to house all new undergraduate enrollment growth. By expanding its on-campus residential capacity by 3,000 to 6,600 beds, the University would be able to house about one-third of its future undergraduate students. The Master Plan contemplates a series of residential complexes stretching north from the present residence halls along the lower slopes of the hills east and north of the campus and along Brizzolara Creek. This layout places students in a unique setting between the surrounding natural environment and the more urbanized academic core. This arrangement retains a buffer between undergraduate student residences and surrounding neighborhoods in San Luis Obispo.

Proposed Student Residential Cor	nmunities		
Area	Housing type/density	Total beds	Comments
1 – North of Brizzolara Creek	Apartment-style, 130 beds/Acre, 2-story	720	
2 – North of Brizzolara Creek	Apartment-style, 130 beds/Acre, 2-story	540	
3 – North of Brizzolara Creek	Apartment-style, 130 beds/Acre, 2-story	360	
4 – North Mountain redevelopment	Apartment-style, 130 beds/Acre, 2-story	120	Net gain (Total beds = 420)
5 – East of lot R1	Corridor-style	512	
6 – Grand Ave and Slack Street	Apartment-style, 130 beds/Acre	136	
7 – Southwest corner	Apartment-style, 130 beds/Acre	612	
TOTAL		3,000	

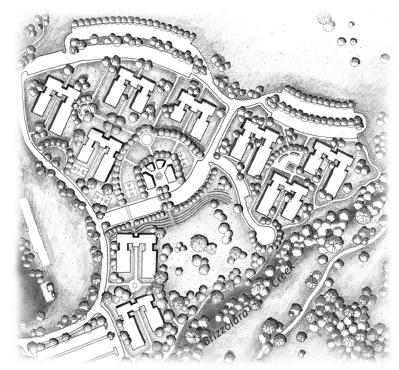
H-1, H-2 and H-3

The primary area for a new apartment-style student residential community is in the Drumm Reservoir area near Brizzolara Creek. Site studies suggest a potential for more than 1,600 beds in three complexes on the north side of Brizzolara Creek. The Master Plan calls for the design of these residential complexes to take advantage of, and be sensitive to, the natural setting. Thus, units would be clustered in small, 2-4 story groups with views and connecting open space. Active recreation facilities will be set back from Brizzolara Creek. The Brizzolara Creek area will be enhanced to achieve a more natural condition and improve water quality. Housing units, walkways, etc. will be set back from the creek, and drainage will be designed to enhance water quality. (Detailed management practices to protect and enhance Brizzolara Creek will be included in the implementation of the Master Plan.) TABLE 5.4

A 540 bed project shown in the Preliminary Draft of the Master Plan was removed from the south side of Brizzolara Creek to allow for a riparian enhancement program as shown in the Outdoor Teaching and Learning element.

In addition, this residential community will be designed with buffers along the northern slope and along the western edge near the Environmental Horticultural Sciences unit and Leaning Pine Arboretum.





Diagrammatic Illustration of Brizzolara Creek Residential Community

The project would alter the existing landscape and will introduce additional sources of light and glare from parking lot lighting and residential exterior lighting. The project site borders populations of *Calochortus obispoensis* (CNPS List 1B) and areas of wetland vegetation, which may be adversely affected. Impacts are significant, but mitigable (Class II). Impacts to grassland foraging habitat, wildlife movement corridors, and other sensitive habitats are less than significant. Impacts to agricultural land are also less than significant; the site has only supported grazing. A pre-construction Phase I archaeological survey will reduce impacts to unknown cultural resources, and Title 24 compliance will reduce the risk of seismic and geologic hazard. Traffic noise is addressed in the Circulation Element, and is expected to be less than significant (Class III).

H-4

As phasing and financing permit, some of the present residence halls (e.g., North Mountain) may be replaced or remodeled to offer additional on-campus housing choices for students.



Redevelopment of the North Mountain Facility is not expected to have significant adverse effects on the environment.

H-5

Some additional housing could be constructed on the parking lots above (east of) the present residence halls. This complex could be corridorstyle to accommodate a larger freshmen class that would be admitted annually as enrollment increases. The Master Plan calls for requiring all new freshmen to live on campus in order to benefit from the residential communities' supportive learning environment.

Environmental Consequences

Visual impacts are less than significant (Class III). The site is currently lit for parking and is not visually prominent. Air quality impacts are expected to be less than significant. The swale bordering the proposed housing site to the east is known to contain wetland vegetation and may be considered Waters of the U.S. by the Army Corps of Engineers. Designs for the project should avoid this area. Other water quality impacts would be governed by a Stormwater Pollution Prevention Plan (SWPPP) and policies guiding drainage and water quality contained in the plan. Existing vegetation on site is not expected to provide habitat for sensitive species, and would not constitute a significant impact. Impacts associated with seismic activity and geologic hazards will be reduced to a less than significant level by Title 24 compliance. Impacts are less than significant (Class III).

Н-б

The area just south of Yosemite Hall is proposed for upper division or married student housing.



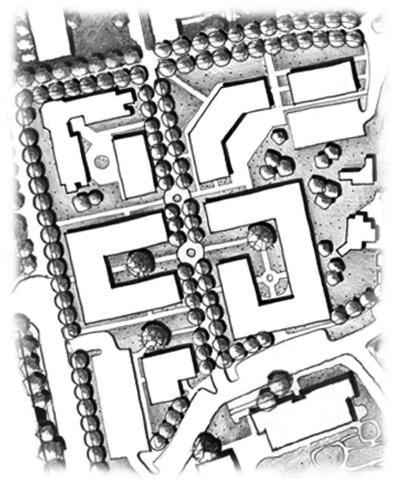
The design of housing in the southwest corner will reflect early California architecture in order to enhance the historic qualities of the area. Detailed studies will address the configuration of new buildings in this area.

Environmental Consequences

This area is currently undeveloped and is bisected by a vegetated drainage. Development would require careful design to protect natural features. The project should be sited to avoid the northern drainage swale, although an Army Corps Section 404 permit may be attainable. Design studies will address visual, light and noise impacts. Lighting should be directed away from residences to the south. Title 24 compliance and a pre-construction Phase I archaeological survey will reduce impacts associated with geology, seismicity, and cultural resources.

H-7

The southwest corner of campus offers a separate site for approximately 612 beds. Separate from other student housing, this community could be designed to meet needs of specific learning communities or other groups.



Diagrammatic Illustration of Southwest Residential Community



Views of the area under Master Plan buildout will include an intensification of existing uses; additional light is not expected to have adverse impacts on the community as all lighting will be hooded and directed away from neighboring residences. Aesthetics impacts are less than significant (Class III). Refer to the Circulation Element for traffic-related air quality impacts.

A records search at the CCIC revealed that buildings in the southwestern area might be eligible for listing on the NRHP. Mitigation will reduce potential impacts to a less than significant level (Class III). Previously undiscovered cultural resources are governed by local and state laws requiring the contractor to stop work and report to the proper authorities.

Demolition of older buildings in the area may include risks of release of asbestos and lead-based paint. State law governs the handling and disposal of these materials; impacts are therefore considered less than significant (Class III).

Under buildout of the Master Plan, the southwestern area will include among other things a new parking structure, and circulation improvements along California Boulevard. The purpose of many of these improvements is to reinvigorate the relatively detached southwestern area. Intensification will increase the population and traffic in this area; surrounding neighborhoods consist mainly of off-campus fraternity and sorority housing and student apartments. Development of student residences in this area, therefore, is not expected to conflict with neighboring communities. Impacts are less than significant (Class III).

Designing new on-campus housing in the form of residential communities or villages will reinforce the integration of learning throughout student life. Thus, new residential complexes will include infrastructure for computing, group study and learning centers, as well as space within individual units for private study. In addition, the University recognizes that a residential population of 6,600 undergraduates will require a range of social and entertainment opportunities. (*see the Support Services element for additional details about services*)

Married Student Residential Community on Campus

Sites under consideration for possible married student housing include the area south of Yosemite Hall and the southwest corner of campus.



Faculty and Staff Residential Community or Housing Program

The Cal Poly Foundation has been investigating the feasibility of offering a housing program for faculty and staff. Options under consideration include the construction of housing (for rent and/or sale with a ground lease from the University) on the properties to the west of Santa Rosa Street (Highway 1). Development of both sites should include support facilities and services, such as child care and recreation space, as appropriate to the site and mix of residents.

Other options include housing assistance and financing programs that would not involve construction on Cal Poly lands.

H-8

H-8 consists of about three undeveloped acres owned by the University at the northwest corner of Highland Drive and State Highway 1. Residential neighborhoods are located to the south and west. Housing types would be compatible with surrounding residential neighborhoods.

Environmental Consequences

Development of H-8 would be visible from the State Highway and a main entrance to the City. Development will be limited to the lower portions of the site, which will reduce visibility and increase screening options. The University will work closely with the City to develop design guidelines for this development. The number of housing units proposed at this site is not yet known; however, the site is less than four acres. The project is unlikely to be large enough to exceed APCD thresholds. Future air quality studies should be performed when details are available.

This site supports mostly non-native weedy vegetation; so biological impacts associated with this site would be less than significant. A pre-construction Phase I archaeological survey will reduce impacts to unknown cultural resources and Title 24 compliance will reduce geologic and seismic risks.

By 2005, noise levels at the site will exceed 60 dBA. Noise at the proposed site would be diminished because of the grade separation between the roadway and the developable portion of the site. This grade differential could reduce noise at the site by as much as 5 dB. Interior and exterior mitigation measures are available to reduce the noise level to less than significant levels. Impacts to public services and roadways cannot yet be quantified.



H-9

The southern portion of this site is currently leased to the California Department of Forestry (CDF) for use as a fire station. The proposed housing development would be located north of and adjacent to these facilities. The CDF is currently (summer 2000) proposing improvements to their development. H-9 consists of about 15 acres of developable area. Housing types would be compatible with surrounding residential neighborhoods.

Impacts from the CDF proposal were analyzed in a Mitigated Negative Declaration (MND). The MND is hereby incorporated by reference.

Environmental Consequences

The property owned by Cal Poly that currently houses the CDF facility is located at the northern edge of the city's developed core. Development here would be an extension of the city's urban area and protrude further into the heretofore undeveloped areas of the county. Careful design and landscaping would be in order, as this would become the northern entrance to the City of San Luis Obispo. Air quality impacts should be quantified once more details are available. A pre-construction Phase I archaeological survey will reduce impacts to unknown cultural resources.

Preliminary soils studies for the CDF facility show that the area soils are subject to erosion, expansion, slippage and generally slow permeability. Compliance with Title 24 standards will reduce impacts to a less than significant level (Class III).

The County Noise Element (1992) projects that by 2005, noise sensitive development with 644 feet of the centerline of the roadway north of Highland Drive will experience noise exceeding the 60 dB outdoor threshold. The University should specify design measures to achieve interior noise standards.

Off-Campus Student Housing Programs

Cal Poly will strengthen the assistance it provides to students seeking housing in the neighborhood rental market and increase the visibility of these services through the worldwide web and other forms of publication. This material includes information about renters' rights and responsibilities. Consistent with the policy of the California State Uni-



versity system, Cal Poly expects that fraternities and sororities will remain off campus.

To assist students living off-campus, Cal Poly should work with the management of large nearby neighborhood complexes that house many students, such as the seven off campus association communities, to assure continuing availability to Cal Poly students, to enhance Internet access, and to increase alternative transportation options.



RECREATION, **A**THLETICS AND **P**HYSICAL **E**DUCATION

Introduction

Recreational and athletic facilities are important to support the needs of the student population but also the instructional programs involved with physical education and intercollegiate sports. In some instances, design standards differ for intercollegiate athletic facilities. However, intramural recreation, physical education, and athletics can share many multipurpose outdoor fields and indoor facilities.

Background and Issues

Outdoor Fields

Current turf field space includes the practice soccer field south of the recreation center, the fields in the track area and softball practice fields west of the Cal Poly Foundation Warehouse.

Over the past two decades Cal Poly has converted recreational field space to indoor recreation facilities and instructional uses as the campus has grown. As a result, the campus had a deficit of field space for all programs, which has been addressed through construction of the new sports complex north of Brizzolara Creek.

The Sports Complex, which opened in Fall 2000, includes the following facilities:

- One (1) Baseball Stadium with practice infield, with a current seating capacity of 768 and potential expansion to 2500 seats
- Six (6) Recreation soccer/football fields
- Three (3) Recreation softball fields
- One (1) Softball stadium with practice infield with a current seating capacity of 426 with potential expansion to 1,000 seats
- Four (4) outdoor basketball courts
- One (1) restroom facility

Other outdoor facilities include the following:

• Recreation: basketball courts, outdoor swimming pool

The Heery Sports Facilities Master Plan was prepared in 1996 as the basis for the development of the Sports Complex north of Brizzolara Creek. The Heery Plan included a range of recommendations. Cal Poly did not adopt the entire plan but rather used it as the basis for the Sports Complex. The campus Master Plan also referred to the Heery analysis but supercedes the Heery Plan.



- Athletics: Mott pool
- Joint use: tennis courts, track

Indoor Recreation

Presently, the Recreation Sports Center is the primary indoor facility for general student recreation. It houses a gymnasium for basketball, volleyball and other uses, racquetball courts, weight rooms, dance and exercise rooms, and its locker rooms serve the outdoor pool as well. The Rec Sports Center also provides space for some physical education courses. Crandall Gym and the Natatorium are used primarily for physical education courses.

Mott Gym accommodates indoor intercollegiate athletic activities, including basketball, weight-training rooms, and offices for coaching staff.

The University Union offers bowling and a game room.

Issues¹

- Inadequate amount of turf field space for recreation and athletics (addressed by the new Sports Complex)
- Inadequate amount of seating in Mott Gym and lack of adequate restroom, press facilities and concession space
- Inadequate amount of outdoor court space in tennis and basketball
- Poor proximity to on-campus residents
- Lack of sports maintenance support facilities adjacent to field areas.
- Difficulty running tournaments with some existing facilities
- Inadequate seating at the track and field, lack of restrooms, concession space and press facilities

Principles

New recreational and athletic space need to be provided in strategic locations, physical arrangements and quantity sufficient to allow full development of a variety of recreation and sports programs. The Master Plan



¹ Issues include items identified by campus and community members during Fall 1998, at public meetings during Winter 1999, during task force discussions in Spring 1999, and at subsequent meetings with campus and community groups in Fall 1999 and Winter 2000.

provides opportunities to locate recreational fields in optimal proximity to existing and future campus residential areas and to consolidate athletic programs to focused areas on campus (as proposed in the Heery Plan).²

Proximity

Recreational facilities proposed in the Master Plan should be in close proximity to the population they are intended to serve. Physical education instruction must occur within normal course schedules, and students use recreation facilities between classes, thus getting to and from facilities within 10 minutes is important. Furthermore, the location of recreation amenities adjacent to residential areas is critical to establish a complete living environment. Finally, field and facility design should incorporate space for spectators (including ticket sales and concessions when appropriate) and access to field maintenance equipment.

Multipurpose Use

The Master Plan seeks to develop flexible recreation and athletic space that can be shared by multiple users for a variety of activities. Space and facilities should accommodate both informal recreation and organized recreation sports programs. Outdoor and interior facilities need to be adequate in number to accommodate free play as well as scheduled activities.

Specialization

Where standards permit, facilities should be designed to serve recreation, physical education and intercollegiate athletic uses. Nevertheless, some sports facilities have specific standards, are designed for certain programs, and need scheduling priority to remain available for exclusive use. The Master Plan provides direction for site specific or specialty facilities.

Continuity

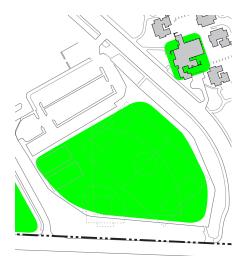
Where the Master Plan calls for moving recreation facilities in the future, the principle of continuity calls for the identification and development of a new site and facilities first, so as to minimize disruption.

Variety

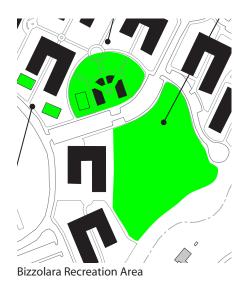
Both the quantity and variety of recreational facilities and spaces should be designed with the specific needs of a diverse college population in mind rather than general community recreation standards.



² The Master Plan team synthesized this list of principles from meetings with the President and senior campus executives and from recommendations provided by the campus/community Land Use, Public and Support Services and other task forces during Spring 1999.



Grand and Slack Street Fields



5 . . . : PHYSICAL PLAN ELEMENTS Recreation, Athletics and Physical Education

Plan Components

The Master Plan identifies the recreation and athletic facilities necessary to support the future enrollment capacity of the University at the main campus. The new sports complex will be readily accessible from new on-campus student housing located to the north along Brizzolara Creek. Additional field space would be located within the new residential complexes and across from Yosemite Hall for greater convenience. These areas would greatly enhance the recreation opportunities on campus and achieve a much-needed redistribution of field space. The following section outlines the primary components of recreation and athletic spaces on campus.

Grand Avenue and Slack Street Fields

A deficiency of field space continues to exist in the southeast area adjacent to Yosemite Residence Halls. Therefore, the Master Plan proposes to locate additional field space on the northwest corner of Grand Avenue and Slack street in a portion of the current parking lot. These fields would provide needed and proximate field space to the existing freshmen dorms and the student recreation center. The Master Plan calls for an unlighted informal recreation area, that includes space to accommodate the following facilities:

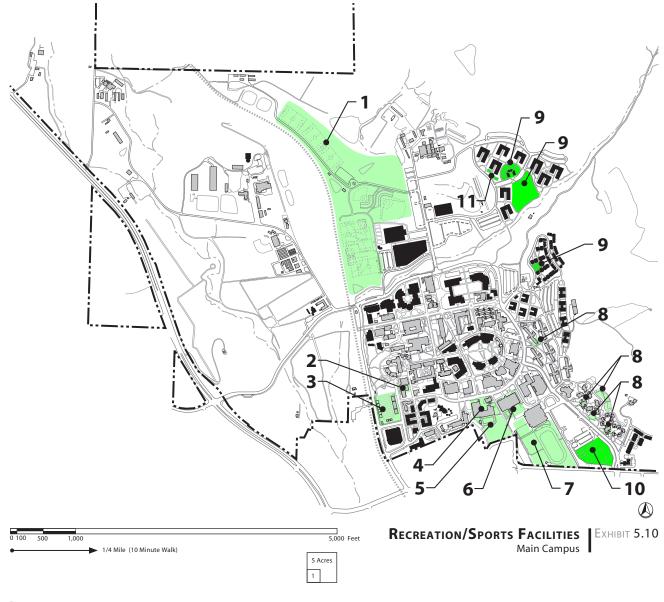
- One (1) softball field
- One (1) recreation soccer/football field
- Two (2) basketball courts

Environmental Consequences

The area proposed is currently a temporary parking lot. The development of recreation fields would constitute a beneficial impact for the area by reducing runoff and improving visual quality.

Brizzolara Recreation Area

Located adjacent to student housing north of Brizzolara Creek, these recreation facilities would be intended to serve the new student population in this area. The recreation space would be developed as informal green space.



Legend

- Existing Recreation/Sports Facilities
- 1 Sports Complex
- 2 Crandall Pool
- 3 Mustang Stadium
- 4 ASI Recreation Center
- 5 Practice Soccer Field
- 6 Mott Gym Sports Complex
- 7 Running Track and Tennis Courts
- 8 Informal Recreation at Housing

- New Recreation/Sports Facilities Informal Recreation at Housing
- **10** New Recreation Sports Fields and Courts

9



Environmental Consequences

The site is currently occupied by corrals. The development of recreational fields will constitute an improvement in use. Policies in the landscape are designed to reduce nutrient loading and the introduction of pesticides to the surface waters specified in the Master Plan will keep impacts at a less than significant level (Class III).

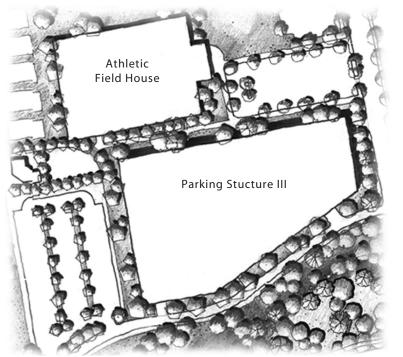
Sports Complex Area

Beyond the facilities completed in the Sports Complex, the Heery plan identified this general area north of Brizzolara Creek for a number of additional facilities discussed below, including a new arena for basketball, other indoor events and maintenance facilities. The Master Plan draws from the recommendations of the Heery plan for siting future athletic facilities. However, the Master Plan supercedes the Heery plan with respect to the details of both siting and size of such facilities based on more recent analysis of recreation needs and the findings of the environmental review conducted for the Sports Complex. As the Master Plan is implemented, the campus, and ASI in particular, will review and refine the kinds of recreational facilities needed to serve students, faculty and staff. As noise and light impacts are significant concerns, the campus will conduct further studies, like the Jones and Stokes Sound Study prepared in 1997 by the City and community for the Sports Complex. In addition, any additional sports facilities, like any other facility on campus, will be designed so as to mitigate environmental impacts on and off campus. Particular consideration will be given to minimizing impacts on established neighborhoods and public open space.

Athletic Field House

The athletics program projects a need for an 8,000-seat sports arena for intercollegiate basketball, currently housed in Mott Gym. With a new arena Mott Gym could be used for additional recreational sports activities. The new arena would include flexible court space, locker rooms, training facilities, office space and exhibit areas. This facility would also allow use by other sports and non-sports events. The arena would be located most beneficially adjacent to the potential future site of Mustang Stadium where locker room and other support facilities could be shared. Parking for events would be located in close proximity to the new structure at Via Carta. Refer to the Heery plan for a description.





Diagrammatic Illustration of Athletic Field House and Parking Structure III

Environmental Consequences

An 8,000 seat arena would generate additional traffic to the area, though not during peak hours. The site is appropriately located adjacent to other existing and proposed athletic facilities, as well as the most abundant parking supply on campus. This area was studied in the 1997 EIR for the Cal Poly Sports Complex.

Mustang Stadium

The football program will remain in its present location at Mustang Stadium at least during the initial phases of the Master Plan. When it is timely, and if resources are available, the football stadium could be relocated to the Sports Complex on the north side of Brizzolara Creek (in the location shown on the Heery plan) during a later phase of Master Plan implementation.

Moving Mustang Stadium to this location would displace two (2) soccer fields and two (2) softball fields. One (1) soccer field and (1) softball field would be relocated to the Grand Avenue and Slack Street entrance. Mustang Stadium would be designed to accommodate approximately 10,000 to 12,000 seats. This location would provide immediate access Several alternative sites were examined for a possible relocation of Mustang Stadium, most of which would have had serious environmental consequences. The Sports Complex is the most compatible area for this facility if and when it is moved. However, the current strategy proposed for Mustang Stadium is to renovate the current facility in place.



to the new parking structure at Via Carta and primary access from Highland Drive.

If Mustang Stadium were moved, the present site would be converted to intramural recreation use, accomodating soccer and/or softball fields.

Environmental Consequences

Since intercollegiate football games occur on Saturday, peak use of the facility would have no effect on weekday peak hour traffic. Soccer games (which are held during weekday evenings) would generate approximately 400 trips and 40 peak hour trips. Noise and lighting impacts would be significant, but mitigable (Class II). Additional studies (similar to the 1997 Jones and Stokes Sound Study) will be conducted so that any future facility could be designed to mitigate noise and light impacts.

Mott Gym

The athletics program has identified a phased expansion to Mott Gym including increasing seating capacity to 4,000. The increase in seating capacity would include upgrading access for the disabled, press boxes, restroom facilities and concession space. In the event a new sports arena is constructed at the Sports Complex, the mid- and long-range improvements to Mott Gym would not be necessary. The potential use of Mott Gym as an additional recreation sports facility would need to be reviewed. Immediately south of Mott Gym, adjacent to the new parking structure, six new tennis courts will be constructed.

Track and Field Area

This facility is proposed to remain unlighted in its current location in the southeast corner of campus. Track events are supported by adjacent parking and the proximity to the Recreation Center and Mott Gym facilities. However, improvements to this facility are proposed in the Master Plan. The track will be resurfaced and relined. New seating for approximately 500 would be added in grandstand arrangements and new facilities for restrooms, concessions and press boxes will be planned.

Environmental Consequences

Track and field improvements are relatively minor and would likely result in less than significant impacts.



Immediately to the west of the Track a new practice field for a variety of sports will be developed.

Environmental Consequences

A new practice field in this location could have some effects on nearby residences from nighttime lighting and noise. Mitigation for lighting and limits on announcing would reduce impacts to a less than significant level.

Recreational Trails - Foot, Mountain Bike and Equestrian

Cal Poly students, faculty and staff and members of the larger community use many of the roads and trails on outlying lands and campus ranches for recreation. The Natural Environment element of the Master Plan calls for standards for the design and management of footpaths, mountain bike trails and equestrian trails. Future campus maps would designate trails by appropriate use.

Environmental Consequences

Effects of trails are addressed in the Natural Environment Element.

Informal Outdoor Recreation

In addition to formal recreation fields, the Master Plan shows informal outdoor recreation space within the new residential communities. These include small courtyards and areas for passive recreation, as well as sites for activities like pick-up basketball and volleyball.

Informal Indoor Recreation

The new residential communities should include multi-purpose indoor recreation space, including game rooms.

As the organizaton responsible for managing student recreation programs, ASI should be involved in the design of new outdoor and indoor recreation facilities.



PUBLIC FACILITIES AND UTILITIES

Introduction

Public facilities and utilities include the physical facilities and infrastructure required to support campus operations. Some public facilities and services are highly visible, such as University Police, while others support students, faculty, staff, and visitor activity indirectly, even invisibly.

Background and Issues

Specific public facilities and services on the main campus include:

- University Police, Parking and Access Services offices, operations center, and vehicle parking on the north side of North Perimeter Road and the information booth at the Grand Avenue entrance to the campus
- Transportation Services offices, garage, and vehicle storage yards, currently on the north side of North Perimeter Road
- The Farm Shop machine shop and garages, currently east of Via Carta, just south of Brizzolara Creek.
- Facility Services and Facilities Planning offices, workshops, and warehouse

Some aspects of the utility infrastructure occupy specific sites on campus:

- The Central Heating and Cooling Plant in Building 40 in the campus instructional core
- The Electrical Substation at the entrance to Poly Canyon
- The Future Thermal Energy Storage Tank site studies under way

Other utilities function as systems linking services to campus facilities. Cal Poly has just completed the first phase of a combined utility infrastructure project known as the Utilidor. This phase consists of a milelong looped vault for district heating, district cooling, domestic water and high-voltage electricity service.

The following utilities are described by their capacity and distribution:

Electricity

Capacity

The recently completed, University owned, Mustang Substation has the capacity for moderate capacity increases. Physical space exists for a twin primary transformer that together with the current primary transformer



should provide ample capacity for the growth anticipated in the Master Plan.

Distribution

The campus is served by two 12,000 volt primary switched loops, one underground serving the campus core, and one overhead serving farm areas as far northwest as the new Poultry Unit. Both loops have ample capacity for the growth anticipated in the Master Plan. Future development would require connection and/or minor modifications to the existing loops and their associated switches.

District Heating

Capacity

The current central heating plant has three boilers serving the campus. Additional development may require the addition of boilers to the plant (Building 40). Relocation of the Graphic Communication printing press would provide space for these additional boilers.

Distribution

The Utilidor has ample capacity for current and future heating. Future development would require connection to the lines in the vault.

District Cooling

Capacity

The current central cooling plant has two chillers serving the campus. Additional development may require the addition of chillers to the plant (Building 40). Relocation of the Graphic Communication printing press would provide space for these additional chillers.

Distribution

The district cooling lines in the Utilidor are approximately half complete. Any major development, especially on the north side of campus would require completion of the loop in addition to connection to the lines in the vault.

Water

Capacity

Cal Poly derives its water from groundwater sources and through surface water entitlements. For domestic (non-agricultural) use, the University owns entitlement to 33% of the water in Whale Rock Reservoir or approximately 13,707 acre-feet. This entire amount is not available for regular annual consumption, however; because a certain level of water must be maintained in the reservoir to avoid a deficit.



The City of San Luis Obispo, which shares the reservoir with Cal Poly, has a computer model which accounts for drought conditions, line loss, evaporation, and other factors. The model assumes drought-year recharge, and assigns allowable yearly withdrawals based on worst-case weather cycle conditions. The model shows that during the 27-year cycle from 1942-1969, approximately 1,384 acre-feet per year (AF/Y) would have been available to the University, and would have drained Cal Poly's allocation during that 27-year period. This is a very conservative lower limit on consumption. The City of San Luis Obispo's water use from Whale Rock regularly exceeds their worst-case allocation.

Water from Whale Rock reservoir is treated at the Stenner Canyon water treatment facility owned and operated by the City of San Luis Obispo. A portion of the entitlement is diverted prior to treatment for use in landscape and turf irrigation. Peak treatment capacity has been recently expanded to 16 million gallons per day (mgd). Since water is conveyed to the University through the City's treatment plant and distribution system, the actual source of drinking water arriving at the campus may be either Whale Rock Reservoir or Salinas Reservoir. No matter the source, Cal Poly's allotment is still based upon its Whale Rock share.

Five wells on Cal Poly property supply water for agricultural irrigation. Irrigation water is stored in three reservoirs on campus with a combined holding capacity of approximately 40 AF. The reservoirs are used to collect rainwater as well as to hold water from Whale Rock until it is needed.

Distribution

Current (2000) domestic water use by the University (for non-agricultural purposes) is 568 AF/Y and agricultural use is currently 460 AF/Y, and the sports complex and housing project will add 129 AF/Y, for a total of 1,028 AF/Y. This figure varies considerably; records have shown total consumption as high as 1,228 AF/Y (1997-1998), and as low as 792 AF/Y (1992-1993).

Environmental Consequences

Supplies will be adequate for all institutional development and student and staffing increases proposed in the plan. Projects for which sizes have not been established (e.g., off-campus housing) will require further analysis, although water constraints are not apparent. Increases in distribution to ensure adequate fire flow must be sensitively sited and constructed to avoid adverse environmental impact.



Natural Gas

Capacity

Natural gas delivery to the campus edge has capacity for the growth anticipated in the Master Plan.

Distribution

Power Plant boiler additions may require additional gas capacity to that facility. Development north of Brizzolara Crrek, if not connected to the Utilidor, would require extensive improvements to the campus distribution system.

Sanitary Sewage

Capacity

Cal Poly participated in the construction of the new treatment plant and allowed for campus growth anticipated in the Master Plan. Present consumption is approximately 0.323 million gallons per day. Cal Poly's portion of the plant capacity is .471 million gallons per day. Total capacity in the collection system is 1.2 million gallons per day. However, storm run-off often exceeds this capacity.

Distribution

An extensive infiltration problem with storm water exists that could be solved by re-lining of existing lines and rerouting storm drainage from sewer lines. Development on the north side of campus, especially residences, may require a new trunk line to the campus' western edge.

Environmental Consequences

Increased capacity at the City treatment plant will be sufficient to serve growth proposed in the Master Plan. Stormwater system improvements will further reduce inflow.

Storm Drainage

Capacity

All existing storm drains are close to capacity during high rains. Replacement development per the Master Plan should have little impact and may improve impact on existing system. Future storm drainage in undeveloped areas should be independent of the existing system.

Distribution

All existing storm drains feed into Brizzolara and Stenner creeks. New development will require greater on-site remediation of storm water impacts.



Environmental Consequences

Stormwater facility development will be guided by Best Management Practices. These measures should ensure that water entering streams does not contribute unduly to sediment or nutrient loading, or any form of contamination.

Data and Communications

Capacity

Cal Poly has most of the conduit capacity to make modifications as technology changes. Present technological changes require less conduit capacity for the backbone. The campus is in the process of a communications infrastructure upgrade. The campus should have a complete fiber backbone and all applicable spaces should have connectivity. This should give the campus the flexibility for Master Plan growth and technological changes.

Distribution

Cal Poly has a fiber backbone and copper connection to 90% of the spaces on campus. The campus core is 98% connected. As the campus core expands into undeveloped areas, infrastructure will be added to supply those areas.

Solid Waste and Recycling

Capacity

Solid waste is collected and removed daily by a waste hauler to the local landfill. The campus landfill is closed to all future use. The campus is presently diverting up to 50% of its waste from the landfill by recycling, except for waste from construction projects.

Distribution

Solid waste is collected in dumpsters at each building. Recycling containers are placed at the same location where room allows. Recycling collection is made by campus personnel and brought to a central location for pickup by the recycler. As the value of certain recycled material increases, it may be in the interest of Cal Poly to designate an area for processing and storing materials for sale to recyclers.



Environmental Consequences

The Cold Canyon Landfill recently underwent expansions to serve the County, including Cal Poly, until 2015. Cal Poly is required to maintain its current 50% diversion rate; impacts are considered less than significant (Class III).

Issues¹

Many public facilities and services currently occupy land slated for campus-core redevelopment. Additionally, the functional capacity of certain existing facilities is compromised due to their age. Thus, the Master Plan addresses the following issues:

- Condition
- Location
- Resource capacity
- System capacities
- Energy consumption
- Conservation and recycling

Principles

Public facilities and services should be located outside the campus core unless their academic mission or functional nature requires immediate access to the core. Utility infrastructure must be provided for the expanded campus instructional core as well as for new residential communities. The following principles guide the location and approach to public facility and utility planning.²

Dependability

Public services and utilities should support the University efficiently, with the flexibility to meet changing needs. The utility infrastructure shall be designed for ease of maintenance and renovation.

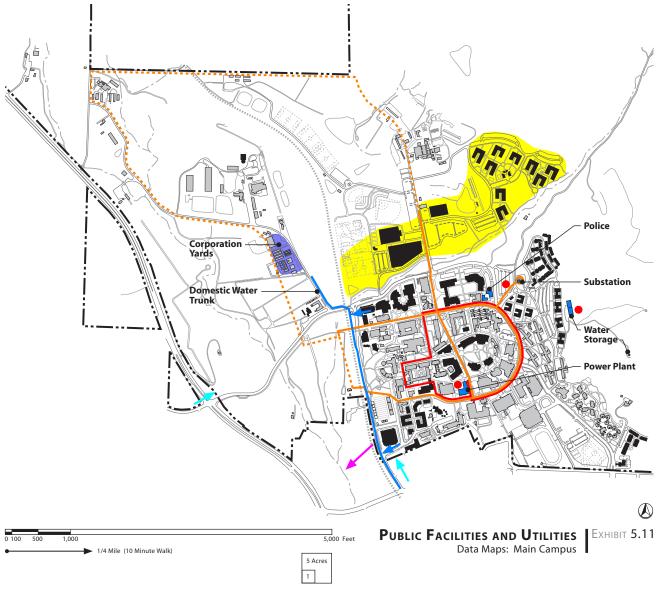
Balance Between Cost and Environmental Impact

Development of campus facilities and their utility infrastructure support



¹ Issues include items identified by campus and community members during Fall 1998, at public meetings during Winter 1999, during task force discussions in Spring 1999, and at subsequent meetings with campus and community groups in Fall 1999 and Winter 2000.

² The Master Plan team synthesized this list of principles from meetings with the President and senior campus executives and from recommendations provided by the campus/community Utilities, Built Environment, Land Use, Public and Support Services and other task forces during Spring 1999.



Legend

- Underground High Voltage Loop
- Above Ground High Voltage Loop
- Utilidor (district heating, cooling and domestic water)
- Gas Entry Points
- Water Lines/Connection Points
- Water Facilities
- Sewer Exit Point
- Area Requiring Utility Distribution Expansion
- Public Facilities
- Possible TES (Thermal Energy Storage) Locations



shall consider sustainability, alternative sources, self-sufficiency, life-cycle costing and/or other strategies to minimize impacts on the environment.

Resource Capacity and Conservation

Utility design and use patterns need to acknowledge that they consume limited resources, and that their use has impacts on and off campus.

Invisibility

To the extent possible, most public facilities and utility support structures shall be concealed from view. However, some may be visible as explicit contributions to teaching students about an environmental aesthetic that balances beauty and function.

Plan Components

Corporation Yards

The basic facilities that support campus operations should be relocated to the Old Poultry Unit site west of the railroad to allow expansion of the campus instructional core: Facility Services, Facilities Planning, Transportation Services, and the Farm Shop.

Environmental Consequences

The site is currently developed with industrial-style buildings. Redevelopment of this site to house the corporation yards would have little impact on the visual quality. The proposed site is under five acres; it is fairly level and will require minor grading, the main source of PM10. Although the site exceeds the general size threshold for PM10, it is unlikely that the project will generate dust at a significant level. Construction and operational emissions are considered less than significant.

Although the site is underlain by prime agricultural soils, it would be impractical to return the site to productive agriculture. There is no impact. It is unlikely, due to prior disturbance of the site, that cultural resources are present. Compliance with Title 24 standards will reduce the risk of geologic and seismic hazards, and compliance with the campus Hazardous Materials Management Plan will reduce risk of upset or release. The proposed location is more distant from sensitive receptors of noise, emissions and odors. Impacts are beneficial (Class IV).

With expansion of the campus instructional core and addition of new student residential complexes, the University Police, Parking and Access



Services operations center will be relocated at the northeast corner of the campus core.

Other Public Facility and Utility Improvements

In order to improve utility service and efficiency, the Master Plan includes the following projects:

- Location of the proposed Thermal Energy Storage tank(s) so as to minimize their visual impact while at the same time leave their functional capacity undiminished.
- Installation of a "twin" primary transformer at the Mustang electrical Substation.
- Relocation of the Graphic Communication printing press to allow for expansion of the Power Plant's district heating boilers and district cooling chillers.
- Completion of the Utilidor chilled water loop.
- Repair and replacement of existing sewer and storm drains.
- Development of a distribution system that would enable the increased use of second-use water for irrigation.

Environmental Consequences

In general, the other facilities proposed in the plan would not have adverse effects on the environment. The development of a second-use water irrigation line would be beneficial to water supplies and the use of energy-efficient building design would reduce impacts on utilities. Replacement of storm drains would improve collection and visually sensitive siting of the TES Tank would reduce aesthetic impacts.

Sustainable Campus Planning and Design

Site selection, site planning and building design should account for solar exposure, prevailing wind direction, and patterns of light and shade to minimize energy requirements and enhance the quality of outdoor space. Design guidelines and processes for implementing the Master Plan should encourage energy efficient building design and resource conservation. The campus landscape plan should consider the impact of vegetation and water use on the resource efficiency of facilities and the creation of comfortable and functional outdoor space.

New section - addresses guidelines for encouraging "green" campus planning and design.

California's governor Davis issued Executive Order D-16-00 which instructs state agencies to incorporate "green" design principles in their projects.

5 · · · : Physical Plan Elements

162 Public Facilities and Utilities

Design for renovation of existing buildings and new construction should consider ways to maximize energy efficiency and take advantage of the mild climate in San Luis Obispo. Alternative, renewable energy sources should be used to the greatest extent possible to offset growth in demand. As costs escalate for traditional energy sources, other options to consider include integrated photovoltaics and solar generation for electricity, passive and low energy cooling strategies for buildings (including materials, solar control, natural ventilation, thermal mass), passive solar space and water heating, and effective use of day lighting. New buildings should be well ventilated using natural ventilation, and existing buildings should be retrofitted where feasible to make them usable and livable during the summer without requiring air conditioning.

Consistent with Cal Poly's mission, the campus should explore an integrated approach to sustainable, or "green" design for research, education and operational applications in new and renovated buildings and in the campus landscape treatment. In addition to the energy conservation measures noted above, these efforts should address water conservation and reclamation, re-use of materials and products, and life-cycle costing in general. Several opportunities for resource recovery projects with educational and research potential as well as operational value include water supply and waste treatment for animal facilities, enhancement of Brizzolara Creek and the construction of new student residential communities.



CIRCULATION

Introduction

University entrances and gateways, vehicular circulation and access, bike and pedestrian circulation and access, public transportation, and service and emergency access are key circulation issues concerning Cal Poly. Campus parking and alternative transportation systems are uniquely related to these issues and merit additional discussion in the alternative transportation and parking elements of the Master Plan.

Background and Issues

The Master Plan discusses circulation at three different geographic scales: (1) regional access to San Luis Obispo, (2) local access to the campus, and (3) circulation within the campus.

Regional Access

The Central Coast of California is relatively isolated from other parts of the State. Airline access is limited to turboprop aircraft; Amtrak serves the community with train and bus connections each way from the north and south; and one major highway (101) provides vehicle access inland to the north and south. Lesser roads connect the area to the coast and Central Valley. Approximately three-fourths of Cal Poly's undergraduates come to the area from outside the Central Coast, and because of Cal Poly's relatively remote location, many of these students from outside the area travel to and from Cal Poly by car.

Local Access

Cal Poly is adjacent to the City of San Luis Obispo where about twothirds of its students live. However, students as well as faculty and staff also live in Los Osos, South County, North County or northern coastal areas. Approximately 13,600 students and 2,600 faculty and staff presently commute daily from off campus to study or work at the campus. With projected enrollment increases, the number of commuting students will not increase because additional students will live on campus. However, about 465 additional faculty and staff will commute to the University.

In recent years, Highland Drive and Grand Avenue have functioned as primary vehicular access points to the University. With nearly half of campus parking presently located along the instructional core's northern edge, most traffic drives through the campus, contributing to pedestrian-

See Alternative Transportation element for data on these modes of travel.



vehicle conflicts, long intersection queues and congestion at Highland and Highway 1.

California Boulevard is closest to the multi-family housing where many students live, but it provides limited access to the University and parking in the vicinity of Mustang Stadium and the Business Building. Currently, California Boulevard does not connect to any major parking lots. The Union Pacific Railroad grade crossing at Foothill Boulevard, just south of the California Boulevard entrance, can cause vehicular, pedestrian and bicycle traffic delays when a train is crossing.

A campus entrance at Stenner Creek Road and Highway 1 is currently very dangerous.

Public transit routes circulate around the campus with designated stops along Perimeter Road.

Bike and pedestrian routes to campus run parallel to the street system, but some are discontinuous. In addition, pedestrians often cross the Union Pacific Railroad at illegal locations. (*refer to the circulation data map in the Existing Conditions chapter*)

Internal Circulation

The primary vehicular circulation route within the campus follows Perimeter Road, Poly Canyon Road, Via Carta and Mount Bishop Road with connections to campus entrances as well as to the residence halls. The roads inside the perimeter (Poly View Drive and Via Carta) are open only to service vehicles, and these vehicles are supposed to avoid traveling on these roads during class breaks. The only bike routes on campus follow the vehicle routes, with one addition - bicyclists may cross campus from north to south on Via Carta. Pedestrian routes traverse the campus in all directions with some connecting through buildings.

Issues with Internal Circulation¹

• No direct connection between California Boulevard and Highland Drive



¹ Issues include items identified by campus and community members during Fall 1998, at public meetings during Winter 1999, during task force discussions in Spring 1999, and at subsequent meetings with campus and community groups in Fall 1999 and Winter 2000.

- Vehicle congestion at Highland and Highway 1, Highland and Via Carta, Grand and South Perimeter, Highland and Mount Bishop Road intersections
- Access to outdoor teaching and learning facilities and fields
- Uneven distribution of parking lots away from primary entrances
- Vehicle congestion at entrances and exits to parking lots, particularly at the change of classes
- Farm equipment and service access and circulation within core
- Vehicle and pedestrian conflicts along California, Grand, North and South Perimeter and Highland
- Lack of alignment between pedestrian routes and crosswalks
- Pedestrian ways are narrow, confusing and poorly lit
- Unclear delineation of pedestrian and bike paths on campus
- Lack of directional signage and building identification
- Limited, discontinuous bike routes on campus
- Topographical challenges to bike routes
- Inadequate bike storage and parking at key campus destinations
- Use of skateboards on pedestrian ways

Principles

Cal Poly is an integral and important part of its local and regional setting and must plan transportation systems and policies within this larger context. The campus-core environment is greatly affected by the perception of "automobile dominance." A fundamental objective of the Circulation element is to redesign campus circulation systems to reduce automobile dependence by establishing a pedestrian-oriented campus core and reducing vehicular access to the core. Reducing conflicts between pedestrians, bicyclists and autos by establishing a comprehensive circulation plan is a primary objective of this Plan. Through careful pedestrian, bicycle and transit planning, the University should strive to obtain these goals and improve the quality of human spaces.²



² The Master Plan team synthesized this list of principles from meetings with the President and senior campus executives and from recommendations provided by the campus/community Circulation and other task forces during Spring 1999. The Landscape Advisory Committee also recommended a set of principles that apply to circulation.

Alternative Transportation

A multi-faceted approach to alternative transportation should assist in enabling a cultural shift away from automobile dominance. (See Alternative Transportation element). Less reliance on vehicles using internal combustion engines can also contribute to improving air quality and diminishing the use of fossil fuels.

Public Transportation

Given the small scale of San Luis Obispo and the quantity of off-campus housing in close proximity to campus, additional public transportation could greatly reduce the need to increase the University parking supply to accommodate enrollment growth. Further, public transit routes and stops must be fully integrated into the campus circulation system.

Vehicle Trip Reduction

Traffic congestion can be reduced by increasing the number of persons in a vehicle and substituting alternative transportation, including public transportation, bicycles and pedestrians. In addition, Cal Poly could consider means to reduce the number of trips altogether by such means as "telework," technology-mediated instruction, using the Internet for administrative transactions, and providing services on campus so that students, faculty, and staff don't need to come and go more than once daily.

Access to Campus

The Master Plan should address local access to Cal Poly, including the coordination of pedestrian, bicycle and vehicle circulation systems and public transportation routes with the City, County and transit providers.

Strategic Parking Locations

A key to reducing the perception of "auto-dominance" is to distribute public parking close to campus entrances and in close proximity to campus residential areas. Primary entrances to the University need to provide direct access to parking lots or structures in order to reduce impacts on the surrounding neighborhoods and minimize vehicle pedestrian conflicts on campus. (See Parking element.)

Bicycle Friendly

Safe and effective bicycle connections to the surrounding street system, a clear bike path system on campus, and convenient bike parking and storage can and should increase bike use as a preferred commuting choice. Where appropriate bicycle routes may follow service access roads.



Compatibility of Circulation Systems

Traffic congestion and safety issues arise when circulation systems for motorized vehicles, bicycles, and pedestrians cross or overlap. The Master Plan should find ways to reduce these conflicts by designing separate routes and managing intersections. "Traffic calming" techniques and grade-separated pedestrian crossings should be considered, including railroad crossings in cooperation with Union Pacific.

Pedestrian Orientation

An instructional core free from parking and vehicular access has long been a University goal. As the instructional core redevelops, a greater amount of land should be dedicated to campus green space and pedestrian spaces supporting a student-centered and learner-friendly atmosphere. At the same time, pedestrian routes must be accessible for people with disabilities of all types and under a range of weather conditions.

Service Access

While removing vehicles from the instructional core, access by service, emergency and vehicles for disabled persons must be provided. Functions such as deliveries, trash pick-up, maintenance and emergency services are a vital necessity. Service routes should be designed to be used and look like pedestrian ways in terms of paving and layout. Many of the pedestrian-oriented circulation routes should also serve these vehicles.

Organization

Campus pedestrian systems in particular must be clearly organized to link all parts of campus in order to help visitors as well as students, faculty and staff find their way around. The pedestrian system must provide for access for the disabled to all campus facilities. Paths through campus should be efficiently designed to move people to their destinations, whether by car, bike, foot or Disability Resource Center services vehicle.

User Friendly

For visitors and daily users alike, a clear directional sign and facility identification system is a must. People should know where they are on campus at all locations and be able to find any campus destination with ease.

Safety

Safety must be addressed with respect to all circulation systems - vehicular, bicycle, pedestrian - including visibility and management of traffic flow at problematic intersections and crossings. In addition, pedestrian routes need to be lighted, graded or surfaced to ensure personal safety.



Beautification

Attractive gateways and entrance corridors, as well as the campus landscape setting, should also enhance circulation to and through the campus. (See Campus Instructional Core element.)

Plan Components

In support of the circulation policies and principles, the Master Plan Update reflects a commitment to providing enhanced access to and from campus for all modes of transportation. Concurrent with access improvements, the campus core should be restricted to pedestrian, bike, service and access for disabled persons. This shift in access is aimed at creating a pedestrian-oriented instructional core with vehicle access to strategically placed parking areas at the perimeter. This shift also underscores a commitment to developing a safe and efficient pedestrian circulation system that reduces pedestrian/vehicular conflict. The plan further recommends beautification and enhancement of key gateways and entrance corridors. These improvements are critical in order to reinforce the University's importance as an educational institution.

The Circulation element focuses on the following components:

- Campus entrances and gateways
- Campus pedestrian system
- Campus bicycle system
- Campus connection to public transit system
- Campus shuttle
- Campus vehicle circulation system

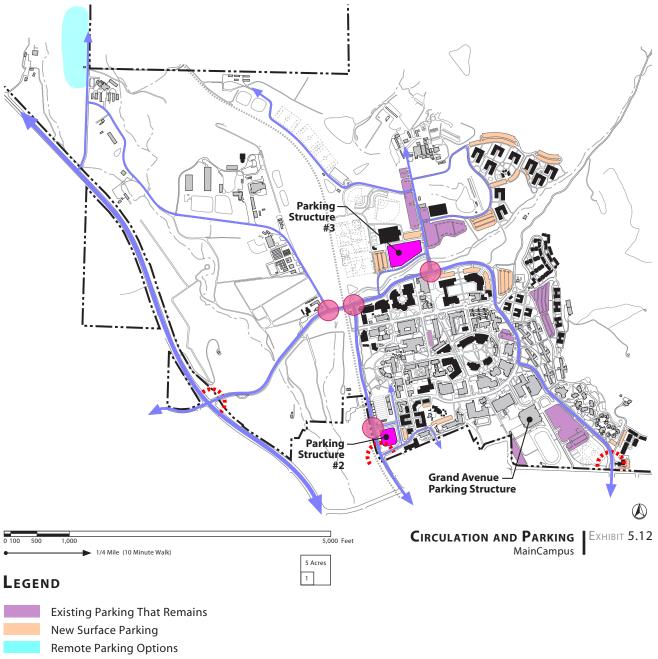
Campus Entrances and Gateways

Campus entrances provide the first image of the University to the community, visitors and prospective students as well as students, faculty and staff. The three principal entrances to the campus are very different in terms of context and design. The Grand Avenue entrance offers panoramic views of Cal Poly, the residence halls and landmarks like the Performing Arts Center. The Highland Drive entrance from Highway 1 provides a scenic overview of the City of San Luis Obispo, the campus, its natural setting and agricultural fields. The California Boulevard entrance provides a connection to San Luis Obispo's historic railroad past and to many of the campus' older buildings.

Environmental Consequences

Improvement of the entrances will have a beneficial impact on campus access and aesthetics.





New Parking Structures Primary Campus Roadways Campus Gateways Key Intersections (May require traffic control)



Grand Avenue and Slack Street

Highway 101 exit signs direct visitors to the Grand Avenue entrance to campus. This entrance provides an informal procession through adjacent residential areas and panoramic views of the entire SLO community. The entrance at Slack Street provides opportunities to screen parking areas, provide exposure to adjacent hillsides and display recreation fields and prominent Cal Poly facilities such as the Performing Arts Center and various residence halls. Views from this entrance also offer a contrast between the scale of the single-family neighborhoods to the south and the more institutional appearance of the campus.

Highland Drive and Highway 1

The campus entrance at Highland Drive and Highway 1 is important not only as an image statement about the University but also as a key entrance to the City of San Luis Obispo and as the southern end of scenic Highway 1. Beautification efforts should strive to acknowledge these three elements and provide for a balanced approach supportive of this context. Particular attention should be given to the views both of campus and to the surrounding morros from this location. The more detailed Highland Corridor Area Plan (in progress) recognizes how important the visual connection is between the dense campus instructional core and the University's natural environment and agricultural heritage; it also redesigns circulation at this entrance to reduce conflicts between vehicle, bicycle and pedestrian traffic.

California Boulevard, Foothill Boulevard and Campus Way

The California Boulevard entrance provides the closest access to studentoccupied multi-family housing both east and west of the Union Pacific Railroad. This historic palm-lined street once was the University's primary entrance. It should be redesigned to improve access, and Cal Poly should work with the City and Union Pacific Railroad to address access and congestion because vehicles approach this entrance from either California or Foothill Boulevard. Intersection redesign should address bicycle and pedestrian access and safety as well as provide for motor vehicles.

Campus Pedestrian System

A clearly defined system of pedestrian ways, linking all campus functions together and to the broader community, is a critical component in the shift to a pedestrian dominated campus core.



Pedestrian Connections To and From Off-Campus Locations

Redesign of Cal Poly's three entrances should address pedestrian access to campus, with the following features:

- Grand Avenue: Sidewalks along this corridor should be widened and linked to more direct routes to campus core destinations.
- Highland Drive: The more detailed Highland Corridor Area Plan (in progress) recommends pedestrian treatment on this route.
- California Boulevard redesign should include a widened pedestrian way from Foothill to Highland along the California frontage. Informal pedestrian crossings of the Union Pacific railroad should be replaced by one well-placed crossing to adjacent off-campus housing areas. A pedestrian path should be developed to provide a direct connection between off-campus housing areas along Foothill and the campus core.
- Other pedestrian access from off campus: Improve pedestrian routes and walkways from major points of access to the internal campus network, including Slack Street at the soccer practice field, from Longview and Hathway on either side of the Recreational Center, and Crandall Way between the Child Care Center and Alumni House.

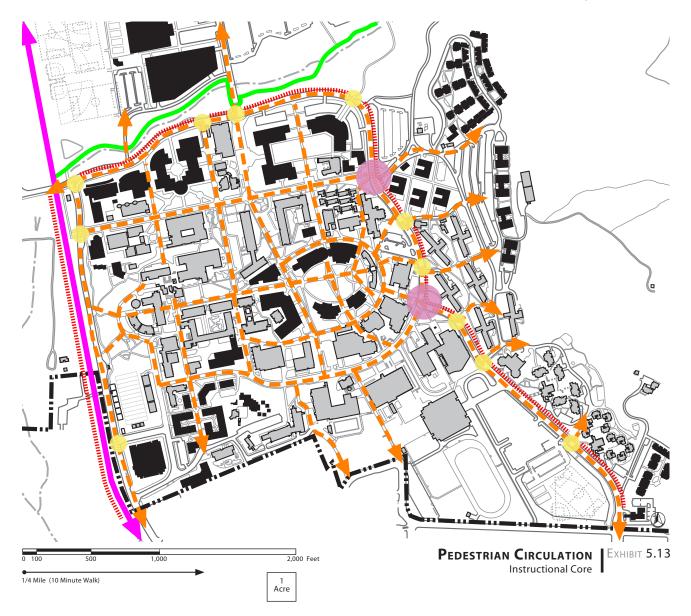
Internal Pedestrian Circulation

The pedestrian circulation system should link campus urban spaces with student destinations and perimeter parking, providing a logical and easyto-use pathway system.

Many of the existing campus walkways started as paved streets with little space designed and dedicated to the pedestrian. The Design Guidelines and Landscape Plan, as part of the Master Plan implementation, should provide guidance for resurfacing major pedestrian pathways. Surfaces must be designed to accept service and emergency vehicle loads.

- Consider grade-separated crossings along Highland and Grand at key locations to reduce conflicts between cars and pedestrians traveling to and from campus residential areas.
- Explore "traffic calming" alternatives to reduce vehicle/pedestrian conflicts.
- Develop at-grade crossings with appropriate traffic control systems at strategic locations along California, Highland and Grand and





Legend

- Primary Campus Pedestrian Circulation Routes
- Controls to Inhibit At-Grade Pedestrian Crossing
 - Class I Railroad Recreation Trail
 - Brizzolara Creek Trail
 - Pedestrian Crossing
 - Potential Grade-Separated Crossings



include corresponding pedestrian circulation designs to channel pedestrians to these key crossing locations.

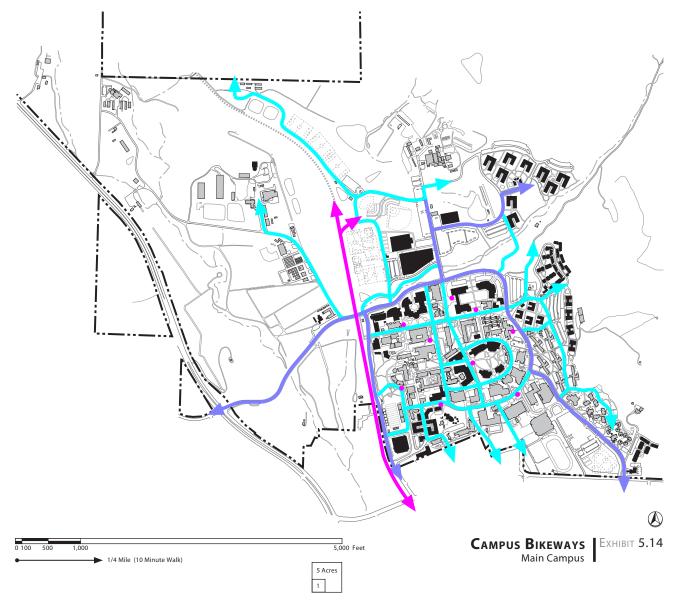
- Improve Via Carta as a major pedestrian promenade from the recreation center to Highland Drive.
- Improve pedestrian access and connections to all transit stops and to all parking lots.
- Design all pedestrian ways wide enough to comfortably accommodate high use and to be well lighted, have well-placed directional signs, supported by a consistent campus furnishing theme, i.e. light types, benches, trash, signposts and graphics.
- Design all pedestrian ways to reduce conflicts between foot traffic and bicyclists.
- The pedestrian system must be compliant with the Americans with Disabilities Act (ADA).
- Develop a new pedestrian path along Brizzolara Creek from the California/Highland intersection to the new residential housing community at the Poly Canyon entrance. The path should be sensitively sited to support enhancement of this natural creek corridor. This path will be designed as part of the Brizzolara Creek Enhancement Project to ensure that it is located outside the riparian corridor. Creek crossings will be consolidated and minimized.
- Develop other new pedestrian ways to connect the instructional core with the surrounding residential villages and natural areas such as Brizzolara Creek and Poly Canyon.

Environmental Consequences

Development of a campus pedestrian system and associated amenities will have a beneficial impact on campus aesthetics. Development of a more convenient campus pedestrian system may reduce impacts to air quality associated with vehicle emissions if it induces more people to walk instead of drive. Designation and improvement of the campus pedestrian system should also reduce conflicts with vehicles.

Pedestrian paths proposed for sensitive areas (e.g., Brizzolara Creek, Poly Canyon) are specified in the Master Plan to be sensitively sited and in concert with restoration efforts. Impacts to sensitive species and habitat are therefore less than significant (Class III).





Legend

- Designated Campus Bikeways
- Class I Bikeway Along Railroad
- Class II Bikeways on Roadways
- Principal Bike Storage Areas



A Class I bike lane is completely separated from roadways.

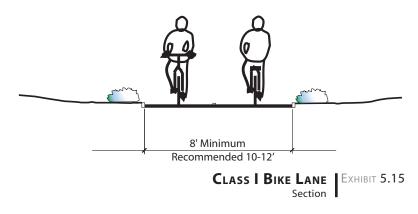
A Class II bike lane is part of a roadway, but it has its own lane.

Detailed planning for bicycle routes and storage will be included in the guidelines for implementing the Master Plan. These guidelines will be developed with campus bicycle user groups and committees.

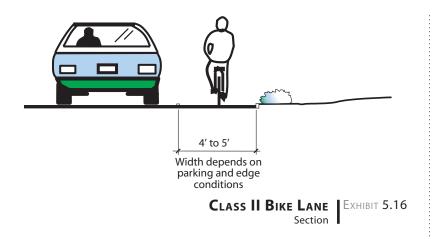
Campus Bicycle system

Development of a campus bicycle system is an important step in reducing vehicle trips to the campus. Of particular importance is the connection of the surrounding City bikeway system to the campus system while ensuring direct routes to primary destinations and ease of use. Campus bike lanes need to be clearly marked and proper use of these lanes needs to be enforced. Separating pedestrians and vehicles from bike lanes is important as well.

- Extend the Class I railroad recreational trail from Foothill Boulevard north to the new recreation sports complex.
- Provide Class II bike lanes on Highland Drive, California Boulevard and Grand Avenue and connect these bike lanes to the surrounding City bikeway system.
- Establish an internal bikeway system for the campus core linking the off-campus route to key on-campus destinations.
- Establish clearly marked bike lanes on campus through the use of special paving surfaces, color markings and attractive signage.
- Establish clear bike routes from perimeter parking lots to key destinations on campus.
- Provide conveniently located safe, secure and attractive bicycle storage facilities at primary destinations and activity centers.
- Consider expansion of options and facilities for solar and electricitypowered bicycles.







Environmental Consequences

Development of a more efficient campus bicycle system may reduce vehicle traffic by providing a convenient alternative. Clearly marked bike paths and separation from other modes of travel should improve circulation. These impacts are beneficial (Class IV).

Campus Connection to Public Transit System

An effective transit system is key to supporting alternative modes of access and transportation to the campus. Connection with pedestrian and bike systems is critical to making the entire system easy and efficient to use. Thus, Cal Poly should continue to work with local transit providers to enhance access to Cal Poly and integrate transit access into the campus circulation system.

- Adjust transit routes to follow new campus roadway alignment.
- Locate transit pullouts and shelters at strategic locations providing convenient access and connections to destinations on campus.
- Use state-of-the-art technologies to add to the convenience and efficiency of transit use.

Environmental Consequences

Enhancement of access to public transit may reduce vehicle traffic by providing a convenient alternative. Air quality, consequently, may be beneficially impacted (Class IV).



Campus Shuttle

In order to encourage alternative transportation and to provide access to and from nearby student residential complexes, parking lots and outdoor teaching and learning facilities, Cal Poly should undertake a financial feasibility analysis to institute a campus shuttle service with dedicated funding. Routes should be designed to serve regular locations on a frequent schedule. In addition, the shuttle service feasibility study should include an analysis of the ability to provide ad hoc access for student field trips and other activities in the Extended Campus away from the instructional core. The shuttle should have regular loading and unloading points at key buildings, parking lots and structures. Consideration should be given to using electric or similar low-emissions vehicles for the shuttle service. (*refer to Alternative Transportation element*)

Environmental Consequences

Access to a campus shuttle may reduce vehicle traffic by providing a convenient alternative. Air quality may also be beneficially impacted (Class IV).

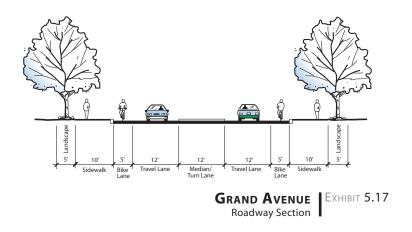
Campus Vehicle Circulation System

The campus vehicle circulation system should be redesigned to surround the campus instructional core, with consideration of medians in the primary roads to create a boulevard effect.

Grand Avenue

Grand Avenue should continue to offer key access to campus from Highway 101 and San Luis Obispo's northeastern area. Grand Avenue should provide necessary access to the Performing Arts Center, Grand Avenue Parking Structure and the large surface parking area in front of the Yosemite residence halls. The lane configuration and design should remain largely as it presently exists. Pedestrian crossings should be redesigned to increase access and safety across Grand Ave.





Environmental Consequences

Implementation of roadway projects that are included in the Master Plan would reduce traffic at this location. Improvement of pedestrian crossings will reduce conflicts between pedestrians and vehicles. This component is therefore considered beneficial (Class IV).

Routing of additional traffic in this area will increase noise levels over existing conditions. Additional traffic expected under the Plan on Grand Avenue totals 1,485 ADT, a 12% increase. This corresponds to a decibel increase of less than one, well below the threshold of human hearing; sensitive receptors will not perceive an increase. Impacts are less than significant (Class III).

Highland Drive

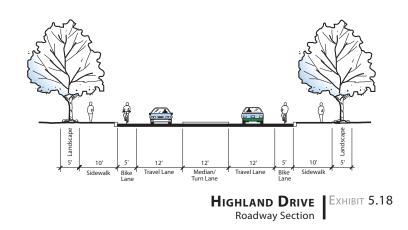
Highland Drive should be redesigned and extended from the current terminus at Via Carta to connect with Perimeter Drive adjacent to the Fisher Science Building.

This new alignment will include additional land in the campus instructional core, thus providing needed expansion space for academic redevelopment. Highland Drive should provide access to a new parking structure at Via Carta and new residential villages along Brizzolara Creek at the entrance to Poly Canyon. Highland Drive should include both one travel lane and a Class II bike lane in each direction.

Highland Drive should also be improved with landscaping and other beautification efforts from the entrance at Highway 1 to the intersection at California pursuant to the Highland Corridor area plan (in progress). (*see Roadway Section, below*) An alternative considered was to bring Highland Drive around through the residence halls so it would meet Grand just north of Vista Grande restaurant. This would have offered greater design flexibility in the core, but would have disrupted residential life.



Highland Drive should be designed to accommodate pedestrian crossings.



Environmental Consequences

Improvement of landscaping and other beautification efforts will visually enhance the Highland Drive corridor (Class IV). Runoff from the roadway may adversely impact water quality, steelhead trout and other sensitive species inhabiting the creek, through transport of sediment and pollutants into the creek. Programs in the Master Plan, including BMP's for drainage, reduce the significance of these impacts.

Routing of additional traffic in this area will increase noise levels over existing conditions. Additional traffic expected under the Plan on Highland Drive totals 935 ADT, a 14% increase. This corresponds to a decibel increase of less than one, well below the threshold of human hearing; sensitive receptors will not perceive an increase. Significance is further reduced in that peak vehicle traffic does not generally correspond with class sessions when sensitive receptors are most likely to be disturbed. Impacts are less than significant (Class III).

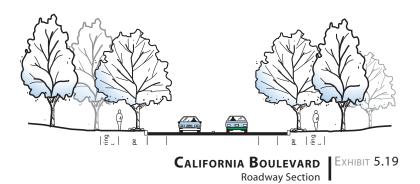
Operation of the realigned Highland Drive will be hampered in three locations: the intersection with Mount Bishop Road, the intersection with California Boulevard and at Via Carta. The Traffic and Parking Report (Chapter 6 and Appendix B) suggests that these intersections will require further study and improved traffic controls. The Master Plan contains a policy ("Key Intersections," below) to further study these intersections and address any issues. Impacts are less than significant (Class III).



California Boulevard

California Boulevard should be connected to Highland Drive. A new connection at Highland Drive should greatly enhance access to the campus from the Foothill corridor area. An important circulation aspect of the California Boulevard extension to Highland Drive is the internal connection between the southwest corner of campus and other major campus gateways. For example, with the proposed closure of North and South Perimeter Roads to campus traffic, a visitor arriving at the Visitor Information Center on Grand Avenue for a meeting at Career Services would otherwise have to leave the campus roadway system and reenter campus via California Boulevard.

California should be redesigned to provide access to a new parking structure at the corner of Campus Way and California and should provide both one travel lane and a Class II bike lane in each direction. The extension of California Boulevard calls for extending the 3-acre lawn west of the Business Building both north and south along the new street as an expanded Campus green belt.



Environmental Consequences

Proposed improvements to California Boulevard should benefit the visual quality of this roadway (Class IV). Operational air quality impacts are individually insignificant; refer to the discussion in Chapter 6 for a discussion of cumulative impacts.

A Mitigated Negative Declaration prepared for the Engineering III Project-California Boulevard Extension in 1999 identified certain Poly Grove trees as potentially historic resources. Policies in the Master Plan specifically state that Poly Grove historic trees will be retained. One archaeo-

(continued next page)



Environmental Consequences (cont.)

logical site eligible for listing on the NRHP may be impacted by the project; mitigation is recommended to reduce potential impacts.

Routing of additional traffic in this area will increase noise levels over existing conditions. Additional traffic expected under the Plan on California Boulevard totals 1,870 ADT, a 12% increase. This corresponds to a decibel increase of less than one, well below the threshold of human hearing; sensitive receptors will not perceive an increase. Impacts are less than significant (Class III).

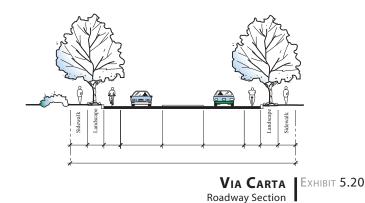
The analysis in Chapter 6 shows that implementation of the Master Plan will not reduce roadway or intersection levels of service below acceptable thresholds. Impacts are not significant.

Via Carta

Via Carta, north of its intersection with Highland Drive, should be redesigned to accommodate additional vehicles and pedestrians needing to access the recreational sports facility, new residential village areas and the new parking structure. This road should be widened to accommodate travel lanes in each direction, a center turn lane and one class II bike lane in each direction.

A new widened pedestrian way should be developed on each side of the street to provide convenient access for pedestrians and should be connected to the Brizzolara creek walkway. The intersection at Via Carta and Highland Drive should be improved for increased capacity.

With the extension of Highland Drive, Via Carta will no longer be needed for through traffic south of Brizzolara Creek, and will be closed except for service access.



5 · · · : PHYSICAL PLAN ELEMENTS 182 Circulation

Environmental Consequences

Operational air quality impacts are individually insignificant; refer to the discussion in Chapter 6 for a discussion of cumulative impacts, and the Parking Facilities element for a discussion of impacts associated with the parking structure. Via Carta crosses Brizzolara Creek before its intersection with Highland Drive. Impacts to the creek during construction and operation are mitigated by required construction erosion control and mitigation specified in the EIR.

Routing of additional traffic in this area will increase noise levels over existing conditions. Additional traffic expected under the Plan on Via Carta has not been quantified; given increases expected on other streets, however, resulting noise is expected to be less than significant.

Key Intersection Designs

The design of specific campus roadway intersections should depend on a case-by-case analysis. However, designs should explore a range of solutions that provide the best response to the needs. Designs should therefore consider roundabouts, signalization, stop signs, intersection geometry, lane configuration and other solutions. Intersection redesign needs to accommodate pedestrians and bicycles as well as motorized vehicles. Intersection redesign should also reduce reliance on University Police staff to monitor and control traffic as a routine daily practice.

Environmental Consequences

Careful study and design of key intersections will benefit circulation (Class IV).

Circulation to the Extended Campus

The campus circulation system will be enhanced and expanded to provide access to the new residential communities as well as to Outdoor Teaching and Learning fields, units and study areas.

Service, Emergency and ADA Access

Access to the campus core by service and emergency vehicles is very important. These vehicles need to circulate throughout the core while sharing circulation routes with pedestrians and bicyclists. Conflicts between these users should be reduced through design and routing plans. Most, if not all, buildings need to be accessed for routine maintenance The term ADA is an acronym for the American Disabilities Act which requires that facilities for the public be made readily accessible for the handicapped.



and service on a daily basis. Clearly defined routes between service centers, such as the Corporation Yard and the campus core, are identified in the Master Plan. The Disability Resource Center shuttle service should use these routes as well. (refer to the campus service access map on the following page)

Environmental Consequences

The designation of clearly defined routes and preservation of access will benefit circulation on campus and reduce conflicts (Class IV).

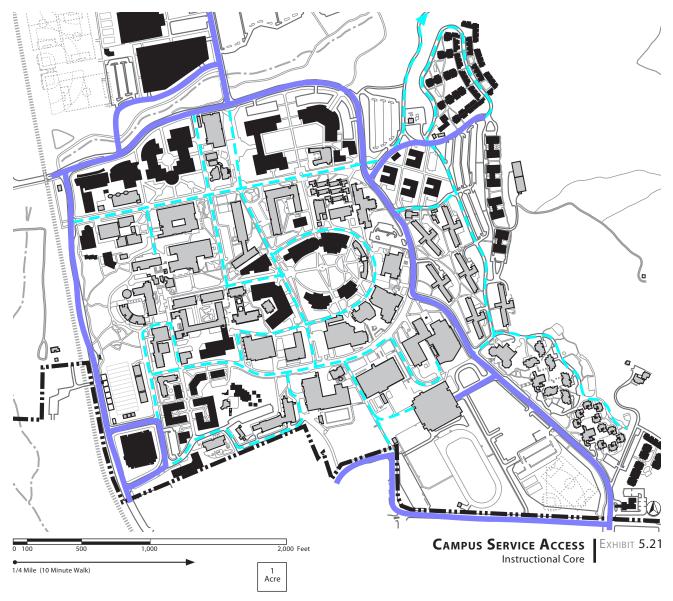
Loading and Unloading

The Master Plan accommodates loading and unloading of car pools and van pools at strategic and convenient locations along roads surrounding the campus core.

Environmental Consequences

Designation of specific loading zones will reduce potential conflicts and traffic delays (Class IV).





Legend

- Major Roadways
- Primary Campus Service Access Ways



ALTERNATIVE **T**RANSPORTATION

Introduction

The need to bring people to campus in a more efficient and environmentally responsible way is so important that the subject merits a separate element in the Master Plan. Enrollment growth would place additional demands on the road system that provides access to campus. Also, Master Plan studies show that the campus cannot reasonably accommodate the anticipated future demand for parking. This element describes Cal Poly's current program and future plans for increasing the use of alternatives to the private vehicle for transportation to and from campus.

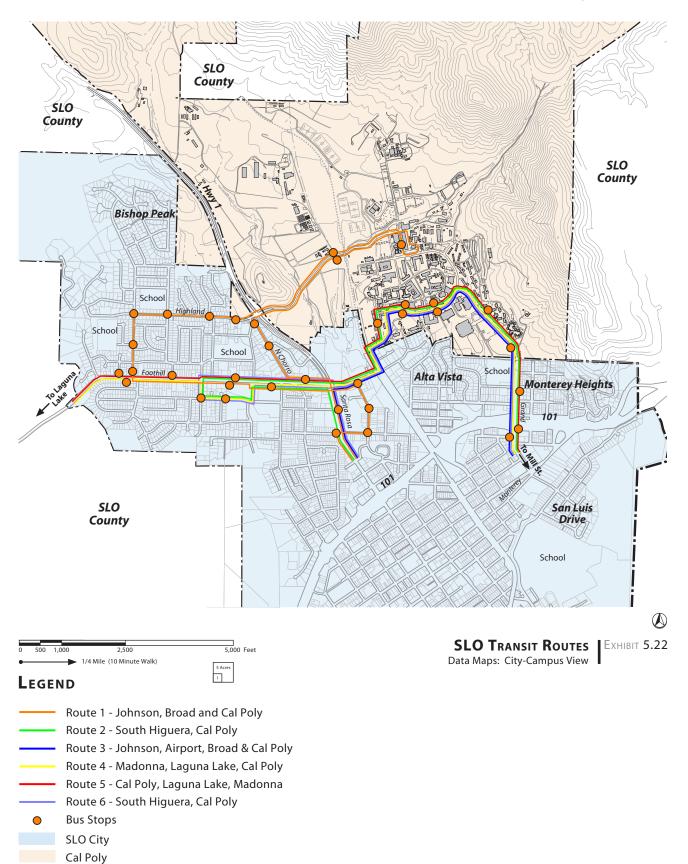
Background and Issues

The primary means of arriving on campus other than by automobile are on foot, by bicycle and bus. Van pools and car pools are active on campus as well. Cal Poly ranks number one in San Luis Obispo County for the average ridership per vehicle. This means more people commute to campus than to any other county institution in something other than a single occupancy vehicle. The following agencies provide the most common alternative means of transportation available to students, staff and faculty:¹

- SLO Transit the city operates the local bus service that provides service within the city limits and Cal Poly.
- Central Coast Area Transit (CCAT) provides regional bus service to Cal Poly.
- San Luis Obispo Regional Ridesharing is a referral service providing information on car pools, van pools, shuttles, bicycling and public transit.
- The Cal Poly Access Services office provides information regarding car pools, van pools, shuttles, bicycling and public transit.
- Cal Poly operates a van pool program for campus employees (who share the monthly cost). 10% of faculty and staff regularly participated in van pools in 1999.



¹ Cal Poly currently provides an annual operating subsidy to both SLO transit and CCAT to encourage students, faculty and staff to use public transportation.





Issues²

- Cal Poly's remote regional location, which encourages students to bring cars when they move to San Luis Obispo.
- Dependence on the automobile by many students, faculty and staff.
- Perception of alternative transportation as slow and otherwise inconvenient.
- Difficulty in setting transit schedules to meet class schedules.
- The cost to the University of maintaining access to alternative transportation, especially the bus service.
- Lack of incentives to change travel behavior.

Principles

Cal Poly should continue its regional leadership role in fostering the use of alternative transportation and discouraging the use of single-occupant automobiles. An important step toward achieving these goals should be working to modify the culture of Cal Poly students, faculty and staff regarding the use of the automobile.³

Education

Cal Poly should continue to improve its programs to demonstrate the availability of transit services and other forms of alternative transportation. To change the culture with respect to reducing automobile dependence, the campus should expand its current educational programs.

Encouragement

Cal Poly should study the financial feasibility of expanding its incentives for students, faculty, and staff to encourage use of alternative transportation.

Support

Cal Poly will continue to provide financial support for public transportation. Further, the campus should explore how the University can balance the allocation of resources toward trip reduction programs rather than toward the cost of providing more parking on campus.

New principle - financial support for alternative transportation.



² Issues include items identified by campus and community members during Fall 1998, at public meetings during Winter 1999, during task force discussions in Spring 1999, and at subsequent meetings with campus and community groups in Fall 1999 and Winter 2000.

³ The Master Plan team synthesized this list of principles from meetings with the President and senior campus executives and from recommendations provided by the campus/community Circulation and other task forces during Spring 1999.

Convenience

Cal Poly should continue to work with city and regional agencies to make alternative transportation increasingly convenient, including scheduling, access and quality of service.

Plan Components

Cal Poly's approach to encouraging the use of alternative transportation involves both incentives and policies. Cal Poly will reduce parking demand by 2,000 spaces by the time the campus attains the new Master Plan enrollment. The following list of possibilities will be addressed in more detail in operational plans associated with the implementation of the Master Plan. Analysis of practices at comparable institutions should provide helpful insight into the feasibility and potential success of these and other programs.

- <u>Van pools</u> Increase this service's convenience and available information.
- <u>Car pools</u> Encourage car pooling by considering more convenient parking locations and/or lower parking fees for regular car pools.
- <u>On-campus Transit</u> Explore the feasibility of providing shuttle service on-campus so that students, faculty, and staff do not need their cars to cover longer distances on campus.
- <u>Integrated Transit Plan</u> Work with SLOCOG, City and County to develop both short and long term transit plans.
- <u>Energy Technology</u> Collaborate with SLOCOG and public transportation providers in exploring alternative technologies, including vehicles not dependent on fossil fuels, "real time" arrival/departure information, flexible as well as fixed routing, etc..
- <u>Bike/Pedestrian Enhancement</u> -Make bike and pedestrian travel to campus safer and more convenient, especially at the California Boulevard entrance to campus. (See Circulation element.)
- <u>Faculty/Staff Incentives</u> Explore additional means of making alternative transportation more attractive, subject to collective bargaining arrangements.
- <u>Entertainment and Other Services</u> Provide entertainment and recreation resources on campus that will entice resident students to stay on campus rather than traveling elsewhere for these services.

Not housing the new enrollment on campus would triple the number of new peak hour car trips to campus.

Many comments on the Master Plan have raised concerns about the continuation of the fully subsidized bus passes for Cal Poly students and employees. The current bus subsidy is an element of a negotiated arrangement between Cal Poly and the City of San Luis Obispo. The current agreement is for four years and ends on June 30, 2001. The negotiations are complex and are influenced by ever increasing costs. In addition, Cal Poly's current funding (through parking fines) has been and continues to be relatively stable, meaning it has not been increasing commensurate with increased transit costs. Because the subsidy is the result of two party negotiations, it is not possible for the University to predict that it will always be able to reach an agreement with the city. Nevertheless, Cal Poly is committed to maintaining the funding for the bus at least at the currently designated level, and is exploring funding sources, such as an increase in parking fees, to fully cover the subsidy.



- <u>Subsidy</u> Continue to provide financial incentives for students, faculty and staff to use public transportation, as it reduces the need to provide parking on campus.
- <u>Parking Fees</u> Explore the adjustment of parking fees, to the extent allowed by law and CSU policy, to meet costs and assist with alternative transportation systems.

Environmental Consequences

The successful implementation of alternative transportation modes will result in beneficial impacts to area traffic and air quality. On the other hand, if Cal Poly fails to meet its goal of reducing vehicle trips, there will be significant impacts on traffic congestion and air quality.

Cal Poly Commuting Patterns, 1997 and 1999

	faculty a	and staff	Inferred Number	stud	ents	Inferred Number
	1997	1999	1999	1997	1999	1999
Number of respondents =	997	594	2,552	422	414	16,296
Average vehicle occupancy	1.42	1.48		3.16	3.03	
Most frequent mode						
drive alone	59.0%	56.0%	1,429	25.0%	26.4%	4,302
carpool	13.8%	14.0%	357	9.9%	7.4%	1,206
vanpool	7.3%	10.0%	255			
bicycle	3.6%	4.0%	102	14.5%	7.5%	1,222
walk	3.2%	3.0%	77	36.7%	37.5%	6,111
City bus	2.0%	2.0%	51	7.0%	12.8%	2,086
County bus	1.0%	2.0%	51	1.0%	1.0%	163
Sub-total, alternative modes	30.9%	35.0%	893	69.1%	66.2%	10,788
	89.9%	91.0%		94.1%	92.6%	

Source: Cal Poly, Average Vehicle Ridership Survey, 1997 and 1999.

Note: Inferred number column applies percentages from survey to entire campus population for Fall 1999.

TABLE 5.6



PARKING

Introduction

Parking is a challenge for any large institution. Many students, faculty and staff travel several miles to campus. While Cal Poly already enjoys a high average vehicle occupancy rate compared with other County employers, there is still a large demand for parking on campus. The program contained in the Master Plan provides for parking in three structures and various surface lots around the Campus Instructional Core. The structures should use land more efficiently, bring commuters closer to campus, and reduce the need for continued sprawl of surface lots. A structure should be located at each of the three major entrances to campus. (*refer to the Circulation and Parking data map in Chapter 4 for existing parking locations*)

Existing Conditions and Issues

Most of Cal Poly's present parking facilities are located on the southeast corner and north side of campus. Several small lots for visitors, deliveries, disabled individuals, short-term parking, other special needs, and staff are tucked into the campus instructional core. Cal Poly has approximately 5,800 existing parking spaces. A 931-space parking structure located adjacent to the Grand Avenue entrance was completed in Fall 2000.

CAMPUS	PARKING
CAIVIFUS	FARMING

General Location (Area)	General	Staff	Other*	Total
Southwest Campus (C)	29	454	187	670
Grand Avenue (G)	568	242	80	890
North Campus (H)	2013	564	218	2795
Residential (R)	1337	8	35	1380
Administration (A)	0	0	67	67
Totals	3947	1268	587	5802

*includes: guest, disabled, metered, state, loading, short term

TABLE 5.7

Lots with a total of 1,530 spaces serve campus residence halls. Approximately 55% of the students who reside on-campus have cars with them, have purchased parking permits, and are accommodated in these lots.

Over 8,000 commuting students are issued parking passes. Of these, approximately 1,500 live on campus and receive residential permits. Close to one-fourth of those students receiving permits live within one mile of campus (9% live within one-half mile).



Parking demand typically peaks during Winter Quarter, mid-week in the middle part of the day. At these times, occupancy reaches 95% or higher. This level is considered full occupancy and, therefore, lots in the core area are fully utilized during peak daytime periods.

Issues¹

- Full occupancy of parking lots during peak times.
- Inconvenient access to surface lots extending too far from the campus instructional core.
- Safety in reaching distant lots, especially in the evening
- Land valuable for other purposes consumed by surface lots
- Visual obtrusiveness of lots and structures

Principles

Cal Poly seeks to provide efficient parking that brings students, faculty and staff close to the campus core without overwhelming the campus environment. The University cannot reasonably meet future demands for parking at existing parking ratios. To remedy the projected future parking deficit, Cal Poly should seek to change the culture of the campus with regard to the automobile.²

Culture

The Master Plan includes many features that should encourage both commuters and on-campus residents to reduce their use of the automobile. Part of this cultural shift should include the development of activities and facilities on campus that make it function as a community, reducing the need or desire to go elsewhere.

Reduction

Cal Poly should use policies and incentives to reduce parking demand by students, faculty and staff.

Location and Access

Concentrating parking near campus entrances should reduce through-



¹ Issues include items identified by campus and community members during Fall 1998, at public meetings during Winter 1999, during task force discussions in Spring 1999, and at subsequent meetings with campus and community groups in Fall 1999 and Winter 2000.

¹ The Master Plan team synthesized this list of principles from meetings with the President and senior campus executives and from recommendations provided by the campus/community Circulation, Land Use and other task forces during Spring 1999.

circulation, control sprawl and maintain a 10-minute walking distance within the campus instructional core. For those who must park farther away, Cal Poly should study the feasibility of providing shuttle service.

Alternatives

Opportunities and encouragement should be provided for finding other ways to campus. These are described more fully in the Alternative Transportation element of this plan.

Parking Management

The campus should research parking management alternatives, including limiting permit access and establishing pricing policies to reduce the need to develop additional parking.

Neighborhoods

Cal Poly should be sensitive to the impact of campus circulation and parking policies on adjacent neighborhoods.

Visibility and Safety

Parking lot and structure design should reduce their visual obtrusiveness, but at the same time be responsive to concerns about personal safety or burglary and vandalism.

Plan Components

The purpose of this Master Plan element is twofold: to provide for efficient parking necessary to accommodate the enrollment and housing increases, and to change the culture of the campus in a way that reduces dependence on the automobile.

Parking Supply

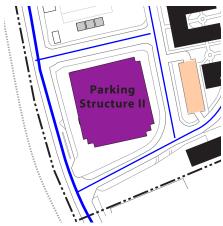
Enrollment and residential increases on campus will increase the demand for parking. The Master Plan provides for parking facilities to replace lots converted to other uses and to meet a portion of the additional demand for parking. These should be organized around the three principal entrances to campus, each of which should have a parking structure for maximizing the use of space near the campus core.

• Construct two parking structures. Parking Structure II (up to 700-800 spaces) should be located in the southwest corner of campus off California Boulevard. Parking Structure III (up to 1,300 spaces) should be located adjacent to Via Carta in the northern edge of the campus core.

Campus Parking Supply and Demar	nd
--	----

SupplyWithout Grand Ave.5,802Structure931Grand Ave. Structure931Adjusted Supply6,7337,184Demand5,6928,6943,002Planned Reduction(2,000)Adjusted Demand5,6926,6941,002		Current	Future	Net Change
StructureGrand Ave. Structure931Adjusted Supply6,7337,184Adjusted Supply5,6928,6943,002Planned Reduction(2,000)	Supply			
Grand Ave. Structure 931 Adjusted Supply 6,733 7,184 451 Demand 5,692 8,694 3,002 Planned Reduction (2,000) (2,000)	Without Grand Ave.	5,802		
Adjusted Supply 6,733 7,184 451 Demand 5,692 8,694 3,002 Planned Reduction (2,000) (2,000)	Structure			
Demand 5,692 8,694 3,002 Planned Reduction (2,000)	Grand Ave. Structure	931		
Planned Reduction (2,000)	Adjusted Supply	6,733	7,184	451
Planned Reduction (2,000)				
(_,)	Demand	5,692	8,694	3,002
Adjusted Demand 5,692 6,694 1,002	Planned Reduction		(2,000)	
	Adjusted Demand	5,692	6,694	1,002
Net Surplus (Deficit) 1,041 490	Net Surplus (Deficit)	1,041	490	

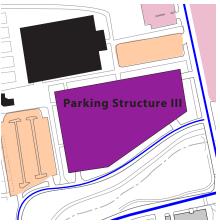
TABLE 5.8



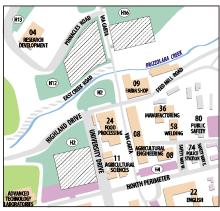
Parking Structure II at Southwest Corner



Cal Poly Master Plan



Parking structure III adjacent to Via Carta



Parking Structure III
Alternative Locations

Cal Poly would need the equivalent of five parking structures to meet future demand. In lieu of this, the plan proposes an aggressive demand management strategy. This strategy will eliminate the need for an additional 14 acres of parking area.

Three alternative locations have been proposed for the parking structure to be located near the intersection of Highland Drive and Via Carta. Each location favors a different use. The northeast corner of the intersection would place the structure closest to the new residential community near Brizzolara Creek. However, this would be farther from the instructional core and have a greater impact on agricultural resources. Cal Poly's former Master Plan had the structure located on the surface parking lot directly north of the library. While most proximate to campus, this location removes a large area of land from the instructional core that could be developed with academic and related uses. The third location, north of Brizzolara and west of Via Carta, is roughly equidistant from the new housing, the athletic facilities existing and proposed at the Sports Complex, and most importantly, the instructional core. This location requires the development of an effective method for getting pedestrians across Highland.

Environmental Consequences

Parking Structures II and III would introduce additional light and glare within already developed portions of the Cal Poly campus, which would be visible to motorists on nearby streets and surrounding land uses. Light and glare impacts are considered significant but mitigable (Class II). Parking Structure II would be highly visible to off-campus student housing along California Boulevard near the southwestern edge of campus. The proposed project is generally consistent with City policies regarding neighborhood preservation. The proposed parking structure is not one of the specified incompatible uses, and more importantly, does not differ from the general nature of development that currently exists adjacent to these homes--namely, large university-related facilities. The visual character of a parking structure is consistent with surrounding campus development. Impacts can be mitigated by design and therefore are considered less than significant (Class III).

Operation of Parking Structures II and III may result in NOx and CO emissions that exceed APCD thresholds. Mitigation measures that modify the operations of the garage may be required to maintain the levels below the APCD thresholds. Operation of the parking structures would create noise that would not be generally audible to sensitive land uses. The 1998 Parking Structure EIR found that although periodic annoyances such as horns and alarms create noise above acceptable standards, operation of the structure would not elevate usual ambient noise

(continued next page)



Environmental Consequences (cont.)

above acceptable levels. Impacts are therefore, less than significant (Class III).

Title 24 compliance requires a site-specific geotechnical survey that will reduce seismic and geologic impacts to a less than significant level (Class III).

- Build additional surface lots adjacent to new residential areas to meet the needs of upper-division residents.
- Integrate parking into other structures at ground level or below as feasible.
- Continue to provide small lots to meet special needs strategically within the campus core.
- Explore the need for a remote vehicle storage to be used if the demand for residential parking exceeds supply. The value of the remote site would be to preclude the need for additional surface lots near the campus core. This would be especially valuable for students who only need their cars occasionally.

Parking Demand

To limit the amount of land devoted to parking, the Master Plan is based on achieving a reduction in parking demand to a level of 2,000 spaces fewer than would be required if present parking ratios were to continue. A campus access and parking management plan will be developed to implement the Master Plan. Such a plan should consider the following possible means to reduce parking demand.

Freshman Parking

One approach to reducing parking demand is to restrict freshmen residents from maintaining cars on campus (with exceptions made for hardship and job-related requirements). The inelasticity of demand for first-year student housing should prevent this policy from having a detrimental effect on the market for the residence halls. In addition, if students become familiar with alternative transportation systems they may be more likely to continue to use them throughout their careers as students. The Master Plan parking plan calls for reducing parking demand by 2,000 spaces. However, the Master Plan team recognizes that at some future date the campus may still need to provide some parking areas beyond those designated near the Campus Instructional Core and new Residential Communities. The land use and circulation maps (exhibits i, 4.11, 5.1 and 5.12) show several potential areas for remote vehicle parking or storage. They are located on Cheda Ranch because that area contains some land that is not prime agriculture (class I) and has access from Highway 1, Stenner Creek and/or Mount Bishop roads. Two sites are near the intersection of Stenner Creek and Mount Bishop Road. Another possible site would be the Goldtree area in the northwest portion of Cheda Ranch, where some additional parking might be consolidated with a possible applied research park. If parking demand should require Cal Poly to consider using any of these locations, additional site analysis will be undertaken to determine the amount of land needed, the most appropriate site or sites, how access will be provided, the effect on circulation, how the parking area(s) would be secured, and how existing uses can be relocated. Planning for development of a remote parking site that would involve moving any Outdoor Teaching and Learning activities, such as the forestry demonstration area or sheep grazing, would follow the principle that a new site for their operations would need to be identified and developed first, so as to minimize disruption.



Cal Poly Master Plan

Miles From Campus	Students with Permits
025	130
.255	428
.575	569
.75 - 1	353

TABLE 5.9

Geographic Controls

Another measure to reduce parking demand on campus is to limit the eligibility of students living near campus to purchase quarterly parking permits, unless they have special needs.

Environmental Consequences

Any restriction on parking permits will result in an increase in pressure by students to park in nearby residential neighborhoods. Cal Poly will work with the City to evaluate and implement effective means to manage impacts to neighborhoods, such as an extension of the residential permit system surrounding Cal Poly.

Enrollment scenarios

Yet another approach to managing parking demand would be to spread the schedule of courses over more hours each day and over a longer week, including weekends. This could reduce the peak demand times. In addition, some demand for parking would be reduced by students who use technology-mediated instruction, or by staff who "telework" at home rather than drive to campus. On the other hand, a more concentrated or efficient class schedule for individual students would discourage multiple daily trips to campus.

See Alternative Transportation element for complementary proposals for managing parking on campus.

Campus Parking Reduction - Policy Illustration		
Future Demand	Spaces 8,694	
Freshman Restrictions Geographic Controls Faculty/Staff Trip Demand Management	(1,200) (650) (150)	
Sub-total - Future Reductions	(2,000)	
Adjusted Demand	6,694	

TABLE 5.10



SUPPORT ACTIVITIES AND SERVICES

Introduction

An academic community with a significant residential component requires a wide range of support activities and services. These services encompass programs and activities that address the needs of four population groups: students, faculty, staff, and visitors or guests. People in any of these groups may have special needs, depending on their personal or family situation, such as a disability, ethnic origin or cultural background. Support services address the following types of activities, whether they are required routinely on a daily or weekly basis, or only occasionally: (1) academic support, (2) institutional support, (3) governance, (4) social, cultural and recreational activities, and (5) basic daily living activities.

Background and Issues

Cal Poly presently offers a wide range of support services through all of its major units:

The Division of Academic Affairs includes the Library, Information Technology Services, Enrollment Support Services (Admissions, Academic Records, and Financial Aid), and academic advising, in addition to direct instruction.

The Division of Student Affairs provides a range of co-curricular activities, including Student Academic Services, Student Life and Activities, Judicial Affairs, Disability Resource Center, Career Services, Health and Counseling, as well as Housing and Residential Life.

Associated Students Inc. manages student organizations and activities including student government, the Children's Center, Recreational Sports Center, intramural recreation, and the University Union.

The Cal Poly Foundation supports the campus with retail and food services, and manages research grants and contracts.

The Division of Administration and Finance provides basic administrative support functions such as human resources (personnel), facilities planning and operations, university police, risk management, budgeting, accounting, procurement, mail, and the like.



The Division of Advancement offers the means to supplement resources available from the State of California with private funds for such purposes as scholarships, and equipment and facility enhancement. It maintains communications with the public, alumni and friends of the University.

Issues¹

Major concerns with many support services focus on their programmatic characteristics - service quality, variety, hours, and funding - as well as their sufficiency or adequacy to meet future demands. Not only must any increase in enrollment be accompanied by the operating budget to provide for a proportionate increase in service needs, but the campus must also be able to find the space and personnel to offer those services.

Additional specific issues identified during the planning process include the following:¹

- Services for non-traditional students, such as adults returning to study part way through their careers.
- Services during evenings and weekends
- Services for graduate students
- Child and dependent care.
- Campus safety and security.
- Emergency response.
- Access for students, faculty and staff to commercial services not currently available on campus.
- Impacts of any enrollment growth on public services provided by the City or County.

Principles

The Master Plan recognizes the importance of a safe, accessible, supportive and affordable environment to the academic community. Fundamentally, all support services must be designed with respect to how they contribute (directly or indirectly) to teaching and learning. At the same time, support services must offer options that are responsive to



¹ Issues include items identified by campus and community members during Fall 1998, at public meetings during Winter 1999, during task force discussions in Spring 1999, and at subsequent meetings with campus and community groups in Fall 1999 and Winter 2000.

different needs and interests of sub-groups among students, faculty, staff and visitors. Any significant growth or change in the composition of the student population needs to be accompanied by a commensurate increase and/or adjustment in the nature of services provided. These may include service availability during summers, evenings and weekends as more classes and other learning opportunities are scheduled during those times.

Ten general principles guide the support services element of the Master Plan. While many of them reinforce one another, it is helpful to list each as an important concept. Many of these principles stress the nature of services required on campus, with the expectation that the Master Plan provide space to accommodate them.²

Array

The following types of services need to be provided on campus: (1) services that are needed specifically by students (e.g., library, advising, bookstore); (2) services that benefit from or require knowledge of the campus and that require coordination with academics or other campus services (e.g., financial aid, academic assistance, disability resources, personal counseling for students); and (3) services used frequently by a considerable number of students, faculty and/or staff daily (e.g., food service, banking, health care).

Commercial Services

Cal Poly is not immediately adjacent to a city commercial district, which limits student, faculty and staff access to such services. As a result, the campus needs to ensure provision of some commercial services on campus (e.g., banking) to reduce the need for students, faculty and staff to run errands off campus during the day. Furthermore, the University needs to design its new campus residential communities with sufficient space to provide for a modest selection of convenient personal and entertainment services.

Diversity of Needs

Contemporary learning studies find that students have different ways of learning effectively. Furthermore, people of different ages and from different personal, ethnic, and cultural backgrounds have different tastes and needs. To accommodate such differences, services need to be



² The Master Plan team synthesized this list of principles from meetings with the President and senior campus executives and from recommendations provided by the campus/ community Circulation and other task forces during Spring 1999.

offered in a variety of forms. Examples include different kinds of supplemental instruction for students requiring extra help in their classes, or food service options and meal plans to accommodate a range of budgets and diets.

Use Patterns

Facility and circulation system capacities are typically designed with peak use patterns in mind. Support services require the same consideration to accommodate peak periods, or manage demand so as to even out peaks - e.g., class schedules and exams spread out over the day and week, rotation of registration priorities. Service centers of all types (e.g., advising, counseling, health care) need sufficient space to accommodate students (or other clientele) waiting for service.

Coordination

Support services should be planned with a holistic approach using collaborative interactive processes to involve all parties delivering and receiving services. Related services that require face-to-face interactions should be coordinated and consolidated in central, accessible locations so as to be convenient to the students, faculty and staff they are intended to serve.

Accessibility

Services must be accessible both physically and temporally. In some instances, 24-hour/7-day electronic access can substitute for physical access - e.g., Computing Help Desk, Health Center Hot-Line, Career Services Web site, touch-tone or Web registration, and on-line purchasing. In other instances, however, students, faculty and staff need to be able interact with service providers face-to-face. For routine services, locations must be accessible to people with disabilities, convenient to other teaching and learning activities, and office hours must accommodate changing schedules. Services with frequent off-campus interaction - such as visits by potential students, donors, parents, vendors or other guests - should be located close to off-campus circulation routes and parking facilities.

Flexibility

Facility design for all campus services - academic, residential, social, cultural, recreational - should be flexible enough to keep pace with changing technology and changing student needs. This should include multi purpose rooms for student clubs and organizations.



Community Interaction

Cal Poly can draw upon the broader community for services used infrequently or by a relatively small proportion of students, faculty and staff. At the same time, Cal Poly can provide opportunities to contribute to services desired by the larger community through such programs as the Performing Arts Center, service learning and the activities of clubs and organizations.

Access When Away From Campus

University services are usually established to support students in residence, or living in the local community. However, the distributed teaching and learning scenario for increasing enrollment implies that additional students should be learning while physically away from campus. The service needs of these students need to be addressed by campus programs, even when they do not require access to facilities on campus, including direct academic services, such as computing, library access, academic advising, counseling, health care, etc.

Legal Compliance

Campus services and facilities must be designed to meet or exceed applicable legal guidelines such as access for those with physical or learning disabilities, fire safety, and emergency response systems.

Plan Components

The Master Plan provides for a full range of academic and student services in support of expanded enrollment, instructional facilities and new residential learning communities. This implies the need for curriculum, advising, recreation, social, and other student service programming to occur concurrently with physical Master Plan development and phasing. The Master Plan provides space to accommodate these support services and activities, consistent with the principles listed above. Because support activities and services are integrated with other land uses - primarily the instructional core and residential communities - the land use map does not designate special areas for them.

Academic Support

Activities, such as library services, information technology, advising, supplemental instruction, testing, and registration, directly support teaching and learning. The Master Plan incorporates these services in office space within the campus instructional core.



Cal Poly Master Plan

Some comments on the Preliminary Draft asked about the location for a number of support services and activities. The revised diagrammatic illustration shows a site for expanding the Child Care Center at its present location. ASI may also explore additional child care facilities on campus and/or within or near married student housing and/or faculty and staff housing. Other support functions have been calculated in the gross building area to be added to serve additional enrollment with the expectation that many of them will be incorporated in multi-purpose facilities.

New section - Commercial Retail Services has been added to the Support Activities and Services element.



Institutional Support

Other institutional activities are necessary to keep the University operating daily. Where these activities involve routine face-to-face interactions with students, the Master Plan incorporates them within the instructional core. Several institutional support activities, such as warehousing and transportation services, require relatively large amounts of land and do not need to be within a 10-minute walking distance of the campus core. They are being consolidated at the Old Poultry Unit. (*refer to Public Services and Facilities element*)

Governance

The campus requires space to support student organizations and faculty and staff involvement in collegial consultation. The Master Plan accommodates a variety of meeting spaces within the campus instructional core. In addition, space in student residential communities can accommodate formal and informal functions of student organizations closer to where students live.

Social, Cultural and Recreational Activities

The primary center for cultural and social activities will continue to be the area around the University Union and Performing Arts Center. These will be expanded to serve the larger on-campus residential population (see Campus Instructional Core element). Other formal and informal social and recreational activities are integrated both within the instructional core and in residential communities. (The Recreation element addresses organized recreational activities.)

Basic Living Activities

Students, faculty, staff and visitors might use a variety of other services and activities routinely or occasionally on campus, such as food service, banking, and personal services. The Master Plan accommodates space for the array of services suggested in the principles above, both within the expanded campus core and within new residential communities. The Campus Core and Circulation elements also address access and safety issues.

Commercial Retail Services

The vision of the Master Plan calls for a primary campus activity center near the University Union that is focused on students. Thus, the range of retail businesses and other activities would remain specialized and not constitute a full urban commercial center. Cal Poly understands that there is a delicate balance in determining how much of what services will be sufficient to support the campus community and manage commuting. Effective alternative transportation will allow students, faculty, and staff - as well as members of the broader community - to take advantage of the range of services and facilities both on and off campus without adding to traffic congestion. The Cal Poly Foundation is presently the exclusive provider of certain services - e.g., food service, vending machines and bookstore. Other services compete for campus outlets - e.g., travel service, ATMs. As planning for an increased range and volume of services occurs, the campus will need to determine which it should offer directly and which might be provided through franchise or "privatization."

Note: Many of the Support Activities and Services principles should be implemented more directly in the Design and Landscape Guidelines that should be developed to implement the Master Plan.

Environmental Consequences

In general, support services will be developed within the campus instructional core. Since this area is urbanized, there will be little or no impact associated with these facilities.



ANCILLARY ACTIVITIES AND FACILITIES

Introduction

A university often attracts ancillary activities that contribute to the life of the campus and surrounding community. Funding of facilities for ancillary activities is typically tied to opportunities for partnerships with donors and other interested parties.

Background and Issues

Cal Poly has a successful history of partnerships to provide facilities that cannot be supported entirely by State of California funds. Where such partnerships contribute directly to teaching and learning, the campus has provided for them within or close to the campus core. Thus, the Performing Arts Center - a partnership between Cal Poly, the City of San Luis Obispo, and the Foundation for the Performing Arts Center - was built adjacent to the Cal Poly Theatre to expand instructional opportunities for students in the performing arts. Similarly, Cal Poly and its Associated Students, Incorporated, have formed partnerships to provide for student recreation (Recreational Sports Center and the Sports Complex) and services such as the Children's Center near the campus core. Furthermore, Cal Poly has taken advantage of donor and grant funding for a range of research facilities, including Applied Research and Development Facilities and Activities (ARDFA), Advanced Technology Lab, Irrigation Training and Research Center, Dairy Products Technology Center, Gallo vineyards, and Computer-Aided Design Research Center (CAD Research Center).

From time to time campus and community members propose additional facilities that would build on and enhance Cal Poly's faculty and student research or other instructional activities. Examples include a conference center, applied research partnerships with local firms, "incubator" support for technology development, English-as-a-second-language institutes, golf learning center, and the like. Often, these activities would involve significant amounts of land and require access for groups other than Cal Poly's regular students, faculty and staff.



Issues

- Competition for land between ancillary activities and land uses more central to teaching and learning, particularly Outdoor Teaching and Learning.
- Infrastructure and access requirements for ancillary facilities.
- Staffing and financial requirements to support partnerships for ancillary activities and facilities.

Principles

The primary policy associated with ancillary activities is that they must clearly complement teaching and learning. Ancillary facilities should not compete with core instructional needs for land within or near the campus core. Such activities can be located at more remote sites when they need not be provided within a 10-minute walking radius and/or when they require significant land area.

Principles for locating specific ancillary facilities should be the same as for land use in general - that is, relationship to the University's academic mission, environmental suitability, compatibility between adjacent uses, proximity among related uses, and community-building - except that compactness in the instructional core may not apply. Please see the Land Use element for discussion of these principles.²

Plan Components

The Master Plan identifies two potential sites for ancillary activities and facilities on the main campus and Cheda Ranch. No sites are proposed on the western ranches in order to maintain their rural character and to support outdoor teaching and learning.

Ancillary Activities

The most commonly mentioned ancillary activities include a visitor center, conference center, and applied research park. This section New section - clarification of possible ancillary facilities.



¹ Issues include items identified by campus and community members during Fall 1998, at public meetings during Winter 1999, during task force discussions in Spring 1999, and at subsequent meetings with campus and community groups in Fall 1999 and Winter 2000.

² The Master Plan team synthesized this list of principles from meetings with the President and senior campus executives and from recommendations provided by the campus/community Land Use, Neighborhood Relations and other task forces during Spring 1999.

explores the nature of each briefly; however, each would require further detailed analysis at such time as a specific proposal is made.

A visitor center would provide a facility to welcome guests to the campus. It could include a station where visitors could obtain parking permits, campus maps, and directions to their destinations. The visitor center could serve as the starting point for campus tours conducted by Poly Reps. It could also include a small exhibit covering Cal Poly's history and accomplishments.

No detailed program has been suggested for a conference center, yet the idea has been studied several times and continues to arise. Presently, Cal Poly's Conference Services use regular campus facilities during times that they are not scheduled for instruction, and house attendees in some of the residence halls during the summer. The Master Plan calls for an expansion of alumni services near the present Alumni House, which may include small conference or retreat facilities. In addition, the area near Grand Avenue and Slack Street has been suggested for potential conference facilities. Cal Poly will continue to use its residence halls during the off season to support conferences.

The City and County of San Luis Obispo have supported a research partnership with Cal Poly through the California Central Coast Research Park (C3RP) task force. While a number of sites both on and off campus have been suggested over the years, the Master Plan explores the potential of an applied research park on campus. One possible site is in the Goldtree area. It is important to note that an applied research park on Cal Poly lands would focus on applied research and advanced development activity in support of the University's academic mission, including applied research partnerships, "incubator" support for new technology, and business development. It is likely to be heavily involved in and dependent on technology - information technology, telecommunications, biotechnology, geographic information systems, visual imaging, etc. An applied research park would provide opportunities for faculty professional development, internships for students, and employment for partners and spouses of faculty and staff. It could include business services (e.g., photocopying equipment, meeting rooms, and food service). However, it would not include activities often associated with business or industrial parks, such as professional offices or manufacturing (assembly) except as incidental to applied research and development.



Slack Street and Grand Avenue

A site in the southeast corner of the main campus adjacent to Slack Street offers one potential site for ancillary facilities. The Master Plan shows this site for limited student housing adjacent to Yosemite dorms and provides for a buffer between students and the adjacent residential neighborhood. The balance of the site's usable area is not large enough to support a significant amount of faculty and staff housing. However, it does offer access at the Grand Avenue entrance of the campus, and may be suitable for a visitor-oriented ancillary facility, or additional conference facilities.

Environmental Consequences

The project will involve minimal security lighting at night in an area of existing street and other facility lighting. Lights will be hooded to reduce spillover into adjacent areas. Impacts are, therefore, less than significant (Class III).

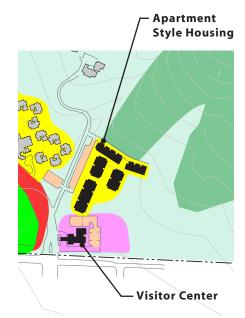
The eventual size of the project is not yet known, but it is unlikely to approach construction acreage necessary for air quality review or mitigation. Operational emissions are expected to be minimal. Impacts are less than significant (Class III).

Biological surveys performed on site did not reveal the presence of any sensitive plant species. Use of the site by special-status wildlife is most likely limited to foraging habitat. Impacts are considered less than significant (Class III).

The site is bisected by a drainage channel which has wetland characteristics near Grand Avenue. The facility will be sited to avoid this area.

No known cultural resources exist onsite. A pre-construction Phase I survey will reduce the potential for impact.

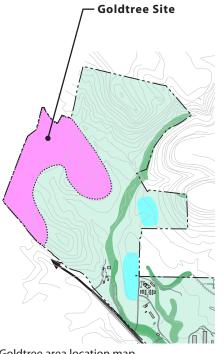
A Visitor Center is not likely to attract additional traffic to campus, but site planning will need to address circulation in and out of the facility.



Slack Street and Grand Avenue area location map

Comments received on the Draft Master Plan, and discussion with University officials, led to the addition of a Visitor's Center at the corner of Grand Avenue and Slack Street. Facilities may include meeting rooms, a reception area, offices, parking and landscaping.





Goldtree area location map

Goldtree Project Area

Preliminary studies suggest that approximately 60 acres are potentially suitable for development in the Goldtree area of Cheda Ranch as an applied research park, conference center or similar ancillary activities. These studies are exploring the potential for between 300,000 and 600,000 square feet of development.

Environmental Consequences

The project site is adjacent to the California Men's Colony and lies east of the County Operations Center, both of which are significant existing light sources. However, the project would involve a new source of light, glare and development in a heretofore undeveloped area visible from Highway 1. Impacts are reduced to a less than significant level by the use of hooded lighting and the implementation of design guidelines (Class III).

Operational emissions would stem from vehicle traffic and energy consumption. The level of operational emissions will also depend on the size of the project and the type of facility developed.

Preliminary botanical studies of the site show that it is unlikely that sensitive plant or animal species are present on site on a regular basis. However, it is likely that species use the grasslands on site for foraging. Serpentine soils may also be present on site, which may support sensitive plant species. A spring plant survey is recommended to reduce impacts. Cumulative loss of grasslands is addressed in Chapter 6, "Other CEQA Sections".

The site has not been surveyed to determine the presence of cultural resources. Given the overall sensitivity of Cal Poly lands, a Phase I survey should be performed prior to facility design.

Title 24 compliance will reduce geologic and seismic impacts to less than significant levels.

The project site is located adjacent to grasslands that constitute a moderate fire hazard. All facilities will comply with the local fire code, and adequate access shall be ensured. Impacts are considered less than significant (Class III).

This site is adjacent to the upper Stenner Creek corridor. Siting should take into consideration drainage to this creek and potential impacts to water quality.



Environmental Consequences (cont.)

Noise constraints to development stem from the highway. By 2005, the County Noise Element predicts that development within 644 feet of the centerline of Highway 1 will face noise levels in excess of acceptable thresholds. Depending on the nature of the development proposed, buildings should be sited at least 139 feet from the centerline of the roadway (the location of the 70 dB noise contour) so that noise is reasonably mitigable by building design.

The development of this site will require the extension of campus police service into a previously unserved area. Careful coordination will be required during the planning phase of this project to determine impacts to this and other public services.

The type of facility proposed will affect the volume and distribution of traffic to the site. Design of circulation systems will need to pay careful attention to entrance and exit from Highway 1. Access to the site from Highway 1 could require signalization or lane modification.

Any development at Goldtree will require additional environmental analysis. Until a development plan which includes some specifics about location, size and use has been proposed, detailed environmental analysis is premature.



Cal Poly Master Plan

C H A P T E R

6 ENVIRONMENTAL IMPACT REPORT

What are the environmental impacts?



INTRODUCTION

This chapter, together with the accompanying Master Plan (Plan) as project description, constitutes the Final Environmental Impact Report (FEIR) for the California Polytechnic State University, San Luis Obispo Master Plan Update. Several of the components of the Master Plan have a discussion of their environmental consequences within the Plan document. This information is also part of the environmental analysis of the Plan.

Purpose/Legal Requirements

This EIR has been prepared in accordance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines. In accordance with Section 15121(a) of the State CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3), the purpose of this EIR is to serve as an informational document that:

"... will inform public agency decision makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project..."

Consistent with the decision in *Environmental Information and Planning Council vs. County of El Dorado* (1982), this EIR evaluates the Final Master Plan on the basis of existing conditions rather than comparing plan goals to those of previous plans. This approach provides a more realistic assessment of how implementation of the plan elements will affect the current Cal Poly environment.

Forecasting, Degree of Specificity

The preparation of an EIR necessarily involves some degree of forecasting and speculation. The CEQA Guidelines speak to these issues as follows:

15144. **Forecasting**. Drafting an EIR or preparing a Negative Declaration necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.

15145. *Speculation*. If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the Agency should note its conclusion and terminate discussion of the impact.

15146. Degree of Specificity. The degree of specificity required by an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR.

a. An EIR on a construction project will necessarily be more detailed in the specific effects of the project than will be an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy.

b. An EIR on a project such as the adoption or amendment of a comprehensive zoning ordinance or local general plan should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow.

This EIR focuses on the impacts that could result from the implementation of the Master Plan. The degree of specificity corresponds to the degree of specificity contained in the plan.

Scope & Content

In accordance with the State CEQA Guidelines, Cal Poly, as Lead Agency, solicited comments from the public through the distribution of a Notice of Preparation (NOP) (Appendix A). The comments received in response to the NOP were incorporated into this EIR. The scope of the EIR includes analysis of the environmental impacts of the proposed Master Plan in the following issue areas:

Aesthetics	Agricultural Resources	Air Quality
Biological Resources	Cultural and Historical Resources	Hydrology and Water Quality
Geology and Soils	Noise	Public Services
Transportation and Circulation	Construction Impacts	

Each issue area is analyzed in regard to both Master Plan and cumulative impacts. The potential growth inducing impacts of the Master Plan are also analyzed. Environmental impacts related to issues not analyzed in this EIR were determined to be less than significant.

The alternatives analysis is prepared in accordance with Section 15126(d) of the State CEQA Guidelines and California court decisions. The alternatives section describes a range of reasonable alternatives that could feasibly attain the basic objectives of the proposed Master Plan and identifies an environmentally superior alternative.

State CEQA Guidelines Section 15088 requires that "the lead agency...evaluate comments on environmental issues received from persons who reviewed the draft EIR and...prepare a written response." Due to the number and length of comments received during the review process, the comment letters and the lead agency's responses are bound as a separate document. This document will be available for review at the Cal Poly Facilities Planning Office; responses to individual letters will be forwarded to each commenter.

Lead, Responsible, & Trustee Agencies

Cal Poly is the lead agency with respect to fulfilling CEQA requirements for the proposed Master Plan. Section 15367 of the State CEQA Guidelines defines the lead agency as "the public agency which has the principal responsibility for carrying out or approving a proposed project."

The California State University Board of Trustees has discretionary approval power over the proposed Master Plan as a responsible agency pursuant to Section 15381. Pursuant to Section 15386, trustee agencies for the Master Plan include all state agencies having jurisdiction over natural resources affected by Master Plan implementation, including the California Department of Fish and Game and the State Water Resources Control Board.

Environmental Impact Review Process

The environmental impact review process, as required under CEQA, is outlined below. The steps are presented in sequential order.

1. Notice of Preparation (NOP) Mailed. After deciding that an EIR is required, the lead agency must file a NOP soliciting input on the EIR scope to "responsible," "trustee," and involved federal agencies; to the State Clearinghouse, if one or more state agencies is a responsible or trustee agency; and to parties previously requesting notice in writing (State CEQA Guidelines Section 15082; Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk's office for 30 days. A scoping meeting to solicit public input on the issues to be assessed in the EIR is not required, but may be conducted by the lead agency.



- 2. Draft Environmental Impact Report (DEIR) Prepared. The DEIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) significant impacts (direct, indirect, cumulative, growth inducing and unavoidable impacts); f) alternatives; g) mitigation measures; h) short term uses vs. long-term productivity (required only in EIRs on plans, policies, ordinances, [LAFCO] actions and joint National Environmental Protection Agency [NEPA] documents); and i) irreversible changes (required only for EIRs as indicated for "h" above).
- **3. Public Notice and Review.** A lead agency must prepare a Public Notice of Availability of an EIR. The Notice must be placed in the County Clerk's office for 30 days (Public Resources Code Section 21092). The lead agency must send a copy of its Notice to anyone requesting it (State CEQA Guidelines Section 15087). Additionally, public notice of DEIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must consult with and request comments on the DEIR from responsible and trustee agencies, and adjacent cities and counties (Public Resources Code Sections 21104 and 21253). The minimum public review period for a DEIR is 30 days. When a DEIR is sent to the State Clearinghouse for review, the public review period must be 45 days unless a shorter period is approved by the Clearinghouse (Public Resources Code 21091). Distribution of the DEIR may be required through the State Clearinghouse (State CEQA Guidelines Section 15305). CEQA does not require public hearings on the DEIR, although in practice, most agencies conduct such hearings.
- **4. Notice of Completion**. A lead agency must file a Notice of Completion with the State Clearinghouse as soon as it completes a DEIR.
- **5. Final EIR (FEIR)**. An FEIR must include a) the DEIR; b) copies of comments received during public review; c) list of persons and entities commenting; and d) responses to comments.

Note: Comments received during the public review process and responses to these comments are bound as a separate document due to their number and length. Responses to individual letters will be forwarded to the commenter.

- **6. Certification of FEIR.** The lead agency shall certify: a) that the FEIR has been completed in compliance with CEQA; b) that the FEIR was presented to the decision making body of the lead agency; and c) that the decision making body reviewed and considered the information in the FEIR prior to approving a project (State CEQA Guidelines Section 15090).
- 7. Lead Agency Project Decision. A lead agency may: a) disapprove a project because of its significant environmental effects; b) require changes to a project to reduce or avoid significant environmental effects; or c) approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (State CEQA Guidelines Sections 15042 and 15043).
- 8. Findings/Statement of Overriding Considerations. For each significant impact of the project identified in the EIR, the lead or responsible agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (State CEQA Guidelines Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that set forth the specific social, economic or other reasons supporting the agency's decision.

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Cal Poly Master Plan

- **9. Mitigation Monitoring/Reporting Program**. When an agency makes findings on significant effects identified in the EIR, the agency must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
- **10. Notice of Determination.** An agency must file a Notice of Determination after deciding to approve a project for which an EIR is prepared (State CEQA Guidelines Section 15094). A local agency must file the Notice with the County Clerk. The Notice must be posted for 30 days and sent to anyone previously requesting notice. Posting of the Notice starts a 30-day statute of limitations on CEQA challenges (Public Resources Code Section 21167[c]).



SUMMARY

This section has been prepared in accordance with the *State of California Environmental Quality Act (CEQA) Guidelines.* The section is divided into two components. The first summarizes the characteristics of the areas affected by the Master Plan, and identifies areas of controversy known to the Lead Agency (Cal Poly). The second identifies the environmental impacts, mitigation measures, and residual impacts associated with the Master Plan and cumulative development. Additionally, this section summarizes Master Plan alternatives.

Project Synopsis

Project Proponent

The California State University Office of the Chancellor 400 Golden Shore Long Beach, California 90802-4275

Project Description

The project is a Master Plan Update that includes management and development strategies for University land holdings in San Luis Obispo County covering 6,000 acres. The Plan is designed to accommodate an increased in enrollment from 15,000 net FTE academic year students to 17,500 net FTE academic year students and 2,500 net FTE during the summer session. The Master Plan serves as the project description for this EIR.

Location

The Master Plan involves two sites in San Luis Obispo County: one 3,000 acre site adjacent to the City of San Luis Obispo and another 3,000 acre site on State Highway 1 about midway between the City of San Luis Obispo and Morro Bay. San Luis Obispo County is approximately midway between San Francisco and Los Angeles (refer to Exhibit 6.1, page 217).

Areas of Controversy Known to the Lead Agency

Geologic Hazards

There is some controversy regarding the stability of a landslide underlying the southeastern third of the campus, northeast of San Luis Obispo. Geotechnical studies that are required for compliance with Title 24 would provide more information; this EIR does not attempt to assess the stability of the landslide.

Summary of Environmental Impacts, Mitigation Measures and Alternatives

Impact Classification

The summary in Table 6.1 identifies four types of potential impacts that are associated with the proposed Master Plan:

Class I. Significant, unavoidable, adverse impacts for which "specific economic, social or other considerations make infeasible the mitigation measures or project alternatives identified in the final EIR." If the Lead Agency decides to approve the project, a Statement of Overriding Considerations must be adopted for any identified Class I impact, as required by CEQA Guidelines Section 15093(b).

Class II. Significant adverse impacts that can be feasibly mitigated to less than significant levels. CEQA Guidelines Section 15091(a)(1) requires that "Findings" be made indicating that changes or alterations have been required in the Master Plan to substantially lessen these impacts.

Class III. Adverse impacts that have been found less than significant.

Class IV. Beneficial impacts.

Cumulative Impacts

The CEQA Guidelines Section 15355 defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Further, "the cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."

The following sections analyze both the cumulative effects of development proposed under the Master Plan and the effect of the Plan in light of other regional projects. Regional projects included in the analysis are:

- Increased enrollment at Cuesta College (approximately 2,300 students for a total of 10,000)
- Projects currently proposed but not built in the City (refer to Appendix C, "Traffic and Parking Study")
- Regional (Projected growth under the City of San Luis Obispo General Plan (1997) and the San Luis Obispo Area Plan (County, 1995))

Alternatives

The EIR focuses on alternatives that are capable of eliminating or reducing significant adverse effects associated with the Master Plan while feasibly attaining the basic objectives of the Master Plan. The EIR identifies the "environmentally superior" alternative from the alternatives assessed. The alternatives evaluated include:

• "No Project" – No further development

•	Alternative Enrollment Scenarios -	"Student Progress" "Distributed Teaching and Learning" "Year-round Operations" "Increased AY FTEs"
•	Alternatives to Plan Components-	Housing No additional on campus housing Housing in different locations Modifying housing configurations Parking
		Development with current supply No additional structures Reduction in parking spaces Modification of structure locations

Summary Table

The following table summarizes the impacts identified in the EIR, their significance, mitigation applied to reduce such impacts, and the residual impact. The residual impact refers to the impact's level of significance after mitigation is applied. In most instances, Class II impacts can be reduced to Class III through proper mitigation.



Implementation of the Master Plan would result in a number of beneficial impacts (Class IV) and two significant, unavoidable impacts (construction and operational air quality) which mitigation would not reduce to less than significant levels.

Торіс	Impact (Significance)	Mitigation	Residual Impact
Geology	Policies protecting riparian areas and steep slopes may result in the reduction of erosion potential in these areas (Class IV).	None	Class IV
	Seismic impacts are less than significant because of required Title 24 compliance (Class III).	None	Class III
	A landslide (Hall and Prior, 1975) has been identified along the southeastern third of the campus, in the vicinity of Grand Avenue and Slack Street. Structures proposed for this area, including H-4, H-6 and the ancillary facilities, could face an increased risk of landslide. Mitigation is recommended to reduce landslide risk (Class II).	Mitigation measures would need to be developed on the basis of site-specific study of the landslide. The general degree of required mitigation would depend on the findings, which could range from: 1) finding that the existing landslide is relatively stable and therefore no significant mitigation is needed; to 2) the existing landslide is marginally stable and will require extensive strengthening and/or subsurface drainage improvements to provide adequate factors of safety for design and construction. This EIR therefore recommends that such a study be performed to estimate the factor of safety of the existing landslide for existing static and earthquake loading conditions, and to evaluate what impact the proposed site improvements could have on the stability of the landslide. The study will specify mitigation measures for any site improvements that are needed.	Class III
	Title 24 compliance reduces the risk of damage from expansive soils to less than significant levels (Class III).	None	Class III
Hydrology and Water Quality	Policies which aim to enhance degraded riparian and reservoir areas will benefit hydrologic processes where those functions and qualities are impaired (Class IV).	None	Class IV
	Impacts to water quality from increased landscaping and recreational fields are less than significant (Class III).	None	Class III
	Runoff from the relocated Beef Unit may adversely impact	Refer to mitigation in Biological Resources, below	Class III

Table 6.1.	Summary of Impacts and	Mitigation	Measures
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Торіс	Impact (Significance)	Mitigation	Residual Impact
	Chorro Creek (Class II)		
	Projects along Brizzolara Creek will include impervious surfaces that may increase runoff and contribute to erosion. This impact is less than significant because of Master Plan policies	No additional	Class III
	calling for proper drainage and filtering of runoff (Class III).		
	Use of reclaimed water in cooperation with the City of San Luis Obispo would not adversely impact water quality (Class III)	None	Class III
	Portions of the Design Village and Parking Structure III lie within the 100-year floodplain of Brizzolara Creek (Class III)	Title 24 compliance	Class III
	Substantial seismic activity may compromise the integrity of Drumm Reservoir. Only parking facilities have been sited in downslope areas to minimize risks (Class III).	None	Class III
	Cumulative impacts to water quality are less than significant (Class III).	None	Class III
Biological Resources	The Master Plan calls for protection and inventory of natural resources, along with ecological sensitivity in farming processes (Class IV).	None	Class IV
	Development at the Grand and Slack site will not impact sensitive species (Class III).	None	Class III
	Preliminary analysis shows that the Goldtree site does not support sensitive species (Class II).	A site-specific spring botanical survey will be completed prior to construction. Areas supporting sensitive plant species shall be avoided; disturbed populations will be replanted in a suitable area at a ratio deemed appropriate by a qualified biologist.	Class III
	Enhancement efforts along Brizzolara and Stenner Creeks will have a net benefit (Class IV).	None	Class IV
	Operation of the Bull Test facility may have adverse impacts on the sensitive species present in Chorro Creek through runoff or direct	Drainage plan. Prior to construction of the Bull Test facility, a construction and operational drainage plan will be drafted with contingencies for storm event and system failures.	Class III



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Торіс	Impact (Significance)	Mitigation	Residual Impact
	disturbance (Class II).	Limitation of Cattle Access. Cattle will not be allowed to enter the creek.	
	Reservoir maintenance may have an adverse effect on sensitive species and wetland habitat (Class II)	Reservoir maintenance should be scheduled outside of the breeding and nesting periods of sensitive species that may inhabit the area, and should be approved by jurisdictional agencies where appropriate.	Class III
	Further development at the Design Village is constrained by potential wetlands, and serpentine habitat (Class II).	Future development at the Design Village shall be restricted to areas not limited by serpentine soils, Army Corps jurisdictional wetlands greater than 1/10 th of an acre in size, and other areas populated by sensitive plant species, unless impacts to plants can be mitigated by replanting and /or relocation. Prior to construction, a site- specific biological and jurisdictional wetlands delineation shall be prepared.	Class III
	Trails policies are implicit in their aim to protect natural resources (Class III).	None	Class III
	Occupancy of the H-1 and H-2 housing projects may adversely impact populations of <i>Calochortus obispoensis</i> (Class II).	Pedestrian Restriction. The northern and eastern portions of the H-1 and H-2 projects will be designed to prevent direct pedestrian access to the native grassland and biological preserve (Exhibit <u>i</u> I). In general, access to buildings and recreation areas will be oriented towards the main campus and away from sensitive areas to the north and east. <u>Pedestrian traffic in the area of Brizzolara</u> <u>Creek will be designed in accordance with the "Goals and Guidelines for the Cal Poly Creek Management and Enhancement Plan<u>" included as Appendix F.</u> Signs will be posted to indicate the sensitivity of the areas. Plant Population Restoration. Suitable habitat exists on campus for replanting of <i>Calochortus obispoensis</i>. Any populations or individuals of <i>Calochortus obispoensis</i> disturbed by construction of the H-1 and H- 2 housing projects will be replanted in suitable areas at ratios deemed suitable by a qualified biologist.</u>	Class III
	The loss of grassland foraging habitat associated with the H-1 and H-2 housing projects and the Goldtree project would not significantly impact the fecundity of sensitive bird	None	Class III

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Торіс	Impact (Significance)	Mitigation	Residual Impact
	species. Impacts are less than significant (Class III).		
	Occupancy of the H-1, H-2 and Goldtree projects would extend human activity into open space areas. The projects are designed to be compact, and avoid impact to corridor (i.e., riparian) areas. Impacts are less than significant (Class III).	Refer to mitigation restricting pedestrian access in sensitive areas, above. Plans for the H-1 and H-2 housing units will include pedestrian systems which are sensitive to the Brizzolara Creek corridor, and which limit access to open space areas to the east of the project site. The Goldtree site has been sited away from the Stenner Creek corridor.	Class III
	Slopes and cutbanks associated with the realignment of Highland drive will be in closer proximity to Brizzolara Creek. Runoff may impact sensitive species (Class II).	The Highland Drive realignment shall be designed with drainage systems sensitive to the creek corridor. Drainage shall incorporate silt and grease traps and/or vegetative buffer strips to prevent pollution and sedimentation of the creek. Landscaping shall consider native vegetation compatible with the riparian area where it is appropriate. Inlets that drain to the creek will be marked accordingly.	Class III
	Cumulative grassland loss is less than significant (Class III).	None	Class III
Agricultural Resources	The Master Plan specifically states that prime agricultural land will be retained in agricultural use and that agricultural land will be managed to protect ecological resources (Class IV).	None	Class IV
	Although portions of the H-1, H-2 and H-3 housing sites are designated "Farmland of Statewide Importance" and "Unique Farmland," the analysis finds that these designations do not apply. Impacts are less than significant (Class III).	None	Class III
	Cumulative non-prime agricultural land loss is less than significant (Class III)	None	Class III
Cultural and Historical Resources	The development of housing and Parking Structure II in the southwestern portion of campus will necessitate the removal of buildings deemed potentially eligible for listing on the NRHP (Class II).	Buildings deemed potentially eligible for listing on the NRHP will be studied to determine their significance. If they are determined to be significant, Cal Poly will undertake proper documentation of the resource. Given the number of buildings on campus that are over 50 years old, determination of historical significance shall be made by a historic architect (with a	Class III



Торіс	Impact (Significance)	Mitigation	Residual Impact
		historic preservation background) prior to removal or substantial remodeling of any such structure.	
	At least one known archaeological site is eligible for listing on the NRHP and may be impacted by the Master Plan (Class II).	Prior to design, Phase II archaeological studies will be completed at known sites; determination of significance will be made, and appropriate mitigation measures followed, as suggested by the archaeologist.	Class III
	Given the number of known archaeological sites, mitigation is recommended to reduce likelihood of impact to undiscovered resources (Class II).	Where soil surfaces are undeveloped and visible and where no previous survey has been completed, Phase I archaeological surveys will take place prior to construction.	Class III
Circulation	Improvement of the campus pedestrian, bicycle, and transit systems will have a beneficial impact (Class IV).	None	Class IV
	Improvement of key intersections and clear definition of ADA routes and loading zones will reduce conflicts and improve circulation (Class IV).	None	Class IV
	All of the Cal Poly area roadways are forecast to operate at acceptable levels of service at Baseline and Baseline + Project conditions (Class III).	None	Class III
	The closure of South Perimeter Road will be successful as long as the California Boulevard and Highland Drive projects take place first (Class III).	None	Class III
	Intersection operations are forecast to operate at acceptable levels (Class III).	Mount Bishop Road/Highland Drive. This location will need to have all-way stop control removed at some time prior to the full implementation of the Master Plan. California Boulevard/Highland Drive. The extension of California Blvd. to Highland would result in a new at-grade three-way intersection. Monitoring the intersection will be required; however, it seems likely that a signal will be needed. Via Carta/Highland Drive. Via Carta north of its intersection with Highland Drive will need to be widened to accommodate vehicular and pedestrian traffic. The intersection should be monitored to see if	Class III

Торіс	Impact (Significance)	Mitigation	Residual Impact	
		signalization is necessary.		
	Impacts to transit from the	The University will need to implement a	Class III	
	Master Plan are considered less	campus shuttle or other alternative		
	than significant (Class III).	transportation modes to accomplish parking		
		reduction goals.		
		The following mitigation measure has been		
		added to reinforce the need for improved		
		transit and reduced parking:		
		Cal Poly will institute the following		
		measures, or measures achieving equivalent		
		results, in order to meet its stated policy of		
		2,000 parking space reduction, in addition to improving circulation on local streets		
		(refer to table in Circulation Section).		
	The Master Plan parking supply	No additional	Class III	
	is forecast to accommodate			
	future demands (Class III).			
	The analysis shows that all of	None	Class III	
	the Master Plan-area			
	intersections are forecast to			
	operate within their respective design capacities when			
	cumulative traffic is considered			
	(Class III).			
	Two of the Master Plan-area	California Boulevard/Taft Street. The peak	Class III	
	intersections are forecast to	hour traffic forecasts meet warrants for		
	operate below acceptable levels (Class II).	consideration of traffic signals.		
		California Boulevard/U.S. 101 north bound		
		ramps. The peak hour traffic forecasts meet		
		warrants for consideration of traffic signals.		
Air Quality	Operational air quality impacts	No additional mitigation are required for	Class III	
	from traffic are mitigated by policies contained in the Master	traffic-related impacts.		
	Plan (Class III). Mitigation is	Stationary source emissions. Cal Poly shall		
	suggested for reduction of	implement the following or similar APCD-		
	stationary source emissions	approved energy-reducing measures to		
	(Class II).	reduce stationary source emissions:		
		Shade tree planting along the		
		southern exposures of buildings.		
		Building orientation to take		
		advantage of natural light and		
		heating and cooling.		
	Operation of the parking	Design. The structures shall be designed	Class III	
	structures may result in CO	with multiple exits in order to reduce the		
	emissions exceeding acceptable	time required to vacate the cars. Walls		
	thresholds (Class II).	should be generally open allowing for free		
		passage of outside air through the		



Торіс	Impact (Significance)	Mitigation	Residual Impact
		structures. Parking payment options. Prepayment of parking fees should be considered to prevent vehicle queuing when leaving. Reduction of exit time. The University shall incorporate management strategies contained in Section 2 of the Cal Poly Parking and Commuter Services Event Parking Management Plan (Draft) for the structures.	
	It is unlikely that the off- campus housing projects would result in operational impacts exceeding acceptable levels; however, specific modeling should be conducted (Class II).	Prior to construction, specific air quality models will be conducted for the off-campus housing projects.	Class III
	Operational emissions associated with the Corporation Yards are considered less than significant (Class III).	None	Class III
	Implementation of the Master Plan will contribute to non- attainment of ozone precursors when viewed in light of other regional projects. The Master Plan is consistent with the Clean Air Plan and suggested mitigation measures have been incorporated into the plan. However, impacts will remain cumulatively significant (Class I).	No additional	Class I
Noise	Noise impacts from the movement of Mustang Stadium are significant, but mitigable (Class II).	Mustang Stadium. A specific noise analysis and mitigation plan will be developed for the Stadium when the relocation is proposed. Design recommendations at this time include the following:	Class III
		Public Address System. In general, speakers should be oriented towards the interior of the stadium and/or directed downward.	
		More speakers with a smaller output dispersed throughout the stadium would have less external noise impacts than a few, louder speakers.	
		Building Orientation. The stadium should be designed to be oriented away from	

Торіс	Impact (Significance)	Mitigation	Residual Impact
		sensitive receptors. Design should minimize noise directed towards these areas.	
	Off campus housing facilities may face exterior noise from Highway 1 exceeding acceptable levels (Class II)	Off campus housing facilities north of Highland and at Highland and Highway 1 should be sited to minimize noise and should incorporate acoustic design intended to reduce interior noise to acceptable levels.	Class III
	Vehicular traffic over the long- term associated with the implementation of the Master Plan will not result in audible noise increases (Class III)	None	Class III
	Operation of the parking structures would not elevate ambient noise levels above acceptable levels (Class III).	None	Class III
	Cumulative noise from traffic associated with the University and regional growth would not be considerable (Class III).	None	Class III
Aesthetics	Development of greenspace, protected natural space, and unified landscaping will enhance the visual quality of the campus core (Class IV).	None	Class IV
	Enhancement of campus entrances and protection of steep slopes will minimize adverse impacts to City residents (Class IV).	None	Class IV
	Lighting and glare from implementation of the Master Plan are considered significant, but mitigable (Class II)	All exterior lighting associated with the proposed Master Plan will be hooded. No unobstructed beam of light shall be directed toward sensitive uses (e.g., Brizzolara Creek, Drumm Reservoir, environmental and Horticultural Sciences (EHS), and neighborhoods). The use of reflective materials in all structures shall be minimized (e.g., metal roofing, expanses of reflective glass on west-facing walls).	Class II <u>I</u>
	Lighting from the Parking Structures (especially Parking Structure II) may adversely affect sensitive land uses. Impacts are significant, but mitigable (Class II).	All interior lighting associated with proposed parking structures shall be directed internally with lamp "cut-off shields." Unobstructed beams of light shall not be directed toward land uses outside the structure and shall not interfere with vehicular traffic on nearby streets. Examples of specifications for minimizing light and glare include the following: All lights must be shielded to avoid glare	Class III

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EINAL ENVIRONMENTAL IMPACT REPORT 224 Summary

Торіс	Impact (Significance)	Mitigation	Residual Impact	
		and light spill-over onto adjacent areas and onto public right-of-way areas;	r	
		Landscape illumination should be done with low level, unobtrusive fixtures;		
		Parking structure lighting shall be designed to provide the minimum safe lighting levels. Per IES standards, this is 6 foot-candles (fc) maintained throughout internal to the structure, and 1 fc minimum on the roof;		
		The use of reflective materials on the exterior of all structures shall be minimized;		
		Internal lightwells will be provided to maximize the amount of natural light;		
		Light fixtures will include a vertical component to create an even distribution of light;		
		Solid rails shall be included around the perimeter to block light spillage from headlights on cars within the structure; and		
		All roof light fixtures shall be located on the interior columns to keep light from spilling out on to adjacent areas, and will include "cut-off" shields.		
	Lighting from Mustang Stadium may adversely affect views from area residences (Class II).	If this project were to occur, final design shall include measures to reduce light and glare visible to area residents. <u>The stadium</u> will be redesigned from that which is shown in the Heery Plan in order to accomplish the following measures Examples of specifications include the following :	Class III	
		All lights must be shielded to avoid glare and spillover onto adjacent areas and onto public right of way areas		
		The use of reflective materials will be minimized		
		Landscape illumination will be accomplished with low-level, unobtrusive fixtures		
		Minimum safe lighting levels will be used in adjacent parking and other facilities.		

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Торіс	Impact (Significance)	Mitigation	Residual Impact
		Further environmental analysis of the lighting and glare impacts would be required as part of future environmental review for this project.	
	Projects potentially impacting views from Highway 1 include off-campus housing north of Highland, the Goldtree facility, and the Bull Test. Impacts are significant, but mitigable (Class II).	City Consultation. Prior to design finalization, the University shall consult with the City regarding the visual impact of the proposed off-campus housing on the City gateway. Compliance with County Guidelines. If the proposed facilities lie within 100 feet of Highway 1, the Bull Test and the Goldtree facilities will comply with County Guidelines for design near scenic highways. In any case, the University shall consult with the County regarding reduction of visual impacts to sensitive areas such as the Highway 1 corridor.	Class III
	Cumulative visual impacts are	No additional	Class III
Public Services	less than significant (Class III). The use of reclaimed water and the continuation of the campus recycling program will have beneficial impacts on public aemiacs (Class IV)	None	Class IV
	services (Class IV). The Plan specifically addresses emergency access; the completion and expansion of the Utilidor will address fire flow deficiencies. Impacts to fire service are less than significant (Class III).	None	Class III
	Implementation of the Master Plan will increase the need for police services. Impacts are significant, but mitigable (Class II)	The University will provide for at least the equivalent of 3.3 additional police personnel to serve the anticipated growth. The University will work with the campus police to determine an adequate level of service ratio for the campus and will plan for provision of needed personnel.	Class III
	The Master Plan will result in the increased need for personal safety infrastructure. The Master Plan is explicit in its requirement that all proposed development consider personal safety in design. Impacts are less than significant (Class III).	None	Class III
	City of San Luis water supply models show that during worst-	Because future water demand will begin to tax the University's supply of Whale Rock	Class III



Торіс	Impact (Significance)	Mitigation	Residual Impact
	case weather cycle conditions, Cal Poly demand would exceed supply. During normal rain years, it is likely that	water, the following programs should be instituted: Water Conservation Program. The	
	years, it is likely that considerably more water would be available to Cal Poly; impacts are significant, but mitigable (Class II).	Water Conservation Program. The University should develop a program designed to reduce overall water consumption on campus. The program will incorporate water-saving fixtures into new development, retrofit older facilities over time, and modify landscaping irrigation requirement.	
		Drought contingency plan. As part of implementation of the Master Plan, the University will draft a drought contingency plan to address potential water shortages associated with extended drought conditions.	
		Additional Water Supply. The University should investigate the availability of additional water supplies over the next twenty-year horizon.	
	Impacts to the wastewater system (treatment and infrastructure) will be less than significant (Class III).	None	Class III
	Impacts to solid waste collection and disposal capability are considered less than significant (Class III).	None	Class III
	Cumulative impacts to public services are considered less than significant (Class III), except for water, which is significant but mitigable (Class II); cumulative impacts to police services are less than significant because of incorporated mitigation (Class II).	None; refer to police and water supply mitigation above	Class III
Construction Impacts	Aesthetics. Campus construction will have less than significant impacts on views (Class III).	None	Class III
	Aesthetics. Off-campus construction may have temporary adverse impacts on views from Highway 1. Impacts are significant, but mitigable (Class II).	Contractors at the Goldtree and off-campus housing facilities will locate stockpiling and staging areas out of view where feasible	Class III
	Air Quality. Some buildings on	None	Class III

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Торіс	Impact (Significance)	Mitigation	Residual Impact
	campus may contain asbestos or lead, which may pose a risk during demolition. Regulations require proper handling and disposal of these materials; impacts are less than significant (Class III).		
	Air Quality. Construction activities may result in dust and vehicle emissions exceeding acceptable thresholds. Impacts are significant but mitigable (Class II).	Dust and vehicle emissions are mitigated by Cal Poly Standard Construction Requirements and measures recommended by the consultant. Refer to the Construction Impacts section for full text.	Class I for H-1, H-2, Goldtree, off- campus housing and Grand and Slack housing; Class III for all other projects
	Biological Resources/Hydrology and Water Quality. Construction of facilities may have adverse impacts on sensitive species associated with riparian areas. Impacts are significant, but mitigable (Class II).	Construction drainage plan. Prior to construction, the contractor shall draft a drainage and activity plan to protect channels on the Goldtree, Grand/Slack, H- 1, H-2 and H-3 housing sites, Highland drive, Parking Structure III and the Brizzolara Creek enhancement projects and their associated habitats. The plan will emphasize avoidance, and erosion and runoff control. The University will consult with appropriate jurisdictional agencies prior to any activity.	Class III
	Hydrology and Water Quality. Construction activities may adversely affect the drainage channels at the Grand/Slack and Drumm Reservoir area. At Grand/Slack, the northern drainage will need to be filled to accommodate development. (Class II).	Refer to Construction Drainage Plan, above. Grand/Slack northern drainage. The University shall consult with the Army Corps of Engineers well in advance of construction to determine permitting requirements.	Class III
	Hydrology and Water Quality. Impacts to Brizzolara Creek from enhancement projects and other direct alterations would have temporary adverse effects (Class II).	 Refer to "drainage plan" above Biological Resources. Develop, for each enhancement project and other direct alteration, a set of performance standards, incorporating the following requirements: Timing – Highly invasive activities shall 	Class III



Торіс	Impact (Significance)	Mitigation	Residual Impact
		 be scheduled to avoid breeding and nesting periods of sensitive species, including steelhead, and southwestern pond turtle Erosion control – Erosion of banks and streambed will be minimized through approved methods (per agencies listed above) Revegetation – Disturbed areas shall be revegetated with native species to provide nesting habitat, and connections to adjacent areas for migration The University shall consult with 	
		appropriate jurisdictional agencies prior to activity.	
	Noise. Noise levels will temporarily exceed acceptable thresholds. Impacts are significant, but mitigable (Class II).	University Construction Noise standards (refer to section for full text)	Class III
	Traffic and Circulation. Construction activities may hamper circulation and pose hazards to pedestrians (Class II).	Circulation Plan. Where vehicle and pedestrian routes and residential areas conflict with construction activities, a circulation plan will be developed, which will include warning signs and detours, as well as efforts to minimize noise in residential areas.	Class III



PROJECT DESCRIPTION

Project Proponent

The Master Plan proponent is:

California Polytechnic State University San Luis Obispo, California 93407 (805) 756-1131

The California State University owns the properties under the jurisdiction of the Master Plan.

Project Location

Regional Location

The Master Plan guides development at the campus of California Polytechnic State University at San Luis Obispo (Cal Poly). This EIR does not address University property located in Santa Cruz County. The campus occupies over 6,000 acres west and northeast of the City of San Luis Obispo in the western foothills of the Santa Lucia Range in Central San Luis Obispo County. Exhibit 6.1 represents the campus in context to its regional location. These lands provide hands-on opportunities for students, especially those studying agriculture, biological sciences, architecture, and engineering, to apply their classroom knowledge to real-life situations. During fall 1999 (the largest term of the academic year) Cal Poly enrolled about 16,500 students, which converts to 14,800 full-time equivalent students for the academic year.

Site Location

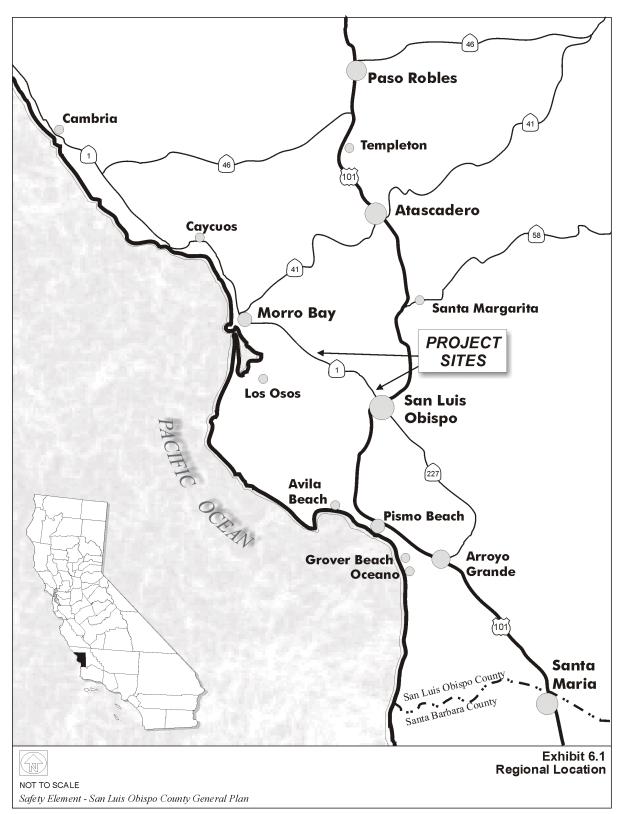
The Master Plan site consists of the entire California Polytechnic State University campus in San Luis Obispo County. For a more detailed location of specific projects refer to the preceding Master Plan.

Project Objectives

In keeping with its mission to provide the highest quality "learn-by-doing" educational experience, Cal Poly has undertaken an extensive program to expand and modernize its campus facilities. The Cal Poly Master Plan is key in helping to guide the ongoing improvements. The Master Plan provides a blueprint for the expansion and modernization of campus facilities, academic programs, and services -- including housing -- through the year 2020.

The Master Plan's focus and direction follows the Cal Poly Mission Statement, which outlines the University's academic mission, key institutional characteristics, aspirations and principles. Through the mission statement Cal Poly is committed to providing an environment where all share in the common responsibility to safeguard each other's rights, encourage mutual concern for individual growth and appreciate the benefits of a diverse campus community. Some of the characteristics include national reputation, polytechnic program emphasis and residential campus as well as applied instruction (learn by doing) and state-of-the art education. The aspiration is to be a model for public higher education as well as to follow principles such as having a student-centered, learner-directed culture, where teaching and learning resources systematically foster active learning. Please refer to the Master Plan introduction for specific examples of principles guiding the Master Plan.





Project Characteristics

This document is a comprehensive Master Plan prepared to guide development within the campus. Refer to the Master Plan for details regarding components of the Plan.

Standard Construction Requirements

The California State University system has adopted standard construction requirements that govern new construction on university campuses. The standards contain provisions that contractors must adhere to and include provisions that help mitigate certain impacts associated with construction. The Standard Construction Requirements are incorporated herein by reference and may be reviewed at California Polytechnic State University San Luis Obispo, Office of Facilities Planning located in Building 70 on the Cal Poly campus, as well as the offices of Crawford Multari and Clark Associates, 641 Higuera Street, Suite 303, San Luis Obispo.

Discretionary Approvals Required

The Master Plan requires the approval of the California State University Board of Trustees. No other discretionary actions are required. Some individual plan components will require subsequent approval by agencies such as the California Department of Fish and Game (CDFG), Army Corps of Engineers (ACOE), and/or the Regional Water Quality Control Board (RWQCB).



ENVIRONMENTAL SETTING

The main and extended campus of Cal Poly, along with the San Luis Obispo Creek watershed ranches, lie at the base of the western foothills of the Santa Lucia Range in central San Luis Obispo County immediately northeast of the City of San Luis Obispo (see Figure 6.1). Stretching west to the Pacific Ocean is a series of small volcanic peaks, or *Morros*, which provide a unique scenic backdrop of regional significance. The University and surrounding urban area are located in a valley formed by the Santa Lucia mountains to the north and east and the eastern-most Morros, Bishop Peak and Cerro San Luis, to the west. This scenic setting and proximity to the ocean make San Luis Obispo an attractive choice for university students and residents alike.

The Master Plan also addresses land use at the University ranches located north and west of Cuesta College towards Morro Bay. The Chorro Creek watershed ranches are located in the Chorro Creek Valley, between the Morros to the south and the foothills to the north.



View of the Morros looking west from Cerro San Luis.

Climate

The climate of San Luis Obispo County can be described as semi-arid with warm, dry summers followed by a cool, rainy period from November to March. Weather systems are dominated by the Pacific high pressure system which persists off the coast of California for much of the year, diverting storms northward. A daily pattern of dense morning fog followed by periods of afternoon sunshine occurs regularly during the summer months near the coast and within numerous small coastal valleys. Minimum average temperatures in San Luis Obispo average about 42° F in January; September is the warmest month with an average maximum temperature of about 79°F. High and low temperatures are moderated by the proximity of the ocean, about twelve miles to the west. The average annual rainfall in San Luis Obispo measured from 1950 to 1980 was 23 inches.

Population

The 1999 Department of Finance population estimate for the City of San Luis Obispo is 44,000 people, approximately 17% of the population of the County during that same year (255,000 people). During fall 1999 (the largest term of the academic year) Cal Poly enrolled about 16,500 students, of which about 2,800 lived on campus (outside of the City limits).

Site-specific Setting

Information regarding the site-specific setting is provided in the following sections under applicable topics.



Regulatory Setting

The Cal Poly campus and ranches (refer to Exhibits i and ii in the Master Plan) are owned by the California State University, a system of 23 campuses providing comprehensive undergraduate and post-baccalaureate professional education. The Board of Trustees has jurisdiction over development projects on campus. The campus properties covered in the Master Plan are in the unincorporated area of San Luis Obispo County. Development is not subject to local land use regulations. However, relevant policies and programs of the City of San Luis Obispo General Plan provide additional context for land use decisions in the immediate vicinity of the campus. It is also important to include policies from County planning documents that are relevant to development near the campus ranches.

City of San Luis Obispo General Plan

The City's General Plan was adopted in April of 1997 after undergoing a lengthy revision that began in the fall of 1988. The Land Use Element map designates land near the University for residential development at densities up to 24 dwelling units per acre, recognizing the value of providing lower-cost housing near the campus. Land Use Element policies 1.12.2 and 2.7.1 speak directly to the role the University plays in the community of San Luis Obispo:

1.12.2 Cal Poly. The City favors Cal Poly's approved master enrollment targets. These targets should not be changed in a way that would exceed campus and community resources. The City favors additional on-campus housing, enhanced transit service, and other measures to minimize impacts of campus commuting and enrollment.

2.7.1 Cal Poly. California Polytechnic State University campus should provide housing opportunities for both faculty and students. Existing on-campus housing should be retained. On-campus housing should increase at least as fast as enrollment, so the proportion of students living on campus can remain the same as in 1992.

2.7.3 Amenities. Multi-family housing likely to be occupied by students should provide the amenities which students seek in single-family areas, to provide an attractive alternative.

Master Plan Response. The Plan proposes additional enrollment. The Plan incorporates means to reduce the impact of these additional students on the surrounding community, including on-campus housing, parking restrictions, and alternative transportation modes. The Plan also proposes an increase in available amenities on campus, which should reduce vehicle trips and reduce conflicts with neighborhoods.

County of San Luis Obispo

Most relevant to the campus ranches are the Agriculture and Open Space Element of the General Plan (1998), and the San Luis Obispo Area Plan (revised January, 1997). The Agriculture and Open Space Element provides policies to guide use and development of agricultural land. The San Luis Obispo Area Plan provides policies and programs specific to the unincorporated areas surrounding the City. The Area Plan makes the following statement regarding Cal Poly:

"The county encourages continued coordination between both of these planning efforts within the campus administration and with the larger community and county. Assessments are needed that fully review the potential impacts of enrollment and facilities expansions, including adverse impacts to the regional housing supply and transportation system. On- and off- campus housing should be provided concurrently as enrollment increases and be designed to serve student and faculty needs with apartments, condominiums and detached residences. Commuting impacts within the region could be avoided by providing enhanced transit and other types of transportation along with enrollment increases.



Cal Poly is encouraged to acquire by gift, lease of fee title those production agriculture lands shown within the city's "Greenbelt Plan" which would be beneficial to Cal Poly's agriculture programs. Such acquisitions would allow Cal Poly to replace campus lands lost to expansion of academic buildings, sports facilities, and on-campus housing. The acquired lands should be permanently retained as agriculture or open space." (Pg. 4-33)

Master Plan Response. The Plan designates areas beyond the instructional core as Outdoor Teaching and Learning or Natural Environment. These land use categories recognize the importance of protecting agricultural and environmentally sensitive resources. To this extent, the Plan is consistent with the County's policies.

The County Agriculture and Open Space Element contains the following policy relevant to the ranches:

AGP24: Discourage the conversion of agricultural lands to non-agricultural uses through the following actions:

Avoid locating new public facilities outside urban and village reserve lines unless they serve a rural function or there is no feasible alternative...

Master Plan Response. The Goldtree facility is the only non-agricultural facility proposed for location outside of the existing core and extended campus.

OSP13:

Establish a network of Major Ecosystems

- a. Identify and establish a network of Major Ecosystems that are representative of the region's most important natural ecosystems. Use public lands, such as National Forests or Natural Area Preserves, as the core for such areas.
- b. Work with and support the efforts of local, state, and federal agencies and conservation, environmental, and agricultural organizations and private landowners to establish a Major Ecosystem Network.
- c. Designation of a Major Ecosystem shall not interfere with agricultural uses on private lands that are either within or adjacent to the Major Ecosystem.

Master Plan Response. The Master Plan contains policies that call for an inventory of the biological resources of all Cal Poly land holdings, and ecological sensitivity in areas which merit special management and land use.

OSP 14 through 20 call for the protection of wildlife corridors, riparian areas, and unique or sensitive habitat. As mentioned above, the Master Plan also provides policies for the protection of these resources.

Morros Natural Area. The Morros Natural Area as identified in the County Agriculture and Open Space Element corresponds to the southern side of Highway 1 between San Luis Obispo and Morro Bay, to Los Osos Valley Road on the south. The County is currently preparing to draft a plan to address the management of this area. Although it is too early in the process to speculate on the outcome, the plan would be most relevant to proposed uses on the southern portion of Chorro Creek Ranch.

Master Plan Response. The Master Plan proposes to relocate the Bull Test to the southern portion of Chorro Creek Ranch. The facility will be set back both from the highway and the creek, and will be consistent in character with the other agricultural facilities in the area.

Trails Plan. The County has a Trails Plan (1991), which designates areas for expansion of the County trails system. Some trails are shown in the Cal Poly area, including the Poly Canyon/Stenner Creek and Cal Poly to West Cuesta Road trails.

Master Plan Response. The Master Plan provides for expansion and improvement of trail systems, with protection of the environment paramount. Implementation of the Master Plan (Chapter 7) will include consultation with the County to site trails on Cal Poly property.



6

GEOLOGY AND SOILS

The following section analyzes the impacts of the proposed Master Plan in terms of geologic structure and potential hazards.

Setting

Seismic Setting

The San Luis Obispo area is located in a seismically active region of California where relatively strong ground motion has occurred in the past, and is likely to occur again in the future. Area faults are shown in Exhibit 6.2. The fault activity nomenclature defined under the State of California's Alquist-Priolo Fault Hazards Act (APFHA) was used as the basis for evaluating fault activity and seismicity for this study. The activity rating of faults under the act is summarized by the following guidelines:

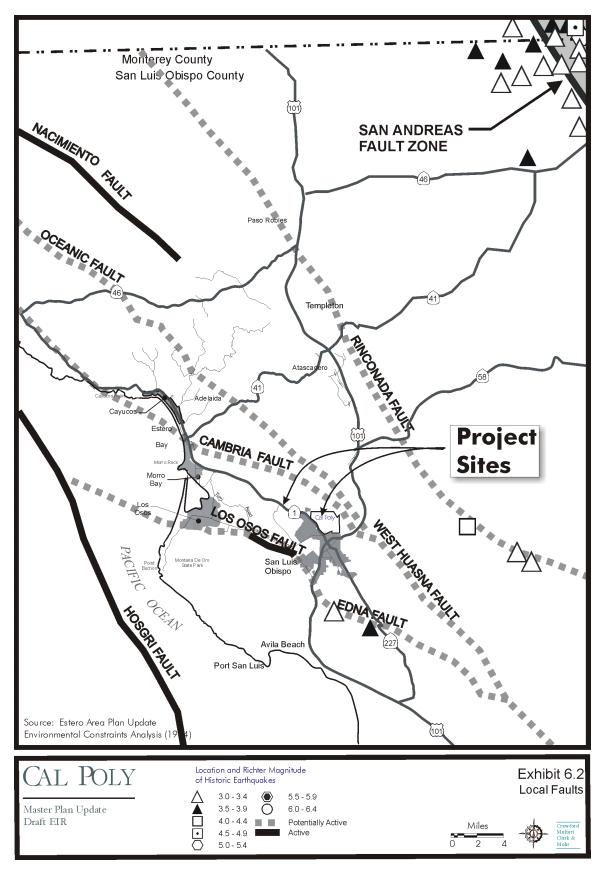
- A fault is considered *active* if it can be substantiated that the fault has ruptured during the Holocene (within the last 11,000 years BP).
- A fault is considered *potentially active* if it can be substantiated that the fault has ruptured during the Pleistocene (within the last 2,000,000 years BP) but not during the Holocene.
- A fault is considered *inactive* if it can be substantiated that the fault has not ruptured during the Pleistocene or Holocene (in other words, it has not ruptured within the last 2,000,000 years).

APFHA active faults are assigned an exclusionary zone of variable width, which require special fault studies to estimate the feasibility of construction within that zone. It should be noted, however, that there are many faults in California and the local area that satisfy the Alquist-Priolo Fault Hazard Act definition of being active, that are not currently zoned under the act. Although there are mapped active and potentially active faults in the region, no known faults have been mapped through campus (Dibblee, 1974; Hall and Prior, 1975; Pacific Gas & Electric, 1988; San Luis Obispo County Seismic Safety Element, 1975).

There are three main faults that lie near the study area: 1) the Cambria fault, 2) the West Huasna/Oceanic fault, and 3) the Los Osos fault (refer to Exhibit 6.2). The Cambria fault lies approximately ½ mile northeast of the site. The southern end of the Cambria fault could be considered part of the West Huasna/Oceanic fault group where the faults nearly join east of Cal Poly. A line of serpentine rock ridges distinguishes the boundaries of the fault. Splays of the Cambria fault break Pliocene strata east of Cambria, but there is no known offset of Holocene age rocks by the system (Chipping, 1987). The West Huasna/Oceanic fault is located approximately 2-1/4 miles northeast of the site. This fault lies along the crest of the western side of the Santa Lucia Range. It is approximately 75 miles long and has a near vertical dip (Buchanan-Banks, et al., 1978). Both of these faults exhibit late Quaternary displacement (during the past 700,000 years) and are considered potentially active at this time (Jennings, 1994).

The Los Osos fault is the closest active fault to the site, located approximately 3.5 miles southwest. This fault is considered a west-northwest-trending reverse fault located on the south side of the Los Osos Valley. The Los Osos fault is divided into four segments. The westerly segment of the fault is the Estero Bay segment, which lies mostly offshore. The Irish Hills segment starts near Los Osos and extends to just past San Luis Obispo Creek. A two-mile length of this segment west of Laguna Lake is considered to be active (Treiman, 1989) and is designated as an Earthquake Fault Zone (Hart, 1997, revised). The other two segments of the Los Osos fault are the Lopez Reservoir segment and the Newsome Ridge segment, located southeast of the Irish Hills segment. The Los Osos fault is capable of generating a maximum moment earthquake of magnitude 6.8; the recurrence interval for an earthquake of this magnitude is approximately 1,925 years (Petersen, 1996).





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Other faults that are likely capable of generating strong ground motions in the campus region are the San Andreas Fault, the Nacimiento fault, the Rinconada fault, and the Hosgri-San Simeon fault. A description of these major faults is presented below.

San Andreas Fault Zone. The Mojave segment of the San Andreas Fault is mapped along the eastern County line, approximately 35 miles east of the City of San Luis Obispo. The San Andreas is the most historically active fault in California, and is considered the most likely source of future major earthquakes. The San Andreas Fault is estimated to be capable of a maximum credible seismic event of moment magnitude 8.3 to 8.5. It is expected that a magnitude 8.5 earthquake on the fault could result in up to 30 feet of ground displacement along the fault trace.

Nacimiento Fault Zone. The Nacimiento fault is a regional, active to potentially active fault extending northwest from about Santa Margarita into northern Monterey County. The fault system is located about 10 miles northwest of Cal Poly and may have been responsible for the November 21, 1961, magnitude 6.0 earthquake. However, there is some controversy related to the location of that seismic activity (San Luis Obispo Seismic Safety and Safety Element, 1975).

Rinconada Fault Zone. The Rinconada fault, which trends northwest to southeast, joins the Nacimiento fault approximately 10 miles east of the City of San Luis Obispo (Dibblee, 1976).

Dibblee indicates that the Paso Robles formation, which is likely not younger than several hundred thousand to a million years old, is the most recent geologic unit that has been conclusively displaced by the Rinconada fault. PG&E (1988) reported that data was inconclusive, but it is believed that the Rinconada fault will probably not cause ground rupture in the near future.

San Simeon-Hosgri Fault. The Hosgri fault is located offshore approximately 15 miles west of San Luis Obispo. The fault trends in a northwesterly to southeasterly direction, and comes onshore as the San Simeon fault near San Simeon Point. It has been identified as having the potential to produce an earthquake event of magnitude 7.2 to 7.7 every 200 to 800 years. The San Simeon fault, which is onshore, is a right-lateral fault that has been substantiated as having ruptured during the Holocene, thus indicating the fault is active (Hall et al., 1990). The Hosgri fault, which is also a right-lateral fault, was studied by Lettis et al. (1990) and is inferred to have moved within the Holocene; indicating the fault is active. The last rupture event along the San Simeon fault could have occurred between about 265 and 2,000 years ago (Hall et al., 1990). The southern segment of the Hosgri fault could be responsible for the 1927 magnitude 7.0 Lompoc Earthquake.

Edna Fault. The Edna fault depicted in Exhibit 6.2 is generally considered part of the Los Osos Fault Zone (*San Luis Obispo County Safety Element*, 1999).

Geologic Hazards

The San Luis Obispo area is subject to several types of related but distinct geologic hazards, including earthquakes, liquefaction and landslides. These hazards are described briefly below.

Earthquakes. PG&E (1988) indicate that at least 20 earthquakes of magnitude 5.0 or greater have occurred in or near San Luis Obispo County within the historical record (beginning in about the year of 1812). As described above, many active faults in the area could rupture and subject the campus to seismic shaking. Several types of seismic hazards are associated with earthquake events, including ground rupture, liquefaction, tsunami and seiches.

Fault-Related Ground Rupture. The term fault-related ground rupture refers to a break in the ground surface that occurs as a result of movement of a fault. As no known faults cross or are located immediately adjacent to the campus, the potential for fault-related ground rupture is considered low.



Seismically-induced Settlement. Seismically induced settlement of sufficient magnitude to cause significant structural damage is normally associated with poorly consolidated, predominately sandy soils, or variable consolidation characteristics within the building areas.

Liquefaction. Liquefaction is the loss of soil strength during a significant seismic event. Liquefaction occurs primarily in loose, fine to medium-grained granular material in saturated or near-saturated condition. Liquefaction occurs during rearrangement of the soil particles into a denser condition, resulting in localized areas of settlement.

Tsunami and Seiches. Tsunami are mistakenly called "tidal waves," and are in reality seismically induced waves that occur in large bodies of water, such as the ocean. Because the site is not near the ocean, tsunami will not affect the site. Seiches are standing waves set in motion on rivers, reservoirs, ponds and lakes at the time of passage of seismic waves from an earthquake. A seiche can also affect water tanks and other water impoundments.

Differential Settlement. Differential settlement occurs when a foundation of a particular building spans two materials having different settlement characteristics, such as soil and rock. The soil-supported portion of the building will settle more than the rock-supported portion; this situation can stress and possibly damage foundations, often resulting in severe cracks and displacement. To reduce this potential, it is necessary for all foundations of an individual building to bear in relatively uniform material.

Landslides and Slope Stability. A geologic map prepared by Hall and Prior (1975) indicates that most of the eastern third of the Cal Poly campus is underlain by a landslide (see Exhibit 6.3). It has not yet been determined whether the landslide is stable (no longer moving) or whether it is active in part or whole. Investigations performed for Parking Structure I (1997) encountered landslide deposits; however, no assessment of the stability was made.

Expansive Soil. Expansive soils tend to swell with seasonal increases in soil moisture and shrink during the dry season as soil moisture decreases. The volume changes that the soils undergo in this cyclical pattern can stress and damage slabs and foundations if precautionary measures are not incorporated into the construction procedure. Methods commonly used for slab protection include placement of nonexpansive material beneath the slab or premoistening of subslab soils.

Soils Setting

A map of the soils and slopes for the extended campus northeast of San Luis Obispo can be found in the Master Plan. Soil types vary widely and have slopes ranging from zero to more than 20 percent. The suitability of such soils for development varies, as does the potential for geologic hazard. The following tables identify the soils types located on the campus and ranches and their characteristics.



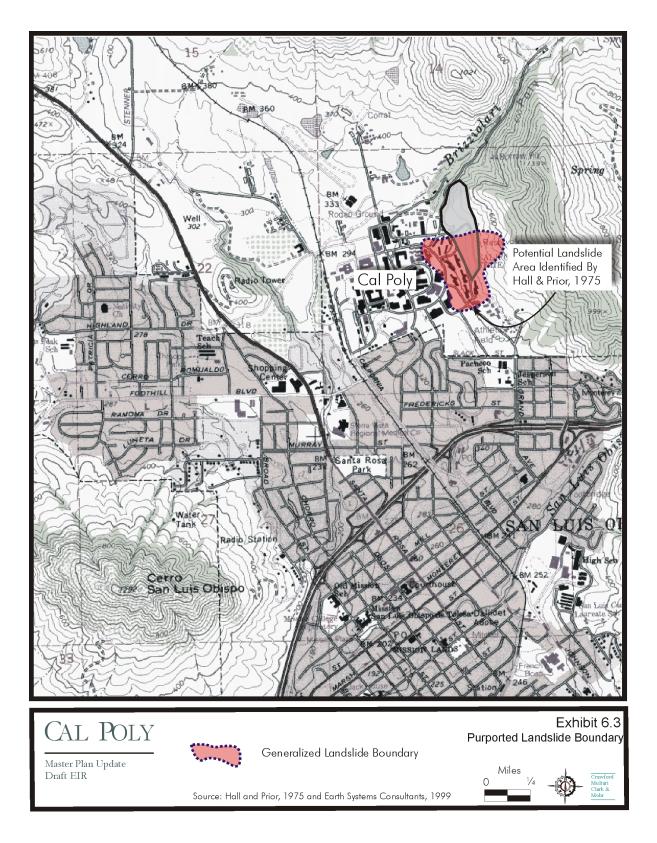




Table 6.2:	Campus	Soil Types	
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	Soil Name	Percent Slope	Irrigated	Non-irrigated	Description
121	Concepcion Loam	5-9%		llle-3(14)	Very deep soil, moderate drainage, permeability very slow, runoff medium to moderate hazard
123	Concepcion Loam	15-30 %		lve (14)	Deep to moderate soil, well drained, permeability very slow, rapid erosion
128	Cropley Clay	2-9%	lle-5(14)	llle-5(14)	Moderate well drainage, potential for soil compaction
129	Diablo Clay	5-9%	llle-(15)	llle-(15)	Deep soil, drains well
132	Diablo and Cibo Clay	30-50%		vle(15)	Drains well, slow permeability
147	Lodo Clay Loam	5-15%		lve-1(15)	Moderate permeability
148	Lodo Clay Loam	15-30%		vle(15)	Moderate permeability
149	Lodo Clay Loam	30-50%		vle(15)	Excessively drain, moderate permeability
150	Lodo Clay Loam	50-75%		vlle(15)	Shallow soil, excessive drainage, very steep, permeability moderate
158	Los Osos Loam	5-9%	llle-3(15)	llle-3(15)	Moderate to deep soil, drains well
160	Los Osos Loam	15-30%		lve-1(15)	Moderate to deep soil, drains well
161	Los Osos Loam	30-50%		vle(15)	Moderate to deep soil, drains well
163	Los Osos-Diablo Complex	9-15%	llle-1(15)	llle-1(15)	Moderate soil, drains well, permeability slow, runoff medium
164	Los Osos-Diablo Complex	15-30%		lve-1(15)	Moderate deep, drains well, permeability slow
165	Los Osos-Diablo Complex	30-50%		vle(15)	Moderate deep, drains well, permeability slow, water erosion
183	Obispo Rock Outcrop Complex	15-75%		vlle(15)	Shallow soil, well drained, permeability slow, surface runoff rapid
194	Riverwash			vlllw(14)	Permeability rapid to very slow, moderate well drain
197	Salinas Silty Clay Loam	0-2%	l (14)	lllc-1(14)	Very deep soil, drains well, permeability slow

Table 6.3: Ranch Soil Types

	Soil Name	Percent Slope	Irrigated	Non-	Description
		_	_	irrigated	_
127	Cropley Clay	2-9%	lls-5(14)	llls-5(14)	Drains well, potential for soil compaction
128	Cropley Clay	2-9%	lle-5(14)	llle-5(14)	Moderate well drainage, potential for soil
					compaction
129	Diablo Clay	5-9%	llle-(15)	llle-(15)	Deep soil, drains well
130	Diablo and Cibo Clay	9-15%	llle-(15)	llle-(15)	Deep soil, drains well, slow permeability
131	Diablo and Cibo Clay	15-30%		lve-5(15)	Drains well, slow permeability
132	Diablo and Cibo Clay	30-50%		vle(15)	Drains well, slow permeability
147	Lodo Clay Loam	5-15%		lve-1(15)	Moderate permeability
148	Lodo Clay Loam	15-30%		vle(15)	Moderate permeability
149	Lodo Clay Loam	30-50%		vle(15)	Excessively drain, moderate permeability
158	Los Osos Loam	5-9%	llle-3(15)	llle-3(15)	Moderate to deep soil, drains well

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	Soil Name	Percent Slope	Irrigated	Non-	Description
				irrigated	
159	Los Osos Loam	9-15%	llle-3(15)	llle-3(15)	Moderate to deep soil, drains well
160	Los Osos Loam	15-30%		lve-1(15)	Moderate to deep soil, drains well
161	Los Osos Loam	30-50%		vle(15)	Moderate to deep soil, drains well
194	Riverwash			vlllw(14)	Permeability rapid to very slow, moderate well
					drain
216	Tierra Sand Loam	2-9%	llle-3(15)	llle-3(15)	Moderate to well drain, surface runoff slow to medium drain

The subsurface soil structure is generally unknown; the above table reflects mostly surface data.

Geologic and Seismic Regulation

Cal Poly is required to meet Title 24 standards for geologic and seismic hazards in the construction of buildings. Compliance with the standards involves, among other things, site-specific geotechnical surveys, and seismic design and peer review. Potential impacts from such hazards, therefore, are largely mitigated by regulatory requirements.

Significance Thresholds

Impacts associated with geology may be grouped into two categories: those associated with seismic events, and those stemming from the geologic structure. According to the State CEQA Guidelines, an impact to geologic structures or resources may be significant if:

- The project would expose persons or structures to adverse effects from earthquake fault rupture, seismic ground shaking, or seismic-related ground failure
- The project would expose persons or structures to adverse effects from landslides
- The project would result in substantial soil erosion or loss of topsoil
- The project would be located on unstable soils
- The project would be located on expansive soils
- The project would directly or indirectly destroy a unique geologic feature

Impacts

Beneficial Impacts

The enhancement of riparian corridors and reservoirs will suppress soil erosion. Protection and enhancement of other natural resources and steep slopes may reduce the potential for soil erosion and landslides in areas where conditions are degraded and prevent sedimentation of riparian areas, while improving the overall condition of riparian and wetland areas. These impacts are considered Class IV, beneficial.

Seismic Hazards

To comply with Title 24, a site-specific geotechnical study and seismic peer review must be performed prior to construction. These requirements reduce any potential seismic impacts to a less than significant level. No known faults cross properties proposed for development under the Master Plan.

Erosion

Construction activity is the most likely source of erosion associated with the Master Plan. Impacts are discussed in the "Construction Impacts" section towards the end of this chapter.

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Landslide

A landslide (Hall and Prior, 1975) has been identified along the southeastern third of the campus, in the vicinity of Grand Avenue and Slack Street. Structures proposed for this area, including H-4, H-6 and the ancillary facilities, could face an increased risk of landslide. Mitigation is recommended to reduce landslide risk.

Expansive Soils

Expansive soils may be present on campus. Required geotechnical surveys will identify areas containing this soil condition; implementation of appropriate engineering techniques will reduce the impacts to a less than significant level (Class III).

Cumulative Impacts

No cumulative impacts are identified.

Mitigating Measures

Landslide. Mitigation measures would need to be developed on the basis of site-specific study of the landslide. The general degree of required mitigation would depend on the findings, which could range from: 1) finding that the existing landslide is relatively stable and therefore no significant mitigation is needed; to 2) the existing landslide is marginally stable and will require extensive strengthening and/or subsurface drainage improvements to provide adequate factors of safety for design and construction. This EIR therefore recommends that such a study be performed to estimate the factor of safety of the existing landslide for existing static and earthquake loading conditions, and to evaluate what impact the proposed site improvements could have on the stability of the landslide. The study will specify mitigation measures for any site improvements that are needed.

Residual Impacts

Seismic hazards are a condition of living in California. Title 24 requirements along with mitigation proposed above reduce these and other geologic hazards to the extent feasible. Impacts are less than significant (Class III).



HYDROLOGY AND WATER QUALITY

The following section analyzes impacts to water quality and drainage associated with implementation of the Master Plan.

Setting

Drainage Patterns

The main campus and contiguous ranches lie within the watershed of San Luis Obispo Creek, a perennial coastal stream that flows south through the City of San Luis Obispo to an estuary at Avila Beach. The San Luis Obispo Creek watershed covers an area of about 18 square miles stretching from the foothills of the Santa Lucia Mountains to the ocean. The main campus and contiguous ranches lie within the Stenner Creek Sub-basin, a tributary to San Luis Obispo Creek, which flows southwest of the campus for approximately 1.8 miles to its junction with San Luis Obispo Creek. Brizzolara Creek drains the Poly Canyon area north of Highland Drive, and flows southwest towards the City.

The campus ranches (Chorro, Walters, and Escuela) to the north and west of Cuesta College lie within the Chorro Creek watershed. Chorro Creek originates in the foothills east of the California Men's Colony and is a tributary of the Morro Bay National Estuary.

Stenner and Brizzolara Creeks and their floodplains are shown in Exhibit 6.4. The floodplain of Chorro Creek is not mapped where it crosses Cal Poly property.

Threats to Water Quality

Threats to water quality on campus include the following:

- Urban runoff (parking lots, roofs, landscaping)
- Degraded streambanks and
- Agricultural operations

Water Quality Management Plan

Cal Poly is developing a Water Quality Management Plan for all agricultural and other non-urban activities on campus. This plan will address Regional Water Quality Control Board requirements for stormwater management of point and non-point sources on campus. Measures include manure management, runoff controls, and livestock fencing (away from creeks).

Significance Thresholds

Impacts to water quality were determined to be significant if Master Plan implementation would not comply with surface water quality objectives established by the Regional Water Quality Control Board (RWQCB) in Chapter 3 of the Water Quality Control Plan, Central Coast Region.

Impacts

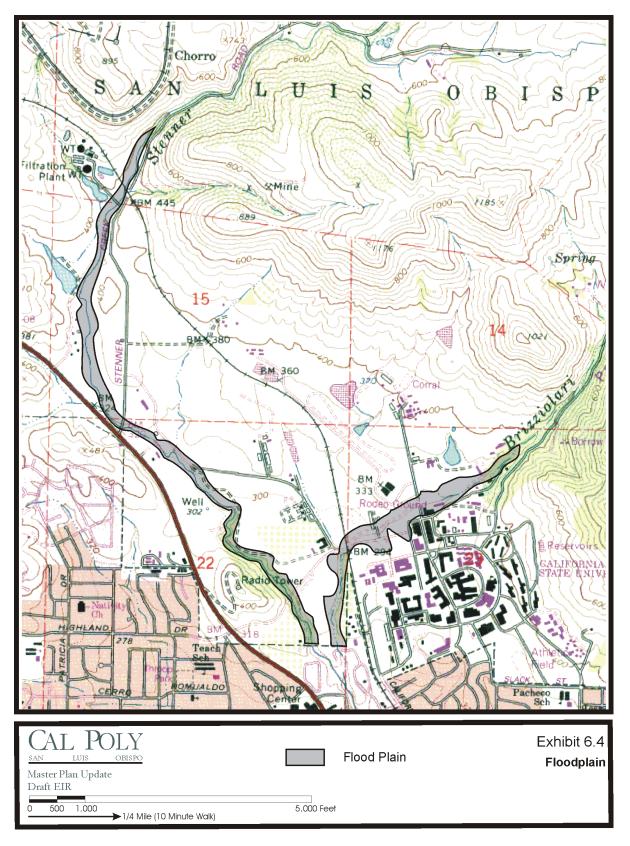
Beneficial Impacts

The Plan contains policies that aim to enhance degraded reservoirs and riparian corridors and will benefit hydrologic processes and water quality where those functions and qualities are impaired (Class IV).

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EINAL ENVIRONMENTAL IMPACT REPORT 244 Hydrology and Water Quality

Cal Poly Master Plan





Water Quality - General

The development of increased campus greenspace and landscaping, particularly lawns, will increase the need for fertilizer use on campus. This could adversely impact water supplies and nearby waterbodies. Greens located near waterways, specifically Brizzolara Creek, may result in increased runoff of nitrates and other pollutants from fertilizers. The University landscaping department minimizes the use of fertilizers, reducing the likelihood of adverse impact. Increased amounts of impervious surfaces (i.e., parking lots, roofs) will also contribute to increased runoff. The "grading and drainage" policy contained in the Master Plan specifically calls for proper drainage and filtering of runoff and protection of water quality. Potential impacts to water quality are therefore less than significant (Class III).

Chorro Creek

Runoff from the Beef Unit would include nitrates and other pollutants that may adversely impact the quality of Chorro Creek water. Mitigation identified at the end of this section would reduce impacts to the extent feasible.

Brizzolara Creek - Runoff

Projects along Brizzolara Creek have been sited at a distance from the creek to minimize direct impacts. However, development will involve the construction of parking and driveways, sidewalks, patios, and buildings. These impervious surfaces will increase the amount and velocity of runoff leaving the site to surrounding drainage systems, which in turn could accelerate erosion of soils. This impact is considered less than significant (Class III), because of policies in the Master Plan calling for proper drainage and filtering of runoff, and implementation of BMP's to protect water quality.

Degradation of water quality in Brizzolara Creek could also occur from increased sediment loads caused by erosion and from hazardous substances washed from parking lots. Accumulated silt and sediment could adversely affect creek habitat and the capacity of the creek to carry runoff. This impact is considered less than significant because of policies guiding drainage identified above. Impacts are further reduced by mitigation in the Biological Resources section for Highland Drive.

Reclaimed Water

The University is currently working with the City of San Luis Obispo to establish a system using reclaimed water to irrigate the Sports Complex. Use of this water is governed by the Health Department, and would require careful piping, risk management and public notification. Generally, reclaimed water is low in nutrients, and would not pose a considerable risk to water quality in Brizzolara Creek.

Flooding

Portions of the Design Village area and Parking Structure III lie within the 100-year floodplain of Brizzolara Creek. Title 24 compliance will require special design of any proposed structures within the floodplain to reduce risk of damage from flooding. Impacts are less than significant (Class III).

In the event of substantial seismic activity, the integrity of Drumm Reservoir may be compromised, causing flooding in its vicinity. Facilities proposed for areas downstream from the reservoir are limited to parking, to minimize risks to life and property. Impacts are less than significant (Class III).

Mitigating Measures

Chorro Creek

Mitigation listed in the Biological Resources section will reduce impacts to a less than significant level.

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Cumulative Impacts

Implementation of the Master Plan will result in an overall increase in impermeable surfaces on campus. Policies in the Master Plan and mitigation included in this EIR reduce impacts to creeks to a less than significant level.

Residual Impacts

Residual impacts are less than significant.



BIOLOGICAL RESOURCES

The following section provides examples of the biological resources present on Cal Poly land holdings in San Luis Obispo County and analyzes potential impacts to these resources due to implementation of the Master Plan.

Introduction

The Cal Poly campus, located in the Central Coast biological region of the South Coast Range, sits at the base of the Santa Lucia Mountains and close to the Pacific Ocean. Because Cal Poly is located about halfway between Los Angeles and San Francisco the local plants and animals are representative of an interesting mixture of northern and southern California species and habitats. Many species reach their northern and southern limits along the Central Coast in the general vicinity of Cal Poly.

The biological resources of the Cal Poly campus have been the subject of many studies conducted by undergraduate and graduate students as well as faculty at Cal Poly. Many of these studies had a limited focus while others were more broadly based. The Biological Sciences Department is currently developing an inventory of the biological resources of the Cal Poly lands. This inventory will include a complete list of the plant and animal species and plant communities and wildlife habitats found on both contiguous and non-contiguous campus lands. The department is also mapping the vegetation and wildlife habitats for use on the campus GIS database. All sensitive species and habitats will be identified, inventoried, and mapped. Some of the biological resources on campus. These additional studies will be the subject of the on-going inventory of the campus, will be incorporated into future environmental review, and will be part of the implementation of specific policies in the Master Plan.

Existing Conditions

The diversity of vegetation and wildlife habitats found on the Cal Poly campus has developed in response to the interaction of a complex of environmental features that are variable over the area. Local climate (wind, temperature, rainfall, fog, etc.), topography, soils, parent materials, biotic components, fire, location of waterways, and natural historical events are all variables and have all historically affected the biological resources on campus. Past and present land-use and other human caused events have also resulted in changes in the flora, vegetation, and wildlife.

Soils and geology on the campus, like the vegetation, are complex and form a pattern that often corresponds with vegetation patterning. Geological formations range from sandstone-shale complex to serpentinite. Soils range from deep, fine textured soils in some of the floodplain and grassland areas to rocky soils on the steep hillsides covered by coastal scrub and chaparral. The natural vegetation of the Cal Poly campus is composed of a mosaic of terrestrial and aquatic communities consisting of rock outcrops, grasslands, shrublands, and woodlands. Blue gum eucalyptus, pepper trees, and many other exotics have been planted or have naturalized in several areas on campus. The diversity of wetland habitats found on campus range from open water and freshwater marshes to riparian woodlands and seasonal marshes.

Plant communities are dynamic assemblages of plants that interact among themselves and their environment. Some of these communities are well defined and distinct while others are not. No two sites within a given community are exactly the same in environmental requirements, vegetation structure, or species composition. Geographic or spatial boundaries among plant communities may be abrupt or gradual depending on changes in the environmental conditions. In addition, communities change through time due to ecological succession.

Plant communities provide habitat for, and exist in tandem with, populations of wildlife species that are as dynamic and varied as the vegetation they inhabit. Management and preservation of these species must take

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EINAL ENVIRONMENTAL IMPACT REPORT 248 Biological Resources place in concert with preservation of their habitats. The following sections include descriptions of these communities and habitats and discuss the integrated nature of plant and animal species.

Common Plant Communities and Wildlife Habitats

This subsection provides descriptions of the major vegetation types found on campus and lists the common plant and animal species found in each of them. Vegetation (plant communities) on the Cal Poly campus is complex and very diverse. Classification of vegetation types follows that of Holland and Keil (1996) although reference is also made to other classification systems such as Sawyer and Keeler-Wolf (1995) and Cowardin et al., (1979). information regarding communities described More plant below can be found at http://biosci.cosam.calpoly.edu/BioSci/Faculty/Holland/Poly%20Cyn%20/plycnyn.html. Special status and sensitive species are described beginning on page 244.

Valley and Foothill Riparian Communities. Waterways such as drainage channels, creeks, streams, lakes, reservoirs, and marshes often support communities of hydrophilic trees, shrubs and herbs. These communities form narrow to locally broad corridors of dense to open woodland vegetation. The lateral extent of the woodland depends on the size and nature of the creek banks, the amount of water carried, on the depth and lateral extent of the subterranean aquifers, and the history of land use. Many of the plant species found in riparian habitats are restricted to the flood plain, banks of streams, drainage channels, and other areas where they have access to a shallow water table. Most of the trees and shrubs of the riparian corridors are deciduous plants that require a permanent water supply. However, patches of riparian woodland can also occur in depressions and canyons where the water table is shallow or around seeps and springs found in various locations in the hills around the campus.

Where permanent, slow moving pools of water occur along the creeks, patches of freshwater marsh become established. In these areas, the riparian woodland and freshwater marsh communities overlap and form a mosaic along the creek. Small freshwater marsh areas occur in scattered locations along the creeks on campus.

There are several creeks and drainages on the Cal Poly campus that support various forms of riparian vegetation ranging from broad corridors of dense riparian forests to small corridors of mostly aquatic and semi-aquatic shrubs and herbs. Common trees include *Salix lasiolepis* (arroyo willow), *Salix laevigata* (red willow), *Populus balsamifera* ssp. *trichocarpa* (black cottonwood), and *Platanus racemosa* (sycamore). *Quercus agrifolia* (coast live oak), *Umbellularia californica* (California bay-laurel), *Heteomeles arbutifolia* (toyon), and *Sambucus mexicana* (elderberry) join these riparian trees along several creeks. *Eucalyptus globulus* (blue gum) have escaped from cultivation or have been planted along some creeks, as have several other exotic species such as *Olea europaea* (olive), *Phoenix dactylifera* (date palm), and *Schinus molle* (Peruvian pepper tree).

Riparian areas support a diversity of wildlife species. These are complex habitats that provide water and moist areas in otherwise arid areas of the campus. The variety of vertical habitats created by the trees, shrubs and herbs provide nesting and foraging sites for a diversity of animal species. These habitats are critical for many wildlife species because they provide a rather permanent source of water and moist microhabitats.

Riparian communities are considered sensitive by CDFG and frequently qualify as wetland based on the USFWS wetland classification system (Cowardin et al., 1979).

Common wildlife species of riparian areas include:

Ensatina California Slender salamander Black-bellied slender salamander Pacific slender salamander Arboreal salamander Western toad Western scrub jay Chestnut backed chickadee Bushtits White-breasted nuthatch Berwicks wren Marsh wren Bonaparte's gull Herring gull Glaucous winged gull Mourning dove Western screech owl Vaux's swift



Pacific tree frog Ruby crowned kinglet Green (backed) heron Hermit thrush Swainson's thrush Black-crowned night heron Green winged teal Robin Cinnamon teal European starling Mallard Hutton's vireo Canvasback Warbling vireo Common goldeneye Orange crowned warbler Yellow rumped warbler Bufflehead Townsend's warbler Red shouldered hawk Red tailed hawk Palm warbler American kestrel Common yellow throat Killdeer Swamp sparrow Song sparrow Western snowy plover Red-winged black bird Willet Brewer's blackbird Common snipe Ring billed gull Brown headed blackbird California gull Hooded orioles Western gull Ornate shrew Hoary bat Trowbridge's shrew Mexican free-tailed bat Broad-footed mole Myotis bats Western harvest mouse Longtailed weasel Raccoon

White throated swift Anna's hummingbird Rufous hummingbird Allen's hummingbird Belted kingfisher Say's phoebe Black phoebe Tree swallow Violet green swallow Rough-winged swallow Cliff swallow Bullock's Oriole Purple finch American goldfinch Lesser goldfinch House finch House sparrow Virginia Opossum California mouse Deer mouse Brush mouse House mouse Coyote Grey fox

Riverine and Open Water. Riverine/open water communities of the main campus occur primarily in the reservoirs on campus and the channels of Stenner Creek, Brizzolara Creek, and adjacent drainages. Just south of the Chorro Creek Ranch, Chorro Creek provides open water habitat. Stream channels and all associated tributaries, floodplains, drainages and streambanks, are specifically addressed by the CDFG Code Section 1600-1603 (Streambed Alteration Agreement) and are considered Waters of the U.S. Waters of the U.S., including stream channels and wetlands, fall under the jurisdiction of the Corps under Section 404 of the Clean Water Act.

Open water of the campus reservoirs and the pools along the creeks support limnetic plant communities. These communities have both an algal component and a higher plant component. The algal component may largely planktonic and consists of a mixture of various types of algae and cyanobacteria. If a body of water is sufficiently shallow (or is deeper and clear), algae that grow attached to bottom debris may be important as well. Vascular plants of the open-water environment are either rooted or planktonic. Floating on the surface of open water may be *Lemna minor* (duckweed) and *Azolla filiculoides* (mosquito fern). These wetland habitats are considered sensitive habitats by CDFG and are classified as wetland according to the USFWS' wetland classification system.

Creek channels are generally flushed of vegetation during the winter/spring storms. Afterward a sparse to locally dense temporary vegetation develops on the sand and gravel bars along the creek and along the slowly flowing stream of the main channels. Species such as *Rorippa nasturtium-aquaticum* (Watercress), *Polypogon spp.* (Rabbitsfoot grass), and *Carex spp.* (Sedges) establish themselves in the creek channel. The plants characteristic of riparian environments are joined by some species common to the surrounding plant communities and, in some places, by a sparse waif flora of plants whose seeds were washed into the creek gravels by winter storms and germinated in the riparian area. These include a mixture of introduced weeds and native species more characteristic of non-riparian vegetation. The fate of most of the plants of the stream channel is to be washed out by the winter floods that scour the channel nearly free of vegetation.

Creek channels are often unvegetated in areas that have rocky and gravelly bars with little or no soil. These areas have no vegetation because of the substrate and because floodwaters during the rainy season wash the

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EINAL ENVIRONMENTAL IMPACT REPORT 250 Biological Resources vegetation in the channels away. However, tough-rooted or rhizomatous herbs such as *Cyperus eragrostis* (umbrella sedge), *Carex spp.* (sedges), and *Juncus spp.* (rushes) remain firmly anchored in the stream sediments in some sections.

The stream channels of Chorro, Stenner and Brizzolara Creek are expected to provide important habitat for various aquatic and semi-aquatic species of wildlife due to the presence of instream cover and substantial nearshore cover, consisting of overhanging and submerged woody riparian vegetation. Species expected to occur in association with these creeks include various resident fish species such as three-spine stickleback (*Gasterosteus aculeatus*) and prickly sculpin (*Cottus asper*), and a variety of amphibians including Pacific chorus frog (*Pseudacris regilla*), western toad (*Bufo boreas*), and bullfrog (*Rana catesbiana*), in addition to those listed above.

Freshwater Marsh. Freshwater marshes usually occur in nutrient-rich mineral soils that are saturated through most or all of the year by water. These communities are best developed in locations with slow-moving or stagnant shallow water. Such sites commonly occur on campus around springs and along the margins of ponds, reservoirs, or lakes and in the flood plains of slow-moving streams. In areas where freshwater marshes occur there is not always standing water throughout the entire year, but instead, the water table is so close to the soil surface that it can be tapped in the dry season by marsh plants.

Freshwater marshes are dominated mostly by a mixture of aquatic and semi-aquatic species such as erect, emergent plants from less than a meter to several meters tall. A mixture of lower-growing herbs is usually also associated. The tall dominant plants include: *Typha spp.* (cattails), *Scirpus.* spp. (bulrushes, tules), *Carex* spp. (sedges), *Eleocharis* spp. (spike-rushes) and *Juncus* spp. (rushes). Commonly associated with these are species of *Rumex* spp. (docks) and *Polygonum* spp. (smartweeds), *Rorippa nasturtium aquaticum* (watercress), and *Epilobium watsonii* (willow-herb).

Wildlife species listed for the riparian areas above also use the freshwater marshes. Birds expected to occur in association with freshwater marsh communities include American coot (*Fulica americana*), mallard (*Anas platyrhynchos*), black-crowned night heron (*Nycticorax nycticorax*), great blue heron (*Ardea herodias*), as well as numerous other migratory bird species. In addition, a variety of warm water fish species, amphibians, and reptiles, including the native southwestern pond turtle, occur within these habitats, as mentioned above.

Seasonal Freshwater Marsh/Seep. Some freshwater marshes are seasonal communities. During the winter and spring when ample moisture is available in the soil, communities dominated by *Juncus, Carex, Eleocharis*, etc., occur in some low, wet areas. These sites may retain some soil moisture well into the summer, but the soil surface becomes dry and hard. Grassland species may predominate during the dry summer months. The perennial marsh species may die back to the ground level or may be grazed during the summer. However, their rhizomes remain alive, and in the following wet season these plants once again form a seasonal marsh.

Natural springs often support a localized assemblage of wetland species supported by seepage but have little or no standing water. Seeps may be seasonal or perennial. Hillside springs occur in scattered locations on the Cal Poly campus. Some have been tapped by springboxes in the past whereas others are undisturbed or periodically grazed by cattle.

Cirsium fontinale var. *obispoense* (Chorro creek bog thistle) occurs in areas of seasonal marsh associated with serpentinite parent materials. Freshwater seep communities are considered sensitive by CDFG.

Wildlife inhabiting wet meadow/freshwater seep habitat includes various amphibians such as Pacific chorus frog, Western toad, bullfrog, and California slender salamander. Other species of wildlife are expected to frequent wet meadow/freshwater seep habitat for foraging purposes, including raccoon (*Procyon lotor*), gopher snake (*Pituophis melanoleucus*), snowy egret (*Egretta thula*), as well as a variety of songbirds, including red-winged blackbird (*Agelauis phoeniceus*) and song sparrow (*Melospiza melodia*). A more complete list can be found above under the "Riparian and Open Water" section.

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Coastal Valley Grassland. Grasslands are areas in which the dominant plants are various species of native and introduced grasses and forbs (dicot herbs). Often there are numerous species of herbaceous plants and scattered shrubs present. The grasses that dominate a grassland area may be annuals, perennials, or a mixture of the two depending on location. Many of the grasslands on campus are dominated by grasses and forbs introduced into California during the period of Spanish settlement.

Grasslands often occur on fine textured, clay rich soils of valleys and alluvial deposits at the base of hillsides. They integrate with coastal live oak woodlands on mesic hillside slopes, with coastal scrub and chaparral on xeric, steep, rocky slopes, and with riparian and freshwater marsh communities in aquatic and semi-aquatic areas along the creek. Many of the grassland species occur as understory species in the other communities.

Species composition varies from place to place but some of the most common species include the following:

Slender wild oats (*Avena barbata*) False brome grass (*Brachypodium distachyon*) Soft chess brome grass (*Bromus hordeaceus*) Foxtail barley (*Hordeum murinum*) Rattail fescue (*Vulpia myuros*)

Common associated weedy forbs include:

Scarlet pimpernel (Anagallis arvensis) Filaree (Erodiumspp.) Smooth cat's ear (Hypochaeris glabra) Slender lettuce (Lactuca saligna) Bristly ox-tongue (Picris echioides) Knotted dock (Rumex conglomeratus) Windmill pink (Silene gallica) Vetch (Vicia sativa)

Common native herbs include:

Yarrow (Achillea millefolium) California poppy (Eschscholzia californica) Cudweed (Gnaphalium purpureum) Tarplants (Hemizonia spp.) Coast tarweed (Madia sativa) Blue-eyed-grass (Sisyrinchium bellum) Common wild oats (Avena fatua) Ripgut brome grass (Bromus diandrus) Red brome (Bromus madritensisvar. rubens) Annual ryegrass (Lolium multiflorum)

Italian thistle (*Carduus pycnocephalus*) Perennial mustard (*Hirschfeldia incana*) Rough cat's ear (*Hypochaeris radicata*) Prickly lettuce (*Lactuca serriola*) English plantain (*Plantago lanceolata*) Docks (*Rumex* spp.) Sow-thistles (*Sonchus* spp.)

Soap plant (Chlorogalum pomeridianum) Cudweed (Gnaphalium luteoalbum) Hayfield tarweed (Hemizonia congesta spp. luzulifolia) Lupines (Lupinus spp.) Buttercup (Ranunculus californicus)

Raptors, such as red-tailed hawk (*Buteo jamaicensis*), white-tailed kite (*Elanus caeruleus*), and American kestrel (*Falco sparverius*), commonly use open grassland areas extensively for foraging purposes, while species such as Western meadowlark (*Sturnella neglecta*) and Western bluebird use open grasslands for nesting. Reptiles that commonly breed within annual grassland habitats include Western fence lizard (*Sceloporus occidentalis*), common garter snake (*Thamnophis sirtalis*), and Western rattlesnake (*Crotalus viridis*). Mammals that are expected to occur in or frequent these habitats include black-tailed jackrabbit (*Lepus californicus*), Botta's pocket gopher (*Thomomys bottae*), coyote, and muledeer (Mayer and Laudenslayer, 1988). In addition, various species of bat, including Townsend's Western big-eared bat (*Plecotus townsendii townsendii*) forage nocturnally within this habitat type.

California Native Grassland. Cal Poly has an impressive number of native grasses in its grassland areas, much more than in most local grassland. These are particularly well developed in areas with soils derived from serpentine. The stands of perennial, native bunch grasses, which dominated California grassland prior to

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EINAL ENVIRONMENTAL IMPACT REPORT 252 Biological Resources Spanish settlement, have gradually been reduced locally but are fairly common on some hillsides forming significant stands in places. Historically, the changes in the composition of the grassland in this area were a function of the introduction and invasion of alien plant species and changes in livestock grazing and grazing patterns.

The composition of true native grasslands is unknown. However, based on examples of this community surviving today, the dominant perennial grasses of these areas were probably *Nassella pulchra* (purple needle-grass), *Nassella lepida* (slender needle-grass), *Danthonia californica* (California oat-grass), *Elymus glaucus* (wild blue-rye, *Muhlenbergia rigens* (deer grass), *Koeleria macrantha* (June grass), *Melica californica* (California melic grass), and *Melica imperfecta* (melic grasses). Associated with these perennial grasses is a mixture of annual and perennial forbs.

Forbs and non-graminoid monocots found in this habitat are similar to those listed above for Annual Grassland.

Coastal Scrub. This community is dominated by small to medium sized (3-6 feet tall) shrubs with an herbaceous understory. Both the density and the composition of the shrub cover vary from site to site, as does the herbaceous understory. In some places, the shrubs form a dense, almost impenetrable woody plant cover with a sparse understory while in other places the shrubby overstory is more open and has a well-developed herb layer. Most of the dominant shrubs in this plant community are comparatively soft-stemmed plants that undergo significant dieback during the summer drought. For this reason, coastal scrub is sometimes referred to as "soft chaparral" as opposed to the "hard chaparral" or "true chaparral".

The coastal scrub community occurs in several small to extensive patches on the steep, rocky hillsides on the Cal Poly campus. Coastal scrub usually forms a mosaic with grassland and also integrates with chaparral, coast live oak woodland, and to a lesser extent, riparian woodland. Some coastal scrub species extend into coastal live oak woodlands and riparian areas where they form part of the understory vegetation. In more favorable sites, coastal scrub is composed of a diversity of shrub species.

The relative species composition of the coastal scrub stands varies from site to site on campus. The most common species are listed below

California sagebrush (Artemisia californica) Golden-yarrow (Eriophyllum confertiflorum) Saw-toothed goldenbush (Hazardia squarrosa) Bush monkeyflower (Mimulus aurantiacus) Redberry (Rhamnus crocea) Poison-oak (Toxicodendron diversilobum) Coyote bush (*Baccharis pilularis*) Climbing bedstraw (*Galium porrigens*) Deerweed (*Lotus scoparius*) Coffee-berry (*Rhamnus californica*) Black sage (*Salvia mellifera*)

Within the coastal scrub there are often exposed, rock outcrops that support a different species composition than the surrounding coastal scrub. Rock outcrops provide specialized habitats for both plants and animals. Rock outcrops are mostly sparsely vegetated by extremely drought tolerant species on their surfaces and by moisture-requiring species in their crevices. The hillsides in the Santa Lucia Range on the Cal Poly campus have a large number of rock outcrops that support drought tolerant herbs and shrubs such as *Artemisia californica* (California sagebrush), *Eriogonum fasciculatum* (California buckwheat), *Yucca whipplei* (yucca), *Epilobium canum* (California fuchsia), *Hazardia squarrosa* (saw-toothed goldenbush), *Chlorogalum pomeridianum* (soap plant), *Dichelostemma pulchellum* (blue dicks), *Salvia columbariae* (Chia), *Phacelia distans* (phacelia) and *Astragalus curtipes* (locoweed). On the driest, rocky areas, yucca and California buckwheat along with *Selanginella bigelovii* (spikemoss) are dominant. Native bunch grasses are also common around some of the rock outcrops, especially the needlegrasses, *Nassella pulchra* and *Nassella lepida*.

Coastal scrub vegetation provides excellent cover, nesting sites, and foraging opportunities for a wide variety of amphibians, reptiles, birds, mammals, and other animals. Sticky monkeyflower provides abundant nectar resources for insects and hummingbirds, and dense shrubs provide protection for small mammals and birds.

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Barren soil in patches among the shrubs indicates both rodent consumption of small herbs and grasses as well as an allelopathic effect of foliage and leaf litter. Insects rising from flowers and vegetative material in the coastal scrub and chaparral provide excellent food for insectivorous birds. Some common wildlife species of the coastal scrub and chaparral are listed below.

Red-tailed hawk (*Buteo jamaicensis*) California quail (*Callipepepla californica*) Allen's hummingbird (*Selasphorus sasin*) Cliff swallow (*Hirundo pyrthonota*) Scrub jay (*Aphelocoma coerulescens*) Northern mockingbird (*Mimus polyglottos*) White-crowned sparrow (*Zonotrichia leucophrys*) Brewer's blackbird (*Euphagus cyanocephalus*) Southern alligator lizard (*Gerrhonotus multicarinatus*) Broad-handed mole (*Scapanus latimanus*) Western gray squirrel (*Sciurus griseus*) Coyote (*Canis latrans*)

American kestrel (*Falco sparverius*) Mourning dove (*Zenaida macroura*) Anna's hummingbird (*Calypte anna*) Barn swallow (*Hirundo rustica*) Western bluebird (*Sialia mexicana*) California towhee (*Pipilo crissalis*) Dark-eyed junco (*Junco hyemalis*) Western fence lizard (*Sceloporus occidentalis*) Gopher snake (*Pituophis melanoleucus*) Brush rabbit (*Lepus californicus*) Botta's pocket gopher (*Thomomys bottae*) Mule deer (*Odocoileus hemionus*)

Chaparral. Chaparral communities are dominated by stiffly branched, leathery-leafed (sclerophyllous) shrubs from 3 to 10 feet tall. These communities are normally extremely dense and form an almost impenetrable shrubby community with little understory in most areas. Chaparral is a very broad category and may be composed of a variety of different species. As a result, chaparral communities have been subdivided into several different types depending on location and dominant species. The soils of chaparral, like those of the coastal scrub, are generally shallow, infertile, rocky or gravelly in texture and have a low water holding capacity.

Chaparral stands occur only in small patches on the upper hillsides in some areas of campus sometimes associated serpentine soils. Some of the common species include *Ceanothus cuneatus* (buckbrush), *Adenostoma fasciculatum* (chamise), *Cercocarpus betuloides* (mountain mahogany), *Prunus ilicifolia* (holly-leafed cherry), *Holodiscus discolor* (creambush), *Quercus durata* (leather oak), *Mimulus aurantiacus* (sticky monkeyflower), *Heteromeles arbutifolia* (toyon), *Salvia mellifera* (black sage), *Toxicodendron diversilobum* (poison oak), and *Galium porrigens* (Climbing bedstraw).

Chaparral, like the coastal scrub, provides excellent cover, nesting sites, and foraging opportunities for a wide variety of amphibians, reptiles, birds, mammals, and other animals. Common wildlife species of the chaparral are like those of the coastal scrub discussed above.

Coast Live Oak Woodland. Coast Live Oak Woodland is one of the most characteristic and interesting vegetation types of California's central coast and the Cal Poly campus. Coast live oak woodland is typically composed of pure stands of *Quercus agrifolia* (coast live oak) although a few *Umbellularia californica* (California bay-laurel) are present. *Heteromeles arbutifolia* (toyon) is also common and sometimes attains the size of small oaks.

Coast live oak woodland is the climax vegetation type in this area and characteristically occupies the most mesic north facing slopes and canyon areas. Because of the heterogeneity of the habitats in these hills, the coastal live oak woodlands integrate with grassland in the valley and with coastal scrub and chaparral (on steep slopes with rocky, gravelly, dry soils). Coast live oaks are also a common to dominant component of the riparian community along many of the creeks found on campus.

Coast live oak woodlands often form a closed-canopied woodland composed of very old trees that typically vary from about 1 to 3 feet in trunk diameter; however, there are some smaller and larger trees present. Several very large sprawling trees with large branches occur locally. The understory is quite variable from place to place depending on the microhabitat conditions. In some places the understory may be composed of a relatively lush growth of ferns, shrubs, and shade tolerate herbs. In other places, the understory is sparse consisting of a thick

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layer of litter with scattered shrubs and herbs typical of adjacent coastal scrub and grasslands. Coast live oak woodland also forms more open woodland with a grassland understory on some of the campus hillsides.

Oak woodlands have vertical and horizontal structure that provide excellent cover, nesting sites, shelter, and foraging opportunities for a wide variety of amphibians, reptiles, birds, mammals, and other animals. The woodland also supports numerous insects and small mammals that are important food sources for other vertebrates in the area. Snags provide excellent roosts for raptors, and provide nesting cavities for owls, kestrels, woodpeckers, nuthatches, wrens, chickadees, and bluebirds. The woodland vegetation moderates environmental conditions; the community reduces wind and temperature variation compared to grassland and coastal scrub communities.

This vegetation type supports a rich and wide variety of vertebrate species. Common wildlife species are listed below.

Turkey vulture (*Cathartes aura*) California quail (*Callipepepla californica*) Common barn-owl (*Tyto alba*) Loggerhead shrike (Lanius ludovicianus) Northern flicker (*Colaptes auratus*) Blue-grey gnatcatcher (*Polioptila caerulea*) Western wood-pewee (*Contopus sordidulus*) Hutton's vireo (Video huggoni) Scrub jay (*Aphelocoma coerulescens*) Chestnut-backed chickadee (Parus rufescens) Brown creeper (*Certhia americana*) Northern mockingbird (*Mimus polyglottos*) California towhee (Pipilo crissalis) White-crowned sparrow (*Zonotrichia leucophrys*) Dark-eyed junco (Junco hyemalis) Western fence lizard (Sceloporus occidentalis) Southern alligator lizard (*Gerhonotus multicarinatus*) Broad-handed mole (*Scapanus latimanus*) California ground squirrel (Spermophilus beechevi) Botta's pocket gopher (Thomomys bottae) Raccoon (Procyon lotor)

Red-tailed hawk (*Buteo jamaicensis*) Mourning dove (*Zenaida macroura*) Great-horned owl (*Bubo virginianus*) Acorn woodpecker (*Melanerpes formicivorus*) Flycatcher (*Empidonax* spp.) Western bluebird (*Sialia mexicana*) Ruby-crowned kinglet (*Regulus calendula*) Plain titmouse (*Parus inornatus*) American crow (*Corvus brachyrhynchos*) Bushtit (*Psaltriparus minimus*) House wren (*Troglodytes aedon*) House finch (*Carpodacus mexicanus*) Song sparrow (*Melospiza georgiana*) English sparrow (*Passer domesticus*) Pacific treefrog (*Pseudacris regilla*)

Brush rabbit (*Lepus californicus*) Western gray squirrel (*Sciurus griseus*) Coyote (*Canis latrans*) Mule deer (*Odocoileus hemionus*)

Rock Outcrops. Rock outcrops provide specialized habitats for both plants and animals. Some species are restricted to the rock crevices or to the bare, dry rock surfaces. Rock outcrops are sparsely vegetated by extremely drought tolerant species on their surfaces and by moisture-requiring species in their crevices. In the case of the Cal Poly campus, many of the outcrops are serpentinite. Serpentinite is a metamorphic, magnesium silicate rock, often green in color and slippery to the touch. Serpentine and the soils derived from it have a number of traits inimical to plant growth. It is low in some essential nutrients, especially calcium, and high in magnesium. In addition, it is often high in toxic elements such as nickel and chromium. As a result of these unusual conditions, serpentine rock and soil support unusual, endemic floras including a large number of rare and endangered species. Some of the common plant species are *Dudleya lanceolata* (dudleya), *Pellaea andromedifolia* (coffee fern), *Pentagramma triangularis* (goldback fern), *Selaginella bigelovii* (clubmoss) *Yucca whipplei* (yucca), and *Eriogonum fasciculatum* (California buckwheat). In addition, several rare plants are found associated with serpentinite rock outcrops such as *Calochortus obispoensis* (San Luis mariposa lily). More information regarding sensitive plant species can be found on page 244.

Wildlife species found on rock outcrops include those listed for the grassland, chaparral and coastal scrub communities.

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Anthropogenic Communities: Communities dominated by plants that have been introduced by humans and established or maintained by human disturbance are anthropogenic communities. Some of these are entirely artificial communities such as cultivated row crops, lawns, vineyards and ornamental plantings. Others are assemblages of weedy species that have invaded disturbed areas, sometimes in spite of human efforts to control them. Weed-dominated communities often represent the early stages of natural succession. In the absence of disturbance many weedy plants do not persist, but are gradually replaced by native vegetation. Anthropogenic communities on the campus that are wholly the result of human activity (lawns, orchards, vineyards, etc.) are not discussed here. Those that develop spontaneously can be divided into the three types: pastoral communities, ruderal communities, and plantations and urban mix communities.

Pastoral. The pastoral communities occur in upland pastures created from existing native bunchgrass grassland where repeated disturbance to the vegetation and soil by grazing animals maintains a plant community of only those species tolerant of this repeated disturbance regime. These assemblages are usually a mix of plant species, typically grasses, intentionally grown for grazing livestock to consume, and those capable of invading and tolerating the existing grazing regime. Some species are intentionally planted such as *Dactylis glomerata* (Orchardgrass), *Festuca arundinacea* (Tall fescue), *Lolium perenne* (Perennial ryegrass), and *Phalaris aquatica* (Harding grass). Annuals typical of southern valley grasslands, such as *Avena spp.* (Wild oats), *Bromus spp.* (bromes), Hordeum spp. (wild barley), *Lolium spp.* (ryegrasses), usually mix with these species. Other invaders of pastures are frequently Eurasian forbs, but some natives, such as *Eremocarpus setigerus* (Turkey mullein), or *Lupinus* spp. (lupines), are also able to persist in pastures.

Ruderal Communities. Ruderal communities occur where there are frequent disturbances such as along roadsides and trails. These communities are common in areas along most of the campus roads and other areas that have been subjected to ongoing or past disturbances (e. g., heavy grazing and trampling, cattle trails, hiking trails, vehicle activities, etc.). In these disturbed areas, assemblages of native and introduced weedy species have become established. A band of ruderal vegetation commonly borders the rural roadsides on campus. The components of the ruderal community vary from place to place, but most of the species are introduced weeds. These include various annual grasses and forbs of Eurasian origin, many of which also occur in the grasslands. Some of the common weeds are listed below.

Alien Grasses		Alien Forbs	
Avena barbata	Slender Wild Oats	Anthemis cotula	Mayweed
Avena fatua	Common Wild Oats	Brassica nigra	Black mustard
Brachypodium distachyon	False Brome Grass	Carduus pycnocephalus	Italian thistle
Bromus diandrus	Ripgut Brome Grass	Centaurea melitensis	Tocolote
Bromus hordeaceus	Soft Chess Brome Grass	Centaurea solstitialis	Yellow star-thistle
Bromus madritensis	Red brome, Spanish Brome	Dipsacus sativus	Teasel
Hordeum marinum	Mediterranean barley	Erodium botrys.	Storkbill filaree
Hordeum murinum	Foxtail Barley	Foeniculum vulgare	Fennel
Lolium multiflorum	Annual Ryegrass	Hirschfeldia incana	Perennial Mustard
Lolium perenne	Perennial Ryegrass	Lactuca saligna	Slender lettuce
Vulpia myuros	Rattail Fescue	Lactuca serriola	Prickly lettuce
		Medicago polymorpha	Bur-clover
		Picris echioides	Bristly ox-tongue
		Plantago lanceolata	English plantain
		Plantago major	Common plantain
		Polygonum arenastrum	Knotweed

Rumex crispus

Sonchus asper

Silybum marianum

Sonchus oleraceus

Curly dock

Milk Thistle

Prickly sow-thistle

Common sow-thistle

EINAL ENVIRONMENTAL IMPACT REPORT 256 Biological Resources **Plantations and Urban Mix** communities include plantations, windbreaks, and ornamental plantings comprised of mostly non-native trees such as *Eucalyptus* sp. as well as other exotic species that have been planted or have escaped from cultivation and become part of the local vegetation. Native species may also be a component of these human-influenced communities. On the Cal Poly campus there are several areas where ornamental trees have been planted along roads, highways, agricultural fields, athletic fields, and pastures. The most extensive of these man-made forests are composed of large plantings of *Eucalyptus spp.*, mostly *Eucalyptus globulus* (blue gum). Some of these plantations are characterized by having pure, dense stands of blue gum trees that grow tall and straight and form wind breaks and provide screening. Other common trees planted in various locations include: *Acacia melanoxylon* (Blackwood acacia), *Casuarina sp.* (She-oak), *Grevillea robusta* (Silky-oak), *Olea europaea* (olive), *Phoenix dactylifera* (date palm), *Pistacia atlantica* (pistachio), *Prunus dulcis* (almond), *Prunus spp.* (cherry, apple), *Schinus molle* (Peruvian pepper-tree), and various species of Eucalyptus. Many of these exotic trees are successfully reproducing themselves and are invading some of the surrounding native communities.

Some planted species are native to California but not to the Cal Poly campus such as *Pinus radiata* (Monterey pine), *Cupressus macrocarpa* (Monterey cypress), and *Juglans californica* (black walnut). In some areas the native and exotic trees occur as windrows, in other areas they form man-made forest communities, and in still other areas they mix with native species and form what is sometimes referred to as an "urban mix". The urban mix is common in several areas on campus and along some of the drainages and creek areas where these planted trees mix with willows and other natives.

In addition to trees there are many shrubs and perennials such as *Agave americana* (century plants), *Opuntia sp.* (prickly-pear cactus), *Cortaderia jubata* (pampas grass), and *Genista monspessulana* (French broom) that are also common. Ornamental vines such as *Asparagus asparagoides* (garden-similax), *Hedera helix* (English ivy), *Lonicera japonica* (Japanese honeysuckle), and *Vinca major* (periwinkle) often spread from developed areas into adjacent undeveloped areas on campus, including the riparian vegetation along creeks.

There are really no native wildlife species that are exclusively found in anthropogenic plant communities. There are wildlife species that are associated with such communities and these include primarily grassland species. Grassland species present in these areas might include: meadow voles, pocket gophers, brush rabbits, hares, and a diversity of commensal species such as house mice and introduced rats. Also associated with grasslands would be a diversity of seed eating birds (sparrows, finches, towhees, and juncos) as well as insectivorous and carnivorous predators (shrikes, kingbirds, phoebes, swallows, egrets, owls, hawks, lizards and snakes). Specific list of possible species includes:

Turkey vulture (*Cathartes aura*) American kestrel (*Falco sparverius*) Black phoebe (*Sayornis nigricans*) Barn swallow (*Hirundo rustica*) Western bluebird (*Sialia mexicana*) Savanna sparrow (*Passerculus sandwichensis*) Dark-eyed junco (*Junco hyemalis*) Western meadowlark (*Siternella neglecta*) Meadow vole (*Microtus californicus*) Desert cottontail (*Sylvilagus audobonii*) Coyote (*Canis latrans*) Red-tailed hawk (*Buteo jamaicensis*) Loggerhead shrike (*Lanius ludovicianus*) Cliff swallow (*Hirundo pyrrhonota*) American crow (*Corvus brachyrhynchos*) California towhee (*Pipilo crissalis*) White-crowned sparrow (*Zonotrichia leucophrys*) Brewer's blackbird (*Euphagus cyanocephalus*) Western fence lizard (*Sceloporus occidentalis*) Botta's pocket gopher (*Thomomys bottae*) Jack rabbit (*Lepus californicus*) Mule deer (*Odocoileus hemionus*)

Eucalyptus and other plantations can offer significant wildlife habitat. On the Cal Poly campus the most important use of plantations by wildlife is for nesting by several raptor species such as Great horned owl, Barn owl, Red-shouldered hawks and red tailed hawks. Portions of the eucalyptus plantations may also be used for roosting by monarch butterflies. Plantations that are composed principally of pines can be very important habitat for trunk foraging species such as red-breasted nuthatch, and brown creepers. Those plantations that are older and contain dead trees or limbs may be extremely important to woodpeckers and a variety of cavitynesting birds. In general there are no specialists on plantations since these trees are imported. Rather, birds

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that use plantations extensively would be found in any wooded area. They generally respond to the presence of trees rather than to the species composition of the tree stand.

Sensitive Species and Habitats

Special-status species are plants and animals that are listed as either endangered or threatened under the Federal or California Endangered Species Acts, or rare under the California Native Plant Protection Act. They may also be considered rare (but not formally listed) by resource agencies, professional organizations (e.g., Audubon Society, California Native Plan Society (CNPS), The Wildlife Society), and the scientific community. For the purposes of this Master Plan, special-status species are defined as shown in Table 6.4.

The Federal Endangered Species Act (ESA) of 1973 (50 CFR 17) provides legal protection for plant and animal taxa that are in danger of extinction, and classified as either threatened or endangered under the ESA. The ESA requires Federal agencies to make a finding on all Federal actions, including the approval by an agency of a public or private action, such as the issuance of a Corps permit under Section 404 of the Clean Water Act, as to the potential to jeopardize the continued existence of any listed species potentially impacted by the action. Section 9 of the ESA prohibits the "take" of any member of a species listed as threatened or endangered.

A search was conducted of the California Native Plant Society's *Inventory of Rare and Endangered Vascular Plants of California* data base and the most recent California Department of Fish and Game *Natural Diversity Database (CNDDB)* was obtained for all rare or endangered plant species found on the campus quadrangles. The rare and endangered plants listed below have either been revealed in the data base search, have been observed by staff of the Biology Department, or have been reported from the areas on or near the campus.

Based on information obtained through the CNDDB search, CNDDB List of Special Plants (July 2000), IUCN Red List and review of existing literature, a special-status species list was compiled that includes species that have potential to occur in the vicinity of the areas proposed for development in the Master Plan. Table 6.5 identifies the name and legal status of special-status plant species either reported from or expected to occur on the campus based on the presence of suitable habitat. Table 6.6 identifies the common name and legal status of special-status wildlife species either reported from or expected to occur on the campus based on the presence of suitable habitats, and any known occurrences of various identified special-status species are described following the tables.

Special-Status Plant Species	Special-Status Animal Species
\succ Plants listed or proposed for listing as threatened or	> Animals listed or proposed for listing as threatened
endangered under the Federal Endangered Species Act	or endangered under the Federal Endangered
(50 CFR 17.12 for listed plants and various notices in	Species Act (50 CFR 17.11 for listed animals and
the Federal Register for proposed species).	various notices in the Federal Register for proposed
\succ Plants that are Category 1 candidates for possible future	species).
listing as threatened or endangered under the Federal	\succ Animals that are Category 1 candidates for possible
Endangered Species Act (55 CFR 6184, February 21,	future listing as threatened or endangered under the
1990).	Federal Endangered Species Act (54 CFR 554).
\succ Plants that meet the definitions of rare or endangered	\succ Animals that meet the definitions of rare or
species under the CEQA (State CEQA Guidelines,	endangered species under the CEQA (State CEQA
Section 15380).	Guidelines, Section 15380).
\succ Plants considered by the CNPS to be "rare, threatened,	\succ Animals listed or proposed for listing by the State of
or endangered" in California (Lists 1B and 2 in Skinner	California as threatened and endangered under the
and Pavlik, 1994).	California Endangered Species Act (14 CCR 670.5).
\succ Plants listed by CNPS as plants about which we need	➤ Animal species of special concern to the CDFG
more information and plants of limited distribution	(Remsen, 1978 for birds; Williams, 1986 for

Table 6.4. Definitions of Special-Status Species





Special-Status Plant Species	Special-Status Animal Species
(Lists 3 and 4 in Skinner and Pavlik, 1994).	mammals).
\succ Plants listed or proposed for listing by the State of	➤ Animal species that are fully protected in California
California as threatened or endangered under the	(California Fish and Game Code, Section 3511
California Endangered Species Act (14 CCR 670.5).	[birds], 4700 [mammals], and 5050 [reptiles and
▶ Plants listed under the California Native Plant	amphibians]).
Protection Act (California Fish and Game Code 1900	Animal Species listed on the IUCN Red List
et seq.).	\succ Animals considered sensitive by other federal
➢ Plants considered sensitive by other federal agencies	agencies (i.e., U.S. Forest Service, Bureau of Land
(i.e., U.S. Forest Service, Bureau of Land	Management), state and local agencies or
Management), state and local agencies or jurisdictions.	jurisdictions.
\succ Plants considered sensitive or unique by the scientific	
community or occurring at the limits of its natural	
range	
Plants listed on the IUCN Red List	

Table 6.5. Special-Status Plant Species and Communities with Potential to Occur on Cal PolyLands

Common Name	Scientific Name	Legal Status Federal/State/CNPS/IUCN ¹
Bishop or San Luis manzanita	Arctostaphylos obispoensis	//4/
Brewer's calandrinia	Calandrinia breweri	//4/
Club-haired mariposa lily	Calochortus clavatus ssp. clavatus	//4/
San Luis mariposa lily	Calochortus obispoensis	/SSC/1B/V
Cambria morning glory	Calystegia subacaulis var. episcopalis	C2//1B/E
San Luis Obispo sedge	Carex obispoensis	/SSC/1B/V
Dwarf soaproot	Chlorogalum pomeridianum var. minus	//1B/
Brewers spineflower	Chorizanthe breweri	/SSC/1B/V
Palmer's spineflower	Chorizanthe palmeri	//4/
Chorro Creek bog thistle	Cirsium fontinale var. obispoense	E/E/1B/E
San Luis serpentine dudleya	Dudleya abramsii ssp. bettinae	/SSC/1B
San Luis dudleya	Dudleya abramsii ssp. murina	//4/V
Blochman's dudleya	Dudleya blochmaniae ssp. blochmaniae	/SSC/1B/V
Ojai fritillary	Fritillaria ojaiensis	/SSC/1B
San Benito fritillary	Fritillaria viridea	/SSC/1B/R
Congdon's tarplant	Hemizonia parryi ssp. congdonii	C1//1B/E
Jones layia	Layia jonesii	/SSC/1B/E
Small-leaved lomatium	Lomatium parvifolium	//4/
Palmer's monardella	Monardella palmeri	//4/
Pringle's yampah	Perideridia pringlei	//4/R
Michael's rein orchid	Piperia michaelii	//4/
Hoffman's sanicle	Sanicula hoffmannii	//4/
Adobe sanicle	Sanicula maritima	/SSC/1B/V
Rayless groundsel	Senecio aphanactis	//2/
Cuesta Pass checkerbloom	Sidalcea hickmanii ssp. anomala	/SSC/1B/E
Sensitive Habitats/Communities		
California Native Grassland (Serper	ntine Bunchgrass)	
Coastal and Valley Freshwater Mar	sh	
Wet Meadow/ Freshwater Seep		
Riparian/Open Water and associate	d habitat	



			Legal Status
Notes:	I		
Federal Codes		State Codes	
E: Endangered C1: Category 1 candidate species C2: Category 2 candidate species		E: Endangered SSC: Species of S	pecial Concern
CNPS Codes			
1B: Plants rare, threatened or endange2: Plants rare, threatened or endange4: Plants of limited distribution, a ware	ered in California but mo		re
IUCN Codes:			
E: Endangered	V: Vulnerable	R: Rare	

Sensitive Habitat/Communities

California Native Grassland. Native grasslands are discussed under "Common Vegetation Communities," above.

Coastal and Valley Freshwater Marsh. Freshwater marsh is discussed above under "Common Vegetation Communities."

Wet Meadow/ Freshwater Seep. Freshwater seeps and seasonal marshes are discussed above under "Common Vegetation Communities" as wetland.

Riparian/Open Water. Riparian and open water communities are discussed under "Common Vegetation Communities."

Sensitive Plant Species

Bishop manzanita (*Arctostaphylos obispoensis*) is endemic to northern San Luis Obispo County and southern Monterey County where it is mostly restricted to serpentine or serpentine-derived soils. It extends from Cuesta Grade north to Monterey County and is often locally abundant where it occurs. Bishop manzanita is common on serpentine soils on hillsides of the Cuesta Grade west of Highway 101 and extends onto Cal Poly lands in some places.

Brewer's calandrinia (*Calindrinia brewerii*) occurs mostly after burns or in disturbed sites in chaparral and coastal scrub. It ranges from Sonoma and Mariposa Counties southward to Baja California but is widely scattered and uncommon throughout its range. It has been observed to be locally common after recent chaparral burns in San Luis Obispo County on and around the Cal Poly campus.

Club-haired mariposa lily (*Calochortus clavatus ssp. clavatus*) is restricted to San Luis Obispo County and Santa Barbara County in the western portion of the Coast Ranges, mostly on soils derived from serpentinite parent material. In San Luis Obispo County, it is known from several locations in the Santa Lucia and San Luis Ranges. Four other rare subspecies occur to the north and south of subspecies *clavatus*. It is known from several sites in the area. Club-haired mariposa lily has been documented in Poly Canyon and on the Pennington Creek Biological Reserve.

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EINAL ENVIRONMENTAL IMPACT REPORT 260 Biological Resources **San Luis mariposa lily** (*Calochortus obispoensis*). San Luis mariposa lily is restricted to central San Luis Obispo County where it occurs only on the hills and mountains in the vicinity of San Luis Obispo. It generally occurs within chaparral habitats, but may also be found in coastal scrub and valley and foothill grassland habitats within San Luis Obispo County (Hickman, 1993; Skinner and Pavlik, 1994). It is a component of the California native grassland community on the Cal Poly campus. Within these habitats, this species primarily occurs in dry, serpentine soils (Hickman, 1993). San Luis mariposa lily has been documented north of the Cal Poly campus on hillsides located adjacent to Brizzolara Creek (NDDB, 1996), in Poly Canyon, near the "P", and in the Pennington Creek Biological Reserve.

Cambria morning glory (*Calystegia subacaulis var. episcopalis*), at present is known only from San Luis Obispo and northern Santa Barbara counties. In San Luis Obispo County it ranges from the Hearst Ranch in the northwestern corner of the county south to the vicinity of San Luis Obispo where it usually occurs in grassy sites with clay-rich soils often in association with serpentinite parent material. It has been observed on the proposed Poly Canyon North and Poly Canyon South housing sites, in the vicinity of Smith Reservoir, and in the Pennington Creek Biological Reserve.

San Luis Obispo sedge (*Carex obispoensis*). San Luis Obispo sedge is a perennial herb that occurs in coastal scrub, valley and foothill grasslands, coastal prairie, chaparral and closed-cone conifer forest communities. This species primarily occurs in dry, serpentinite soils (Hickman, 1993). It is threatened by grazing. San Luis Obispo sedge is known from southwestern Monterey County to the vicinity of San Luis Obispo. No populations of this species have been documented from the Cal Poly campus, but not all areas of suitable habitat on campus have been examined for its presence.

Dwarf soaproot (*Chlorogalum pomeridianum var. minus*). Dwarf soaproot is a perennial herb that grows mostly in grassy areas or openings in chaparral, coastal scrub, and coastal live oak woodland. It occurs from the Coast Ranges north of the San Francisco Bay region to the vicinity of San Luis Obispo. Around San Luis Obispo it occurs mostly on soils derived from serpentine. On the Cal Poly campus dwarf soaproot is known to occur in Poly Canyon and the Pennington Creek Biological Reserve and is probably present elsewhere as well.

Brewer's spineflower (*Chorizanthe brewerii*). Brewer's spineflower is an annual herb known from about twenty occurrences in the vicinity of San Luis Obispo. This species occurs in coastal scrub, closed-cone conifer forest, chaparral and cismontane woodland communities. Brewer's spineflower primarily occurs in dry, serpentinite soils (Hickman, 1993). Brewer's spineflower has been documented from Poly Canyon and from the Pennington Creek Biological Reserve.

Palmer's spineflower (*Chorizanthe palmeri*) is known definitely from Monterey and San Luis Obispo counties and may occur as well in San Benito and Santa Barbara counties. Most occurrences are on serpentine or serpentine-derived soils. In San Luis Obispo County it occurs in the Santa Lucia and San Luis Ranges from the northwestern corner of the county to the serpentine hills around San Luis Obispo and the Cal Poly campus. On campus *Chorizanthe palmeri* occurs in stony areas of serpentine grassland and in openings in the serpentine chaparral. It has been documented from Poly Canyon.

Chorro Creek bog thistle (*Cirsium fontinale var. obispoense*). Chorro Creek bog thistle is a perennial herb restricted to San Luis Obispo County where it occurs from the drainage of San Simeon Creek to the hills and mountains around San Luis Obispo. This species is known from fewer than ten occurrences and grows primarily in serpentinite soils (Hickman, 1993). It is a component of the seasonal freshwater marsh/seep communities located in grassland, chaparral and woodland communities. It is threatened by grazing, development and water diversions. One of the healthiest populations of this species occurs in Cal Poly's Pennington Creek Biological Reserve and there are unverified reports of its occurrence on some of Cal Poly's agricultural lands.

San Luis serpentine dudleya (*Dudleya abramsii ssp. bettinae*). San Luis serpentine dudleya is restricted to westcentral San Luis Obispo County where it occurs from the vicinity of San Luis Obispo to near Cayucos. It is a

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perennial herb that occurs in association with stony serpentinite soils and serpentine rock outcrops, usually in areas of California native grassland. This plant is known in fewer than ten occurrences. No populations of San Luis serpentine dudleya have been documented from the Cal Poly Campus, but not all areas of suitable habitat have been examined.

San Luis Obispo dudleya (*Dudleya abramsii ssp. murina*). San Luis Obispo dudleya is endemic to San Luis Obispo County and it is apparently limited to stony serpentinite soils and serpentinite rock outcrops, usually associated with California native grassland. Its range is limited to the hills bordering the San Luis Valley in the foothills of the Santa Lucia Mountains from Chorro Creek to Corral de Piedra Creek and in the San Luis Range from upper Prefumo Canyon to the Froom Ranch and the hills south of Broad Street. San Luis Obispo dudleya is known to occur in Poly Canyon and in the Pennington Creek Biological Reserve and is to be expected in similar habitats elsewhere on campus.

Blochman's dudleya (*Dudleya blochmaniae ssp. blochmaniae*). Blochman's dudleya is a perennial herb that occurs from northern Baja California to San Luis Obispo County. In San Luis Obispo County it grows on clay soils (usually derived from serpentine) from the hills near Cayucos to the western part of the San Luis Valley in San Luis Obispo County. It usually grows in grassland communities or openings in chaparral or coastal scrub. Blochman's dudleya has not been documented to occur on the Cal Poly campus but areas of suitable habitat occur here. It has been observed at Camp San Luis Obispo, on the grounds of the County Educational Facility at Rancho El Chorro, and at El Chorro Regional Park.

Ojai fritillary (*Fritillaria ojaiensis*). Ojai fritillary is a perennial herb that occurs in Ventura, Santa Barbara, and San Luis Obispo Counties. In San Luis Obispo County this species occurs on serpentine soils in chaparral, coastal live oak woodlands, and Sargent cypress forests. It is known in the county from Reservoir Canyon and from Cypress Mountain (near Cambria). Similar habitats occur on the Cal Poly campus. Ojai fritillary seldom flowers and is very easily overlooked. It is closely related to the San Benito fritillary, described in the following paragraph.

San Benito fritillary (*Fritillaria viridea*). San Benito fritillary is a perennial herb that occurs in serpentine soils of San Luis Obispo and San Benito counties. This species grows in chaparral communities on serpentinite soils (Hickman, 1993). Vehicles and expansion of mining threaten the San Benito fritillary in part of its range. A 1964 collection from the ridge northwest of Cuesta Pass (a short distance north of the Cal Poly campus) is the only verified collection from San Luis Obispo County. Habitats similar to where this species was collected occur on the campus. The taxonomy of California *Fritillaria* species is in need of further study.

Congdon's tarplant (*Hemizonia parryi ssp. congdonii*). Congdon's tarplant is an annual herb that formerly occurred from Alameda and Sacramento counties south to San Luis Obispo County. It has been eliminated from much of its former habitat by agriculture and development. It grows primarily in seasonally wet grassland containing alkaline soils (Hickman, 1993). This subspecies is documented by the NDDB as occurring in grassland communities located within the Chorro and Los Osos Valleys, and near Laguna Lake. Observations during the past few years place it in several locations around San Luis Obispo from the valleys near Bishop Peak to the Union Oil property on tank Farm Road. It has not been documented to occur on the Cal Poly campus, but suitable habitats may exist in campus agricultural areas.

Jones layia (*Layia jonesii*). Jones layia is an annual herb that occurs in Monterey and San Luis Obispo counties. It grows in chaparral and California native grassland communities, primarily on open serpentine or clay slopes (Hickman, 1993). Within San Luis Obispo County this species occurs from the San Luis Obispo area to coastal hills north of Cayucos and the vicinity of Cypress Mountain. It occurs locally in Poly Canyon and may be expected in suitable habitats elsewhere on the Cal Poly campus.

Small-leaved lomatium (*Lomatium parvifolium*). Small leaved lomatium is a perennial herb that occurs from Santa Cruz County to Santa Barbara County in the western portion of the Coast Ranges, mostly on soils derived from serpentinite parent material. It is a component of coastal scrub, chaparral, California native grassland, and

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EINAL ENVIRONMENTAL IMPACT REPORT 262 Biological Resources rock outcrop communities. It is known from several sites in the San Luis Obispo area. On the Cal Poly campus it has been documented from Poly Canyon, Serrano Canyon, and the Pennington Creek Biological Reserve. It is likely to occur elsewhere on campus where suitable habitat exists.

Palmer's monardella (*Monardella palmeri*). Palmer's monardella is a perennial herb that occurs in Monterey and San Luis Obispo counties. It usually occurs in areas of serpentine soils associated with chaparral, Sargent cypress woodlands, coastal scrub, California native grasslands, and rock outcrop communities. Within San Luis Obispo County it occurs in widely scattered locations from Rinconada Mine (south of Santa Margarita) to the See Canyon-Prefumo Canyon summit and the Hearst Ranch (in the northwestern corner of the county). It has not been documented from the Cal Poly campus, but it grows a short distance to the north on the ridge northwest of Cuesta Pass. Similar habitats occur on the campus.

Adobe yampah (*Perideridia pringlei*). Adobe yampah is a perennial herb that is known to occur in coastal locations from Monterey to Los Angeles counties and in the interior from Nevada to Kern counties. In San Luis Obispo County it has been documented from a few widely scattered locations: serpentinite soils in the vicinity of San Luis Obispo, from dry hills east of Creston, and the summit of the Caliente Range. It grows in California native grasslands, open shrub-dominated communities, and rock outcrop communities. On the Cal Poly campus Adobe yampah has been documented from Poly Canyon and may be expected in areas with serpentine soils elsewhere on campus.

Michael's rein orchid (*Piperia michaelii*). Michael's rein orchid is a perennial herb that occurs in the Coast Ranges from Humboldt to San Luis Obispo counties. It grows in undisturbed coastal scrub and woodland vegetation, usually protected by shrubs or trees, but occasionally is also found in grassy vegetation dominated by a dense herbaceous cover. In San Luis Obispo County it occurs in widely scattered sites from Los Osos to Creston. The plants seldom flower and are easily overlooked. This species has not been documented to occur on the Cal Poly campus.

Adobe sanicle (*Sanicula maritima*). Adobe sanicle is a perennial herb that occurs within variety of communities including, chaparral, coastal prairie, wet meadows, and valley foothill grassland. Within these communities, the adobe sanicle occurs primarily on seasonally wet serpentine-derived soils or soils with a high clay content (Skinner and Pavlik, 1994). This species is also often found along the margins of salt marshes. Within the San Luis Obispo Quadrangle, the adobe sanicle is documented by the NDDB as occurring on slopes associated with Cerro Romauldo, approximately 4 miles away from the Cal Poly campus (NDDB, 1996), and from Laguna Lake Park. It is a component of seasonal marsh/seep communities and has the potential to occur on habitats of this kind on campus.

Rayless groundsel. Senecio aphanactis is an inconspicuous annual that occurs in vernally moist openings in low elevation coastal scrub on the mainland from Solano County south to northern Baja California, and on Santa Rosa, Santa Cruz, and Santa Catalina Islands. It usually occurs in sparsely vegetated areas with shallow stony soil. In San Luis Obispo County, it is known from a few widely scattered sites from Montana de Oro State Park to Creston. On the Cal Poly campus it has been documented from serpentine soils of hills west of Poly Canyon. It is easily mistaken for the much more common weedy *Senecio vulgaris* (common groundsel).

Cuesta Pass checkerbloom (*Sidalcea hickmanii ssp. anomala*). Cuesta Pass checkerbloom is a perennial herb restricted to San Luis Obispo County. Until recently it was known from only three occurrences on the Cuesta Ridge in Los Padres National Forest. A population was recently documented from the Hearst Ranch near San Simeon Creek Road. This species lives on serpentinite soils in chaparral and closed-cone conifer forest dominated by Sargent cypress (Hickman, 1993). Although it has not been documented from the Cal Poly campus, Cuesta Pass checkerbloom has the potential to occur on campus. After the Highway 41 fire in 1994 a mass germination of long-dormant seeds of these plants resulted in a flush of new plants. Seeds from this event may have dispersed to upland sites on campus.

Special-Status Wildlife Species

Based on review of NDDB documentation, other pertinent literature, and results of the field surveys, the following special-status animals were determined to potentially occupy or frequent the campus and ranches. The species present are listed in Table 6.6. The special-status wildlife species identified as occurring on Cal Poly property are described briefly in the following section.

Common Name	Scientific Name	Status Federal/State/IUCN
Cooper's hawk	Accipiter cooperi	/SSC/
Sharp-shinned hawk	Accipiter striatus	/SSC/
Tricolored blackbird	Agelaius tricolor	/SSC/
Black legless lizard	Anniella pulchra	FSC/SSC/NE
California tiger salamander	Ambystoma tigrinum	E/SSC/NE
Pallid bat	Antrozous pallidus	/SSC/
Golden eagle	Aquila chrysaetos	/SSC/
Great blue heron (rookery)	Ardes herodias	CDFSC
Burrowing owl	Athene cunicularia	/SSC/
American bittern	Botaurus lentiginosus	MNBMC
Canada goose (wintering)	Branta canadensis	FT//
Ferruginous hawk	Buteo regalis	/SSC/
Northern harrier	Circus cyaneus	/SSC/
Southwestern pond turtle	Clemmys marmorata pallida	/SSC/
Monarch butterfly	Danaus plexippus	/SSC/
Yellow warbler	Dendroica petechia brewsteri	/SSC/
White-tailed kite	Elanus caeruleus	/SSC/
Willow flycatcher	Empidonax traillii	/SE/
Merlin	Falco columbarius	/SSC/
Peregrine falcon	Falco peregrinus	FE/SE/
Loggerhead shrike	Lanius ludovicianus	/SSC/
Monterey dusky-footed woodrat	Neotoma fuscipes (luciana)	FSC/SSC/DD
San Diego desert woodrat	Neotoma lepida intermedia	FSC/SSC/DD
Central California Coast steelhead	Oncorhynchus mykiss	FT/SSC/
California brown pelican	Pelecanus occidentalis	FT//
Double-crested cormorant (rookery)	Phalacrocorax auritus	/SSC/
Coast horned lizard	Phyrnosoma coronatum	FSC/SSC/
Townsend's western big-eared bat	Plecotus townsendii	/SSC/VUA2c
California red-legged frog	Rana aurora draytonii	FT/SSC/
Bank swallow	Riparia riparia	/ST/
Western spadefoot toad	Scaphiopus hammondii	FSC/SSC/
Coast Range newt	Taricha torosa	/SSC/
American badger	Taxidea taxus	/SSC/
Two-striped garter snake	Thamnophis hammondii	/SSC/DD

Table 6.6. Special Status Wildlife Known or Likely to Occur on Cal Poly Lands



Common Name		Scientific N	Name	Status Federal/State/IUCN
Notes:				
Federal Codes: FT: Federally threatened E: Federal Endangered CE: Candidate, endangered FSC: Federal species of concern	State Codes: SE: State Enda SSC: Species o	ngered f Special Concern	NE:	Vulnerable, population reduced by at least 20% based on extent of occupancy, occurrence, and/or quality of habitat Not evaluated Data deficient
CDFSC: California Department o MNBMC: Fish and Wildlife Servi				ncern

Cooper's hawk. The nesting lifestage of the Cooper's hawk (*Accipiter cooperi*) is considered sensitive by CDFG, primarily due to the loss of riparian nesting habitat. Suitable nesting habitat is present along Stenner Creek. This species is an uncommon transient and winter visitor throughout most of San Luis Obispo County. Suitable foraging habitat occurs within Annual Grassland habitats on campus.

Sharp-shinned hawk. The nesting lifestage of the sharp-shinned hawk (*Accipiter striatus*) is considered sensitive by CDFG. This species is an uncommon transient and winter visitor within San Luis Obispo County (Audubon Society, 1984). Winter foraging habitat for sharp-shinned hawk may occur within Annual Grassland.

Tricolored blackbird. The tricolored blackbird (*Agelaius tricolor*) occurs in flocks within grasslands and freshwater marsh habitats containing cattails and tulles (Robbins et al., 1983). This species is considered an uncommon resident of San Luis Obispo County (Audubon Society, 1984). Tricolored blackbirds have been observed near Shepard and Smith Reservoirs.

Black legless lizard. The form in the San Luis Obispo area (*Anniella pulchra nigra*) is listed as a Species of Special Concern by the state. These lizards are adapted for burrowing in sandy or loamy soils and through leaf litter. As such, they spend much of their time underground or beneath duff. Legless lizards may be active on the surface at night, remaining in subsurface moisture horizons during the day. The movement of this small limbless lizard appears to be primarily determined by soil temperature and moisture gradients (Jennings and Hayes 1994). Their behavior can be characterized as desiccation avoidance. Preferred soil temperatures are in the range of 21-28°C (Bury and Balgooyen 1976). This lizard can be found on the soil surface when the surface temperature is warm (> 21°C), or near the soil surface during periods of high activity (morning and evening) (Jennings and Hayes 1994). Outside of abiotic factors, the movement ecology of this species is not well understood. It appears that in the short term they exhibit high site fidelity.

California tiger salamander. The tiger salamander (*Ambystoma tigrinum*) requires moist grassy areas near a water source. In San Luis Obispo County, the tiger salamander is often found in low-lying agricultural areas near ponds. Suitable habitat for the salamander may exist near campus reservoirs and other wet areas.

Pallid bat. The pallid bat (*Antrozous pallidus*) lives in a variety of communities throughout California, including coastal conifer and broad-leaved forests, oak and conifer woodlands, and grasslands. Pallid bats typically roost in caves and structures and forage in grassland habitats. Suitable foraging habitat for this taxon occurs within grassland habitats.

Golden eagle. The nesting lifestage and wintering habitat for the golden eagle (*Aquila chrysaetos*) is considered sensitive by CDFG. This species is an uncommon, permanent resident and migrant throughout California and San Luis Obispo County. Habitats include oak woodlands, coastal scrub communities, and open grassland.

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Nests are constructed on cliffs and in large trees in open areas. Suitable foraging habitat for the golden eagle occurs throughout Annual Grassland.

Great blue herons typically nest in colonies in the tops of large secluded snags or the tallest available live trees within a given area, often near shallow-water feeding areas (Zeiner et. al, 1990). This species is known to nest in the vicinity of the Cal Poly campus. Great blue herons are highly sensitive to human disturbance and have been known to abandon existing nests following significant disturbance (Zeiner et. al., 1990).

Burrowing owl. The burrowing owl (*Athene cunicularia*) is documented as an uncommon-to-common permanent resident of the interior valleys and plains of San Luis Obispo County, and an uncommon winter visitor to the coastal regions of the county (Audubon Society, 1984; Morro Group, 1994). This species is primarily associated with extensive grassland habitats and agricultural areas, and is typically dependent on existing burrows of other mammals.

The **American Bittern** is a common winter visitor to coastal marshes that contain some *Typha* vegetation cover. Since this bird is mostly associated with fresh water as well as brackish water habitats it could occur on the Cal Poly campus where there are habitats that have extensive reed cover.

Canada geese are winter transients and visitors that are common in the fresh and brackish waters near the coast. This is a species that forages widely from shoreline to inland habitats and has been observed on campus as well as Laguna Lake. Its occurrence near Cal Poly is best correlated with open water rather than with any particular upland foraging localities or habitats. Impacts on this species would be primarily through habitat conversion.

Feruginous hawk. Wintering habitat for the feruginous hawk (*Buteo regalis*) is considered sensitive by CDFG. The feruginous hawk is an uncommon winter resident and migrant along the Coast Ranges and in San Luis Obispo County (Audubon Society, 1984). This species does breed in California. Foraging habitat for the Ferruginous hawk includes open, dry terrain such as grassland and scrub. This hawk may occasionally use Annual Grassland habitats on campus for foraging during the winter months.

Northern harrier. The nesting lifestage of the northern harrier (*Circus cyaneus*) is considered sensitive by CDFG. This species is a common transient and winter visitor within much of San Luis Obispo County (Audubon Society, 1984). The northern harrier nests on the ground near freshwater and salt marshes. Open areas, such as grasslands and coastal scrub, provide foraging habitat for this species. Potential nesting habitat for the northern harrier occurs adjacent to the two reservoirs and suitable foraging habitat occurs in grassland communities.

Southwestern pond turtle. The southwestern pond turtle (*Clemmys marmorata pallida*) prefers quiet waters of ponds, small lakes, streams, and marshes. It is found to inhabit the largest and deepest pools along streams with large amounts of basking sites, including fallen trees and boulders. Pond turtles also congregate in areas of streams with abundant underwater cover or places of escape beneath the water surface such as undercut banks, tangles of roots, and submerged logs (Hunt, 1994).

Monarch butterfly. Overwintering habitat for the Monarch butterfly (*Danaus plexippus*) is considered sensitive by the CDFG. Monarch Butterfly typically uses dense Eucalyptus stands for this purpose.

Yellow warbler. The yellow warbler (*Dendroica petechia brewsteri*) is known as a summer visitor of the San Luis Obispo County region (Audubon Society, 1984). This species breeds primarily in riparian woodland habitats.

White-tailed kite. The nesting lifestage of the white-tailed kite (*Elanus caeruleus*) is considered sensitive by CDFG. The White-tailed kite occurs in coastal and valley lowlands, usually associated with agricultural lands and open fields, throughout California. Nests are typically constructed in treetops with dense foliage. This species is considered an uncommon resident of most of San Luis Obispo County. Suitable foraging habitat occurs throughout Annual Grassland, while suitable nesting habitat may occur within cottonwoods and other tall trees.

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Willow flycatcher. The nesting lifestage of the willow flycatcher (*Empidonax traillii*) is considered sensitive by CDFG. Within San Luis Obispo County, this species is documented as a rare but regular spring transient and an uncommon fall migrant (Audubon, 1984). Appropriate habitat for willow flycatcher breeding exists in the form of dense willow-dominated riparian vegetation.

Merlin. The merlin (*Falco columbarius*) is a winter migrant throughout the western portion of the state in grassland to woodland habitats, but does not breed in California (Audubon Society, 1984). The Merlin may occasionally occur on campus in Annual Grassland and riparian scrub habitats during the winter months.

Loggerhead shrike. The loggerhead shrike (*Lanius ludovicianus*) occurs in lowlands and foothills throughout most of California. This species is considered a common resident of most of San Luis Obispo County (Audubon Society, 1984). Preferred habitats for loggerhead shrike include woodland, chaparral, coastal sage scrub and grassland with perches such as fences, posts, and scattered trees. This species has been observed foraging on campus.

The **Monterey dusky-footed wood rat** (*Neotoma fuscipes luciana*) has a range that extends into northern San Luis Obispo County. This species is generally found in dense vegetation, thick shrubbery, and in oak woodlands. Their presence is usually determined through the observation of a woodrat house (packrat midden). In this species, the houses are piles of interlaced stick several feet in diameter. The houses afford protection and a place for the woodrat to hide. The house itself need not be hidden. It is expected that this species occurs in willow thickets or dense vegetation on campus.

The **San Diego desert woodrat** (*Neotoma lepida intermedia*) is one of several subspecies of desert woodrat that occurs in California. This subspecies has a range that extends from Baja California into Northern San Luis Obispo County (Hall 1981). California's coastal scrub habitat harbor large populations of desert woodrats (Wilson and Ruff eds. 1999), especially in Southern California. Yet, relative to the dusky-footed woodrat the desert woodrat is associated with arid and semiarid conditions.

In San Luis Obispo County these two woodrat species are separated ecologically. Desert woodrats are restricted to rocky outcroppings. Occasionally, they extend out of these outcroppings into diverse plant communities, but only in association with patches of prickly pear cactus (*Opuntia*). Desert woodrats in coastal California are larger than interior woodrats. This species overall is larger than the dusky-footed woodrat. As such, they will generally displace dusky-footed woodrats from rocky outcroppings and cactus patches. Desert woodrats build complex stick nests either in crack and rock crevices, or in clumps of cactus. The desert woodrat's nest is made up of a collection of sticks, leaves and other debris that are placed in what seems to be a random fashion. Shiny objects such as pieces of metal or bone are often collected and placed on the nest. These stick piles are easily identified and are considered active if fresh green material is mixed in with older debris.

Southern steelhead. Steelhead (*Oncorhynchus mykiss*) are known as the anadromous form of rainbow trout. Steelhead have been documented as occurring in Chorro, Stenner and Brizziolari Creeks (CDFG, 1973). Optimal habitat for steelhead can be generally characterized by clear, cool water with abundant instream and riparian cover and relatively stable stream flow (Raleigh et al., 1984).

The **California brown pelican** is a common late summer and fall bird in Coastal San Luis Obispo County. Preferred habitats include offshore islets, beaches, inshore waters, and off shore waters near the coast. Feeding occurs mainly in shallow waters. Morro Bay residents would be post-breeding season visitors to the campus.

Double-crested cormorants are known residents of inshore waters at Morro Bay but they could extend inland to the Cal Poly campus. Morro Rock represents the primary breeding locality in this area. This species is a year round resident, with population densities increasing during the non-breeding winter months (due to the southward migration of birds that breed to the north).

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Coast horned lizard. Listed by the state as a Species of Special Concern, the coast horned lizard, *Phrynosoma coronatum*, is a species that is found in California from the tip of Baja northward to the Sacramento Valley (Brattstrom 1997). This species has been found in various places in the county, including various localities around Cal Poly Within its range it can be found in a variety of habitats that include coniferous forests and broadleaf woodland (Stebbins, 1966). Along the coast of California this lizard is often associated with shrublands and grasslands. In addition to being found in sandy washes, they are found in areas with a substrate of fine loose soil. Horned lizard diet consists of ants and other insects (Stebbins, 1966). In some regions of California it is thought that exotic ant species, that have displaced and reduced numbers of native ants, are unpalatable to horned lizards and have reduced the lizard's abundance.

Townsend's western big-eared bat. The Townsend's western big-eared bat (*Plecotus townsendii townsendii*) lives in a variety of communities throughout California, including coastal conifer and broad-leaved forests, oak and conifer woodlands, and grasslands. Townsend's Western big-eared bats typically roost in caves and structures and forage in grassland habitats. Suitable foraging habitat for this taxon occurs within grassland habitats.

California red-legged frog. The California red-legged frog (*Rana aurora draytonii*) prefers aquatic habitats with little or no flow, the presence of surface water to at least early June, surface water depths of at least 2.3 feet, and the presence of fairly sturdy underwater supports such as cattails [Federal Register 59(22): 4888]. The largest densities of this subspecies are typically associated with dense stands of overhanging willows and an intermixed fringe of sturdy emergent vegetation [Federal Register 59(22): 4888]. The Fish and Wildlife Service is currently proposing critical habitat for this species that does not include Cal Poly property. Site assessments for the campus dated February 18, 1997 and June 26, 2000 (Andoli and Ingamells, respectively) have found limited suitable habitat on campus, restricted generally up and down stream of the developed core along Brizzolara Creek.

Bank swallows are uncommon within the county and are usually seen as migrants. This species generally forages and nests near fresh water (lakes, streams and rivers). There are no known current nesting sites within the county. Historical nesting sites are known to occur in the Morro Bay and San Luis Obispo areas.

Western spadefoot toad's geographic range extends through San Luis Obispo County. This toad is found in a diversity of habitats though always proximate to some body of water (temporary or seasonal). Aestivating toads would be most likely found close to the creek or seeps, though one cannot rule out their occurrence almost anywhere on the campus.

California newts breed (Dec-May) in streams and permanent standing water. During non-breeding periods individuals are found beneath leaf or other vegetative litter. Occurrence of this species in a particular habitat can generally only be determined through directed census during non-breeding seasons (i.e.: pit or can traps).

American badger. The American badger (*Taxidea taxus*) requires friable soil for burrowing and foraging areas with rodent populations. This species is generally found in grassland areas.

The **two-striped garter snake** has a geographic distribution from Monterey Bay into Northern Baja. This species is primarily aquatic. It is most common along streams, flooded ditches, or in the vicinity of almost any permanent source of water. It is most frequently found where streamside and streambed rocks are abundant, or in areas where streams pass through chaparral, or oak and pine woodlands (Bartlett and Tennant 2000). This species (*Thamnophis hammondii*) was previously considered a subspecies of *Thamnophis couchii*.

Regulatory Setting

Regulations and agencies governing biological resources in the campus area are described below.

Clean Water Act of 1977. Regulatory protection for water resources throughout the United States is under the jurisdiction of the Army Corps of Engineers (ACOE). Section 404 of the Clean Water Act prohibits the

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EINAL ENVIRONMENTAL IMPACT REPORT 268 Biological Resources discharge of dredged or fill material into waters of the United States without formal consent from the ACOE. Delineation of wetlands and other waters of the United States is required to determine acreage affected by dredge spoil or fill disposal. The U.S. Fish and Wildlife Service assess impacts to biological resources as part of the permit process. Policies relating to the loss of wetlands generally stress the need to compensate for wetland acreage losses by creating wetlands from non-wetland habitat on at least an acre-for-acre basis.

Section 7 or Section 10 of the United States Endangered Species Act. The United States Endangered Species Act provides legislation to protect federally listed plant and animal species. Impacts to listed species resulting from the implementation of a project require that the responsible agency consult the United States Fish and Wildlife Service (USWFS). Formal consultations must take place with the USFWS pursuant to Section 10 of the Endangered Species Act, with the USFWS then making a determination as to the extent of impact to a particular species. If the USFWS determines that impacts to a species would likely occur, alternatives and measures to avoid or reduce impacts must be identified. Section 7 also requires determination of environmental impacts, and thorough biological assessment. Section 7 applies to projects in which a federal agency is involved, either through financial support or project leadership.

The Endangered Species Act also designates threatened or endangered species and where appropriate, critical habitat for such species. Species are also listed as candidates for listing. Federal candidate species are assigned to one of two categories depending on the current state of knowledge of the species and its biological appropriateness for listing. Federal Category 1 candidate species (FC1) include taxa for which the USFWS currently has compiled substantial information on biological vulnerability and potential threats in order to support the appropriateness of proposing to list the taxa as endangered or threatened species.

State of California Endangered Species Act. The State of California Endangered Species Act mandates that in instances where impacts to a state-listed endangered species would occur, the lead or responsible agency must contact the California Department of Fish and Game and enter into formal consultation. Impacts to the state-listed species would be evaluated and identification of mitigation measures would likely be required.

In addition to formal endangered and threatened listings, the State of California also list *Species of Special Concern* based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. These species are not afforded the same legal protection as listed species, but may be added to official lists in the future. There are two general categories of species of special concern:

- 1) Those species that are candidates for official federal or state listing as threatened or endangered; and
- 2) Those species that are not candidates, but that have been unofficially identified as a species of special interest by private conservation organizations or local government agencies.

The State of California also maintains lists for Candidate-Endangered Species (SCE) and Candidate-Threatened Species (SCT).

California Department of Fish and Game Code, Chapter 6. This code governs state-designated wetlands, including riparian and stream habitat, and mandates that mitigation be implemented to replace wetland extent and value lost to development. A Section 1603 (Fish and Game Code) Agreement is required for any alteration to a stream or lake, as well as to their associated riparian habitats.

State Regional Water Quality Control Board - Basin Plan. The Regional Water Quality Control Board Basin Plan provides management guidelines for maintaining water quality and associated beneficial uses of streams and rivers within the central coast region of California. Water quality objectives are set forth to maintain optimum habitat for various aquatic species.

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Significance Thresholds

Determination of biological significance thresholds is based on the *State CEQA Guidelines*. Using these guidelines, the Master Plan would have a significant impact on biological resources if it would:

- Conflict with applicable regulations and policies protecting biological resources
- Substantially affect, either directly or through habitat modification, any species identified locally, by the state or federally as candidate, sensitive, or special status species
- Substantially affect any riparian habitat or other sensitive natural community identified locally, or at the state or federal level
- Substantially affect federally protected wetlands as defined by Section 404 of the Clean Water Act
- Interfere substantially with the movement of any resident or migratory fish or wildlife species, or with established corridors

Plant or animal taxa are considered locally important if they meet any of the following criteria:

- Taxa (species, subspecies, or varieties) that are limited in distribution in the county or region, or are endemic (limited to a specific area) in the region;
- Taxa that are at the extremes of their range or are separated from the known range for the taxon;
- Taxa whose habitat requirements make them susceptible to local extinction as a consequence of development, the introduction of barriers to movement, and/or accompanying increases in human activity;
- Populations of a particular species that exhibit unusual adaptation or are quality examples of the species; and
- Taxa that are considered sensitive by recognized monitoring groups (e.g., Audubon Society, CNPS, CDFG).

Based on these guidelines, as well as pertinent state and federal policies and regulations, the following thresholds of significance will be applied to Master Plan-related impacts to biotic resources:

- Loss of individuals of or habitat for special-status species.
- Loss of sensitive vegetation/habitat types, including wetlands such as Freshwater Marsh, Wet Meadow/Freshwater Seep, and Central Coast Riparian Scrub.
- Loss of raptor nests.
- Introduction of invasive exotic species.
- Disruption of existing wildlife corridors

Impacts

The following is a discussion of the impacts expected from the implementation of the proposed Master Plan. Assessment of impact is limited to those areas proposed for development or redevelopment under the Plan where sensitive species are expected to be in close proximity.

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Beneficial Impacts

Implementation of policies in the Master Plan that include measures for natural resource protection will have a beneficial impact on the environment. A thorough investigation and inventory of sensitive plant and animal species and communities on the property will provide a better understanding of the resources present. Impacts are beneficial (Class IV).

Policies that propose inclusion of ecological sensitivity in the grazing land management program will benefit plant and animal species currently impacted by grazing activities (Class IV). Finally, management for ecological value could help maintain proper vegetation cover, and reduce impacts to banks and beds of riparian areas.

Grand Avenue and Slack Street (Housing and Visitor's Center)

Biological surveys performed on site did not reveal the presence of any sensitive plant species (the full text of the studies may be found in Appendix C) within the boundaries of the proposed development. Care must be taken to avoid populations of *Calochortus obispoensis* on the northeastern hillsides. Use of the site by special-status wildlife is most likely limited to foraging habitat. Impacts are considered less than significant (Class III). Impacts to waters of the U.S. and other ACOE jurisdictional areas are discussed under "Construction Impacts."

Goldtree

Preliminary analysis of the Goldtree site shows that it is unlikely that sensitive plant or animal species are present on site (refer to study, Appendix B). In fact, vegetation on site is largely a mix of weedy and noxious species that are unpalatable to livestock. Serpentine soils are present in some areas but do not appear to support sensitive plant species. Impacts are considered significant, but mitigable, due to the lack of information during the appropriate season (Class II); a spring plant survey is recommended. Cumulative loss of grasslands is addressed below.

Creek Corridors (General)

Although enhancement of riparian corridors is designed to result in overall improvements to biologic and hydrologic quality, immediate impacts of excavation, vegetation removal, and other activities may be adverse. These impacts are discussed in "Construction Impacts" towards the end of this chapter. After completion, the enhancement projects will result in a net benefit to riparian vegetation and fisheries habitats (Class IV).

Chorro Creek

Operation of the Bull Test facility may have adverse effects on resources associated with Chorro Creek. The creek serves as a tributary to the Morro Bay National Estuary, and provides habitat for steelhead, red-legged frog, and numerous migratory bird species. Operation of the facility may impact the creek through runoff and direct disturbance from cattle. Mitigation is proposed to reduce impacts to a less than significant level (Class III).

Sensitive Species

Reservoir Maintenance. Some reservoirs and other water impoundment on campus have developed wetland characteristics. Periodically, they may also serve as nesting and/or foraging habitat for animal species. Maintenance of these water bodies is essential to the operation of the campus irrigation and agricultural programs. Mitigation located at the end of this section is recommended to reduce impacts to a less than significant level.

Poly Canyon

Design Village. The policies guiding future development in the Design Village are implicit in their consideration of biological resources during planning. However, the site is constrained by potential wetland areas, serpentine soils and associated rare plants, and floodplains associated with Brizzolara Creek. Mitigation located at the end of this section is recommended to reduce the significance of potential impacts.

Trails. Through proper establishment and management of trails sensitive populations could be maintained where trails avoid sensitive habitats, and where visitors are properly educated as to the sensitivity of the resource. Because the trails policy is clear in its aim to protect such resources, impacts are considered less than significant (Class III).

H-1 and H-2 Housing. Occupancy of the H-1 and H-2 student housing project may result in adverse impacts to special-status plant species. The project site borders populations of *Calochortus obispoensis* (CNPS List 1B). Although the project is designed to remain within currently disturbed areas, student occupancy of the area may result in increased foot traffic and disturbance in these areas. Impacts are significant, but mitigable (Class II).

Grasslands

Development of the eastern portions of the H-1 and H-2 housing complex and the Goldtree facility would result in the loss of suitable grassland habitat for resident special-status birds, potentially including loggerhead shrike, golden eagle, and white-tailed kite. This impact is less than significant (Class III).

The above-listed species are not expected to breed on-site; impacts would be limited to loss of potential foraging habitat. The southern slopes of the Santa Lucia Mountains provide many square miles of higher quality habitat associated with no or lesser intensity grazing. Therefore, the loss of foraging habitat is not expected to substantially affect the fecundity or survival of the local breeding population of these species. Impacts to special-status wildlife species are considered less than significant (Class III).

An analysis of the cumulative loss of grasslands associated with the Master Plan is located towards the end of the section.

Open Space and Wildlife Corridors

Occupancy of the H-1 and H-2 housing complexes and the Goldtree facility would extend existing human-related disturbance (human presence, noise, dust, and lighting) nearer to open space areas.

The H-1 and H-2 site is located 150 feet from Brizzolara Creek, and is bordered by native grasslands on the northeastern edge. The housing project will not encroach upon these sensitive habitats, and foot traffic will be directed to specified areas (refer to mitigation for biological resource impacts below). Because of mitigation included in the project, human-related disturbance impacts are considered less than significant (Class III). The Goldtree site has been sited away from the Stenner Creek corridor. Impacts are considered less than significant (Class III).

Highland Drive

Slopes and cutbanks associated with the realignment of Highland Drive will be in closer proximity to Brizzolara Creek. Runoff from the roadway and its slopes may adversely impact steelhead trout and other sensitive species inhabiting the creek. Impacts are significant, but mitigable (Class II).



Mitigating Measures

Goldtree

A springtime site-specific survey will be completed prior to construction. Areas supporting sensitive plant species shall be avoided; disturbed populations will be replanted in a suitable area at a ratio deemed appropriate by a qualified biologist.

Chorro Creek

Drainage Plan. Prior to construction of the Bull Test facility, a construction and operational drainage plan will be drafted with contingencies for storm events and system failures. The plan will address ground disturbance associated with construction and potential for erosion, as well as operational drainage patterns and systems. Areas disturbed by construction will be revegetated as soon as possible. Cattle stalls and holding areas will be bermed and runoff will be routed away from the creek to settling ponds.

Limitation of Cattle Access. Cattle will not be allowed to enter the creek.

Sensitive Species

Maintenance Scheduling and Approval. Maintenance activities should be scheduled outside of the nesting and breeding periods of sensitive species that may inhabit the area. Maintenance of reservoirs should be approved by regulatory agencies where necessary prior to action.

Poly Canyon

Further development at the Design Village will be restricted to areas not limited by the following environmental constraints:

- Serpentine Soils
- Army Corps jurisdictional wetlands encompassing more than 1/10th of an acre
- Other areas populated by sensitive plant species, unless impacts to plants can be mitigated by repopulation elsewhere

Prior to planning of any future development in this area, a site-specific biological resource study and wetlands delineation will be completed to assess the presence or absence of the above, and the jurisdictions of agencies.

Plant Population Restoration. Suitable habitat exists on campus for replanting of *Calochortus*. Any populations or individuals of *Calochortus* disturbed by project construction will be replanted in suitable areas at ratios deemed suitable by a qualified biologist.

Pedestrian Restriction. The northern and eastern portions of the H-1 and H-2 projects will be designed to prevent direct pedestrian access to the native grassland and biological preserve (Exhibit i). In general, access to buildings and recreation areas will be oriented towards the main campus and away from sensitive areas to the north and east. <u>Pedestrian traffic in the area of Brizzolara Creek will be designed in accordance with the "Goals and Guidelines for the Cal Poly Creek Management and Enhancement Plan<u>" included as Appendix F.</u> Signs will be posted to indicate the sensitivity of the area.</u>

Open Space and Wildlife Corridors

Plans for the H-1 and H-2 housing units will include pedestrian systems which are sensitive to the Brizzolara Creek corridor, and which limit access to open space areas to the east of the proposed project site.



Highland Drive

The Highland Drive realignment shall be designed with drainage systems sensitive to the creek corridor. Drainage shall incorporate silt and grease traps and/or vegetative buffer strips to prevent pollution and sedimentation of the creek. Landscaping shall consider native vegetation compatible with the riparian area where it is appropriate. Inlets that drain to the creek will be marked accordingly.

Cumulative Impacts

Grassland Loss

The Master Plan (including Goldtree and the Bull Test at Chorro ranch) is expected to result in the conversion of approximately 100 acres of currently grazed grassland. This represents approximately 1.5% of Cal Poly's land holdings, which as a whole generally exhibit grassland characteristics. City and County development trends have focused on conversion of grasslands because they are readily accessible and generally easier to develop. However, the County has witnessed the commitment of an average 200 acres of grazing land per year since 1992, less than 0.03% of the County total. In light of the relatively low rate of conversion countywide, the Master Plan would not result in a cumulatively considerable impact to grassland foraging habitat. The plan is otherwise designed to prevent impacts to biological resources and enhance them where necessary. Impacts are less than significant (Class III).

Commenters have noted (Ashley) that prior EIRs for Cal Poly have identified the loss of grassland foraging habitat as a Class I cumulative impact. These EIRs were prepared prior to the development of the comprehensive data base for the Master Plan. This information identified these grasslands, and perhaps more importantly, designated this land as either Outdoor Teaching and Learning, or Natural Environment, which protects it from development unless a modification is made to the Master Plan. With the adoption of the Master Plan, the loss of acreage on a campus-wide level for Cal Poly will be established, and the cumulative impact will no longer be speculative. Because the Master Plan provided this protection, the impact was considered to be mitigated, and no longer appropriate to be considered Class I.

Residual Impacts

Impacts to biological resources are less than significant because of mitigation incorporated into the project.



AGRICULTURE

The following section analyzes the impacts of the Master Plan to prime and important farmland.

Existing Conditions

Cal Poly has a long history of excellence in agricultural education. Classroom education in agriculture is augmented with hands-on learning at the various livestock facilities, pastureland, rangeland, and cropland that exist on campus. Cal Poly has 320 acres in livestock facilities, cropland, pastureland, and rangeland production in the main campus farm and west of Stenner Creek Road. Further information on farming facilities and ranches can be found in the proposed Master Plan.

The University's College of Agricultural may base at least part of its success on the rich agricultural soils found on campus. Much of the soil can be classified as Class I, or "prime" for irrigated agricultural production. The Master Plan includes a policy to preserve the remaining undeveloped prime farmland on campus for productive use. Therefore, none of the projects proposed in the Plan will result in development of prime farmland. Graphics depicting prime agricultural land on campus may be found in the "Existing Conditions" section in the Master Plan.

Significance Thresholds

The State CEQA Guidelines consider impacts to agricultural resources significant if the project will:

- a) Convert prime farmland, unique farmland, or farmland of statewide importance
- b) Conflict with agricultural zoning or Williamson Act contracts
- c) Result in the indirect conversion of agricultural land.

The Master Plan specifically identifies prime agricultural soils on campus, and states that no further development of such lands will take place. The Master Plan is otherwise not expected to have an impact on prime agricultural resources.

Impacts

Beneficial Impacts

Currently undeveloped prime agricultural land will be retained in agricultural use, and ranches will be preserved. This impact is beneficial (Class IV). The policy also requires that where agricultural uses occur in environmentally sensitive areas, they will be managed to protect or enhance environmental quality, sustainability and productivity of these sensitive areas. This will constitute a beneficial impact to such areas (Class IV).

Unique Farmland and Farmland of Statewide Importance

The H-1, H-2 and H-3 housing sites overlie designated Unique Farmland and Farmland of Statewide Importance. One stipulation of designation as "Statewide Important" is that "the land must have been used for production of irrigated crops at some time during the four years prior to the mapping date." The site currently supports grazing cattle, and has since at least 1949 (per aerial photo review). Therefore, the property in question does not meet the criteria for designation. Similarly, criteria for Unique Farmland include that the land is used for "production of the state's major crops." This land is "usually irrigated, but may include nonirrigated fruits and vegetables." The property in question is not used for production of such crops, therefore, impacts are considered less than significant (Class III). Important Farmland Maps are largely based on review of

aerial photos; it is likely that pasture was misidentified as crops leading to the map change. The site did not show any "Statewide Important" farmland in 1996 maps (Robert Hopkins, Deputy Agricultural Commissioner, pers. comm.).

Cumulative Impacts

Under the proposed Master Plan, approximately 100 acres of currently grazed land will be converted. This is approximately 1.5 percent of Cal Poly's total local agricultural land. Cal Poly controls use of their land; cumulative development in the City and County of San Luis Obispo will not impact their operations.

Because grazed land proposed for development under the Master Plan is only a fraction of Cal Poly's agriculturally viable land holdings, and because prime farmland will not be impacted, impacts are considered less than significant (Class III).

Residual Impacts

Impacts are less than significant (Class III).



CULTURAL AND HISTORIC RESOURCES

The following section analyzes impacts of the Master Plan to cultural and historic resources.

Setting

Prehistory

The campus lies within the historic territory of the Native American Indian group known as the Chumash. The Chumash occupied the region from San Luis Obispo County to Malibu Canyon on the coast, inland as far as the western edge of the San Joaquin Valley, and the four northern Channel Islands (Grant 1978). The Chumash are further divided into factions based on six distinct dialects: Barbareño, Ventureño, Purisimeño, Ynezeño, Obispeño, and Island. The Obispeño were the northernmost Chumash group, occupying much of San Luis Obispo County, including the Cal Poly area. The name Obispeño is derived from the mission with local jurisdiction, San Luis Obispo de Tolosa.

The archaeological record indicates that sedentary populations occupied the coastal regions of California more than 9,000 years ago. Several chronological frameworks have been developed for the Chumash region including Rogers (1929), Wallace (1955), Harrison (1964), Warren (1968), and King (1990). King postulates three major periods -- Early, Middle and Late. Based on artifact typologies from a great number of sites, he was able to discern numerous style changes within each of the major periods. The Early Period (8000 to 3350 Before Present [B.P.]) is characterized by a primarily seed processing subsistence economy. The Middle Period (3350 to 800 B.P.) is marked by a shift in the economic/subsistence focus from plant gathering and the use of hard seeds, to a more generalized hunting-maritime-gathering adaptation, with an increased focus on acorns. The full development of the Chumash culture, one of the most socially and economically complex hunting and gathering groups in North America, occurred during the Late Period (800 to 150 B.P.).

The Chumash aboriginal way of life ended with Spanish colonization. As neophytes brought into the mission system they were transformed from hunters and gatherers into agricultural laborers and exposed to diseases to which they had no resistance. By the end of the Mission Period in 1834, the Chumash population had been decimated by disease and declining birthrates. Population loss because of disease and economic deprivation continued into the next century. Today many people proudly claim Chumash ancestry and take an active interest in promoting their culture and protecting archaeological evidence of their ancestors.

History

In 1769 Gaspar de Portola and Father Junipero Serra departed the newly established San Diego settlement and marched northward toward Monterey with the objective to secure the port and establish five missions along the route. The Portola expedition passed through present day San Luis Obispo County that same year. The closest mission to Cal Poly is Mission San Luis Obispo de Tolosa founded in 1772 (Krieger 1985).

In 1822, Mexico gained its independence from Spain, and in 1834, the Missions were secularized (separated from the restrictions imposed by the Catholic Church) and their lands granted as rewards for loyal service or in response to an individual's petition. During Mexican rule, missions declined in influence and large cattle ranches (called ranchos) came into dominance in the San Luis Obispo area. California families received the vast majority of the 35 Mexican land grants within present-day San Luis Obispo County (Krieger 1990). The Mexican Period ended with the signing of the Treaty of Guadalupe Hildago on February 2, 1848, which transferred control of California, New Mexico, Texas, and other western properties to the United States.

During the early American Period, the Rancho lands were sold off and cattle ranching continued to be the major economic activity in the Cal Poly region. Only with the coming of the Southern Pacific Railroad in 1894 did San Luis Obispo begin to experience significant population growth.

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In 1901, a vocational school that would become Cal Poly was founded. Myron Angel, a driving force behind the establishment of the school, inspired the institution to "*teach the hand as well as the head so that no young man or woman will be sent off in the world to earn their living as poorly equipped as I was when I landed in San Francisco in 1849*" (Krieger 1990). The concept of teaching the hand as well as the mind manifested itself as the Cal Poly approach to education. Today Cal Poly provides an undergraduate and graduate curriculum that emphasizes "learning by doing" as part of the system of state universities.

Known Resource Sites

A records search was conducted at the Central Coast Information Center (CCIC), housed at the University of California, Santa Barbara, for archaeological sites on campus lands. The search revealed a relatively high density of archaeological resources on Cal Poly property, although approximately 90% of the property has not yet been surveyed. Forty-seven cultural resources studies have been conducted within a one-half mile radius of the Plan area, with ten archaeological investigations occurring within the Cal Poly area. Seventy-five archaeological sites are located within a ¹/₂-mile radius of Cal Poly and its ranches, twenty-eight of which are located within the Plan area. Three additional archaeological sites are located immediately adjacent to the study area's boundaries. The majority of these sites have not been subject to subsurface surveys and/or have not been evaluated for listing on the National Register of Historic Place (NRHP).

The Old Powerhouse Building located on Cuesta Avenue is listed on the National Register of Historic Places. Eight other structures were identified as appearing eligible for listing. No California State Landmarks were identified. The southwestern area of campus is recognized as having several structures that represent an earlier period of Cal Poly's architectural style. These are shown on Exhibit 6.5. The integrity of these structures has been compromised over the years due to extensive interior renovations and remodeling. However, the Master Plan includes policies that would guide the design of future development in the area to reflect this early California architecture. The renovation of the Business and Education Building incorporates this style and serves as an anchor for establishing the character of the area.

Significance Thresholds

CEQA Guidelines Section 15064.5 provides the definition and guidance for the determination of the significance of a cultural or historical resource. According to these guidelines, a significant resource is defined as:

- A resource listed in or determined eligible for listing in the California Register of Historical Places.
- A resource included in a local register, or deemed significant in a local meeting, unless the preponderance of evidence demonstrates otherwise.
- Anything deemed significant in the annals of California provided there is substantial evidence.

A resource is also considered significant if it:

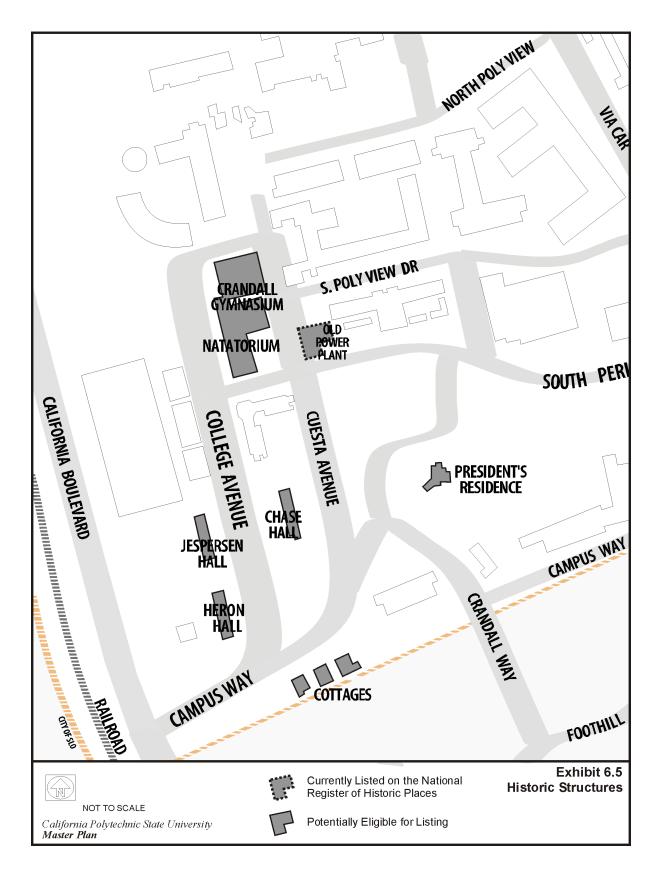
- Is associated with events that have a made a significant contribution to broad patterns of California history and cultural heritage.
- Is associated with the lives of persons important to our past.
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- Has yielded, or is likely to yield, information important in history or prehistory.

According to these guidelines, a project may have a significant impact on such a resource if it would:

• Cause a substantial adverse change in the significance of a historical or cultural resource through demolition, destruction, relocation or alteration of factors that make it significant.



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If potential development would disturb a cultural resource site, and the significance of a site is unknown, this analysis assumes that it is significant for the purpose of this EIR. An impact would also be considered significant if it disturbed a unique paleontologic site.

Impacts

Historic Structures

The development of housing and Parking Structure II in the southwestern portion of campus will necessitate the removal of buildings deemed potentially eligible for listing on the NRHP, specifically Jespersen, Chase and Heron Halls and the President's Residence. The loss of these buildings will affect the overall historic nature of this area, however, the integrity of these buildings has already been compromised due to past interior remodeling. Impacts are significant, but mitigable (Class II).

Known Resource Sites

At least one known archaeological site is eligible for listing on the NHRP and may be impacted by the Master Plan; mitigation is recommended to reduce potential impacts.¹

Unknown Resource Sites

Discovery of buried cultural resources is governed by County and State policy, which require reporting to proper authorities and work cessation pending resolution. Given the number of sites, mitigation is recommended to reduce the likelihood of accidental disturbance.

Mitigating Measures

Historic Structures

Buildings deemed potentially eligible for listing on the NRHP will be studied to determine their significance. If they are determined to be significant, Cal Poly will undertake proper documentation of the resource. Given the number of buildings on campus that are over 50 years old, determination of historical significance shall be made by a historic architect (with a historic preservation background) prior to removal or substantial remodeling of any such structure.

Known Resource Sites

Prior to design, Phase II archaeological studies will be completed at known sites; determination of significance will be made, and appropriate mitigation measures followed, as suggested by the archaeologist.

Known Resource Sites

Where soil surfaces are undeveloped and visible and where no previous survey has been completed, Phase I archaeological surveys will take place prior to construction.

¹ To protect the integrity and ensure proper documentation and handling of archaeological resources, locations of known archaeological sites are confidential.





Residual Impacts

Residual impacts are less than significant.



CIRCULATION

The following information is excerpted in large part from the Parking and Traffic Study prepared by ATE for the Master Plan Update (full text is included as Appendix C; full text and technical appendices are available for viewing at the Facilities Planning Office at Cal Poly).

Terminology

Principal arterials consist of freeways, expressways or other principal roads that connect major population centers and other points of traffic generation. Access to principal arterials is strictly controlled; they are not intended for local trips. Highway 101 is the principal arterial in the campus area.

Arterials carry traffic between principal arterials and between population centers, or they may carry large volumes of traffic within urban or rural areas. They are not intended to provide primary access to residences and are best used for controlled access to areas of retail and service commercial uses, industrial facilities and major community facilities.

Collector roads enable traffic to move to and from local roads, arterial roads and activity centers. They are principal roads of residential areas and carry relatively high volumes of traffic.

Local roads are used primarily for access to adjacent properties.

The efficiency and adequacy of a roadway or intersection is often described in terms of Level of Service, or LOS. LOS is a measure of the ratio of motor vehicle traffic volumes to the capacity of the roadway or average delay at an intersection. Motor vehicle traffic volumes are most often expressed in terms of Average Daily Traffic, or ADT, which is the number of vehicle trips passing a given point in each travel direction. The capacity of a street segment or intersection is based largely on the design or functional classification as described above. Based on the volume to capacity ratio, or the delay at an intersection, LOS A through F are applied, with LOS A indicating very good operating conditions and LOS F indicating poor conditions. LOS D has been established as the minimum acceptable level of service for roadway segments and intersections in the San Luis Obispo area.

The following table provides the standard definitions of LOS for signalized intersections and roadway segments

LOS	Flow	Definition
А	Unobstructed flow	No delays and all signal phases sufficient in duration to clear all approaching vehicles
В	Stable flow	Very little delay, a few phases are unable to handle all approaching vehicles
С	Stable flow	Delays are low to moderate, full use of peak directional signal phase is experienced
D	Nearing Unstable flow	Delays are moderate to heavy, significant signal time deficiencies are experienced for short durations during the peak traffic period.
E	Unstable flow	Delays are significant, signal phase timing is generally insufficient, and congestion exists for extended duration throughout the peak period.
F	Forced flow	Travel speeds are low and volumes are well above capacity. This condition is often caused when vehicles released by an upstream signal are unable to proceed because of back-ups from a downstream signal.

Table 6.7. Summary of Levels of Service for Signalized Roadway Segments and Intersections



Setting

Roadways

U.S. Highway 101, located one-half mile south of the University, is a multi-lane freeway that serves as a major arterial within the City of San Luis Obispo and is the principal inter-city route along the Central Coast. Near the campus, U.S. 101 is a four-lane freeway generally following an east-west alignment.

State Route 1 (SR 1) - Santa Rosa Street. State Route 1 extends north south through the City of San Luis Obispo as Santa Rosa Street. West of Cal Poly, Santa Rosa Street is a four-lane major arterial that provides regional access to the college via Highland Drive. The Santa Rosa Street/Highland Drive and Santa Rosa Street/Foothill Boulevard intersections are controlled by traffic signals.

Highland Drive is a two-lane arterial that serves the residential neighborhood west of Santa Rosa Street and serves as one of the primary entrances to Cal Poly east of Santa Rosa Street. The City of San Luis Obispo classifies Highland Drive as an arterial from Ferrini Road (just west of Santa Rosa Road) to the Union Pacific railroad tracks within the campus.

Foothill Boulevard is a four-lane undivided arterial street with signalized intersection control at major street crossings. Foothill Boulevard serves as a major route to Cal Poly, via California Boulevard, from locations south and west of the campus.

California Boulevard is a two-lane arterial that serves the residential neighborhood east of the Union Pacific railroad tracks and serves as one of the primary entrances to Cal Poly. The City of San Luis Obispo classifies California Boulevard as a residential arterial from Taft Street (near U.S. Highway 101) to the edge of the University north of Foothill Boulevard; and an arterial from Taft Street across U.S. Highway 101 to Monterey Street.

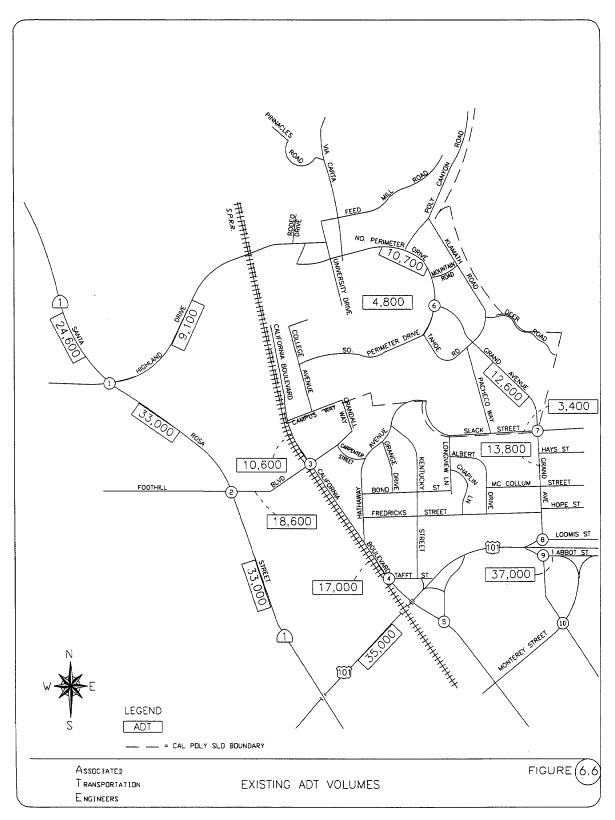
Perimeter Road is a two-lane roadway that is the main roadway for on-campus vehicular travel. Perimeter Road is U-shaped, starting at College Avenue in the southwest part of campus and then curving north-south around the University's administrative buildings, eventually curving back in an east-west alignment along the north core of the campus where it terminates at Dexter Drive near the library.

Grand Avenue serves as one of the primary entrances to Cal Poly. From U.S. Highway 101, Grand Avenue is a four-lane roadway and follows a north-south alignment to its intersection with Slack Street, which is controlled by all-way stop signs. North of Slack Street, Grand Avenue narrows to a two-lane roadway and curves in a northwest-southeast alignment towards its intersection with South Perimeter Road, which is also controlled by all-way stop signs. The City of San Luis Obispo Circulation Element classifies Grand Avenue as a residential arterial south of Slack Street to U.S. Highway 101.

Slack Street is a two-lane local street that follows an east-west alignment along the southern perimeter of the University between Grand Avenue and Hathaway Avenue. Slack Street intersects with Longview Lane, which is controlled by a four-way stop. Pacheco Way, a one-way roadway southbound, is stop sign-controlled at its intersection with Slack Street.

Existing Volumes and Level of Service

Roadway. Existing average daily traffic (ADT) volumes for the study-area roadways are illustrated in Exhibit 6.6. ADT volumes for the street segments included in the study area were obtained from traffic counts conducted by ATE in 2000. LOS were determined based on roadway capacity standards in the City of San Luis Obispo Circulation Element.





Intersections. Because traffic flow on urban arterials is most constrained at intersections, a detailed analysis of traffic flow must examine the operating conditions of critical intersections during peak travel periods. Levels of service for the signalized and unsignalized study-area intersections were calculated using the operational methodology outlined in the Highway Capacity Manual.²

Table 6.8 lists the A.M. and P.M. peak hour levels of service for each of the study-area intersections. Calculation worksheets are contained in the technical appendix available at the Cal Poly Facilities Planning Office.

Intersection	Control Type	A.M.		P.M.	
		Delay	LOS	Delay	LOS
Santa Rosa Street (SR 1)/Highland Drive	Signal	13.8 SEC	LOS B	11.8 SEC	LOS B
Santa Rosa Street (SR 1)/Foothill Blvd.	Signal	16.6 SEC	LOS B	26.2 SEC	LOS C
California Boulevard/Foothill Boulevard	Signal	14.5<u>12.2</u> SEC	LOS B	29.5<u>21.7</u> SEC	LOS C
California Boulevard/Taft Street	One-way stop	12.7 SEC	LOS B	16.5 SEC	LOS C
California Boulevard/U.S. 101 NB Ramps	One-way stop	13.8 SEC	LOS B	18.7 SEC	LOS C
So. Perimeter Road/Grand Avenue	All-way stop	9.4 SEC	LOS A	17.1 SEC	LOS C
Grand Avenue/Slack Street	All-way stop	11.0 SEC	LOS B	12.7 SEC	LOS B
Grand Avenue/U.S. 101 SB On-Ramp-Loomis	One-way stop	11.7 SEC	LOS B	12.7 SEC	LOS B
Grand Avenue/U.S. 101 NB On-Ramp-Abbot	One-way stop	14.1 SEC	LOS B	18.3 SEC	LOS C
Grand Avenue/Monterey Street	Signal	12.2 SEC	LOS B	11.6 SEC	LOS B

Table 6.8. Existing Intersection Levels of Service (2000	Table 6.8.	Existing In	tersection Lev	vels of Service	(2000)
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The data presented in Table 6.8 indicate that the study-area intersections currently operate at acceptable levels of service based on the Highway Capacity Manual calculations during normal operations. Vehicle delay data collected at the South Perimeter Road/Grand Avenue intersection during the A.M. peak hour shows that an acute level of congestion occurs during the peak 15 to 20 minute surge period when the majority of school classes begin. Both vehicular and pedestrian traffic flows cause this congestion. The University staffs one to two Public Safety Services personnel during this peak to control the intersection operations and distribute right-of-way between vehicular and pedestrian traffic through the intersection.

The Grand Avenue/Slack Street intersection also experiences very sharp directional traffic flows each weekday morning and evening, due to University employee and staff arrivals and departures via Grand Avenue. The reported level of service (LOS B), which is considered relatively good, was validated by field observations. Many vehicles roll through the stop signs in groups of up to four vehicles.

Highland Drive is also subject to congestion during the A.M. peak hour. As data indicate above, levels of service remain above acceptable levels.

Certain university events, such as commencement and the first day of class, often result in extraordinary traffic conditions, with area roadways slowed considerably and intersections under heavy stress. University Police have a Draft Event Management Plan to address acute traffic levels associated with these events; further mitigation is not practicable for these sporadic activities.



² <u>Highway Capacity Manual</u>, Transportation Research Board, 1997.

"Baseline" Traffic Volumes

"Baseline" traffic volumes were forecast to provide a point of comparison for measuring the effects of the additional traffic that would be generated by implementation of the Master Plan. The Baseline forecasts assume implementation of the roadway extensions and realignments proposed in the initial phases of Master Plan development. These roadway projects, which will change the traffic patterns in the Cal Poly area, are listed below:

- Highland Drive Extension. Highland Drive will be extended easterly to form a new perimeter road section in the northern portion of the campus.
- California Boulevard Extension. California Boulevard will be extended northerly to connect with Highland Drive.
- South Perimeter Road Closure. The section of South Perimeter Road west of Slack Street will be closed to vehicular through traffic.

Table 6.9 compares the existing campus distribution pattern and the campus distribution pattern associated with implementation of the Master Plan roadway projects. Baseline traffic volumes are presented in Exhibit 6.7.

Origin/Destination	Direction (to/from)	Existing Distribution Percentage	Master Plan Distribution Percentage
California Boulevard	South	28%	40%
Highland Drive	West	28%	20%
Grand Avenue	Southeast	39%	35%
Surrounding areas	Local	5%	5%
Total		100%	100%

 Table 6.9. Existing & Master Plan Traffic Patterns

Parking

Parking conditions on campus are summarized in Table 6.10. The interim phase refers to the spaces available including the Grand Avenue parking structure.

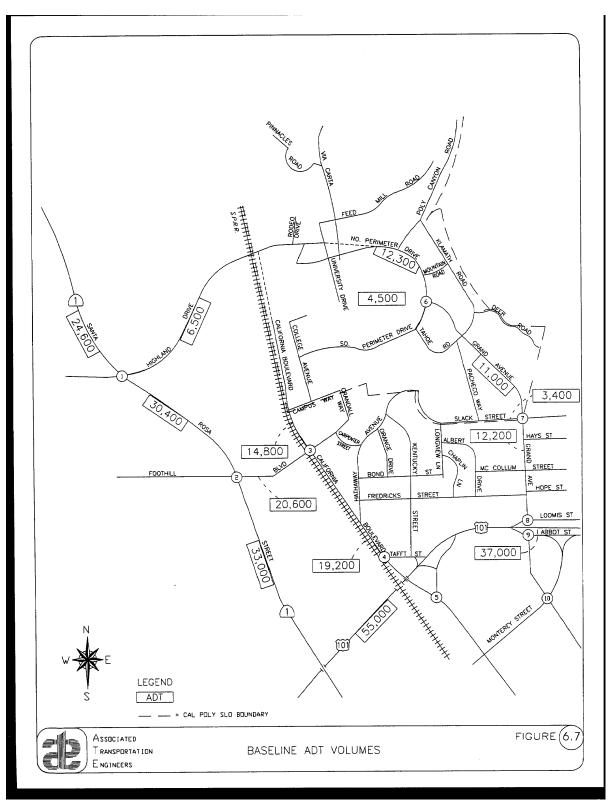
Scenario	Spaces Supplied	Peak Occupancy	Percent Occupancy	Reserve Spaces
Existing	5,802	5,692	98.1%	110
Conditions				
Interim Phase	6,733	5,969	88.7%	764

Table 6.10. Existing Parking Conditions Summary

Significance Thresholds

City of San Luis Obispo Circulation Element standards will be used to determine the significance of Master Plan-generated traffic impacts for this study. The City's Circulation Element has adopted LOS D as the minimum service level for roadway and intersection operations. Consequently, mitigation would be required for operations at LOS E or worse.





Cal Poly Master Plan

Transit impacts would be significant if ridership increases resulted in diminished levels of service for City and CCAT buses.

Parking impacts would be significant if demand exceeded supply.

Impacts

Beneficial Impacts

Designation and improvement of the campus pedestrian system should reduce conflicts with vehicles. Development of a more efficient campus bicycle system, improved physical access to public transit and provision of a campus area shuttle may reduce vehicle traffic by providing a convenient alternative. Clearly marked bike and pedestrian paths and separation from other modes of travel will improve circulation. These impacts are beneficial (Class IV).

Careful study and design of important intersections will benefit circulation (Class IV), as will designation of clearly defined ADA routes and loading zones.

Campus Vehicular Circulation (Baseline + Project)

The Baseline + Project analysis adds the traffic generated by enrollment growth and additional faculty and staff to the realigned roadway system.

Regional

Exhibit 6.8 illustrates the Baseline + Project ADT volumes. Table 6.11 presents the results of the Baseline and Baseline + Project roadway analyses.

Roadway	Roadway Type	Scenario			
		Baseline	Master Plan	Baseline + Master	
		ADT	Added ADT	Plan ADT	LOS
Grand Ave	4-Lane Res. Art.	12,200 ADT	1,485 ADT	13,700 ADT	LOS A
California Blvd	2-Lane Res. Art.	14,800 ADT	1,870 ADT	16,700 ADT	LOS C
Highland Dr	2-Lane Arterial	6,500 ADT	935 ADT	7,400 ADT	LOS A
Foothill Blvd	2-Lane Arterial	9,500<u>20,600</u> ADT	935 ADT	10,40021,500 ADT	LOS AD
Santa Rosa - North	4-Lane Highway	24,600 ADT	390 ADT	25,000 ADT	LOS A
Santa Rosa - South	4-Lane Arterial	33,000<u>30,400</u> ADT	755 ADT	33,80031,200 ADT	LOS C

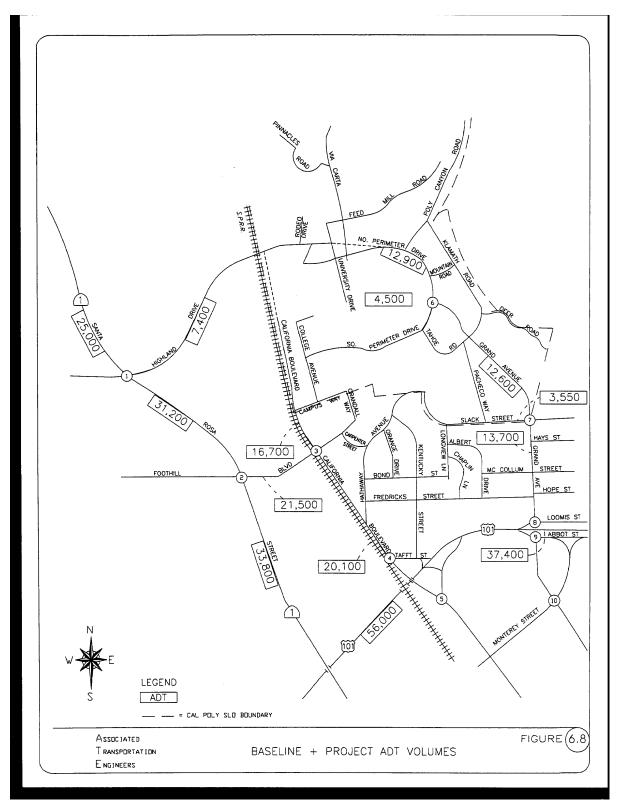
 Table 6.11. Baseline and Baseline + Project Roadway Operations

All of the Cal Poly-area roadways are forecast to operate at acceptable levels of service under Baseline and Baseline + Project operating conditions.

Campus Roadways

South Perimeter Road. The closure of South Perimeter Road, as identified for the later phase of the Master Plan, would displace approximately 5,000 ADT. Phasing of the Master Plan will ensure that the extension of California Boulevard and realignment of Highland Drive are completed prior to the closure of South Perimeter Road. The closure of South Perimeter Road will be successful as long as the California Boulevard and Highland Drive projects take place first (Class III). Impacts are less than significant (Class III).







Intersection Operations

Table 6.12 compares the Baseline and Baseline + Project levels of service for the A.M. and P.M. peak hour periods.

Intersection	A.M. Peak Hour		P.M. Peak Hour	
		Baseline +		Baseline +
	Baseline	Project	Baseline	Project
	Delay ^a /LOS	Delay ^a /LOS	Delay ^a /LOS	Delay ^a /LOS
Santa Rosa Street (SR 1)/Highland Drive	7.4/LOS A	7.6/LOS A	10.3/LOS B	10.9/LOS B
Santa Rosa Street (SR 1)/Foothill Boulevard	16.0/LOS B	16.5/LOS B	26.4/LOS C	27.4/LOS C
	17.8<u>13.8</u>/LOS	18.3<u>14.3</u>/LOS	32.9 25.5/LOS	37.8<u>30.4</u>/LOS
California Boulevard/Foothill Boulevard	В	В	С	<u>C</u> Ð
California Boulevard/Taft Street	14.0/LOS B	14.2/LOS B	18.4/LOS C	22.6/LOS C
California Boulevard/U.S. 101 NB Ramps	15.5/LOS C	15.9/LOS C	21.6/LOS C	22.7/LOS C
So. Perimeter Road/Grand Avenue	8.8/LOS A	9.1/LOS A	13.2/LOS B	17.3/LOS C
Grand Avenue/Slack Street	10.2/LOS B	10.5/LOS B	11.5/LOS B	12.5/LOS B
Grand Avenue/U.S. 101 SB On-Ramp-Loomis	11.1/LOS B	11.3/LOS B	11.8/LOS B	12.5/LOS B
Grand Avenue/U.S. 101 NB Off-Ramp-Abbot	12.7/LOS B	13.2/LOS B	15.5/LOS C	17.7/LOS C
Grand Avenue/Monterey Street	12.5/LOS B	12.3/LOS B	11.3/LOS B	11.4/LOS B

Table 6.12. Baseline and Baseline + P	Project Intersection Levels of Service
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^a Levels of service based on average seconds of delay per vehicle.

The data presented in Table 6.12 indicate that all of the Cal Poly-area intersections are forecast to operate at acceptable levels based on City criteria. The Master Plan roadway network changes would also improve operations at the South Perimeter Road/Grand Avenue intersection and at the Grand Avenue/Slack Street intersection. The intersections in the California Boulevard corridor are forecast to operate at acceptable levels of service with the forecast volumes (Class III).

Public Transit

Currently most on-campus bus stops are located on South Perimeter Road and Grand Avenue. The expected closure of South Perimeter would necessitate alternative shuttle or bus stop locations. It is recommended that on-campus transit facilities operate from centralized hub locations; preferably at the primary campus centers (primary campus activity center, Northwest Satellite Center, Northeast Satellite Center and the Residential Centers). The Master Plan specifies continued work with SLO Transit (City operated local bus service) and CCAT (Central Coast Area Transit) to develop the transit plan for the campus.

According to the city, buses serving off-campus residential areas are often beyond capacity and must leave riders at the curb. Because proposed enrollment increases associated with the Master Plan would be housed oncampus, ridership during peak hours is not expected to increase substantially. Staff and faculty increases will be addressed by policies contained in the Master Plan (mentioned above), which specify that the University will develop long and short range plans for transit service to the University. Given that enrollment will increase gradually over the next ten years, transit modifications can be put in place.

Any reduction in financial incentives for the student and staff use of bus services will have a negative effect on the use of transit.

The Master Plan identifies the need for a shuttle service that would provide frequent on-campus service between housing and instructional areas. The traffic engineer further recommends that the shuttle provide access to and from the off-campus areas within a one-mile radius (approximate) in order to make the Master

6

EINAL ENVIRONMENTAL IMPACT REPORT 290 Circulation Plan traffic and parking reduction strategies successful. Impacts to transit from the Master Plan are considered less than significant (Class III).

Parking

Master Plan Parking Supply

Table 6.13 summarizes the parking supply statistics proposed in the Master Plan. The spaces lost by the campus redevelopment are shown as a negative number. <u>The table has been modified to reflect the completion of Parking Structure I.</u>

Project Component	Parking Spaces		
Existing Surface Parking Spaces	5,802		
Current-Parking Structure I	+ 931		
Lost Spaces	-3,185		
Absorbed Redevelopment Areas	+ 700		
Absorbed Housing Areas	+ 300		
Parking Structure P1	+ 1,236		
Parking Structure P2	+ 700		
Surface Lots	+ 700		
Total Future Supply	7,184		
Net Increase	1,382<u>451</u>		

Master Plan Parking Demands

Table 6.14 shows the parking demand analysis completed for the Master Plan. The parking demands were forecast assuming the increase in students, faculty and staff proposed under the Master Plan. The data presented in the table also accounts for the decrease in existing and future parking demands associated with implementation of the policies and TDM trip reductions provided for in the Master Plan. These policy guidelines include implementation of on-campus parking restrictions for resident freshman (limiting permits issued to freshman), commuter control measures restricting parking permits for students that live within a certain distance of the campus; implementation of a transit/shuttle service or another alternative transportation mode to serve key campus areas and continuation of the successful faculty/staff incentives already in-place to promote car-pooling, van-pooling, bicycle use, telecommuting, etc. for new campus personnel. Parking supply and demand calculation worksheets are included in the Appendix for reference.



Project Component	Parking Spaces
Existing Demands	5,692
Interim Dorms/Structure Projects	+ 277
Future Upper division students (80% Permits)	+ 2,000
Future Freshman (60% Permits)	+ 300
Future Faculty/Staff (85% Peak Demand)	+ 425
Subtotal Future Demand	8,694
Freshman Restrictions	-1,200
Commuter Students	-650
Faculty/Staff TDM Measures	-150
Subtotal Future Reductions	-2,000
TOTAL FUTURE DEMAND	6,694

Table 6.14. Master Plan Parking Demands

Table 6.15 summarizes the future parking supply and demand forecasts for the Master Plan. As shown, the Master Plan parking supply is forecast to accommodate future demands. Therefore, parking impacts would be less than significant (Class III).

Table 6.15. Future Parking Conditions Summary

	Spaces	Peak	Percent	Reserve
Scenario	Supplied	Demand	Occupancy	Spaces
Existing Conditions	5,802	5,692	98.1%	110
Existing + Parking Structure I	6,733	5,969	88.7%	764
Master Plan	7,184	6,694	93.2%	490

Cumulative Traffic Analysis

ATE analyzed cumulative traffic levels as part of the Parking and Traffic Study. The study incorporated traffic expected from <u>approved and</u> pending development <u>in the City of San Luis Obispo</u> and enrollment increases at Cuesta College into projected traffic levels resulting from the implementation of the Master Plan. The list of pending <u>development can be found in Appendix C projects is outlined in Table 6.16</u>.

Table 6.16. Pending Projects Included in Cumulative Analysis

(Planning Log #) - Project Description			<u>P.M.</u> <u>Trips</u>
1. (1-00) SLO Senior Housing - 19 unit complex	<u>66</u>	<u>1</u>	<u>2</u>
2. (9-00) Apple Farm - 58 room hotel	<u>477</u>	<u>33</u>	<u>36</u>
3. (11-99) SLO Housing - 11-unit apartments	<u>73</u>	<u>6</u>	<u>7</u>
4. (12-98) 8,437 SF office project	<u>93</u>	<u>14</u>	<u>12</u>
5. (17-98)a Gas station remodel w/new convenience mart	<u>169</u>	<u>92</u>	<u>122</u>
6. (21-00) 2-Story 14.5 KSF commercial building	<u>590</u>	<u>55</u>	<u>62</u>
7. (32-00)a 2,047 SF am/pm w/6 pump stations	<u>1,259</u>	<u>41</u>	<u>46</u>
8. (38-00) 4,319 SF office/retail building	<u>113</u>	<u>4</u>	<u>10</u>
9. (75-00) Expand exist. Motel by 15-units	<u>123</u>	<u>8</u>	<u>9</u>
<u>10. (90-99) 9,925 SF Office building</u>	<u>109</u>	<u>16</u>	<u>15</u>
11. (93-99) Child care center - 6,240 SF	<u>203</u>	<u>36</u>	<u>39</u>
12. (97-99) New 20 KSF office building	<u>220</u>	<u>31</u>	<u>30</u>



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(Planning Log #) - Project Description	<u>ADT</u>	<u>A.M.</u> <u>Trips</u>	<u>P.M.</u> <u>Trips</u>
13. (114-99) 5,300 SF Expansion school facilities	<u>290</u>	<u>19</u>	<u>29</u>
<u>14. (120-98) 6,000 SF Bank Building</u>	<u>939</u>	<u>24</u>	<u>200</u>
15. (138-98)a Gas station w/convenience Store - 12 pumps	<u>2,604</u>	<u>82</u>	<u>92</u>
<u>16. (146-98) 10-Single Family Homes</u>	<u>96</u>	<u>8</u>	<u>10</u>
<u>17. (152-99) New 7,876 SF Office Building</u>	<u>91</u>	<u>14</u>	<u>14</u>
18. (153-98) Mall Redevelopment -Replace 150 KSF Retail Space (assume 70% existing	4,270	0	272
<u>vacancy rate)</u>			
<u>19. (156-98) New Motel - 74 Units</u>	<u>609</u>	<u>41</u>	<u>45</u>
<u>20. (165-98) 8,750 SF Office Complex</u>	<u>96</u>	<u>14</u>	<u>13</u>
21. (176-97) 13 KSF Car Dealership	<u>488</u>	<u>29</u>	<u>36</u>
22. (192-99) Housing complex - 8 apartments - 8 double-occ. du?s	<u>107</u>	<u>8</u>	<u>11</u>
<u>23. (207-98) New Hotel - 25 rooms</u>	<u>206</u>	<u>14</u>	<u>15</u>
24. (067-121-022) ^a Marketplace Project -500 KSF Retail	<u>16,202</u>	<u>389</u>	<u>1,412</u>
25. Cuesta College - 2,300 student enrollment increase	<u>3,680</u>	<u>115</u>	<u>294</u>
26. (217-98) ^a 1,787 SF Convenience store to replace existing pumps (3-bays removed)	<u>618</u>	<u>15</u>	<u>38</u>
<u>^a Pass-by reduction included in calculations</u>			

Table 6.17 shows the Cumulative and Cumulative + Project traffic volume forecasts and levels of service. The data presented in the table show that all of the Cal Poly-area roadway segments are forecast to operate within their respective design capacities with Cumulative and Cumulative + Project traffic except for Santa Rosa – South. The levels of service shown for the southern segment of Santa Rosa Street and the section of Foothill Boulevard adjacent to the campus are is forecast at LOS E based on standard engineering design capacities, which are "rules-of-thumb" influenced by many factors. Intersections are the primary controlling factor on arterial roadways such as Santa Rosa Street and Foothill Boulevard. The cumulative intersection analysis below finds that intersections within these corridors are forecast to operate at LOS C - D or better during peak periods, indicating relatively good operations for the roadway. Cumulative roadway impacts would therefore be less than significant (Class III).

Table 6.17. Cumulative Roadway Volumes

Roadway	Roadway Type	Scenario			
		Cumulative	Project Added	Cumulative +	Roadway
		ADT	ADT	Project ADT	LOS
Grand Ave	4-Lane Res. Art.	14,100 ADT	1,485 ADT	15,735 ADT	LOS A
California Blvd	2-Lane Res. Art.	17,100 ADT	1,870 ADT	18,970 ADT	LOS D
Highland Dr	2-Lane Arterial	6,900 ADT	935 ADT	7,835 ADT	LOS A
Foothill Blvd	2-Lane Arterial	10,700 21,800 ADT	935 ADT	11,635 <u>22,735</u> ADT	LOS <u>AE</u>
Santa Rosa - North	4-Lane Highway	27,500 ADT	390 ADT	27,890 ADT	LOS A
Santa Rosa - South	4-Lane Arterial	<u>38,100</u> ADT	755 ADT	38,855 ADT	LOS E

Cumulative Intersection Operations

Table 6.18 summarizes the Cumulative and Cumulative + Project level of service forecasts. As shown, two of the Cal Poly-area intersections are forecast to operate below acceptable levels (based upon City Standards) under Cumulative + Project conditions. Both the California Boulevard/Taft Street and California Boulevard/U.S. 101 north bound Ramps intersections are forecast to operate at LOS E during the P.M. peak hour under Cumulative + Project conditions. Mitigation is recommended to reduce these impacts.

Intersection	A.M. Peak Hour		P.M. Pe	eak Hour
		Cumulative +		Cumulative +
	Cumulative	Project	Cumulative	Project
	Delay ^a /LOS	Delay ^a /LOS	Delay ^a /LOS	Delay ^a /LOS
Santa Rosa Street (SR 1)/Highland Drive	7.8/LOS A	7.9/LOS A	12.0/LOS B	12.9/LOS B
Santa Rosa Street (SR 1)/Foothill				
Boulevard	16.8/LOS B	16.8/LOS B	31.9/LOS C	33.3/LOS C
			- <u>36.1</u> 43.4/LOS	<u>42.7</u> 51.2/LOS
California Boulevard/Foothill Boulevard	19.2<u>16.3</u>/LOS B	<u>16.8</u> 19.8/LOS B	D	D
California Boulevard/Taft Street	15.0/LOS B	15.3/LOS C	29.3/LOS D	35.7/LOS E
California Boulevard/U.S. 101 north				
bound Ramps	18.1/LOS C	18.5/LOS C	33.0/LOS D	36.5/LOS E
So. Perimeter Road/Grand Avenue	8.4/LOS A	8.7/LOS A	11.9/LOS B	13.3/LOS B
Grand Avenue/Slack Street	10.4/LOS B	10.6/LOS B	15.1/LOS C	17.8/LOS C
Grand Avenue/U.S. 101 SB On-Ramp-				
Loomis	11.1/LOS B	11.4/LOS B	14.1/LOS B	15.3/LOS C
Grand Avenue/U.S. 101 north bound				
Off-Ramp-Abbot	13.9/LOS B	14.6/LOS B	25.2/LOS D	33.2/LOS D
Grand Avenue/Monterey Street	12.1/LOS B	11.8/LOS B	12.5/LOS B	12.7/LOS B

Table 6.18. Cumulative and Cumulative + Project Intersection Levels of Service

^a Levels of service based on average seconds of delay per vehicle.

Mitigating Measures

Although campus-area roadways and intersections are forecast to operate at acceptable levels under implementation of the Master Plan, the following recommendations by the traffic engineer are included in the Master Plan to increase efficiency:

Mount Bishop Road/Highland Drive. This location will need to have all-way stop-control removed at some time prior to full implementation of the Master Plan. The delay on Highland Drive will increase due to directional peak traffic flows as future volumes are realized. Further study would need to be completed at this location to determine the appropriate traffic control measure for implementation. Implementation of traffic signals or possibly a roundabout at this location would be dependent upon roadway slopes, intersection geometry and future traffic volumes.

California Boulevard/Highland Drive. The extension of California Boulevard to Highland Drive would result in a new at-grade three-way intersection. Monitoring the intersection's operation during the course of Master Plan implementation will be required to determine the appropriate traffic control device. The A.M. and P.M. peak hour traffic volumes associated with the Baseline + Project scenarios, as well as the intersection geometrics (T-configuration) suggest a likely location for traffic signal control.

Via Carta/Highland Drive. Via Carta north of its intersection with Highland Drive will need to be widened to Master Plan specifications to accommodate vehicular and pedestrian traffic associated with the new residential and parking areas. The new intersection, with the extension of Highland Drive, should be monitored during the course of Master Plan implementation to determine if signalization is necessary. Due to the slope of Via Carta, a roundabout design at this location would not be recommended.

The following mitigation measure has been added to reinforce the need for improved transit and reduced parking:



<u>Cal Poly will institute the following measures, or measures achieving equivalent results, in order to meet its</u> stated policy of 2,000 parking space reduction, in addition to improving circulation on local streets.

Freshmen restrictions	Bike/pedestrian enhancement
Geographic controls	Continued bus subsidy
Car/vanpools	Faculty/Staff incentives
Parking Fee increases	Entertainment/services on campus
On-campus shuttle	Modified enrollment scenarios
<u>City transit improvements</u>	Remote parking

MANAGING PARKING AND VEHICLE TRIPS ON CAMPUS

Cumulative Impacts

California Boulevard/Taft Street. The peak hour traffic forecasts meet traffic signal warrants (signal warrant calculations are provided in the technical appendix). Installation of traffic signals would provide for LOS B-C operations during the P.M. peak hour under Cumulative + Project conditions (LOS calculations are provided in the technical appendix for reference).

California Boulevard/U.S. 101 north bound Ramps. The peak hour traffic forecasts meet warrants for consideration of traffic signals (signal warrant calculations are provided in the technical appendix). Installation of traffic signals would provide LOS B-C operations during the P.M. peak hour under Cumulative + Project conditions (LOS calculations are provided in the technical appendix for reference).

Residual Impacts

Residual impacts would be less than significant (Class III).



AIR QUALITY

The following section analyzes the impacts to air quality associated with the implementation of the Master Plan.

Existing Conditions

Meteorology

Airflow plays an important role in the movement and dispersion of air pollutants in the San Luis Obispo region. The speed and direction of local winds are controlled by 1) the location and strength of the Pacific High pressure system and other global patterns, 2) topographical factors, and 3) circulation patterns resulting from temperature differences between the land and sea.

During the spring and summer, when the Pacific High attains its greatest strength, onshore winds from the northwest generally prevail during the day. As evening approaches, onshore winds die down, and the wind direction reverses with weak winds flowing down the coastal mountains and valleys to form light easterly breezes.

In the fall, onshore surface winds decline and the marine layer grows shallow, allowing an occasional reversal to a weak offshore flow. This along with the diurnal alteration of land-sea breeze circulation can sometimes produce a "sloshing" effect. Under such conditions, pollutants may accumulate over the Pacific Ocean and subsequently be carried back onshore with the return of sea breezes.

In the atmosphere, air temperatures normally decrease as altitude increases. At varying distances above the earth's surface, however, a reversal of this temperature gradient can occur. Such a condition, which is called an inversion, is simply a warm layer of air over a layer of cooler air. Inversions can have the effect of limiting the vertical dispersion of air pollutants, trapping them near the earth's surface.

Several types of inversions are common to the San Luis Obispo area. Weak surface inversions are caused by radiational cooling of air in contact with the cold earth surface at night. In valleys and low-lying areas, this condition is intensified by the addition of cold air flowing down from hills and pooling on valley floors. Surface inversions are common throughout the County during winter months, particularly on cold mornings. As the morning sun warms the earth and air near the ground, the inversion lifts, gradually dissipating throughout the day.

During the summer, subsidence inversions can occur when the summertime presence of the Pacific highpressure cell can cause the air mass aloft to sink. As the air descends, compressional heating warms the air to a higher temperature than the air below. This highly stable atmospheric conditioning can act as a nearly impenetrable lid to the vertical mixing of pollutants. Subsidence inversions can persist for one or more days, causing air stagnation and the buildup of pollutants.

Effects of Air Pollution

The primary chemical compounds that are considered pollutants emitted into or formed in the atmosphere include ozone (O_3) , oxides of nitrogen (NO_x) , sulfur dioxide (SO_2) , hydrocarbons (HC), carbon monoxide (CO), and respirable particulate matter (PM or PM_{10}).

Ozone is formed in the atmosphere through a complex series of chemical reactions generally requiring light as an energy source. Ozone is a pungent, colorless gas that is a strong irritant and attacks the respiratory system. Respiratory and cardiovascular diseases are aggravated by exposure to ozone. A healthy person exposed to high concentrations of ozone may experience nausea, dizziness, and burning in the chest. Ozone also damages crops and other vegetation.



Oxides of nitrogen that are considered pollutants include nitric oxide (NO) and nitrogen dioxide (NO₂). NO is colorless and odorless and is generally formed by combustion processes combining atmospheric oxygen and nitrogen. NO_2 is a reddish-brown irritating gas formed by the combination of NO and oxygen in the atmosphere or at the emission source. Both NO and NO_2 are considered ozone precursors because they react with hydrocarbons and oxygen to produce ozone. Exposure to NO_2 may increase the potential for respiratory infections in children and cause difficulty in breathing even among healthy persons and especially among asthmatics.

Sulfur dioxide is a colorless, pungent, irritating gas that affects the upper respiratory tract. Sulfur dioxide may combine with particulate matter and settle in the lungs, causing damage to lung tissues. Sulfur dioxide may combine with water in the atmosphere to form sulfuric acid that may fall as acid rain, damaging vegetation.

Hydrocarbons include a variety of compounds containing hydrogen and carbon. Many hydrocarbons, known as reactive organic compounds (ROC), react with NO and NO_2 to form ozone. Generally, ambient hydrocarbon concentrations do not cause direct adverse health effects, but result in ozone formation.

Carbon monoxide is a colorless, odorless gas generally formed by incomplete combustion of hydrocarboncontaining fuels. Carbon monoxide does not irritate the respiratory tract, but does interfere with the ability of blood to carry oxygen to vital tissues.

Particulate matter consists of a variety of particle sizes and composition. Generally, particles less than 10 microns (PM_{10}) are considered to be pollutants because they accumulate in the lung tissues and may contain toxic materials which can be absorbed into the system.

Regulatory Setting

Air pollution control in San Luis Obispo County is administered on three governmental levels. The United States Environmental Protection Agency (EPA) has jurisdiction under the Federal Clean Air Act to develop Federal air quality standards and require individual states to prepare State Implementation Plans (SIPs) to attain these standards.

The California Environmental Protection Agency, Air Resources Board (ARB) has jurisdiction under the California Health and Safety Code and the California Clean Air Act to develop California air quality standards. They also require regional plans to attain these standards, and coordinate the preparation of plans by local air districts. ARB is also responsible for the development of state emission standards for mobile and stationary emission sources.

The San Luis Obispo County Air Pollution Control District (APCD) shares responsibility with the ARB for ensuring that all State and Federal ambient air quality standards are attained within the County. The APCD has jurisdiction under the California Health and Safety Code to develop emission standards for the County, issue air pollution permits, and require emission controls for stationary sources in the County. The APCD is also responsible for the attainment of State and Federal standards in the County.

Air Quality Standards

Air quality standards are specific concentrations of pollutants that are used as thresholds to protect public health and the public welfare. The U.S. Environmental Protection Agency (EPA) has developed two sets of standards; one to provide an adequate margin of safety to protect human health and the second to protect the public welfare from any known or anticipated adverse effects. At this time, sulfur dioxide is the only pollutant for which the two standards differ.

FINAL ENVIRONMENTAL IMPACT REPORT Air Quality 297 ARB has developed air quality standards for California, which are generally lower in concentration than the Federal standards. California standards exist for O₃, CO, PM₁₀, visibility, sulfates, lead, hydrogen sulfide and vinyl chloride.

In July 1997, EPA implemented new health-based ozone and PM standards. The new Federal ozone standard is based on a longer averaging period (8-hour vs. 1-hour), recognizing that prolonged exposure is more damaging. The new Federal PM standard is based on finer particles (2.5 microns and smaller vs. 10 microns and smaller), recognizing that finer particles may have a higher residence time in the lungs and cause greater respiratory illness. The U.S. Court of Appeals for the District of Columbia has since reached a decision to prohibit EPA from enforcing the 8-hour ozone standard. Table 6.19 lists the applicable State and Federal standards.

Pollutant	Average Time	State Standard	Federal Standard
Ozone	1-Hour	0.09 ppm	
	8-Hour		0.08 ppm
Carbon Monoxide (CO)	1-Hour	20 ppm	35 ppm
	8-Hour	9.0 ppm	9.0 ppm
Nitrogen Dioxide (NO ₂)	1-Hour	0.25 ppm	
Inhalable Particulate Matter	24-Hour		50 ug/m3
(PM _{2.5})	Annual Arithmetic Mean		15 ug/m3
Inhalable Particulate Matter (PM ₁₀)	24-Hour	50 ug/m3	150 ug/m3
	Annual Geometric Mean	30 ug/m3	
	Annual Arithmetic Mean		50 ug/m3
Sulfur Dioxide (SO ₂)	24-Hour	0.04 ppm	0.14 ppm

Table 6.19. Air Quality Standards

Air Quality Management

The 1988 California Clean Air Act (CAA) requires all air pollution control districts and air quality management districts in the state to adopt and enforce regulations to achieve and maintain air quality that is within the State air quality standards. Based on a design value of 0.10 ppm ozone (1-hour), San Luis Obispo County has been declared a "moderate" nonattainment area for the State ozone standard. The County did not meet the December 31, 1997 deadline to attain the State 1-hour ozone standard; therefore, it should have reclassified as a "serious" nonattainment area. However, the ARB determined that a change in classification would not result in a more expeditious attainment of the standard. The County is also considered a nonattainment area for the State PM₁₀ standard.

In response to the requirements of the CAA, the San Luis Obispo County APCD prepared the 1991 Clean Air Plan (CAP) to provide a framework for the attainment of State air quality standards by the earliest practicable date. The CAP is a comprehensive document, intended to facilitate attainment and maintenance of the State ozone standard. The 1995 CAP was developed as a comprehensive update to the 1991 CAP and was expected to bring the County into attainment of the State ozone standard by the end of 1997.

The 1995 CAP described the pollutants that effect County air quality, the sources of those pollutants, and future year emissions that are anticipated under current growth trends. Based on this information, the 1995 CAP also provides a control strategy for reducing emissions of ozone precursors. Included in the 1995 CAP are a number of land use and circulation management policies and programs that have already been implemented to reduce vehicular emissions. Additional measures recommended for adoption include trip reduction programs and telecommuting.

A second update to the 1991 CAP was developed in 1998, as a continuation of the 1995 CAP. The 1998 CAP proposes no adoption of new control measures. The 1998 CAP is expected to bring the County into attainment with the State 1-hour ozone standard by 2003.



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Overall, full implementation of the control measures contained in the 1995 CAP will result in a 33 percent reduction in ROG emissions and a 45 percent reduction in NO_x emissions compared to 1991 levels. These reductions are in excess of those required by the CAA, but appear to be necessary to attain the State ozone standard by the year 2003.

San Luis Obispo County is in attainment of the Federal standards and is not subject to the planning requirements of the Federal Clean Air Act.

Baseline Air Quality

San Luis Obispo County has been identified as a non-attainment area for both ozone (1-hour standard) and PM_{10} by the ARB (California state air quality standards are generally stricter than federal standards). Draft recommendations as to the attainment status of the County relative to the Federal 8-hour ozone standard were issued by the ARB on April 28, 1999. San Luis Obispo County is considered "too close to call" by ARB, and the air quality monitoring results of the 1999 ozone season will determine the attainment status. Maximum concentrations of other criteria pollutants are currently within federal and state standards.

Air quality in San Luis Obispo County is currently monitored at eight public agency and private sector monitoring stations located throughout the County. The nearest station is located on Marsh Street in the City of San Luis Obispo, approximately two miles south of campus. This station monitors ozone, CO, NO_2 , SO_2 , and PM_{10} levels. Table 6.20 presents the maximum pollutant concentrations that were recorded at this station from 1996 through 1998. Maximum ozone levels have not exceeded the State standard at the San Luis Obispo station since 1989.

	1996	1997	1998
Ozone (ppm)	•		
Worst Hour	0.083	0.067	0.070
Number of State Exceedances (Days > 0.09 ppm)	0	0	0
Number of Federal Exceedances (Days > 0.12 ppm)	0	0	0
Carbon Monoxide (ppm)			
Worst Hour	2.91	2.56	2.34
Number of State Exceedances (Hours>20 ppm)	0	0	0
Number of State Exceedances (8 hours>9 ppm)		0	0
Nitrogen Dioxide (ppm)			
Worst Hour	0.060	0.065	0.061
Number of State Exceedances (Hours>0.25 ppm)	0	0	0
PM ₁₀ (micrograms/cubic meter)			
Worst Sample	39	55	32
Number of State Exceedances (Samples>50)	0	2	0
Annual Geometric Mean (Standard is 30)	15	17	14
Annual Arithmetic Mean (Standard is 50)	17	18	15
Source: California Air Resources Board (<u>www.arb.ca.gov</u>)			

Table 6.20. Air Quality Standards Exceedance

There was an additional station installed as mitigation for the Grand Avenue Parking Structure in 1999, which has recorded baseline (ambient) CO levels for three months. The station will continue to monitor air quality for a year after the structure opens. Monthly high CO levels at his station were 2.1 ppm and 2.8 ppm for the months of November 1999 and December 1999, respectively, well within the APCD thresholds.

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High ozone levels in San Luis Obispo County have occasionally been traced to air pollutants transported from other air basins, such as the South Coast Air Basin, the San Francisco Bay Area, and the San Joaquin Valley. The frequency with which long-range transport of pollutants affects local air quality has not been definitively established. However, most exceedances of the State ozone standard measured in the County are the result of local emissions and adverse meteorology.

Significance Thresholds

The San Luis Obispo Air Pollution Control District (APCD) sets standards and guidelines for the assessment of environmental impact from construction and operation of projects. The following analysis is consistent with guidelines and significance thresholds developed by the APCD and contained within the *CEQA Air Quality Handbook* (San Luis Obispo County APCD, 1995). Specifically, Master Plan emissions are considered significant impacts if any of the following thresholds are exceeded:

Operational Impacts:

Reactive Organic Gases (ROG), NO _x , SO ₂ , PM ₁₀	10 lbs/day
CO	50 lbs/day

The APCD requires more stringent environmental review requirements for projects exceeding 25 lbs/day of ROG, NO_x , SO_2 and PM_{10} emissions, or 550 lbs/day CO emissions.

Consistency with the Clean Air Plan (CAP)

Determining consistency with the adopted Clean Air Plan more appropriately assesses air quality impacts associated with the adoption of a plan or program. Projects deemed inconsistent with the CAP are considered significant.

Impacts

Operational Impacts (General)

The net new square footage and vehicle trips expected under the Master Plan were put into the URBEMIS7G air quality model to determine the potential operational emissions. Model calculation sheets and assumptions are attached as Appendix D.

Unmitigated Emissions (lbs./day)				
	ROG	NOX	СО	PM10
	Operationa	l (Vehicle)		
Residential	10.50	16.17.20	49.09	0.70
Non Residential	19.59	52.21	152.15	2.03
Total (lbs./day)	30.09	69.41	201.24	2.73
Threshold	10	10	50	10
Significant?	Yes	Yes	Yes	No
	Statio	nary		
Natural Gas	0.83	10.7	4.6	0.002
Landscaping	0.27	0.01	1.79	0.01
Total	1.1	10.71	6.39	0.012
Threshold	10	10	50	10
Significant?	No	Yes	No	No

Table 6.21. Unmitigated Operational Air Quality Emissions



Mitigation incorporated into the Master Plan through specific policies and programs will reduce traffic-related impacts to a less than significant level. Examples of these policies include:

- Housing all new enrollment on campus
- Increasing student services on campus to reduce the need for off-campus trips
- Enhanced transit services
- Improved bike and pedestrian pathways
- Restricting freshman automobile use
- Improved parking efficiency

Mitigation is recommended to reduce stationary source emissions to a less than significant level (Class III). <u>Mitigation has been added to the circulation section above to reinforce the Master Plan's objectives for lowering vehicle trips and reducing parking demand</u>. This mitigation will reduce air quality impacts as well.

Parking Structures

Components of the Master Plan most likely to result in operational air quality impacts are the parking structures. One of the significant impacts cited in the 1998 EIR for the first parking structure was air quality, specifically, potential emissions of carbon monoxide (CO) at levels in excess of current standards. Pursuant to mitigation prescribed in the EIR, air quality monitoring for CO levels is taking place at a station near the parking structure. Monitoring will continue for the first year of operation of the structure in order to evaluate compliance with air quality regulations.

Mitigation measures that modify the operations of the garages may be required to maintain the levels below the APCD thresholds. Data from the monitoring of the existing parking structure will be used to evaluate the likely performance and efficient design of the new structures.

Off-campus Housing

The APCD CEQA Handbook states that generally, a minimum of 35 units of single–family residential development is required before the emissions standards are exceeded. As many as 85 units can be developed with mitigation incorporated before impacts are unavoidable. PM10 thresholds are generally exceeded where greater than 4 acres of ground will be graded.

The type and size of the off-campus housing projects is not yet known. Standard measures identified in the Construction Impacts section would mitigate any potential construction impacts if size thresholds are exceeded. It is unlikely that the size of the project will generate operational emissions at a significant level. Residual impacts would likely be less than significant (Class III); however, studies should be completed for the off-campus housing projects prior to construction.

Corporation Yards

The corporation yards will have truck, tractor and other larger equipment activity. According to the APCD CEQA Handbook, light industrial uses such as the corporation yards generally require 9.8 acres in size before operational emissions reach significant levels. The proposal to relocate the corporation yards in the Master Plan, therefore, is considered less than significant (Class III).

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Consistency with the Clean Air Plan (CAP)

Consistency with the CAP is determined by answering the following questions, which are provided in the APCD CEQA Handbook (1997):

- Are the population projections used in the plan equal to or less than those used in the most recent CAP for the same area?
- Is the rate of increase in vehicle trips and miles traveled less than or equal to the rate of population growth for the same area?
 - Have all applicable land use and transportation control measures from the CAP been included in the plan to the maximum extent feasible?

Master Plan Response. The attainment planning projections contained in the CAP include population projections for the City of San Luis Obispo, on-campus student housing at Cal Poly and the county at large. Projected growth within the City of San Luis Obispo is governed by the General Plan, which designates a growth rate of 1% per year. Cal Poly, under the Master Plan, will grow over the next twenty years at a rate of approximately 1.5 percent per year.

The Master Plan projects population growth of 3,000 students and 465 staff over the next twenty years. Projected growth is based partially in response to estimated state growth rates and mandates of the California State University system to provide access to the top one-third of the students graduating from high school in the state. Therefore, growth at the University is largely a response to the University's fair share burden of growth statewide, as opposed to the University growing disproportionately to the rest of the community.

Because the District's attainment planning efforts include projections of future county-wide population levels, land use decisions with the potential to significantly exceed these projections may impede attainment of the State air quality standards or result in a reclassification of the County to a more severe attainment designation. The 1998 CAP projects a 33% increase in countywide population between 1990 and 2010, for an annual average increase of 1.6 percent per year. Under the Cal Poly Master Plan, campus growth will increase over the next twenty years at a rate of 1.5% per year. Since the university's population growth over the next twenty years is not anticipated to exceed countywide growth rates, the Cal Poly Master Plan is considered consistent with the latest CAP.

In addition, the Master Plan absorbs the growth by providing on-campus housing, reducing impacts to the community and reducing vehicle trips to campus. In response to the second criterion for consistency, therefore, the rate of vehicle miles traveled per student will decline under the Master Plan. The greater emphasis on a residential student body and provision of additional services on campus, along with parking permit restrictions, will enable the University to decrease the average vehicle ridership and trip rate.

In addition to parking restrictions and a shift to increased residents on campus, the Master Plan identifies several measures to reduce trips to and from campus. Improved physical access to transit and continued ridership, improved pedestrian walkways and bike access and freshman vehicle restrictions will all help to maintain Cal Poly's admirably high average vehicle ridership. Given the efforts of Cal Poly to absorb anticipated growth and reduce traffic impacts while emphasizing alternative transportation, this analysis finds the Master Plan consistent with the goals and policies of the CAP.

Mitigating Measures

Construction

Mitigation measures for construction related air quality impacts are contained in the last section of this chapter.



Operational Emissions

Stationary source emissions. Cal Poly shall implement the following or similar APCD-approved energy-reducing measures to reduce stationary source emissions:

- Shade tree planting along the southern exposures of buildings
- Building orientation to take advantage of natural light and heating and cooling

Traffic

As discussed above, a number of policies in the Master Plan will reduce the potential for impacts to air quality.

Parking Structures

The following measure shall be implemented to reduce CO hotspot impacts to the extent feasible.

Design. The structures shall be designed with multiple exits in order to reduce the time required to vacate the cars after large events. Walls should be generally open allowing for free passage of outside air through the structure.

Parking Payment Options. Prepayment of parking fees should be considered to prevent vehicle queuing when leaving, which would reduce vehicle startup emissions within the parking structure and associated ambient CO concentrations. Parking fees could be collected through long-term or special event passes.

Reduction of Exit Time. The University shall incorporate the management strategies contained in Section 2 of the Cal Poly Parking & Commuter Services Event Parking Management Plan (Draft) event management for the structures.

Off-campus Housing

Prior to construction, specific air quality studies will be performed for the housing projects to determine their potential impact.

Cumulative Impacts

Implementation of the Master Plan will contribute to non-attainment of ozone precursors when viewed in light of other regional projects. The Master Plan is consistent with the Clean Air Plan and suggested mitigation measures have been incorporated into the plan. However, impacts will remain cumulatively significant (Class I).

Residual Impacts

Residual impacts are less than significant. Cumulative impacts are considered significant and unavoidable (Class I).



NOISE

This section analyzes the potential noise impacts associated with the implementation of the proposed Master Plan.

Existing Conditions

Measurement of Noise

Environmental noise is frequently measured in decibels (dB). The A-weighted decibel (dBA) refers to the human ear's sensitivity to sounds of different frequencies. On this scale, the sound level of normal talking is about 60 to 65 dBA.

Two other measurement scales are used in this EIR: L_{dn} and L_{eq} . L_{dn} refers to the equivalent energy (or energy average) sound level during a 24-hour day, obtained after addition of ten decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m. The L_{dn} is generally computed for annual average conditions. L_{eq} refers to the sound level containing the same total energy as a time varying signal over a given sample period. Thus, the L_{eq} is a single-valued level that expresses the time-averaged total energy of a fluctuating sound level. For example, if 64 dB is measured for 10 minutes, 68 dB is measured for 20 minutes and 73 dB is measured for 30 minutes, the 1-hour L_{eq} is about 71 dB. The L_{eq} is typically computed over 1, 8 and 24-hour sample periods.³

Noise levels are shown on topographic maps by using noise contours (lines indicating a generally uniform level of noise).⁴ Generally, noise levels diminish as distance from the noise source increases. Some land uses are more sensitive to noise than others. Noise sensitive land uses are generally defined as residences, transient lodging, schools, hospitals, nursing homes, churches, meeting halls, office buildings, and mortuaries.

Health Effects of Noise

Excessive noise cannot only be undesirable but may also cause physical and/or psychological damage. The amount of annoyance or damage caused by noise is dependent primarily upon three factors: the amount and nature of the noise, the amount of ambient noise present before the intruding noise, and the activity of the person working or living in the noise source area. Noise impacts can be characterized as auditory or non-auditory. Auditory effects include interference with communication and, in extreme circumstances, hearing loss. Non-auditory effects include physiological reactions such as change in blood pressure or breathing rate, interference with sleep, adverse affects in human performance, and annoyance (see Exhibit 6.9).

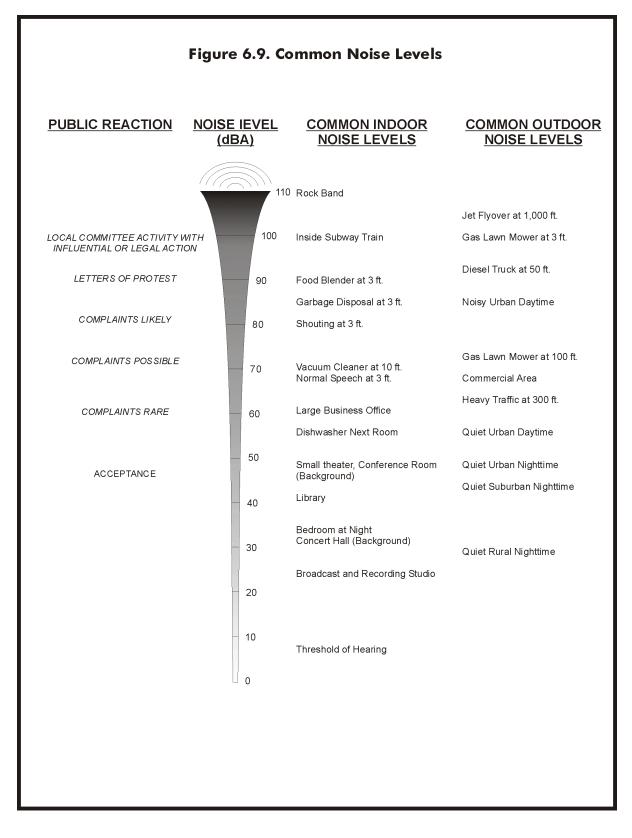
Noise Standards

The County of San Luis Obispo sets appropriate noise levels for various noise-sensitive land uses in the *General Plan Noise Element* (1992). Noise sensitive uses re afforded reduced acceptable noise levels under the Noise Element.

³ County of San Luis Obispo General Plan, Noise Element, County of San Luis Obispo (1992)

⁴ Ibid.

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Significance Thresholds

Cal Poly has not established thresholds for noise exposure or generation on campus. Therefore, the Master Plan has been assessed utilizing the following criteria.

Overall Increase In Community Noise Levels

In assessing community noise (Ldn or CNEL), long-term increases in noise levels of greater than 3 dBA are identified as perceptible, while changes of less than 3 dBA are generally not discernible to local residents or sensitive land uses. For purposes of this EIR, an increase greater than 3 dBA is considered to result in a significant impact.

Impacts

Mustang Stadium

(Note: The likelihood of moving Mustang Stadium is uncertain; to date, there have been no noise studies completed which predict the noise that would be generated from the new stadium. Furthermore, no other component of the Master Plan would require the relocation of Mustang Stadium. The following section describes the potential conflicts on a program level, and relies on future environmental analysis which will be required if the stadium moves to determine the potential impacts. The 1997 EIR and a noise study completed for the existing sports complex by Jones & Stokes Associates after certification of the EIR serve as guidance for the following analysis.)

If Mustang Stadium is moved to the Sports Complex in the northwestern portion of campus at a future date, this change would present a difficult situation in terms of noise. On one hand, the stadium in its existing location is in very close proximity to a number of student and single-family residences. These residences are currently subject to noise during events at the stadium, which may temporarily exceed acceptable noise levels. Movement of the stadium and development of recreational fields will result in less periodic event noise in this area. On the other hand, the stadium, in the new location, may adversely affect noise sensitive residences across Highway 1.

Crowd and public address system noise associated with the Sports Complex was analyzed in the 1997 EIR. The EIR found that stadium noise would not be discernible to residential land uses along Highway 1, Bishops Peak, or the Cal Poly student residence halls. Assuming a worst-case scenario of full capacity of the baseball stadium (2,500 persons) with no attenuation due to the stadiums walls, the EIR found that maximum noise levels would be approximately 80 to 85 dB at 100 feet (including 5.7 dB adjustment factor for 2,500 fans). These noise levels, assuming a uniform 6 dB attenuation rate per doubling of distance, would result in noise levels of approximately 58 dBA (Lmax) in the area of the dormitories and in the residential areas along State Route 1 and Bishops Peak. These noise levels are essentially consistent with existing background noise levels (Ldn) due to traffic, campus and neighborhood activities. While the project's overall impact was considered less than significant, design measures to further reduce any potential noise impacts associated with the project were recommended. Similar mitigation measures are recommended for the Mustang Stadium, should it be relocated. Because the stadium would be considerably larger than the baseball field, specific noise analysis and mitigation is recommended at a future date. It should be noted that the EIR found that the relocation of the stadium would have a beneficial impact on the neighborhood surrounding its current location (Class IV).

The Jones and Stokes study provides the following guidance for expected noise levels at the stadium location:

"The results of the sound level projection analysis and the simulation test indicate that crowd sound and public address sound at levels anticipated from the stadia will not measurably increase A-weighted background sound levels in the neighborhoods of concern under cool, calm, weather conditions with clear skies. They also indicate that sounds from these sources will be barely audible to audible depending on location. In addition, the results of the simulation test indicate that loud music (93-94 dBA and 100 feet) can be distinctly audible at locations



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that have a direct line of sight to the project site and can be barely audible at locations where there is intervening topography or structures. The test results also indicate that public address announcements at a level of 84 dBA at 100 feet can be audible at locations with a direct line of sight to the project site. The predominant winds out of the northeast will tend to increase sound transmission from the project site and could result in distinctly audible crowd and public address sound in the neighborhoods of concern. However, these types of conditions are usually unstable, intermittent, and short term in nature. In addition, temperature inversion conditions and the associated low cloud cover that would tend to increase sound transmission typically occur in July. August, and September and would not typically coincide with use of the stadia."

Highway 1

At the off-campus housing and Goldtree sites, noise constraints to development stem from the highway. The following section describes the noise environment and potential impacts to proposed development from Highway 1 traffic noise.

Off Campus Housing Facilities (North of Highland). By 2005, the County Noise Element predicts that noise sensitive development within 644 feet of the centerline of Highway 1 will face noise levels in excess of acceptable thresholds. Proposed off-campus housing in this area should be sited at least 139 feet from the centerline of the roadway (the location of the 70 dB noise contour) so that noise is reasonably mitigable by building design.

Off Campus Housing (Highland and Highway 1). The County Noise Element (1992) states that by 2005, development within 384 feet of the centerline of Highway 1 at Highland Drive will experience noise exceeding 60 dB. This is the maximum acceptable noise level for outdoor spaces in residential areas. Noise at the proposed site would be diminished because of the grade separation between the roadway and the developable portion of the site. This grade differential could reduce noise at the site by as much as 5 dB.

Interior and exterior mitigation measures are available to reduce the noise level even further. Dual-pane windows, insulation, and building orientation can all effect a reduction in noise. The University should use project design to reduce impacts from noise. Mitigation is recommended to reduce impacts to a less than significant level (Class III).

Operational Noise

Noise associated with the occupancy and operation of most facilities proposed in the Master Plan are considered negligible, and well below thresholds of significance adopted by either the City or County of San Luis Obispo. Operational noise associated with the Master Plan will primarily be associated with vehicular traffic consisting of student-owned automobiles.

Traffic Noise

The main noise source on campus under the Master Plan will be vehicular traffic. The following section analyzes the potential impacts of traffic increases.

Grand Avenue. Additional traffic expected under the Plan on Grand Avenue totals 1,485 ADT, a 12% increase. This corresponds to a decibel increase of less than one, well below the threshold of human hearing; sensitive receptors will not perceive an increase.

Highland Drive. Additional traffic expected under the Plan on Highland Drive east of Highway 1 totals 935 ADT, a 14% increase. This corresponds to a decibel increase of less than one, well below the threshold of human hearing; sensitive receptors will not perceive an increase.

California Boulevard. Additional traffic expected under the Plan on California Boulevard totals 1,870 ADT, a 12% increase. This corresponds to a decibel increase of less than one, well below the threshold of human hearing; sensitive receptors will not perceive an increase.

Additional traffic expected under the Plan on Via Carta and other campus roadways has not been quantified; given increases expected on other streets, however, resulting noise is expected to be less than significant.

Parking Structure

The 1998 Parking Structure EIR found that although periodic annoyances such as horns and alarms create noise above acceptable standards, operation of the structure would not elevate usual ambient noise above acceptable levels. Impacts are therefore, less than significant (Class III).

Cumulative Noise

Cumulative noise impacts will be associated with operational activities, including regional traffic increases and increased activity on campus. Traffic is the quantifiable portion of this increase. Considering increased noise from traffic associated with other City projects and increased enrollment at Cuesta, cumulative noise levels from traffic will be as follows.

Table 6.22. Cumulative Traffic Noise Levels						
Roadway	Existing ADT	Cumulative ADT	Percent Change	Change in Decibels		
Grand Avenue	12,200	15,375	+ 26%	1		
California Boulevard	14,800	18,970	+ 28%	< 1.5		
Highland Drive	6,500	7,835	+ 21%	< 1		
Foothill Boulevard	9,500<u>18,600</u>	11,635 22,735	+ 22%	< 1		
Santa Rosa – North	24,600	27,890	+ 13%	< 0.5		
Santa Rosa - South	33,000	38,855	+ 18%	< 0.5		
Source: ATE, Master Plan Parking and Traffic Study (Appendix C) and San Luis Obispo County Noise Element:						
Technical Reference Document (1992).						

Changes in noise associated with cumulative development would be below the level of hearing for human beings. Impacts are not considered significant.

Mitigating Measures

Mustang Stadium. A specific noise analysis and mitigation plan will be developed for the stadium at the time when the relocation is proposed. Preliminary design recommendations at this time include the following:

- **Public Address System.** In general, speakers should be oriented towards the interior of the stadium and/or directed downward. More speakers with a smaller output dispersed throughout the stadium would have less external noise impacts than a few, louder speakers.
- **Building Orientation.** The stadium should be designed to be oriented away from sensitive receptors. Design should minimize noise directed towards these areas.

Building Noise Mitigation. Off campus housing facilities should be sited to minimize noise and should incorporate acoustic design intended to reduce interior noise to acceptable levels.

Residual Impacts

Residual impacts are less than significant (Class III).

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AESTHETICS

The following discussion identifies the visual impacts associated with implementation of the proposed Master Plan.

Setting

Regional and Community Visual Character

Scenic resources in the campus area include the Morros, especially Bishop's Peak, and the Santa Lucia foothills. These landmarks provide a dramatic backdrop to the university.

Sensitive Visual Corridors

Principal travel corridors are important to an analysis of aesthetics because they define the viewpoint for the largest number of viewers. This section describes the primary travel (viewing) corridors near the Cal Poly area.

Highway 1. Highway 1 is designated a scenic highway by the County of San Luis Obispo and Caltrans. The Morros and the Santa Lucia foothills are readily visible from this roadway. Portions of the campus visible from Highway 1 are limited to agricultural operations that occupy the foreground view for southbound vehicles and brief views of northern campus facilities, including the sports complex currently under construction. Further north, Cal Poly's ranch facilities and crops (e.g., Chorro, Escuela and Walters) are also visible.

Grand Avenue. Grand Avenue provides views of the mountain backdrop to the northeast of the existing dormitories. Views to the west of Grand Avenue are mostly urbanized, consisting of residential uses to the south of Slack Street, and surface parking areas, the Recreation Center and Performing Arts Center to the north. The City of San Luis Obispo's *Circulation Element* (1983) identifies the block of Grand Avenue just south of the entrance to campus as a roadway of "moderate scenic value."

California Boulevard. Views from the campus portion of California Boulevard mainly consist of campus structures, the railroad, and palm and other trees. The campus portion of California Boulevard is considered a roadway of "moderate scenic value" in the City's Circulation Element.

Highland Drive. Highland Drive serves as the main access road for the campus from Highway 1. The roadway provides views of the campus and hillsides towards the east.

Regulatory Setting

The design and aesthetic qualities of all development on the Cal Poly campus are subject to discretionary review by the administration of the University and the trustees of the California State University System. The Cal Poly Campus Planning Committee first reviews development that may affect the visual qualities of the campus. If approved, a project is forwarded to the CSU Chancellor's office for final approval.

Development on Cal Poly land in areas along Highway 1 is subject to guidelines adopted by the County as part of the Scenic Highway designation by California Department of Transportation (Caltrans). Development in areas within 100 feet of this roadway must include sensitive design components to preserve scenic resources and views. County guidelines for this area generally include height and color restrictions as well as requirements for vegetative screening.

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Significance Thresholds

The State CEQA Guidelines state that a project will normally have a significant impact on the environment if it will "conflict with adopted environmental plans and goals of the community where it is located." Therefore, the Master Plan is considered to have a significant aesthetic impact if it can be reasonably argued that:

- a) it would adversely affect a view from a public viewing area (such as diminish the character of the area from an identified park, roadway, or other publicly-accessible property) ; or
- b) it would add new light and glare sources that substantially alter the nighttime environment.

Visual impacts from private residences are generally not considered significant, unless the project would overwhelm an existing view. New sources of light and glare have a significant impact when they create a nuisance, preventing people from using or enjoying their property (for example: new lighting sources interfere with a person's ability to sleep). They are also significant when they pose a safety hazard, such as interfering with pedestrian visibility or driving.

Impacts

Beneficial Impacts

Development of additional greenspace, protected natural spaces, and unified landscaping designs will improve visual quality in the campus core. Enhancement of campus entrances such as Highland Drive and other campus corridors such as Grand Avenue and Highland Drive will improve views for pedestrians and motorists. Restriction of development from steep slopes will minimize adverse impacts to views from City residences. These impacts are considered beneficial (Class IV).

Lighting and Glare

Glare is generated when sunlight is reflected from surface materials at a developed site. Examples of glare sources include asphalt parking lots, glazed surfaces and metallic roofing surfaces. Introduced areas of concrete for expansive exterior walls and glazing would also create new sources of glare. Glare resulting from the implementation of the Master Plan is considered potentially significant. Mitigation measures are recommended to reduce potential impacts to a less than significant level.

Light from campus will be visible to area residences and public vantage points such as Highway 1. Light is not expected to be at a level sufficient to impair visibility for passing motorists or interfere with sleeping patterns; however increased development will result in an overall increase in lighting. Impacts are potentially significant, but mitigable (Class II).

Parking Structures. For security and visibility, parking structures are usually well lit and may adversely impact surrounding residences. This is particularly true for Parking Structure II, proposed for the southwestern corner of campus. Impacts are significant, but mitigable (Class II).

Mustang Stadium. It is unclear whether Mustang Stadium will be relocated to the Sports Complex area within the horizon of the Master Plan. An analysis of impacts from lighting and glare would be required when the stadium is proposed for relocation. Suggested mitigation is included at the end of this section.

Highway 1

Projects potentially impacting views from Highway 1 include the proposed off-campus faculty and staff housing north of Highland Drive, the proposed facilities at Goldtree, and the Bull Test. Impacts are significant, but mitigable (Class II).

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Grand Avenue

Projects impacting views in the Grand Avenue area include the proposed ancillary facilities and low-density student housing near the intersection of Grand Avenue and Slack Street, and the recreational fields proposed to replace the current parking lot area. Removal of the parking lot is considered a beneficial impact; lighting and glare mitigation stated towards the end of this section will reduce impacts to neighborhoods to a less than significant level. Refer to the text of the Master Plan and the environmental consequences cited therein for more information.

California Boulevard

Implementation of the Master Plan would have a beneficial impact on the aesthetics of California Boulevard (Class IV).

<u>Highland Drive</u>

Implementation of the Master Plan would have a beneficial impact on the aesthetic quality of the Highland Drive Corridor (Class IV).

Design Village

If further development is proposed for this area, careful attention should be paid to visual character. This EIR does not attempt to assess visual impact of such development.

TES Tank

Locating the TES Tank on the campus has already been studied in a Mitigated Negative Declaration (1998), and as part of the Student Housing Project review process. Potential environmental impacts associated with the TES Tank are largely visual; eventual placement will require careful planning to minimize visual impacts. This EIR does not attempt to assess these impacts; eventual placement is not well understood.

Mitigating Measures

Lighting and Glare

General. All exterior lighting associated with proposed campus facilities shall be hooded. No unobstructed beam of light shall be directed toward sensitive uses (e.g., Brizzolara Creek, Drumm Reservoir, Environmental Horticultural Sciences (EHS), neighborhoods). The use of reflective materials in all structures shall be minimized (e.g., metal roofing, expanses of reflective glass on west-facing walls).

Parking Structures. All interior lighting associated with proposed parking structures shall be directed internally with lamp "cut-off shields." Unobstructed beams of light shall not be directed toward land uses outside the structure and shall not interfere with vehicular traffic on nearby streets. Examples of specifications for minimizing light and glare include the following:

- All lights must be shielded to avoid glare and light spill-over onto adjacent areas and onto public right-ofway areas;
- Landscape illumination should be done with low level, unobtrusive fixtures;
- Parking structure lighting shall be designed to provide the minimum safe lighting levels. Per IES standards, this is 6 foot-candles (fc) maintained throughout internal to the structure, and 1 fc minimum on the roof;
- The use of reflective materials on the exterior of all structures shall be minimized;
- Internal lightwells will be provided to maximize the amount of natural light;
- Light fixtures will include a vertical component to create an even distribution of light;



- Solid rails shall be included around the perimeter to block light spillage from headlights on cars within the structure; and
- All roof light fixtures shall be located on the interior columns to keep light from spilling out on to adjacent areas, and will include "cut-off" shields.

Mustang Stadium. If Mustang Stadium were to be moved, design shall include measures to reduce light and glare visible to area residents. <u>The stadium will be redesigned from that which is shown in the Heery Plan in order to accomplish the following measures: Examples of specifications include the following:</u>

- All lights must be <u>shielded</u> <u>designed</u> to avoid glare and spillover onto adjacent areas and onto public right of way areas <u>and minimize impacts to adjacent neighborhoods</u>
- The use of reflective materials will be minimized
- Landscape illumination will be accomplished with low-level, unobtrusive fixtures
- Minimum safe lighting levels will be used in adjacent parking and other facilities.

An analysis of the lighting and glare impacts would be required as part of future environmental review for this project.

Highway 1 (Gateway to the City of San Luis Obispo)

City Consultation. Prior to design finalization, the University shall consult with the City regarding the visual impact of the proposed off-campus housing on the City gateway.

Compliance with County Guidelines. If the proposed facilities lie within 100 feet of Highway 1, the bull test and Goldtree facility will comply with County Guidelines for design near scenic highways. In any case, the University shall consult with the County regarding reduction of visual impacts to sensitive areas such as the Highway 1 corridor.

Cumulative Impacts

Cumulative effects of development will vary among areas of campus. Cumulative impacts associated with development proposed in the Master Plan will manifest in both overall lighting and glare levels, and building density.

Building Density

The campus core will be denser, but because it is already largely developed, increases in density should not be as noticeable from a distance. Minimal development is proposed for the outlying ranches; coordination with the City and County regarding off-campus development is recommended in the EIR to reduce impacts.

The extended campus area will experience the most significant and noticeable change. Some previously undeveloped agricultural land, visible from Highway 1 and area residences, will be developed with a variety of campus facilities, and some existing development will increase in height. The net effect of this development will be to alter the existing landscape, while retaining views of the hillsides.

Future development in the City will not impact views of the hills and other landscapes surrounding Cal Poly, because most of this property is in University ownership. Development in the City is subject to discretionary review, which includes an analysis of aesthetic impact. Because views of the hillsides will be retained, and because future development will be consistent with existing campus character and the relatively "built-out" City environment, impacts from building density will be less than significant (Class III).



Lighting and Glare

Cumulative development under the Master Plan will result in an increase in light levels near the City of San Luis Obispo. This will contribute to overall nighttime glow in the area, and may increase the level of light visible to area residences. Glare could also increase as more buildings are developed in the extended core.

The University is situated north and east of the City of San Luis Obispo, a developed urban environment. Because of the dense nature of urban development, nighttime skies are subject to light intrusion and "glow." Cumulative projects within the City and at the University are expected to increase these light conditions.

Glare can also be a concern; buildings and paved surfaces can cause light reflection, which can be a nuisance to area residents and can impair driving safety.

Mitigation included in the EIR reduces the impacts of the lighting and glare to the extent feasible. Impacts are less than significant (Class III).

Residual Impacts

Residual impacts are less than significant (Class III).



PUBLIC SERVICES AND UTILITIES

The following section analyzes impacts to area resources and services.

Existing Conditions

Fire

Until several years ago, the University had its own on-campus fire department. Recently, the University concluded that a more cost-effective approach was to contract for fire protection services with the City of San Luis Obispo Fire Department and the California Department of Forestry (CDF). Cal Poly's contract with the City covers all structures on campus as well as grassland fire suppression up to 450 feet in elevation. Fires that may occur above this elevation fall under the jurisdiction of CDF/San Luis Obispo County Fire Department. Cal Poly retains a Fire Marshall on campus who is responsible for providing fire prevention information.

The City of San Luis Obispo Fire Department has a staff of approximately 48 firefighters. The City's Insurance Service Office rating is 2 on a scale of 1 to 10, with 1 being highest (*Student Housing Project Final EIR*, 1999). The City's high rating is a reflection of the quick response time for fire protection and adequate fire flows.

The Department has four stations strategically located throughout the City to provide the most efficient fire protection coverage. Station No.1 is located near the intersection of Santa Barbara Street, Broad Street and South Street. Station No. 2 is located near Foothill Boulevard and Chorro Street. Station No. 3 is located at the corner of Laurel Lane and Augusta Street. Station No. 4 is at Los Osos Valley Road and Madonna Road. Station No. 2 would provide the first response in case of a fire occurring on campus; current response times are 2 to 2.5 minutes, followed by Station No. 1 with a response time of 3 to 3.5 minutes. These response times indicate time to the campus core. Response times to outlying buildings are expected to be slightly longer. The two CDF stations, which are available to offer backup service through a mutual aid agreement, are located at Highway 1 and Highland Avenue, and at the Airport south of the City.

Police

The University Police Department is responsible for the protection of lives and property within the boundaries and jurisdiction of the Cal Poly campus. In addition, University Police serve a unique role as public safety educators. University police officers are vested with full enforcement capabilities and responsibilities in accordance with the California Penal Code. Current staffing includes one police chief, two sergeants, three corporals and ten officers. The University Police Department also has a Community Service Officer (CSO) program. The CSO Program consists of approximately 30 unsworn student employees who perform numerous routine duties that would normally be handled by patrol officers. The net result of the CSO Program is an increase in the number of patrol hours by police officers. In addition, the Public Safety Department includes parking personnel that may be called upon to perform such services as crowd and traffic control.

The Cal Poly Police Department has a mutual aid agreement with the City of San Luis Obispo Police Department and the County Sheriff's Department. Either of these agencies may be called upon for back-up assistance. If additional aid is needed, the California Highway Patrol can be called in.

The California State University system has a Critical Response Unit (CRU) in place to provide additional law enforcement services. The CRU is comprised of officers from the CSU system throughout the state that can be dispatched to a given campus when a major emergency takes place. CRU can also be brought in when advance notice of an event is provided. Information regarding the University Police Department can be found on the web at: <u>http://www.afd.calpoly.edu/Police/</u>.

A number of factors influence the police staffing needs of the University, including:

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The rural setting of the campus.

Cal Poly is located in a semi-rural setting with a relatively low crime rate. Crime levels tend to mimic those in the surrounding community.

The types of crimes occurring on campus and in the surrounding community, and the incidence of crime.

Historically, most crimes associated with on-campus student housing involve burglary and petty theft. Crime statistics for the years 1995 through 1998 are summarized in Table 6.22. Cal Poly has one of the lowest crime rates of the entire CSU system. For a comparison of universities in California and throughout the United States, see http://www.campussafety.org/information/crimestats/UCR/index.html

Student enrollment and demographics.

The number of students living on campus and the level of involvement by support services such as the CSO and Residence Hall staff.

Currently, the majority of on-campus residents are freshmen living in a residence hall with significant residence hall programmatic involvement. This level of involvement helps minimize problems that require campus police intervention.

Whether alcohol is allowed on campus.

Some universities have adopted a standard of 1.7 sworn police officers per 1,000 students. However, in consideration of the factors described above, Cal Poly has determined that there are an adequate number of sworn officer positions for the current student population (approximately 1.1 officer per 1,000 students).

Crime	1995	1996	1997	1998
Murder/non-negligent	0	0	0	0
manslaughter				
Forcible Rape	2	1	0	0
Robbery	2	1	0	0
Aggravated Assault	1	1	4	3
VIOLENT CRIMES (TOTALS)	5	3	4	3
Burglary	41	32	33	40
Larceny/Theft	464	354	252	250
Vehicle Theft	3	7	8	2
Arson	6	1	1	0
PROPERTY CRIMES (TOTALS)	508	393	292	292
Source: FBI Uniform Crime Reports (http://www.campussafety.org/information/crimestats/UCR/index.html.)				

Table 6.23. Crime Statistics for Cal Poly, 1995-1998

Water

Cal Poly derives its water from groundwater sources and through surface water entitlements. For domestic (non-agricultural) use, the University owns entitlement to 33% of the water in Whale Rock Reservoir or

approximately 13,707 acre-feet. This amount is not available for continuous consumption because a certain level of water must be maintained in the reservoir to avoid a deficit.

The City of San Luis Obispo, which shares the reservoir with Cal Poly, has <u>developed</u> a computer model that assigns allowable yearly withdrawals based on worst-case weather cycle conditions. The model shows that during the 27-year cycle from 1942-1969, approximately 1,384 acre-feet per year (AF/Y) would have been available to the University, and would have drained Cal Poly's allocation during that 27-year period. This allocation does not account for losses due to sedimentation of the reservoir over time; however, this loss of capacity is relatively minor (estimated 2 AF/Y) and has not been documented. This is-remains a very conservative lower limit on consumption. The City of San Luis Obispo's water use from Whale Rock regularly exceeds their worst-case allocation.

Water from Whale Rock reservoir is treated at the Stenner Canyon water treatment facility owned and operated by the City of San Luis Obispo. A portion of the entitlement is diverted prior to treatment for use in landscape and turf irrigation. Peak treatment capacity has been recently expanded to 16 million gallons per day (mgd). Since water is conveyed to the University through the City's treatment plant and distribution system, the actual source of drinking water arriving at the campus may be <u>either</u> Whale Rock Reservoir or Salinas Reservoir. No matter the source, Cal Poly's allotment is still based upon its Whale Rock share.

Agricultural operations on campus derive their water from a number of sources, depending on location. Untreated Whale Rock water is supplied to the Sports Complex, and all agricultural operations east of Mount Bishop Road, via the reservoir system on campus. Agricultural operations west of Mount Bishop Road are supplied by groundwater, namely two shallow wells fed by Stenner Creek. Agricultural operations on the Chorro Creek watershed ranches are supplied by three groundwater wells. The University's understanding and documentation of their water supply is limited to their allocation from Whale Rock; none of the groundwater supplies have been documented.

Two deep water agricultural wells north of Brizzolara Creek supply an additional 450 AF/Y for agricultural irrigation. Irrigation water is stored in three reservoirs on campus with a combined holding capacity of approximately 40 AF. The reservoirs are used to collect rainwater as well as to hold water from Whale Rock until it is needed.

The Sports Complex EIR placed total agricultural allocations at 900 AF/Y because it assumed 449 AF.Y of Whale Rock water was allocated specifically for irrigation and 450 AF/Y was available from other sources. Cal Poly does not currently allocate Whale Rock water in this fashion. Therefore, domestic and agricultural water users compete equally for Whale Rock water. Other sources, as mentioned above, have not been documented, although the well have never run dry or hampered agricultural operations. For the purposes of this EIR, analysis is limited to impacts on the Whale Rock supply, as it is the only known quantity. It is strongly suggested that Cal Poly study their total agricultural water supply prior to expansion or intensification of irrigated agricultural operations.

In recent years, use of Whale Rock water has been split almost equally between agricultural and domestic users. The following table illustrates this division.

<u>Year</u>	Total AF	Percentage/AF Domestic	Percentage/AF Agricultural			
<u>1999-2000</u>	<u>1,130</u>	<u>52%/587</u>	<u>48%/544</u>			
<u>1998-1999</u>	<u>918</u>	<u>57%/525</u>	<u>43%/393</u>			
<u>1997-1998</u>	<u>824</u>	<u>63%/552</u>	<u>37%/272</u>			
Source: Ed Johnson, Cal Poly Facilities Planning						

Table 24. Use of Water From Whale Rock



Current (2000) domestic water use by the University (for non-agricultural purposes) is <u>568–587</u> AF/Y, <u>and</u> agricultural use is currently <u>460-544</u> AF/Y, <u>including and</u> the sports complex. <u>The _and</u>-housing project will add <u>129–56</u> AF/Y, for a total of <u>1,028–1,187</u> AF/Y. Water demand varies considerably; records have shown total consumption as high as <u>1,2281,130</u> AF/Y (199<u>97-19982000</u>), and as low as 792 AF/Y (1992-1993)⁵. <u>The year</u> <u>1999-2000 is considered the worst-case scenario for the purposes of this analysis.</u>

Cal Poly and the City of San Luis Obispo are currently working on a project to recycle wastewater for irrigation of the Sports Complex. The development of this system would reduce demands on the domestic system, which is currently irrigating the Complex at a rate of approximately 73 AF/Y.

Wastewater

The City of San Luis Obispo provides wastewater collection and treatment services to the University through a contractual arrangement. Consequently, Cal Poly owns an equity share of the City's sewer collection and treatment infrastructure. The entire campus ties into a sewer main located near the intersection of California Street and Foothill Boulevard. The City meters wastewater flows and charges the University accordingly.

The City's wastewater treatment plant is located on Prado Road near U.S. Highway 101. Existing plant capacity is 5.1 million gallons per day (mgd). Total citywide flow averages 4.2 mgd, leaving a remaining capacity of approximately 0.9 mgd. By 2015, the City plans to increase the capacity of the treatment plant to 5.8 mgd during dry weather flows and 6.2 mgd during wet weather flows.

Solid Waste

The San Luis Garbage Company provides solid waste disposal service to the Cal Poly campus. Solid waste is disposed of at the Cold Canyon Landfill located approximately 7 miles south of the City of San Luis Obispo on State Route 227.

The landfill recently reached its capacity. To address this problem, the California Integrated Waste Management Board approved an expansion of the facility and construction is currently underway. When completed, the landfill is expected to have sufficient capacity for the County (including the University) for the next 15 years. In the meantime, Cal Poly is required to achieve a 50% reduction in their waste stream through recycling or other means. Cal Poly has been successful at reaching this goal, and plans to continue recycling programs on campus.

Significance Thresholds

Fire and Police

Police and fire protection is evaluated based on the ability of local departments to provide service to the campus. Impacts would be considered significant if the demand created by the Master Plan requires additional facilities or personnel.

Water

Water service impacts are evaluated based on the demands for water created by the Master Plan and the supply available. A significant impact would occur if the amount of water required by the Master Plan would require expansion of existing facilities or construction of new facilities which would have adverse effects on the environment.

⁵ These last two figures were adjusted to include the anticipated 129 AF/Y from the Sports Complex, which was under construction at the time of this analysis, and the Student Housing Project, which was being permitted.



Wastewater

Impacts to wastewater service are considered significant if either 1) Master Plan implementation would cause the City of San Luis Obispo's wastewater treatment capacity to be exceeded or 2) if sewage conveyance infrastructure is inadequate to handle Master Plan-related demands, and expansion would have an adverse impact on the environment.

Solid Waste

Impacts to solid waste are considered significant if the garbage-collecting agency would not be able to service the campus or if the amount of garbage generated by the campus would substantially reduce landfill capacity. Impacts are also considered significant if flows would exceed state mandates for waste stream reduction.

Impacts

Beneficial Impacts

The University is currently working with the City to establish a system using reclaimed water to irrigate the Sports Complex. Use of reclaimed water would have a beneficial impact on Cal Poly's domestic water supply.

Continuation of the Cal Poly recycling program, which has been successful at meeting state mandates, will continue to be beneficial in its reduction of the waste stream.

Fire

Facilities proposed in the Master Plan would place additional structures, life and property at risk for damage or destruction from wildland fires. This applies particularly to development proposed along the eastern edge of campus adjacent to grassland areas.

Implementation of the plan is not expected to require additional fire protection equipment or personnel to maintain fire safety. The recent installation of the campus Utilidor has greatly improved fire protection capabilities, and the requirement for fire sprinklers in all new construction further reduces the risk of fire. This impact is considered less than significant (Class III).

Implicit in this conclusion is that adequate access for fire fighting equipment and personnel are provided to the campus and that adequate fire flow (hydrant production) is available. To adequately address access for fire protection, projects proposed in the plan must be designed consistent with emergency access requirements of the CDF. The Master Plan specifically addresses emergency access in the Circulation Improvement Element. Impacts are less than significant (Class III).

Police

General. Implementation of the Master Plan would increase the demand for police protection. More student residents will require police protection and deterrence. To maintain the current ratio of police officers to student residents, approximately 3.3 additional officers would be required. The campus police are currently working on a Master Service Plan that addresses current deficiencies in the department. Currently, there are no plans to hire new additional staff. Mitigation is required to maintain acceptable service levels.

Personal Safety. The Master Plan will result in an increased need for personal safety services and facilities. Personal safety facilities include lighting, telephones, and other design features that provide for the personal safety needs of students. Policies in the Master Plan specifically state that all proposed development will include consideration of personal safety in design. This impact is considered less than significant (Class III).



Goldtree. The development of this site will require the extension of campus police service into a previously unserved area. Careful coordination will be required during the planning phase of this project to determine impacts to this and other public services.

Water

The Master Plan is expected to result in an additional 3,000 student residents and 465 additional faculty and staff. The Plan will also result in approximately eleven acres of additional recreational fields, and approximately nine acres of green space (non-athletic turf). Water demand factors from apartment-style housing facilities at the University of California Santa Barbara campus were used to project water demand in the residence halls. City and County water demand factors were used to calculate staff (office) demand. Water demand for landscape irrigation was based on current per acre usage at the University. Total projected demand, compared with existing use and the University's total domestic Whale Rock water allocation is summarized in Table 6.23 <u>25</u> below.

Use	Number	Water Demand Factor	Total Water Usage (AF/Y)
Current Domestic Usage (Agricultural,			<u>5681,130</u>
Domestic, and Sports Complex)			
Sports Complex & Student Housing Project			129 56
Projected Usage under the Master Plan			
Future Resident Students (Apartments,	3,000 persons	0.09 AF/Y	263
Landscaping + Laundry)	-		
Future Staff/Faculty	465 persons	20 gpd	10.4
Future Recreation Fields	11 acres	29 in<u>1.4 AF</u>/yr/acre	26.5 15.4
Future Greenspace (Lawns)	9 acres	29 in 1.4 AF/yr/acre	22 12.6
Future Facilities (Off campus –estimate)			70
Total Master Plan <mark>Domestic-</mark> Demand			1,089 1,557
Agriculture			460
Total Master Plan Demand			1,549
Total (Worst-case) Supply			1,384
Remaining Water Entitlement (Deficit)			(165) (173)
Source: Ed Johnson, Utilities Coordinator, Cal Po	oly, 2000 and City	of San Luis Obispo Water D	Demand Factors

 Table 6.25: Master Plan (Current + Future) Estimated Whale Rock Water Demand

City of San Luis water supply models show that during worst-case weather cycle conditions, Cal Poly demand would exceed supply. During normal rain years, it is likely that considerably more water would be available to Cal Poly; impacts are significant, but mitigable (Class II).

Off-campus facilities. The Goldtree facility and off-campus housing could use approximately 70 AF/Y. Impacts to services associated with these projects will need to be assessed at such time that more information is available.

Wastewater

The Master Plan would increase wastewater generation on campus and could adversely impact the wastewater collection system serving the University. The Master Plan could also impact the capacity of the City's wastewater treatment plant.

The potential increase in wastewater associated with the Master Plan could reach 0.159 million gallons per day, based on 3,000 student residents generating 50 gallons of wastewater per day. Additional faculty and staff proposed under the plan may generate as much as 9,300 gallons per day for a total of 0.168 million gallons per day.

Cal Poly Master Plan

Cal Poly is entitled to 0.471 mgd of treatment at the City plant. Cal Poly currently averages 0.323 mgd. The plant is planning to increase capacity to 5.8 mgd average dry weather flow. As part of this expansion, Cal Poly's entitlement will be increased. Impacts on the system will be less than significant (Class III).

The University's wastewater collection infrastructure is currently operating well below capacity (1.2 mgd); however, storm runoff often exceeds this capacity. The Public Facilities and Utilities Element of the Master Plan calls for improvement of the stormwater system, which should decrease the impact on the collection system. Impacts related to infrastructure collection are therefore considered less than significant (Class III).

Solid Waste

New residents and staff will generate additional solid waste, which will continue to adversely impact landfill capacity. Because Cal Poly will continue to state mandates for waste stream reduction, impacts are less than significant (Class III).

The development of the Master Plan would increase overall solid waste to be disposed of at the Cold Canyon Landfill. The Landfill is currently undergoing a comprehensive expansion to meet the needs of the County for another 15 years. Impacts are considered less than significant (Class III).

Cumulative Impacts

Fire

Fire service is funded in part by developer's fees and statewide monies. Cumulative impacts to service will be mitigated in part by additional funds paid by area developers. Personnel allocations are decided on a county and statewide basis, a process over which the University exerts no control. Impacts are less than significant (Class III).

Police

Implementation of the Master Plan will mainly impact the campus police force. Other, cumulative growth will not affect this service. Cumulative impacts are significant, but mitigable (Class II).

Water

Cumulative growth in the City of San Luis Obispo will place additional strain on Whale Rock Reservoir. During drought, the burden would be intensified. The City is exploring means to expand their water supply; Cal Poly is projected to remain within their allocation, with the implementation of mitigation below. Cumulative impacts are significant, but mitigable (Class II).

Wastewater

The wastewater system serving the campus and the City is undergoing expansion to increase capacity. Proposed expansions should be sufficient to meet needs of the University and the City of San Luis Obispo.

Solid Waste

The Cold Canyon landfill is currently undergoing expansion to increase capacity to serve the area for the next fifteen years. The University will continue to meet the state-mandated 50% reduction in the waste stream through continuation of the recycling program. Impacts are less than significant (Class III).



Mitigating Measures

Police

The University will provide for at least the equivalent of 3.3 additional police personnel to serve the anticipated growth. The University will work with the campus police to determine an adequate level of service ratio for the campus and will plan for provision of needed personnel.

Water

Because future water demand will begin to tax the University's supply of Whale Rock water, the following programs should be instituted:

- Water Conservation Program. The University should develop a program designed to reduce overall water consumption on campus. The program will incorporate water-saving fixtures into new development, retrofit older facilities over time, and modify landscaping irrigation requirements.
- **Drought contingency plan**. As part of implementation of the Master Plan, the University will draft a drought contingency plan to address potential water shortages associated with extended drought conditions.
- Additional Water Supply. The University should investigate the availability of additional water supplies over the next twenty-year horizon.

Residual Impacts

Residual impacts are less than significant.



CONSTRUCTION IMPACTS

The following section analyzes temporary impacts that will result from construction of proposed buildings and other facilities indicated in the Master Plan.

Setting

Construction activities generally have impacts on air quality, the ambient noise environment, circulation, and water quality. These impacts may be restricted to the immediate campus environment, or they may influence exterior conditions.

Aesthetics

Visual impacts associated with construction stem from clearance of vegetation, staging of equipment and materials and the subsequent construction process. Impacts are more pronounced in sensitive areas such as the Highway 1 corridor and gateways to the City.

Air Quality

Air quality impacts from construction typically take the form of dust and equipment emissions. Dust, or PM10, is associated with earth moving and grading activities, as well as excavation. Equipment emissions are usually measured as oxides of nitrogen (NOx), from combustion engines. Effects of these air pollutants are described in the "Air Quality" section.

Biological Resources

Construction activities, particularly land clearing, may have direct or indirect effects on sensitive species and their habitat. Direct impacts include removal of vegetation, while indirect impacts may include erosion and stream sedimentation.

Hydrology and Water Quality

Land disturbance during grading and clearing may increase the potential for erosion and deposition of sediment in surface water systems. Fuel and other hazardous materials present during construction may spill and adversely affect waterways as well.

Noise

Noise from construction activities varies depending on the phase of construction and the equipment used; land clearing, excavation and grading are generally the loudest. At 50 feet from the source, equipment noise levels range from 75 to 95 dBA for tractors, up to 87 dBA for compressors, and up to 98 dBA for jackhammers. Peak noise levels range from 90 to 95 dBA during demolition, and 75 to 90 dBA during grading and other construction. Trucks hauling materials to and from the site also generate noise.

Traffic and Circulation

Construction-related traffic impacts stem from increased vehicle trips from workers, delays associated with slowmoving equipment, and lane closures and detours. Some projects will also involve temporary losses of parking spaces and relocation of transit stops.



Regulatory Setting

Air Quality. Refer to the portion of this chapter entitled Air Quality; the San Luis Obispo Air Pollution Control District (APCD) governs air quality locally.

Biological Resources. Construction impacts to resources are governed by the California Department of Fish and Game (CDFG) through Streambed Alteration Agreements, Section 404 permits from the Army Corps of Engineers (ACOE) and the Endangered Species Act. Refer to the Biology portion of this chapter for further explanation of regulations.

Hydrology and Water Quality. Refer to the Hydrology and Water Quality portion of this chapter; the Regional Water Quality Control Board (RWQCB) regulates water quality. NPDES permits and Stormwater Pollution Prevention Plans (SWPPP), drafted for projects disturbing more than five acres, most commonly regulate water quality impacts stemming from construction.

Noise. Refer to the portion of this chapter entitled "Noise"; Cal Poly has not adopted noise standards for the campus; the City and County Noise Elements serve as guidelines for determining impact significance.

Traffic and Circulation. Impacts to City roadways and state highways must be coordinated with City and Caltrans officials, respectively. Transit service is coordinated with the City and CCAT. Campus Safety regulates internal circulation.

Significance Thresholds

Aesthetics

If construction activities will substantially affect views of a scenic area visible to the general public (e.g., Highway 1 scenic hillsides), impacts are considered significant.

Air Quality

The following are guidelines for determining the significance of air quality impacts from construction. Impacts are considered significant if any of the following criteria are met.

Three	Mitigation		
Reactive Organic Compounds	Oxides of Nitrogen	PM10	Required
 > 185 lbs/day or 2.0 to 6.0 tons/quarter or > 400,000 cubic yards of material/quarter or > 15,000 cubic yards of material/day 	 > 185 lbs/day or 2.0 to 6.0 tons/quarter or > 50,000 cubic yards of material/quarter or > 2,000 cubic yards of material/day 	> 2.5 tons/quarter or > 4.0 acres of graded area	Best Available Control Technology for Construction Equipment (CBACT)

Table 6.26: SLO APCI) Threshold	Criteria for	Construction
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Threshold By Pollutant			Mitigation
Reactive Organic Compounds	Oxides of Nitrogen	PM10	Required
> 6.0 tons/quarter or > 970,000 cubic yards of material/quarter	 > 6.0 tons/quarter or > 125,000 cubic yards of material/quarter 		CBACT plus further mitigation which may include offsets

Hydrology and Water Quality

Impacts to water quality are significant if construction activities would adversely affect area waterways.

Noise

Construction noise is considered a temporary nuisance; for the purposes of this analysis, construction noise exceeding the ambient background level by more than 10 dB is considered a short-term adverse impact.

Traffic and Circulation

Impacts to traffic and circulation would be significant if a project resulted in substantial additional traffic, if normal circulation patterns would be substantially impeded, or if levels of service were reduced in the long term.

Impacts

Aesthetics

Campus. Construction equipment will be temporarily visible to internal campus viewers. Some off-campus viewers may also have temporary views of construction equipment. This impact is less than significant (Class III). Views of this area are minimized by intervening structures and overall building density. It is unlikely that construction activities will be highly visible to the off-campus public.

Off-campus. Properties proposed for development off campus border Highway 1, a scenic highway, and the northern gateway to the City. Mitigation will reduce impacts from construction in these areas to a less than significant level (Class III).

Air Quality

Toxic Substances. Demolition of some existing buildings may expose persons to asbestos and lead. By law, the University must identify which buildings may contain asbestos or lead and therefore require special demolition and disposal techniques. Properly handled, these materials will not pose a threat to humans or the environment. Impacts from hazardous materials are therefore considered less than significant (Class III).

Dust (PM10). Dust generation is often a function, in part, of soil disturbance associated with site preparation (e.g., grading). The APCD generally considers dust generation significant if the project will involve continuous disturbance of four or more acres. Applicable thresholds will likely be exceeded, therefore, any time total grading activities on or off campus exceed 4 acres. If final phasing of the projects shows that the four-acre threshold will not be exceeded, mitigation will not apply.

Equipment Emission (NOx). Construction will also result in emissions from equipment that will take the form of ozone precursor NOx. If any total campus or off-campus construction activities move greater than 50,000 cubic yards of material per quarter or greater than 2,000 cubic yards per day, mitigation will be required.



EINAL ENVIRONMENTAL IMPACT REPORT 324 Construction Impacts Not enough is known about the construction of each plan component to conduct air quality modeling. Based on modeling completed for the 800-bed student housing project (1999), it is assumed that construction emissions from the larger H-1 and H-2 projects would exceed the APCD's significance thresholds for NO_x and PM_{10} and would be considered a significant impact. Emissions thresholds would also be exceeded by development at the Goldtree site, the off campus housing sites, and the Grand and Slack housing sites because these locations are currently undeveloped and would require substantial grading.

Biological Resources

Construction and operation of facilities may have adverse effects on special-status plant and animal species. The Chorro, Stenner, and Brizzolara Creek corridors provide habitat for special-status plant and animal species. Facilities proposed for these areas have been designed to avoid direct disturbance of the creek corridor; however, road crossings and creek restoration activities will have direct impacts on the corridor. Moreover, construction of facilities near these corridors may have indirect impacts on these species through site disturbance and erosion. Impacts are significant, but mitigable (Class II).

Hydrology and Water Quality

Chorro, Stenner and Brizzolara Creeks. Construction may increase the potential for erosion and subsequent sedimentation of the creeks.

Other Drainage Channels (Grand/Slack, Drumm Reservoir area). Construction activities may adversely affect the drainage channels on these sites by temporarily increasing the potential for erosion. At Grand Avenue and Slack Street, the northern channel will need to be filled to accommodate development.

The drainage channels bisecting these sites most likely constitute wetlands or Waters of the U.S., subject to Army Corps regulation. Projects on these sites have been designed largely to avoid the channels; however direct effects to the northern channel at Grand Avenue and Slack Street, and indirect effects stemming from construction and site disturbance may occur. Mitigation is recommended to reduce the potential for adverse effect.

Brizzolara Creek - Other Direct Alterations

Via Carta crosses Brizzolara Creek before its intersection with Highland Drive. The Master Plan proposes improvements to this roadway. Impacts to the creek during construction and operation are mitigated by measures identified for creek enhancement projects in the Biological Resources section of the EIR and would reduce impacts to a less than significant level (Class III).

Riparian Enhancement

Although enhancement of riparian corridors is designed to result in overall improvements to biologic and hydrologic quality, immediate impacts of excavation, vegetation removal, and other activities may be adverse. Brizzolara and Stenner Creek are known to contain sensitive plant and animal species that may be negatively affected by such activities. Careful planning of such programs is necessary to avoid impacts to species and water quality. Regardless of immediate effects, the net impact of enhancement efforts will be beneficial.

Enhancement programs outlined in the Natural Environment Element of the Master Plan will require the approval of the California Department of Fish and Game (Streambed Alteration Agreement), the Army Corps of Engineers (under Section 10 of the Clean Water Act), and the Regional Water Quality Control Board. Although these agencies will largely dictate the scope and requirements of the enhancement, mitigation is recommended to aid in the reduction of impacts.

After completion, the enhancement projects will result in a net benefit to riparian vegetation and fisheries habitats (Class IV).

Noise

Noise levels will temporarily exceed acceptable thresholds in most construction projects. Impacts are significant, but mitigable (Class II). General construction noise mitigation included at the end of the section would mitigate noise to less than significant levels (Class III).

Noise from equipment would be created throughout the construction of proposed projects, with the noisiest period during site preparation (grading, excavation, etc.). Most projects proposed in the Master Plan are proximate to noise-sensitive uses internal and external to the campus, and construction would temporarily impact such areas.

Traffic and Circulation

During construction, pedestrian and vehicle flows will be interrupted and safety may be reduced. This impact is significant, but mitigable (Class II).

Construction equipment and workers will periodically conflict with the normal flow of traffic in areas. Mitigation for noise impacts at the end of this section includes a requirement to designate a haul route and staging plan for review by the University. The haul route must also have the purpose of avoiding conflicts between equipment and pedestrians and vehicles. Other traffic inconveniences may be addressed by mitigation.

Mitigating Measures

Aesthetics

Off-campus Projects. Construction at the Goldtree and off-campus housing facilities will locate stockpiling and staging areas shall be located out of view where feasible

Air Quality

DUST CONTROL

- A. Employ measures to avoid the creation of dust and air pollution.
- B. Unpaved areas shall be wetted down, to eliminate dust formation, a minimum of twice a day to reduce particulate matter. When wind velocity exceeds 15 mph, site shall be watered down more frequently.
- C. Store all volatile liquids, including fuels or solvents in closed containers.
- D. No open burning of debris, lumber or other scrap will be permitted.
- E. Properly maintain equipment to reduce gaseous pollutant emissions.
- F. Exposed areas, new driveways and sidewalks shall be seeded, treated with soil binders, or paved as soon as possible.
- G. Cover stockpiles of soil, sand and other loose materials.
- H. Cover trucks hauling soil, debris, sand or other loose materials.
- I. Sweep project area streets at least once daily.
- J. Appoint a dust control monitor to oversee and implement all measures listed in this Article.
- K. The Contractor shall maintain continuous control of dust resulting from construction operations. Particular care must be paid to door openings to prevent construction dust and debris from entering the adjacent areas.
- L. When wind conditions create considerable dust, such that a nuisance would generate complaints, the Contractor shall either suspend grading operations, and/or water the exposed areas.
- M. Water down the project site, access routes, and lay down areas whenever generate dust becomes a nuisance.

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- N. The campus reserves the right to request watering of the site whenever dust complaints are received.
- O. It shall be the University's sole discretion as to what constitutes a nuisance.

In addition to the measures listed above, CMCM recommends the following be added to standard construction contracts:

EQUIPMENT EMISSION CONTROL

To the extent feasible, the applicant shall utilize newer construction equipment (manufactured after 1990) that produces fewer emissions, especially for the highest emitting pieces of diesel-fired heavy equipment. In any case, all equipment shall be properly tuned and maintained. Additional measures that would reduce construction-related emissions include, but are not limited to:

- Retarding fuel injection timing two degrees from the manufacturer's recommendation.
- Using high-pressure fuel injectors.
- The use of reformulated diesel fuel.
- The use of Caterpillar pre-chamber, diesel-fired engines (or equivalent low NO_x engine design) in heavy equipment used to construct the project to further reduce NO_x emissions.
- The project shall require that all fossil-fueled equipment shall be properly maintained and tuned according to manufacturers specifications.
- The project proponent shall require that all off-road and portable diesel-powered equipment including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, shall be fueled exclusively with CARB certified diesel fuel.
- During construction activities at each of the locations identified above where equipment emissions are projected to exceed the District's thresholds, the project proponent shall install catalytic soot filters on the two pieces of equipment (per site) projected to generate the greatest emissions. Where the catalytic soot filters are determined to be unsuitable, the project proponent shall install and use an oxidation catalyst. Suitability is to be determined by an independent California Licensed Mechanical Engineer who will submit for District approval, a Suitability Report identifying and explaining the particular constraints to using the preferred catalytic soot filter.

DUST CONTROL

Dust generated by construction activities shall be kept to a minimum by full implementation of the following measures:

- <u>___</u>During construction, the amount of disturbed area shall be minimized.
- Onsite vehicle speeds should be reduced to 15 mph or less;
- <u>Exposed</u> ground areas that are left exposed after project completion should be sown with a fastgerminating native grass seed and watered until vegetation is established;
- → After clearing, grading, earth moving, or excavation is completed, the entire area of disturbed soil shall be treated immediately by watering or revegetating or spreading soil binders to minimize dust generation until the area is paved or otherwise developed so that dust generation will be minimized;
- All roadways, driveways, and sidewalks associated with construction activities should be paved as soon as possible. In addition, building and other pads shall be laid as soon as possible after grading, unless seeding or soil binders are used.

Hydrology and Water Quality/Biology

Construction drainage plan. Prior to construction, the contractor shall draft a drainage and activity plan to protect channels on the Goldtree, Grand/Slack, H-1, H-2 and H-3 housing sites, Highland Drive, Parking



Structure III and the Brizzolara Creek Enhancement Projects and their associated habitats. The plan will emphasize avoidance, and erosion and runoff control. The University will consult with appropriate jurisdictional agencies prior to activity.

Grand/Slack – **northern drainage.** The University will consult with the Army Corps of Engineers well in advance of construction to determine permitting requirement.

Brizzolara Creek – Other direct alterations.

Develop, for each enhancement project and other direct alteration, a set of performance standards, incorporating the following requirements:

- Timing Highly invasive activities shall be scheduled to avoid breeding and nesting periods of sensitive species, including steelhead, and southwestern pond turtle
- Erosion control Erosion of banks and streambed will be minimized through approved methods (per agencies listed above)
- Revegetation Disturbed areas shall be revegetated with native species to provide nesting habitat, and connections to adjacent areas for migration

The university shall consult with appropriate jurisdictional agencies prior to construction activity.

Noise

Cal Poly shall apply the following during construction:

Cal Poly Standard Requirements

- A. The requirements of the Article are in addition to those of Article 4.02 of the Contract General Conditions.
- B. Maximum noise levels within 1,000 feet of any classroom, laboratory, residence, business, adjacent buildings, or other populated area; noise levels for trenchers, pavers, graders and trucks shall not exceed 90 dBA at 50 feet as measured under the noisiest operating conditions. For all other equipment, noise levels shall not exceed 85 dBA at 50 feet.
- C. Equipment: equip jackhammers with exhaust mufflers and steel muffling sleeves. Air compressors should be of a quiet type such as a "whisperized" compressor. Compressor hoods shall be closed while equipment is in operation. Use electrically powered rather than gasoline or diesel powered forklifts. Provide portable noise barriers around jack hammering, and barriers constructed of 3/4-inch plywood lined with 1-inch thick fiberglass on the work side.
- D. Operations: keep noisy equipment as far as possible from noise-sensitive site boundaries. Machines should not be left idling. Use electric power in lieu of internal combustion engine power wherever possible. Maintain equipment properly to reduce noise from excessive vibration, faulty mufflers, or other sources. All engines shall have properly functioning mufflers.
- E. Scheduling: schedule noisy operations so as to minimize their duration at any given location, and to minimize disruption to the adjoining users. Notify the Trustees and the Architect in advance of performing work creating unusual noise and schedule such work at times mutually agreeable.
- F. Do not play radios, tape recorders, televisions, and other similar items at construction site.
- G. When work occurs in or near occupied buildings, the Contractor is cautioned to keep noise associated with any activities to a minimum. If excessively noisy operations that disrupt academic activities are anticipated, they must be scheduled after normal work hours.
- H. All work in the area of the residence halls will be restricted to 10:00 a.m. to 10:00 p.m., seven days per week, throughout the year. No work will be allowed in the residence hall areas during the finals week. University reserves the right to stop construction work, including but not limited to noisy work, during the following events: Spring and Winter Commencement, Open House, Finals Week, residence hall move-in,



or at other times that may be identified by the University. University reserves the right to stop noisy work at any time when said work disrupts classes or other planned events.

In addition to these standard measures, the following measures are recommended:

- A haul route plan shall be prepared for review and approval by the University that designates hall routes as far as possible from sensitive receptors.
- Stockpiling and vehicle staging areas shall be located as far as practical from occupied structures.
- Whenever practical, the noisiest construction operations shall be scheduled to occur together in the construction program to avoid continuous periods of noise generation. Scheduling of noisier construction activities shall also take advantage of summer sessions and other times when classes are not in session.
- Project construction activities that generate noise in excess of 60 dB at the project site boundary shall be limited to the hours of 7 a.m. to 6 p.m.

Pile Driver Use. If possible, the use of pile drivers shall be minimized in construction. Alternative techniques that produce less noise, such as drilled or bored piles, shall be considered.

Traffic and Circulation

Circulation Plan. Where vehicle and pedestrian routes and residential areas conflict with construction activities, a circulation plan will be developed, which will include warning signs and detours, as well as efforts to minimize noise in residential areas.

Residual Impacts

Mitigation included above would reduce most impacts to a less than significant level; however, it is likely that the H-1 and H-2 projects, as well as the Goldtree facility would continue to exceed air quality emissions thresholds and remain significant (Class I).



OTHER CEQA SECTIONS

Growth-inducing Impacts

The CEQA Guidelines (Section 15126(g)) require that an EIR evaluate the growth-inducing impact of a proposed action. The Guidelines define a growth-inducing impact as "the way in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are [public works] projects, which would remove obstacles to population growth. Growth is not assumed to be necessarily beneficial, detrimental, or of little significance to the environment."

The environmental effects of a proposed project's induced growth are secondary or indirect impacts. Secondary effects of growth can result in significant increased demand on community and public service infrastructures, an increase in traffic, noise, degradation of air and water quality, and agricultural land conversion to urbanized uses.

The Master Plan's policies and land use categories would guide future growth on campus and the surrounding ranches through the year 2020. Growth proposed under the Plan occurs mainly in the residential student population (3,000) and faculty and staff (465). By housing the additional students on campus, and providing an increased level on on-campus services, the University attempts to reduce the impact on local communities. The proposed increase in the residential population will help alleviate the need for additional student housing in the City, and the resulting need for substantial additional off-campus services. Some incidental services (e.g., gas stations) may be needed to accommodate the proposed student increase, but the overall impact upon the surrounding community will be diminished.

Implementation of the Master Plan would require and attract additional faculty and staff who would likely settle in San Luis Obispo County. This would result in some additional housing demand or occupation of existing housing, and a need for additional services.

Overall, the proposed Master Plan provides a strategy for accommodating University growth and many policies that encourage orderly growth and provide for reduced impact on the local community and the environment.

Significant and Unavoidable Impacts if The Master Plan is Implemented

According to Section 15126(b) of the CEQA Guidelines, the purpose of this section is to "describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described."

The significant effects of the proposed Master Plan are identified in each element of this document. Mitigation measures identified in those sections would reduce all of the significant impacts to a less than significant level, except for impacts associated with construction and cumulative operational air quality.

Significant Irreversible Environmental Changes

Section 15126 of the CEQA Guidelines requires that an EIR identify any significant irreversible changes associated with a proposed project. Such changes typically include use of non-renewable resources or land use changes that would preclude other types of development in the future.

Continued development of the campus in accordance with the Master Plan would result in a permanent change as development continues on land that is presently vacant, used for agricultural purposes, or underutilized. Although these changes will be permanent, they are not considered adverse. The irreversible commitment of non-renewable resources includes, but is not limited to:

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EINAL ENVIRONMENTAL IMPACT REPORT 330 Other CEQA Sections

- I. The conversion of vacant land to urban uses within existing developed areas.
- II. The conversion of agricultural land to non-agricultural uses.
- III. The consumption of building materials for roads, structures and infrastructure.
- IV. The continued use of energy resources for heating and transportation.

None of the secondary impacts of increased urbanization is considered a significant irreversible adverse environmental impact. Agricultural land proposed for conversion is not considered prime and is currently used for grazing or pasture.

Impacts Found Not to be Significant

It was determined that the Master Plan would not result in adverse environmental impacts to the following issue areas. Therefore, no further assessment of these issues is provided in this document.

- Hazardous Materials
- Mineral Resources
- Recreation

Risk Of Upset

Hazardous substances are routinely used or stored on campus. Hazardous materials include laboratory chemicals and agricultural fuels. The campus maintains a Hazardous Materials Management and Response Plan that addresses the handling of and risks associated with hazardous materials. The Master Plan does not propose storage or use of new hazardous materials that would not be addressed by the existing Management Plan. Risk of upset is considered less than significant.



ALTERNATIVES

Introduction

In accordance with Section 15126(d) of the *CEQA Guidelines*, this section analyzes a range of reasonable alternatives to the proposed Master Plan. The *CEQA Guidelines* specify that the alternatives should be designed to feasibly attain the basic objectives of the proposed project while reducing or eliminating significant adverse impacts. A feasible alternative is one that can be "accomplished within a reasonable period of time, taking into account economic, legal, social and technological factors" (Public Resources Code, Section 21061.1 and the *CEQA Guidelines*, Section 15364).

Alternatives to the Master Plan analyzed in this section may be grouped into two categories: alternatives to the entire Master Plan, and alternatives to specific plan components. Both are discussed below.

Because the plan is a complex combination of many components, broad alternatives to the entire Master Plan are of limited utility. In fact, each of the alternative enrollment scenarios discussed below is a component contained within the proposed Master Plan. The purpose in examining the alternative scenarios in isolation is to understand their relative merits and weaknesses for achieving the objectives of the Master Plan and with regard to their impacts on the environment. The more productive alternative analysis has been to examine several of the major components of the Master Plan, especially housing and parking. These result in the most serious environmental consequences, and isolating them is more productive for understanding those consequences. Additional commentary on alternatives examined during the course of the plan preparation can be found in marginal notes throughout the text.

Description and Analysis of Alternatives

The alternatives to the proposed plan or plan component are described and analyzed below. Impacts associated with each alternative are discussed if they would result in lesser or greater impact than the proposed plan or component. If a particular issue is not highlighted within this section, it is to be assumed that the impact is similar.

Alternative Enrollment Scenarios

During the development of the Master Plan a large number of alternative approaches to enrollment increases were studied. The Master Plan contains all of these elements to a degree. The discussion below is for comparing the relative impacts of these components when viewed in isolation.

Student Progress. This involves increasing the number of students who graduate and reducing the time in which they complete their studies. Achieving this goal is largely an administrative task involving counseling, curriculum changes, and better student tracking. It will likely require subtle modifications in classroom and other academic allocations, perhaps necessitating additional facilities. It is this latter requirement that is likely to have the most impacts, mostly related to construction. This approach has minor environmental impacts. In fact, increased student progress should result in fewer actual students on campus, as head count would move closer to FTE. Lower head count results in fewer automobiles, lower air quality impacts, less demand on services and other related issues.

Distributed Teaching and Learning. This allows more students to utilize campus facilities without residing or coming to the University. This is achieved using technology, especially distance learning (televised classrooms) and the Internet. Developing the infrastructure required to accomplish this approach would have minimal environmental impacts. New equipment, classroom modifications and wiring are the most significant physical attributes of this scenario.



Year-round Operations. This would mean an increase in the summer enrollment, perhaps as high as 40% of quarterly capacity, which is the goal of the Chancellor's office system-wide. The year-round operations would require very few modifications of the campus physical plant to operate. The one serious impediment to summer quarter is the lack of air conditioning (natural or mechanical) in most of the facilities.

Although there would be little modification required to accommodate additional enrollment in the summer, there would be impacts on the community. San Luis Obispo currently operates on a pattern of having students in town during three academic quarters, with most of them departing during the summer. This coincides with a marked increase in tourism during the summer weeks. The combination of more students and increased tourism would put greater stress on area roadways, housing market and services.

Increase Enrollment During the Academic Year. This scenario involves increasing the number of full-timeequivalent students on campus. This results in the greatest demands on the physical plant as well as the largest amount of development needed to accommodate the increased population on campus. Virtually every category of environmental issue would see significant impacts requiring mitigation. This scenario constitutes the basis of the project description for this EIR.

No Project Alternative

CEQA requires an analysis of the "no project" alternative. There has been considerable discussion in the courts about the meaning of "no project." The essential debate is whether this means that the status quo persists indefinitely into the future, or whether the University (in this case) continues to grow in the manner it has in the past, without benefit of the new Master Plan. The reality for Cal Poly is a combination of both. Cal Poly cannot substantially increase its enrollment capacity without a comprehensive revision of its Master Plan. Without added enrollment, there would likely not be a substantial increase in on-campus housing, or additional parking structures, the two largest physical components of the Master Plan outside of the redevelopment areas. The changes that would occur would be the upgrading or replacement of existing facilities and projects brought to campus to enhance academic and research capacity. It is difficult to predict what those changes would be. The following describe the essential environmental differences between proceeding with the proposed Master Plan and continuing the current course. Various housing and parking are discussed in detail below as alternatives to specific plan components.

Housing: Eliminating this component is discussed in detail below. Impacts to natural resources from the development of projects on open land would be eliminated. Necessary services such as police, fire, water and wastewater would not be required from Cal Poly.

Parking: This is also discussed in detail below. Not building these structures eliminates significant construction impacts, as well as operational impacts to circulation and air quality.

Biological Resources: A few areas with sensitive biological resources would be disturbed under the proposed plan. Without the development contemplated, areas near Poly Canyon, Grand Avenue and Slack Street, west of Santa Rosa and near Chorro Creek would remain in their current condition.

Geologic Resources: Fewer students would be subjected to seismic and other geologic hazards on campus. However, since most of those students reside in California, they are generally at risk from the same problems that exist elsewhere.

Water quality and flooding: By not intensifying the instructional campus core, or building beyond the core, there would be less pressure on stormwater facilities and the receiving creek systems in or near Cal Poly. However, there would also not be the enhancement projects contemplated for Brizzolara Creek that will improve water quality and address flooding issues.

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Cal Poly Master Plan

Aesthetics: While the campus core intensification will have only a minor effect on visual resources for the neighborhoods and travelers on nearby roadways, the student housing projects will add to the built environment on the hillsides and into the northern portion of the extended campus. Development at the Goldtree site would add development in the northwest corner of the extended campus. Eliminating these projects would leave these views relatively unchanged.

Cultural and Historical Resources: Not developing the plan would leave intact, for the time being, several structures of historic potential on or near the instructional core. There would be relatively little effect on archaeological resources under any alternative.

Alternatives to Plan Components

Housing

No Additional On-campus Housing

No additional housing would be built on campus under this alternative. The increased enrollment would therefore require housing supply within San Luis Obispo or the surrounding communities. Assuming the likely commensurate increase in the general population, housing supply would continue to be scarce, especially in the City. There would likely be an increase in rent and in the use of substandard premises and the necessity of more students finding housing at ever increasing distances from Cal Poly. The following points outline the general differences between this alternative and the Master Plan proposal of adding 3,000 additional beds at the University.

Biological Resources: There would be less impact to on biological resources on campus since development would not occur near the entrance to Poly Canyon (H-1, H-2, H-3), near Slack Street and Grand Avenue (H-6), or on the properties west of Santa Rosa Street (H-8, H-9). There would be an undetermined impact to biological resources for any housing that may be built outside Cal Poly to accommodate increased enrollment.

Traffic and air quality: There would be a considerable increase in peak hour traffic due to the additional 3,000 students commuting to and from campus during the morning and afternoon peak hours. With this traffic would come an increase in air quality impacts. There would be a slight reduction in off-peak trips, since the additional residents would not be making trips off campus.

Aesthetics: There would be a reduction in impacts to visual resources if the housing were not built on campus. Structures and lighting would not be built near the entrance to Poly Canyon, Slack Street and Grand Avenue, or west of Santa Rosa Street. These structures introduce visual elements that are not currently present.

Public Services and Utilities: Not housing the additional students on campus would mean the University would not have to provide fire, police, water, wastewater and other services to the residences. This would reduce costs and provide greater future capacity for any of these limited resources, especially water and wastewater. However, when examined on a broader basis, these services would still have to be provided to the students, albeit by different entities, especially the City of San Luis Obispo. So while the impact to Cal Poly would be reduced, there would be a concomitant impact elsewhere.

Other impacts: In general, all the other impacts associated with the development of on-campus housing would be eliminated. There would be no impacts to archaeological resources, geology, water quality or hydrology, noise, agricultural resources or the associated construction impacts. Again, these impacts would be transferred to other communities.



Housing in Different Locations

All of the housing location alternatives identified in the Gordon H. Chong housing study are proposed for residential development in the Master Plan. Therefore, all viable housing locations are identified and analyzed in this EIR. For a further discussion of housing locations, see the Housing Project EIR (1999). There are no other housing sites that both meet the definition of "on-campus" housing (reasonably proximate to the instructional core) and resolve or reduce any of the impacts described in this EIR. The only other sites near campus are of very high agricultural value, containing mostly prime agricultural soils. Development on these sites would be a Class I impact.

Modifying Housing Configurations

Of the sites chosen, several have environmental issues, especially regarding biology and aesthetics. Numerous mitigation measures have been proposed that will reduce these impacts to a less than significant level. However, these proposals have been developed only to a programmatic level. As plans for the individual complexes are developed, site specific issues may arise that cannot be ascertained at the current level of planning. It is understood that there will be additional environmental review for these projects. At that time, adjustments to the layout and design of the complexes can be made to reduce any impacts discovered.

Mustang Stadium Remodeling

The relocation of Mustang Stadium is not proposed as part of the Master Plan, although a future possible site has been identified at the Sports Complex. As the preferred alternative, the existing Mustang Stadium could be remodeled to accommodate additional attendance and improve the facilities. This would result in virtually no impacts to the environment, except for temporary impacts associated with construction. Remodeling of the Stadium is considered environmentally superior to relocation.

Parking

Development with Current Supply

The "no project" alternative for this component of the Master Plan would entail increased enrollment with no increase in available parking. An extreme version of this would be to not replace any of the parking lost (approximately 2,000 spaces) to other plan projects, a net reduction of parking.

In general, all impacts associated with building parking structures or surface lots would be eliminated, especially construction-related impacts, visual, circulation, and operational air quality. However, since there would not be adequate supply of parking, there would be resulting significant impacts to neighborhoods (as students parked at ever increasing distances from campus). Many university communities have experienced problems from students who park relatively near campus, take their bike off the bike rack, and ride the rest of the way into school.

In order to accomplish this alternative, alternative transportation would have to be made available in far greater quantities than currently exist.

No Additional Structures

This alternative would entail the development of 2,000 surface parking spaces in lieu of the parking structures proposed under the plan. This would require approximately 14 acres of land, assuming 300 square feet (which includes necessary aisles, sidewalks and entrances) for each space. These lots would be built in several locations in order to disperse the automobiles and service the various areas of campus.

There are general advantages and disadvantages to surface lots over parking structures.



Advantages: Surface lots are less expensive. They result in fewer *concentrated* air pollutants, although given the additional driving required to find a space, the overall emissions associated with surface lots are generally higher. Surface lots have less crime than parking structures because there are fewer opportunities for concealment. Surface lots usually reduce impacts to circulation given the lower concentration of automobiles.

Disadvantages: Surface lots consume more land. At Cal Poly, the only land available near the instructional core is either occupied by buildings or outdoor educational facilities, such as agricultural fields (much of which are on prime agricultural soils). Water quality issues are greater with surface lots because of the larger area of impermeable surface for which runoff must be collected and treated. Surface lots would generally have greater impacts on biology, archaeology, and other natural resources by virtue of the larger area they consume.

Reduction in Parking Spaces

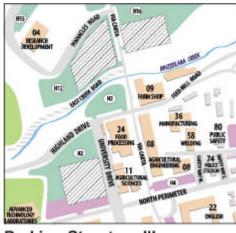
The Master Plan proposal represents a 2,000-space reduction of parking from estimated future demand. To accomplish this, the plan sets forth an aggressive approach to parking demand reduction and increased alternative transportation capacity. Therefore, the "reduced project" is the proposed Master Plan.

Modification of Structure Locations

Alternative locations for parking structures were studied in the Walker parking plan (1988) and the EIR for Parking Structure I (1998). Both documents are incorporated here by reference. The proposed locations follow the Walker approach of placing a parking structure at each of the three entrances to campus. There are alternate possible locations for the two structures in close proximity to their proposed locations. In both situations, there are relatively minor differences in environmental impacts. All of the locations would be on existing parking lots or otherwise disturbed land.

Parking Structure II (California Boulevard). This structure could be moved north and be built in the current location of Mustang Stadium. This would provide a little more of a buffer between the California Boulevard entrance to campus and the structure. This could reduce visual impacts of the structure. In all other respects, the locations would have essentially the same impacts.

Parking Structure III (Highland Drive). The illustration below shows the three possible locations for this structure. The proposed location discussed in the main portion of this EIR is northwest of the intersection of Via Carta and Highland.



Parking Structure III



Library: The location adjacent to the library would eliminate a large area of the instructional core for classroom and other academic development. It would bring automobiles with their noise and air pollutants closer to sensitive receptors on campus. It would eliminate the need to build an additional crossing on Brizzolara Creek with its associated impacts to biological and water resources.

East of Via Carta: This location would bring the structure closer to the proposed housing north of Brizzolara Creek. It would have negative effects on the nearby Environmental Horticulture Sciences facility further north. These would be from noise, lighting and increased vehicular activity. Its proximity to the creek would necessitate greater mitigation measures than the library location.



Alternatives Considered but Dismissed

The development of the Master Plan occurred in the context of understanding the environmental constraints and opportunities of all proposals. Environmental planners were part of the Master Plan Team from the outset and were able to provide guidance that influenced the location and approach to all of the Master Plan components. This process allowed the team to evaluate a number of alternatives and choose, in most instances, the environmentally superior approach. Throughout the text of the Master Plan are marginal notes that indicate many of these choices. Those notes are incorporated here by reference and understood to be an important component of the overall environmental analysis of the Cal Poly Master Plan.

Environmentally Superior Alternative

The "no project" alternative, which means no general increase in enrollment, would have the least amount of environmental impacts. It presumes that Cal Poly would continue on its present course of individual plan modifications through the CSU system without a comprehensive approach to these changes. However, many of the proposed improvements on campus – improved circulation, better student services, protection of natural resources, enhancement of creeks – would not necessarily be planned. Furthermore, there would not necessarily be the establishment of an orderly phasing of development that, through sequencing, resolved many problems of convenience and facility loss.

Because of a number of important mitigating qualities of the plan discussed above, the proposed project is the environmentally superior alternative.



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List of Preparers and Persons Contacted

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Crawford Multari and Clark Associates prepared this Environmental Impact Report, under contract to the California Polytechnic State University. Linda Dalton, Vice Provost for Institutional Planning and Robert Kitamura, Director of Facilities Planning, were the principals on behalf of the University. Persons involved in data gathering, analysis, project management, and quality control include:

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Cal Poly Master Plan



Appendix A Notice of Preparation and Comments



Notice of Preparation of a Draft Environmental Impact Report

August 24, 2000

TO: Responsible and Trustee Agencies and Other Interested Parties

FROM: California Polytechnic State University, San Luis Obispo

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report (DEIR)

California Polytechnic State University, San Luis Obispo (Cal Poly) will be the lead agency for the preparation of an environmental impact report (EIR) for the Cal Poly Master Plan. The project consists of a comprehensive plan guiding growth, development and management of the University and its land holdings in San Luis Obispo County. The location of the project and a general project description are provided in the attached supplemental information. The project will entail an increase in enrollment from 15,000 FTE to 17,500 FTE during the academic year and 2,500 FTE in summer session.

Cal Poly needs to know the views of your agency relative to the scope and content of environmental information to be contained in the EIR. In accordance with the time limits prescribed by State law, your response must be sent at the earliest date **but not later than 30** days from the date of this notice. Please send your comments to:

California Polytechnic State University, San Luis Obispo c/o Crawford Multari Clark & Mohr (Consultants to the University) 641 Higuera Street, Suite 302 San Luis Obispo, CA 93402 Attn: Nicole Phillips

We would also appreciate the name(s) of a contact person at your agency. If you have any questions regarding the project or this notice, please call me at (805) 541-2622 X-20.

Sincerely,

Nicole Phillips Crawford Multari Clark & Associates (on behalf of the University)

attached: supplemental information

Background

California Polytechnic State University, founded in 1901, is a predominately undergraduate, teaching university specializing in applied technical and professional fields. With its unique tradition of "learn-by-doing" education, Cal Poly students receive both theoretical knowledge in the classroom and practical experience in laboratories and fields, ensuring that graduates are prepared for carcers in the 21st century.

About 70 percent of Cal Poly's students major in engineering, agriculture, business, architecture or related fields. Programs in the liberal arts, science and mathematics, and teacher-training build on the University's polytechnic character. More than 90 percent are undergraduates; the rest are in master's degree or teaching credential programs.

The campus occupies over 6,000 acres in San Luis Obispo County and 3,200 acres in Santa Cruz County. These lands provide hands-on opportunities for students, especially those studying agriculture, biological sciences, architecture, and engineering, to apply their classroom knowledge to real-life situations.

Cal Poly, with its national reputation for excellence and its desirable location on the Central Coast, receives many more student applications than can be accommodated. The University is able to enroll only about one in five undergraduate applicants. In Fall 1999, the average GPA and SAT scores for incoming freshmen were 3.64 and 1162.

Cal Poly is regularly included in "best colleges" lists. In its past seven surveys, U.S. News and World Report has ranked Cal Poly as the top public undergraduate university in the western United States. The magazine rates the engineering college the best public non-doctoral program in the entire country.

Cal Poly's new Master Plan provides principles and guidelines for the physical development of Cal Poly so that the University can sustain its mission as a polytechnic university into the 21st century. The Plan is designed to meet the educational needs of the campus, to respond to the growing demand for higher education – particularly in scientific and technical fields – and to address the role of the University as a member of its larger community.

The architectural firm of Allison and Rible prepared the first formal Master Plan for Cal Poly in 1949, based on a projected enrollment of 4,080. In 1958 the California Department of Education dictated that all non-metropolitan state college campuses plan for an enrollment of 12,000 Full-Time Equivalent Students (FTES). This led to the next Master Plan, prepared by the architectural firm of Falk and Booth in 1962, and approved by the California State University Board of Trustees in May 1963. In 1970, the 4th revision to this Master Plan increased the enrollment capacity to 15,000 FTES. Subsequent revisions to add or change building sites resulted from piecemeal planning for new projects – thus, a major review was long overdue.

Project Description

The projected increase in college-bound students in California referred to as 'Tidal Wave II' expands the need for higher education. The high demand for a Cal Poly education, particularly in programs not generally available at other public universities in California, brings that pressure to San Luis Obispo. The existing investment in specialized programs, the number and quality of applications, and the economic and societal contributions of graduates all contribute to the perception of Cal Poly as a candidate for growth.

This Master Plan update represents the culmination of a four-year planning process at Cal Poly. The process began with academic strategic planning in the 1997-98 academic year, involved campus and community task forces in identifying issues during 1998-99 and invited public comment on a preliminary draft in the Spring of 2000.

As guidance for approximately the next 20 years, the Master Plan addresses academic program demand, physical and environmental constraints and opportunities, and capital and operating budget requirements to support a future enrollment of 17,500 net academic year and 2,500 summer full-time equivalent students (FTES). The Plan also anticipates a modest increase in technology-supported instruction and enhancements to curricula and advising to accelerate student progress to degree completion. Together these operational changes designed to increase summer enrollment, apply technology and facilitate student progress are expected to increase college year enrollment by about 9 percent without increasing fall headcount.

The physical development portion of the Master Plan focuses on land use and circulation issues associated with increasing enrollment during the Academic Year, as this scenario involves the most extensive change on campus. Enrollment growth projections translate into a Fall headcount of approximately 20,900 students and about 3,200 regular faculty and staff – an increase of about 17 percent over present capacity to be accomplished in phases over approximately 20 years. Because demographers expect the demand for higher education to increase rapidly through about 2010, the earlier phases of the Master Plan may need to accommodate more enrollment growth than later phases.

The Master Plan redevelops and consolidates academic facilities within an expanded instructional core south of Brizzolara Creek. At the same time, the Plan is designed to protect natural environmental features and agricultural lands that form the character of the campus. A central feature of the plan involves creating new student residential communities accommodating approximately 3,000 additional students and provision of faculty and staff housing. Student services, recreational facilities, would be expanded commensurate with increased enrollment. Although parking may increase over existing numbers, the ratio of parking to students is planned to decrease during the planning period.

Draft and Final EIR

Cal Poly has concluded that a Draft and Final EIR are necessary to assess the potential environmental impacts of the project as described above. The following issues have been identified for inclusion in the Draft EIR:

AestheticsAgricultural ResourcesAir QualityBiological ResourcesCultural ResourcesGeology and SoilsNoisePublic Services/UtilitiesTraffic and Circulation (including Parking)

The list of potential impact areas may be amended as a result of the input from responsible and trustee agencies and other interested parties.

Attached:

Map 1 -- Regional Location Map 2 -- Campus Area Affected by the Master Plan Map 3 -- Conceptual Campus Plan

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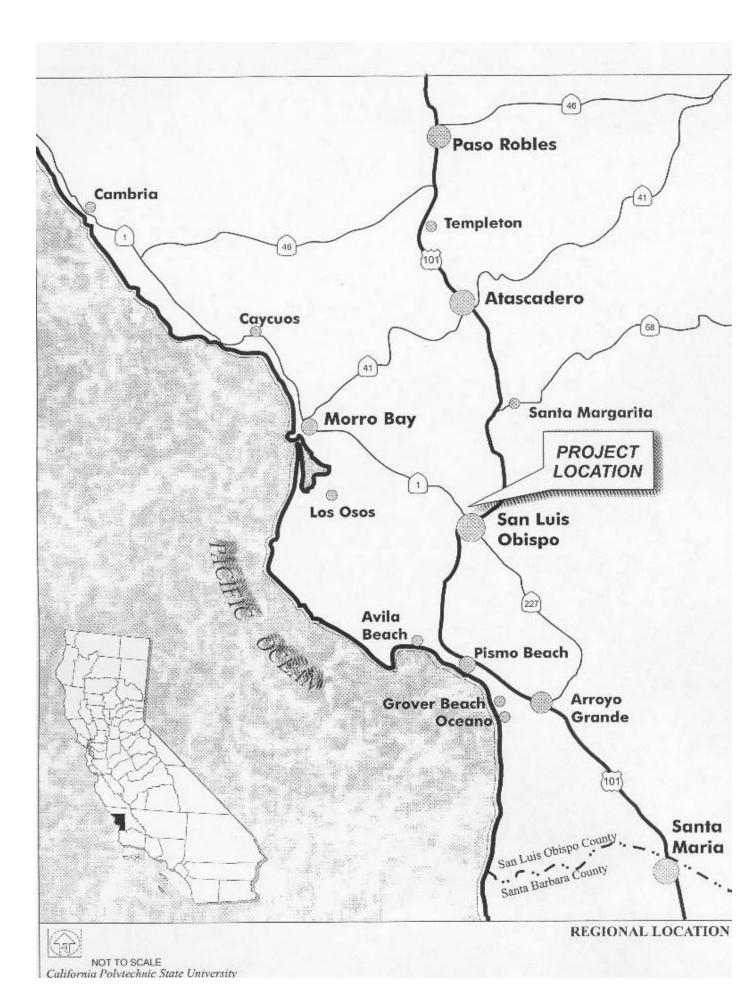
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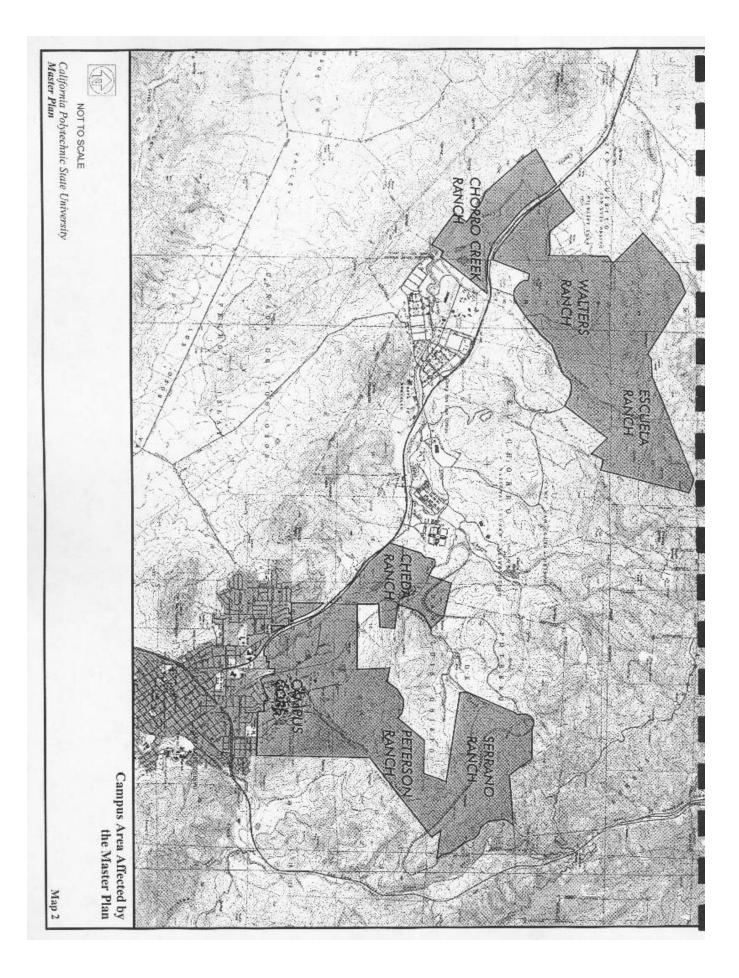
California Department of Fish and Game Region III P.O. Box 47 Yountville, Ca. 94599-0047

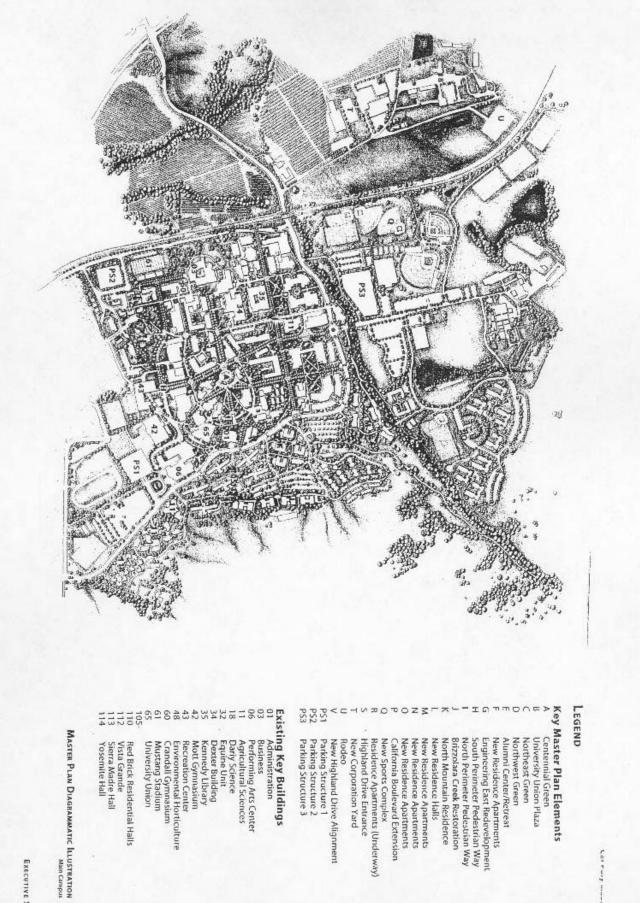
Alta Vista Neighborhood Association P.O. Box 5412 San Luis Obispo, California 93406

California Department of Fish and Game 1178 17th Street Los Osos, California 93407 ATTN: Bob Stafford

Julie Frankel 655 Oak Ridge Road San Luis Obispo, California 93405







EXECUTIVE SUMM

Exe



Gray Davis

Governor's Office of Planning and Research State Clearinghouse



Steve Nissen ACTING DIRECTOR

GOVERNOR

Notice of Preparation

August 28, 2000

To: Reviewing Agencies

Re: Cal Poly Master Plan SCH# 2000081102

Attached for your review and comment is the Notice of Preparation (NOP) for the Cal Poly Master Plan draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Nicole Phillips California State Polytechnic University, San Luis Obispo 641 Higuera Street Suite 302 San Luis Obispo, CA 93402

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

cator morgan

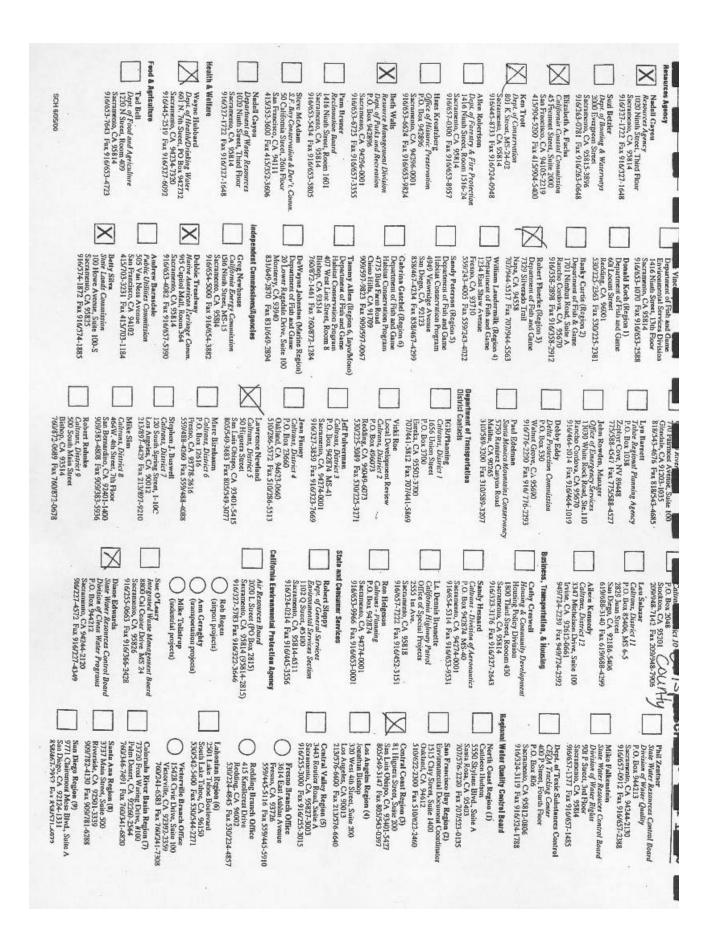
Scott Morgan Project Analyst, State Clearinghouse

Attachments cc: Lead Agency

> 1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044 916-445-0613 FAX 916-323-3018 WWW.DPR.CA.GOV/CLEARINGHOUSE.HTML

Document Details Report State Clearinghouse Data Base

SCH# Project Title Lead Agency	2000081102 Cal Poly Master Plan California State Polytechnic University, San Luis Obispo
Туре	NOP Notice of Preparation
Description	The Master Plan redevelops and consolidates academic facilities within an expanded instructional core south of Brizzolara Creek. At the same time, the Plan is designed to protect natural environmental features and agricultural lands that form the character of the campus. A central feature of the plan involves creating new student residential communities accommodating approximately 3,000 additional students and provision of faculty and staff housing. Student services, recreational facilities, would be expanded commensurate with increased enrollment. Although parking may increase over existing numbers, the ratio of parking to students is planned to decrease during the planning period.
Lead Agenc	y Contact
Name	Nicole Phillips
Agency	California State Polytechnic University, San Luis Obispo
Phone	805 541-2622 x20 Fax
emall	
Address	641 Higuera Street
	Suite 302
City	San Luis Obispo State CA Zip 93402
Cross Streets Parcel No. Township	Range Section Base
Proximity to	9:
Highways	
Airports	
Rallways	
Waterways	
Schools	
Land Use	
Project Issues	Aesthetic/Visual; Air Quality; Other Issues; Noise; Traffic/Circulation; Agricultural Land; Geologic/Seismic; Public Services
Revlewing Agencies	
	Control Board, Clean Water Program; Regional Water Quality Control Board, Region 3
Date Received	1 08/24/2000 Start of Review 08/24/2000 End of Review 09/22/2000



STATE OF CALIFORNIA

NATIVE AMERICAN HERITAGE COMMISSION 915 CAPITOL MALL, ROOM 364 SACRAMENTO, CA 95814 (916) 653-4082 (918) 657-5390 - Fax



Gray Davis, Governor

September 1, 2000

Nicole Phillips Callfornia State Polytechnic University, San Luis Oblspo 641 Higuera Street Suite 302 San Luis Oblspo, CA 93402

RE: SCH # 2000081102- Cal Poly Master Plan

Dear Ms. Phillips:

The Native American Heritage Commission has reviewed the above mentioned NOP. To adequately assess the project-related impact on archaeological resources, the Commission recommends the following action be required:

- 1. Contact the appropriate Information Center for a records search. The record search will determine:
 - Whether a part or all of the project area has been previously surveyed for cultural resources.
 - Whether any known cultural resources have already been recorded on or adjacent to the project area.
 - Whether the probability is low, moderate, or high that cultural resources are located within the project area.
 - Whether a survey is required to determine whether previously unrecorded cultural resources are present.
- The final stage of the archaeological inventory survey is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - Required the report containing site significance and mitigation be submitted immediately to the planning department.
 - Required site forms and final written report be submitted within 3 months after work has been completed to the Information Center.
- 3. Contact the Native American Heritage Commission for:
 - A Sacred Lands File Check.
 - A list of appropriate Native American Contacts for consultation concerning the project site and assist in the mitigation measures.

Lack of surface evidence of archeological resources does not preclude the existence of archeological resources. Lead agencies should include provisions for accidentally discovered archeological resources during construction per California Environmental Quality Act (CEQA) §15064.5 (f). Health and Safety Code §7050.5 and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery and should be included in all environmental documents. If you have any questions, please contact me at (916) 653-4038.

Sincerely

)-1-undulal

Debbie Plas-Treadway Associate Governmental Program Analyst

CC: State Clearinghouse

Crawford Multari Clark & Mohr

641 Higuera Street, Sulte 302 San Luis Obispo, CA 93401 805.541.CMCA (2622) Fax 805.541.5512

424 Second Street, Suite D Davis, CA 95616 530.753.5950 Fax 530.753.5951

Transmittal

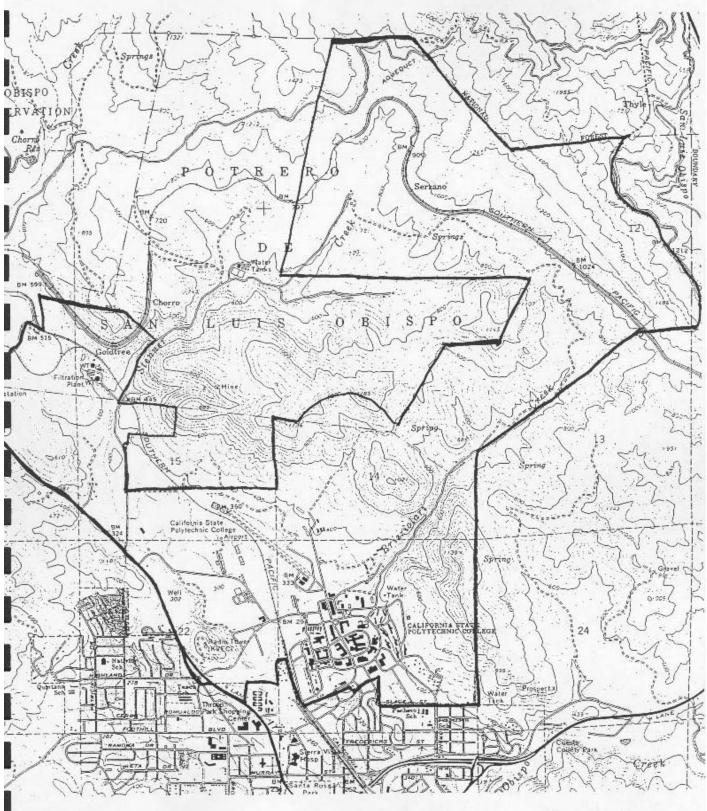
TO: Debbie Pilas-Treadway

DATE: September 7, 2000

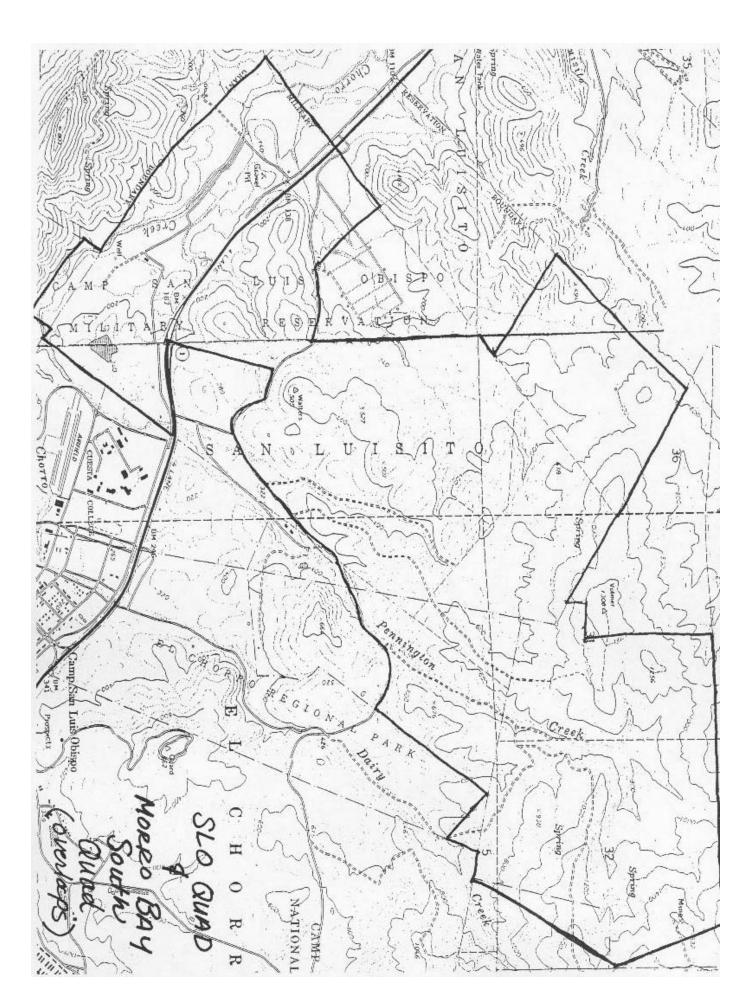
RE: Request for Sacred Lands File Check

In response to your September 1, letter, we are requesting a Sacred Lands File Check for the Cal Poly Master Plan Update EIR (SCH#2000081102). Attached are quads depicting the extent of Cal Poly property in San Luis Obispo County. Please let me know if this is not sufficient.

FROM: Nicole Phillips



SLO QUAD



STATE OF CALLEORNIA

Gray Davis, Governor

NATIVE AMERICAN HERITAGE COMMISSION 915 CAPITOL MALL, ROOM 364 SACRAMENTO, CA 95814 (916) 653-4082 Fax (916) 657-5380



October 2, 2000

Nicole Phillips Crawford Multari Clark & Mohr 641 Higuera Street, Suite 302 San Luis Obispo, CA 93401

RE: Cal Poly Master Plan - San Luis Obispo County

Sent by Fax: (805) 541-5512 Pages Sent: 3

Dear Ms. Phillips:

A record search of the sacred lands file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend other with specific knowledge. A minimum of two weeks must be allowed for responses after notification.

If you receive notification of change of addresses and phone numbers from any these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4040.

Sincerely,

11 200

Rob Wood Associate Governmental Program Analyst P, 01

OCT-02-00 MON 02:25 PM NAHC

FAX NO, 9166575390

NATIVE AMERICAN CONTACTS San Luis Obispo County September 29, 2000

Chief Joseph 5811 Lone Pine Place Paso Robles C A 93446 (805) 238-27'84

Chumash Salinan

Salinan Nation Gregg Castro, Chairperson 10 Jolon Road King City C A 94521 (510) 385-1538 glcastro@pacbell.net

Salinan

Beverly Salazar Folkes 1931 Shadybrook Drive Thousand Oaks C A 91362 805 492-7255

Chumash Tataviam Fernandeño Lei Lynn Odom 1339 24th Street Oceano C A 93445 (805) 489-5390 Chumash

Santa Ynez Band of Mission Indians Edward Valencia, Chairperson Chumash P.O. Box 517 Santa Ynez C A 93460 (805) 688-7997 (805) 688-8005 Fax Judith Bornar Grindstaff 63161 Argyle Road King City C A 93930 (408) 385-3759-home (408) 385-3339-work

Salinan

Pilulaw Khus Zarate Chumash 2001 San Bernardo Creek Morro Bay, C A 93442 (805) 772-0579

San Luis Obispo County Chumash Council Mark Steven Vigil Chumash 315 South Elm Street Arroyo Grande C A 93420 (805) 481-2461

Julie Lynn Tumamait 365 North Pole Ave Ojai C A 93023 (805) 646-6214 Chumash

Mary E. Trejo PO Box 469 Santa Margarita, C A 93456-(805) 528-3143 Chumash

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is on ly applicable for contacting local Native Americans with regards to the cultural assessment for the proposed Cal Poly Master Plan Update (SCH#2000081102), San Luis Obispo County P. 02



Residents for Quality Neighborhoods P.O. Box 12604 · San Luis Obispo, CA 93406

September 22, 2000

California Polytechnic State University, San Luis Obispo c/o Crawford Multari Clark & Mohr 641 Higuera Street, Suite 302 San Luis Obispo, Ca. 93402 Attention: Nicole Phillips

Faxed to: 541-5512

Re: Cal Poly Master Plan EIR

Dear Ms. Phillips:

RQN's comments regarding the scope and content of information to be contained in the EIR for the Cal Poly Master Plan are as follows:

- The "costs" of new development and/or re-development on the campus such as glare, light trespass, noise trespass, and traffic must be thoroughly studied for their impacts on established residential neighborhoods and the City's open space areas.
- The statements, findings and conclusions must be based on factual information, such as, but not limited, to sound tests and traffic studies.

Thank you for including RQN in this process and we look forward to being involved in the future.

Sincerely yours,

yaneer Holcomb

Cydney Holcomb Chairperson, RQN 2076 Hays Street San Luis Obispo, Ca. 93405

Appendix B Botanical Surveys

BOTANICAL SURVEY

Poly Canyon North Proposed Campus Housing Site

Cal Poly State University Campus San Luis Obispo, California

Prepared by

V.L. Holland, Ph.D Professor and Department Chair Biological Sciences Department

David Keil, Ph.D Professor Curator, Robert F. Hoover Herbarium Biological Sciences Department

and

Michael Curto Lecturer Biological Sciences Department

Prepared for:

Cal Poly Master Plan

October 2000

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EXECUTIVE SUMMARY

This report presents the results of a botanical survey conducted during April, May, and June 2000 on a site proposed for new student housing near the southern entrance to Poly Canyon and adjacent to Brizzolara Creek on the Cal Poly campus. Special attention was given to potential occurrences of several rare, endangered or special-status plant species known to exist within the San Luis Obispo Quadrangle (Skinner and Pavlik 1994) and to any sensitive habitats present on the site.

We identified 195 plant species (Appendix 1) consisting of 85 natives, 110 aliens (including 17 cultivated trees and shrubs), and seven general plant communities: (1) coastal valley grassland; (2) California native grassland; (3) coastal scrub; (4) riparian woodland; (5) freshwater marsh; (6) anthropogenic ruderal; and (7) anthropogenic urban mix. Most of the site north of Brizzolara Creek is covered by coastal valley grassland currently used as pasture for the beef and bull test unit. Historically, California native grassland covered this area, but it has largely been converted to a grassland community dominated by alien grasses and forbs. However, some significant stands of California native grasslands remain on the hillsides outside the pasture areas. Coastal scrub occurs on the steep, rocky hillsides along the northern boundary of the site, and riparian woodland, dominated by coast live oak, California sycamore, California bay-laurel, and willows, line Brizzolara Creek. Freshwater marsh occurs along the margin of Drumm Reservoir and its drainage system as well as in small patches along the Brizzolara Creek channel. The southwestern portion of the site, near the Poly Canyon entrance, has significant stands of ornamental trees and shrubs such as eucalyptus, Peruvian pepper, olive, acacia, and pistachio. This human made forest community dominates the southwestern boundary of the site between Brizzolara Creek and Poly Canyon Road. Stands of introduced trees also flank Poly Canyon Road near the entrance to the Poly Canyon. Along the eastern boundary of the site, north of Brizzolara Creek, there is a row of eucalyptus trees just east of the parking lot. Rows of mulberry trees have also been planted in rows along the fence lines separating the pastures of the beef and bull test unit. Remnants of riparian vegetation, including some large coast live oaks and California sycamores, are scattered in the broad floodplain south of Brizzolara Creek among the campus buildings and roads around the Meats Unit, the Horseshoeing Unit, the Feed Mill, and the Rose Parade Float Shop.

The most significant natural resource elements remaining on this site are: 1) the riparian woodland along Brizzolara Creek; 2) the mature coast live oak woodland on the slope along Poly Canyon Road (including a small creek that flows through the woodland, under the paved flood plain, and into Brizzolara Creek); 3) Drumm Reservoir and its associated drainage system and wetlands, 4) the remaining stands of California native grassland along the northern boundary of the project site, and (5) the coastal scrub and serpentinite outcrops with potential rare plants.

Although extensive serpentinite rock outcrops exist on the hillsides above the site, it is not clear if any of these, or any of the rare plant species associated with these outcrops, occur within the disturbance area of the proposed housing site. However, we must consider the impact that students living in the proposed dormitories would have on the plant life of these nearby serpentinite slopes. Foot traffic is likely to result in the trampling of sensitive plants, the deliberate or accidental movement of rocks, the creation of trails, erosion, and the creation of disturbed habitats where weeds will grow in place of native species.

Further studies will be needed when specific plans are proposed for the site, and a creek management and enhancement plan must be prepared to protect Brizzolara Creek.

INTRODUCTION

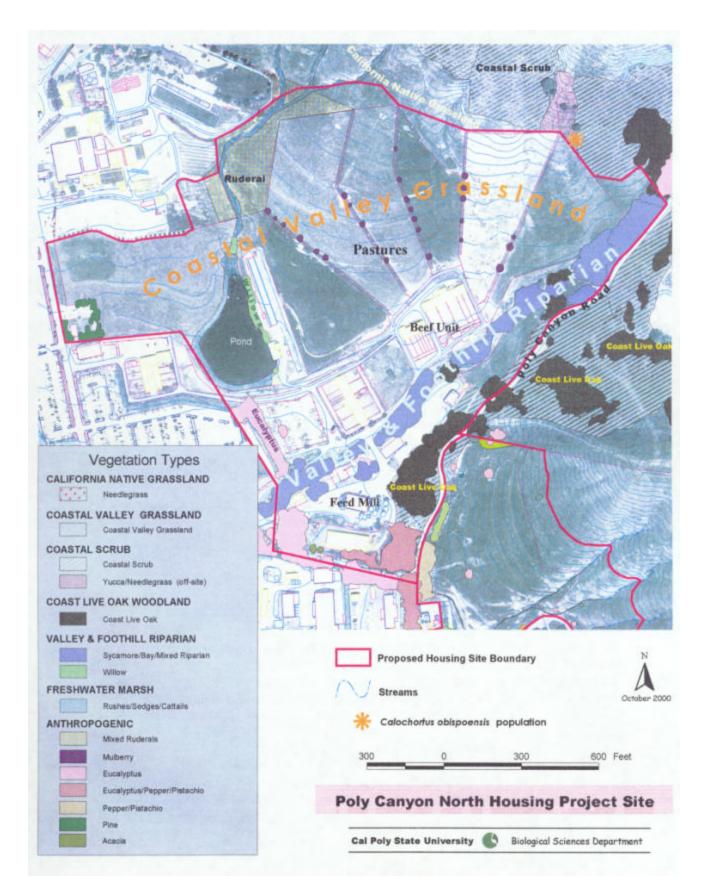
The proposed project site consists of approximately 50 acres of the Cal Poly campus, immediately north and east of the campus core. The site is situated at the southern entrance to Poly Canyon and includes areas both north and south Brizzolara Creek. The site location is specifically in north-central Section 23 of Township 30 South from the Mt Diablo Base Line and Range 12 East from the Mt Diablo Meridian. The study site is bounded on the north and east by the hillsides of Poly Canyon, on the east by Poly Canyon Road, and on the south, west, and northwest by roads and parking lots associated with existing campus facilities (see site map).

The project site is divided by Brizzolara Creek, which traverses the area from northeast to southwest. Approximately 75% of the site is located northwest of the creek. Slopes in this portion of the site gradually increase from about 5% to over 20% slopes in a continuous incline from the creek upward to the steep hillsides along the northern boundary of the project site. The remaining 25% of the site is located southeast of the creek. Much of this portion of the site is located floodplain of the creek. However, the terrain rises abruptly from the floodplain forming steep slopes along Poly Canyon Road and behind Cal Poly's Facilities and Transportation Services yards. Elevations range from approximately 400 to 620 feet in this area.

The general climate is the cool summer phase of the dry-summer Mediterranean type of humid mesothermal climates (Trewartha 1968). Winter high temperatures average near 62°F (16.7°C) with low averages near 41°F (5°C). Winter lows below 32°F (0°C) are not uncommon, and a low of 9°F (–12.7°C) has been recorded on the Cal Poly campus. Summer high temperatures average near 77°F (25°C) with low averages near 52°F (11°C). Summer highs above 90°F (32°C) are not uncommon, and a high of 109°F (42.8°C) has been recorded on the Cal Poly campus. Precipitation falls as rain primarily from October through April and averages about 22 inches (558 mm) per year. Less than one inch of precipitation is typically recorded from May 1 to September 30, but overnight and morning fog with nearly 100% humidity occurs nearly every day unless drier, downsloping winds descend from the Salinas Valley over the Santa Lucia Range to overwhelm the onshore flow of marine air (Felton 1965). However, within this general climatic type are a number of local and micro climates that affect the distribution of plants and vegetation types.

Upland soils are mostly of the Los Osos Loam series with Lodo-Diablo Clay Loam Complex present to the southeast of Brizzolara Creek. Los Osos Loam soils are moderately deep, slowly permeable, well-drained residual soils derived from sandstone. Surface loam or loamy clay is underlain by thick clay horizons to a depth of about 32 inches. Lodo-Diablo Clay Loam soils are shallow to moderately deep, slowly permeable, well-drained residual soils also derived from sandstone but with greater clay content in the surface horizons than is present in Los Osos Loam soils (Ernstrom 1977).

Current land use is mostly agricultural, with the larger northern portion used by the College of Agriculture for its Beef and Bull Test Unit. The portion of this site nearest Brizzolara Creek is sectioned into corrals and equipment yards with unpaved



road access to each. North of these facilities, the gradual sloping hillside is fenced in a fanshaped fashion toward the main corral into six unequally sized, heavily grazed pastures. The southwestern-most part of these pastures contains Drumm Reservoir, which was created by damming a smaller perennial tributary of Brizzolara Creek. This tributary flows from north to south through the project site. In the flood plain along the south side of Brizzolara Creek there are several structures that support activities of the Meats Unit, the Horseshoeing Unit, the Feed Mill, and the Rose Parade Float Shop. Many of these structures extend to the top of the creek bank, and most of flood plain in this area is paved and used as roadways and parking lots. (see project map for overview).

OVERVIEW OF VEGETATION

The vegetation of the study site has developed in response to the interaction of a complex of environmental features that are variable over the area and result in a mosaic of plant communities. Local climate (wind, temperature, rainfall, fog, etc.), topography, parent materials, soils, biotic components, fire, location of waterways, and natural historical events are all variables that have affected the vegetation on the site. Past and present land-use and other human caused events have also resulted in significant changes in the vegetation.

Prior to grazing and the creation of pastures, the large grassland area the covers most of the site north of Brizzolara Creek was covered by California native grassland. Coastal scrub, which is the dominant vegetation on the steep hillsides along the northern and eastern boundaries, has been modified to some extent by past brush clearing, but much of it is relatively undisturbed. There are also small patches of coastal scrub and a significant stand of coast live oak woodland on the slope along Poly Canyon Road. Riparian woodland is restricted to the areas along Brizzolara Creek and its floodplain, which ranges from about 50 to 150 feet or more wide. The riparian zone has been significantly modified by paving and building agricultural facilities along the creek. In many cases the buildings, structures, and paving extent right on the top of the creek bank. Remnants of the once more extensive riparian woodland, including large sycamores and oaks, remain in the paved areas and around the buildings in the flood plain.

Presently, the California native grassland is entirely converted to livestock pastures thoroughly dominated by non-native grasses, forbs, and sparsely-planted trees along the pasture fences. The riparian woodland is now reduced, fragmented, and invaded by alien trees, shrubs, forbs, and grasses. The slopes likely covered at one time by coastal scrub and coast live oak woodland has been converted to ornamental plantings of *Eucalyptus*, *Acacia*, and other exotics along the southern boundary and along the entrance to Poly Canyon.

The most significant natural resource elements remaining on this site are: 1) the riparian woodland and associated wetlands along Brizzolara Creek; 2) the mature coast live oak woodland between Brizzolara Creek and Poly Canyon Road (including a small creek that flows through the woodland, under the paved flood plain, and into Brizzolara Creek); 3) the wetlands around Drumm Reservoir and its drainage system; and 4) the remaining stands of California native grassland along the northern boundary of the site.

VEGETATION DYNAMICS

Plant communities are dynamic assemblages of plants that interact among themselves and their environment within a space-time boundary. Some of these communities are well defined and distinct while others are not. No two sites within a given community are exactly the same in environmental conditions, vegetation structure, or species composition. This complexity makes defining plant communities and mapping their areal coverage sometimes difficult and arbitrary.

Spatial boundaries between plant communities (also referred to as ecotones or transition areas) may be abrupt where environmental features change sharply, such as between terrestrial and aquatic habitats. However, usually there is an environmental gradient and plant communities change more gradually in response to that gradient.

Another complicating factor in vegetation analyses and mapping is that plant communities are not static but change through time in response to both natural and human induced environmental changes. As a result, some areas are mixtures of plant assemblages at varying successional stages. The invasion of exotics into native communities further complicates our study.

DESCRIPTION OF THE VEGETATION AND FLORA

The floristic inventory of the study site took place in April, May, and June 2000. The species list and vegetation map indicates the diversity of plant species and habitats. The vegetation and floristic survey consisted of canvassing the site on foot, recording the plant species found in identifiable condition, and describing the plant communities and habitats.

We identified about 195 plant species (Appendix 1), 85 natives, 110 aliens (including 17 cultivated trees & shrubs), and seven plant communities. However, it is important to note that this may not be a complete list of the plants present on the site. Plant species composition, especially herbaceous cover, varies seasonally and annually. During May and June 2000 some herbaceous plant species may have been overlooked or may bloom in late summer or early fall. A thorough survey through the entire year would be necessary for a complete listing of the flora found on the project site. In addition, more detailed work is needed in some of the less accessible areas.

The natural vegetation on the site can be somewhat arbitrarily divided into seven plant communities, as classified by Holland and Keil (1995): (1) coastal valley grassland; (2) California native grassland; (3) coast live oak woodland; (4) coastal scrub; (5) riparian woodland; (6) freshwater marsh; (7) anthropogenic ruderal and urban mix. Each is discussed separately below.

1. Coastal Valley Grassland

Coastal valley grasslands cover the majority of the site north of Brizzolara Creek. These grasslands are currently composed of various species of native and introduced grasses and forbs (dicot herbs), and sometimes occasional shrubs are present. The grasses that dominate this grassland include annuals, perennials, or a mixture of the two depending on location. Many of the grasslands on campus are now dominated by grasses and forbs tolerant to grazing that were introduced into California during the period of Spanish settlement.

Grasslands often occur on fine textured, clay rich soils of valleys and alluvial deposits at the base of hillsides, although they also extend on some steep hillsides. They integrate with coastal live oak woodlands on mesic hillside slopes, with coastal scrub and chaparral on xeric, steep, rocky slopes, and with riparian woodland and freshwater marsh communities in aquatic and semi-aquatic areas along the creek and reservoir. Many of the grassland species occur as understory species in the other communities.

Some areas of the Cal Poly campus have an impressive number of native grasses in the grassland areas, much more than most grasslands in locally and in California. The stands of perennial, native bunch grasses, which dominated the grassland prior to Spanish settlement, have gradually been reduced on most of the study site and are now found as only scattered components in some areas of the coastal valley grasslands. In heavily grazed pastures, which dominate much of the grasslands north of Brizzolara Creek, few if any native grasses have survived. However, outside these heavily grazed areas, stands of California native grassland persist. Historically, the changes in the composition of the grassland in this area are mostly a function of the introduction and invasion of alien plant species and changes in livestock grazing and their grazing patterns.

The Coastal valley grassland communities in the pastures of the site have been modified by both historical and present-day human influences. These past influences and the current pastoral land-use patterns have shaped the grasslands that occur on the open, upland slopes today. Repeated disturbance to the vegetation and soil by grazing animals maintains a pastoral influence on the grassland and results in grassland composed of mostly introduced species tolerant to this type of repeated disturbance regime.

Communities dominated by plants introduced by humans and established or maintained by human disturbance are anthropogenic communities. The coastal valley grassland used as heavily grazed pastures reflect the influence of humans by their species composition. These grasslands are composed of a mixture of plant species typical of coastal valley grasslands along with species intentionally grown for grazing livestock to consume. In the dry-summer subtropical climate region of California, the intentionally seeded pasture grasses are all cool-season Eurasian species, and mostly annual. The perennial species used, such as Dactylis glomerata (orchardgrass), Festuca arundinacea (tall fescue), Lolium perenne (perennial ryegrass), and Phalaris aquatica (Harding grass) generally need at least 15 inches of annual precipitation to persist. Common coastal grassland species found in these pastures are those capable of invading and tolerating the existing grazing regime. These include a variety of mostly annuals, such as Avena spp. (wild oats), Bromus spp. (bromes), and Lolium spp. (ryegrasses). These species persist through the dry summers as guiescent seeds that await the first autumn rains. Other invaders of pastures are frequently Eurasian forbs, but some natives are able to persist in pastures if they have some inherent chemical or physical attribute that renders them unpalatable to livestock.

Historically, these upland grassland areas were probably dominated by a mixture of the perennial grasses *Nassella lepida* (Foothill needlegrass), *Nassella pulchra* (Purple needlegrass), *Danthonia californica* (California oatgrass), *Elymus elymoides* (Squirreltail), and *Poa secunda* (Malpais bluegrass), along with many perennial and annual forbs. Prior to introduction of cattle by the Spanish, coastal California had no large mammals that grazed all year, and grasslands were never heavily grazed. Native grassland species lack adaptations to heavy grazing and have declined markedly partly because grazing during their reproductive cycle greatly reduces seed production and the stored food reserves necessary to get them through dormant phases. The annual grasses introduced from the Old World are more tolerant of grazing, reproduce quickly, and do not need to store food reserves. Over the years their seedlings have out-competed and replaced native species. Native forbs have suffered a similar fate. On the Cal Poly campus, cultivation as well pastoral land use have played roles in the nearly complete conversion to alien dominated herb lands.

Within this upland pasture, both *Nassella lepida* (Foothill needlegrass) and *Nassella pulchra* (Purple Needlegrass) persist on the steeper slopes. Other indicators of California native grasslands are no longer present. However, in less disturbed sites, stands of California native grassland persist. This community is discussed next.

Some of the typical alien grasses and forbs found in the coastal valley grassland and pastures on-site are listed below. Others are listed in Appendix 1.

Alien Grasses

Alien Forbs

Allen Grass	es	Allen Fo	rds
Avena barbata	slender wild oats	Anthemis cotula	mayweed
Avena fatua	common wild oats	Brassica nigra	black mustard
Brachypodium distachyon	false brome grass	Carduus pycnocephalus	Italian thistle
Bromus diandrus	ripgut brome grass	Centaurea melitensis	tocolote
Bromus hordeaceus	soft chess	Centaurea solstitialis	yellow star-thistle
Bromus madritensis	spanish brome	Dipsacus sativus	teasel
Hordeum murinum	foxtail barley	Erodium botrys.	storkbill filaree
Lolium multiflorum	annual ryegrass	Foeniculum vulgare	fennel
Lolium perenne	perennial ryegrass	Hirschfeldia incana	perennial mustard
Vulpia myuros	rattail fescue	Lactuca saligna	slender lettuce
		Lactuca serriola	prickly lettuce
		Picris echioides	bristly ox-tongue
		Plantago lanceolata	English plantain
		Plantago major	common plantain
		Polygonum arenastrum	knotweed
		Silybum marianum	milk thistle
		Sonchus asper	prickly sow-thistle
		Sonchus oleraceus	common sow-thistle

2. California Native Grassland

California native grasslands are areas in which the dominant plants are various species of native perennial grasses that grow as individual bunches or tussocks rather than as continuous turf. These grasslands typically occur on soils that form heavy, sticky clay in the winter and dries to nearly the hardness of pavement in the dry summer, thus limiting the growth of shrubs and trees. They integrate with coastal live oak woodlands on more mesic slopes, with coastal scrub on xeric, steep, rocky slopes, and with riparian communities in aquatic and semi-aquatic areas along drainages. Typically, numerous other types of herbaceous plants and occasionally scattered shrubs occupy open spaces among the native bunch grasses. These associated herbaceous species may be annuals, perennials or a mixture of the two depending on location and environmental conditions. Many species present in these grasslands also occur as components of the coastal valley grassland and other communities.

California native grasslands once formed the dominant vegetation on over 17 million acres, or 17%, of California land area prior to Spanish settlement (Biswell 1956; Huenneke 1989). Only about 10,000 acres of California grassland remains intact within California (Barry 1972), and less than 1% has any protected status (Keeley 1990). Native perennial bunch grasses have been reduced in distribution locally; however, there are some impressive California native grasslands on the hillsides to the north of the site, and along the slopes of Poly Canyon, especially in association with *Yucca whipplei* (Whipple yucca) on soils derived from serpentinite rock. The California native grasslands on the Cal Poly campus are some of the finest examples extant in California, representing about 10% of the remaining cismontane Foothill Needlegrass Grassland Series (Sawyer and Keeler-Wolf 1995), and 5% of the total remaining native grasslands.

As discussed previously, changes in the composition of California grasslands are mostly due to introduction and invasion of alien plant species and changes in the kinds of animals (especially grazing livestock) and their grazing patterns. Urban development and changes in

land use patterns have also resulted in the loss of native grasslands. As discussed previously, the California native grasslands that covered much of this study site historically and much of the Cal Poly campus have be lost or converted to grasslands dominated by introduced grasses and forbs. Stands of California native grassland remains on site along the northern and northeastern boundary as the slope rises to form the steep hillsides outside the boundaries of the study site.

The dominant species in the California native grasslands on site are the following native grasses and forbs:

Native Gr	asses	Native Fo	rbs	
Bromus carinatus	California Brome	Gnaphalium californicum	Everlasting	
Elymus elymoides	Squirreltail	Sisyrinchium bellum	Blue-Eyed-Grass	
Koeleria macrantha	Junegrass	Chlorogalum pomeridianum	Soap Plant	
Nassella lepida	Foothill Needlegrass	Dichelostemma capitatum	Blue Dicks	
Nassella pulchra	Purple Needlegrass			
Poa secunda	Malpais Bluegrass			
Vulpia microstachys	Small Fescue			
Mixed with the	se natives are the followi	ng alien grass species:		

Alien Grasses

Avena barbata	Slender Wild Oats
Avena fatua	Common Wild Oats
Brachypodium distachyon	False Brome Grass
Bromus diandrus	Ripgut Brome Grass
Bromus hordeaceus	Soft Chess
Bromus madritensis	Spanish Brome
Hordeum murinum	Foxtail Barley
Lolium multiflorum	Annual Ryegrass
Lolium perenne	Perennial Ryegrass
Vulpia myuros	Rattail Fescue

3. Coastal Live Oak Woodland

Coastal live oak woodland are one of the most characteristic and interesting vegetation types of California's central coast and on the Cal Poly campus. On the hillsides around Poly Canyon and on the slopes next to Poly Canyon Road on the study site, the oak woodland is typically composed of pure stands of *Quercus agrifolia* (coast live oak) although a few *Umbellularia californica* (California bay-laurel) are present. *Heteromeles arbutifolia* (toyon) is also common and sometimes attains the size of small oaks.

Coastal live oak woodland is the climax vegetation type in this area and characteristically occupies the most mesic slopes and canyon areas. Because of the heterogeneity of the habitats on the site, the coastal live oak woodland stands integrate and form a mosaic with grasslands, coastal scrub, and riparian woodland along Brizzolara Creek. In addition, coast live oaks are a common to dominant component of the riparian community along the section of the creek that traverses the study site.

Coastal live oak woodlands are common on the north facing slopes and canyon areas on the campus and form a significant stand on the northwestern facing slope along Poly Canyon Road in the study site. While coast live oak woodlands are variable, on the study site they are completely dominated by a dense cover of tall coast live oaks; many of which are multiple stemmed. These oaks form a closed-canopied woodland composed of very old trees that typically vary from about 1 to 3 feet in trunk diameter; however, there are some smaller and larger trees present. Several very large sprawling trees with large branches that come to the ground occur locally.

The overstory of the oak woodland is mostly composed of a dark, evergreen canopy of mature coast live oak trees. The understory is quite variable from place to place depending on the microhabitat conditions. In some places the understory may be composed of a relatively lush growth of ferns, shrubs, and shade tolerate herbs. In other places, the understory is sparse consisting of a thick layer of litter with scattered shrubs and herbs.

Common associated species in the understory or open areas of the oak woodland include *Artemisia californica* (California sagebrush), *Mimulus aurantiacus* (Bush monkeyflower), *Salvia mellifera* (Black sage), *Baccharis pilularis* (Coyote bush), *Heteromeles arbutifolia* (Toyon), *Rhamnus californica* (Coffee-berry), *Rubus ursinus* (blackberry), *Toxicodendron diversilobum* (poison oak), and *Ribes speciosum* (Fuchsia-flowered gooseberry). Associated herbaceous species include many grasses and forbs such as *Bromus diandrus* (ripgut brome), *Salvia spathacea* (hummingbird sage), and *Stachys bullata* (hedge-nettle). In open areas some native grasses are found in association with the oaks on site, including *Nassella lepida* (Foothill needlegrass), *Nassella pulchra* (Purple needlegrass), *Bromus carinatus* (California brome), and *Melica imperfecta* (Coast range melic).

4. Coastal Scrub Community

This community is typically dominated by small to medium sized (3-6 feet tall) shrubs with a herbaceous understory. Both the density and the composition of the shrub cover vary from site to site as does the herbaceous understory. The dominant shrubs in this plant community are comparatively soft-stemmed plants that undergo significant dieback during the summer drought. For this reason, coastal scrub is sometimes referred to as "soft chaparral" as opposed to the "hard chaparral" or "true chaparral".

The coastal scrub community is the dominant cover on the steep hillsides north and east of the study site and small stands extend onto the northeastern portion of the study site. Patches of coastal scrub are also found along the slope of Poly Canyon Road in the southeast portion of the site where coastal scrub forms a mosaic with the coast live oak woodland. The dominant shrubs of the coastal scrub on site are *Artemisia californica* (California sagebrush), *Mimulus aurantiacus* (Bush monkeyflower) and *Salvia mellifera* (Black sage). Other shrubs present include *Baccharis pilularis* (Coyote bush), *Hazardia squarrosa* (saw-toothed goldenbush), *Heteromeles arbutifolia* (Toyon), and *Prunus ilicifolia* (Holly-leafed Cherry), *Rhamnus californica* (Coffee-berry), and *Ribes speciosum* (Fuchsia-flowered gooseberry). Among these shrubs are some native grasses, including *Nassella lepida* (Foothill needlegrass), *Nassella pulchra* (Purple needlegrass), *Bromus carinatus* (California brome), and *Melica imperfecta* (Coast range melic), and many of the same alien grass species listed above under California native grassland.

5. Riparian Woodland

A well developed riparian woodland occurs along the section of Brizzolara Creek that traverses the study site even though it has been reduced in size historically by human activities. This band of riparian woodland varies in width and density depending on the size and nature of the banks, the amount of water carried, the persistence of water in the soil, on the depth and lateral extent of the subterranean aquifer, and perhaps more importantly the extent of human

modification of the habitat. Because of California's summer dry season, many riparian species, such as the California sycamores and Arroyo willows, are restricted to streamside areas where water is permanently available.

The tree overstory is composed of native *Platanus racemosa* (California sycamore), *Quercus agrifolia* (Coast live oak), *Umbellularia californica* (California bay-laurel), and *Salix laevigata* (Red willow) sparsely invaded by *Schinus molle* (Peruvian pepper tree) and *Phoenix dactylifera* (Date palm).

Common understory shrubs include the following: *Heteromeles arbutifolia* (Toyon), *Rhamnus californica* (Coffee-berry), *Rubus ursinus* (California blackberry), *Salix lasiolepis* (Arroyo willow), and *Toxicodendron diversilobum* (Poison-oak). Common native herbs include: *Artemisia douglasiana* (Mugwort), and *Salvia spathacea* (Hummingbird sage). Native grasses are mostly *Bromus carinatus* (California brome), *Elymus glaucus* (Blue wild rye), *Leymus condensatus* (Giant wild rye), and *Melica imperfecta* (Coast range melic). Common alien forbs include *Carduus pycnocephalus* (Italian thistle), and *Foeniculum vulgare* (Fennel). Alien grasses are mostly *Bromus diandrus* (Ripgut brome), *Polypogon monspeliensis* (Rabbitfoot grass), and *Piptatherum miliaceum* (Smilo). Other common associates are listed in Appendix 1.

A second area of riparian woodland is associated with Drumm Reservoir and the inlet channel that drains into it. A fringe of arroyo willow-dominated riparian vegetation partially encircles the reservoir and extends as a narrow band along the inlet drainage. This riparian woodland vegetation grades into freshwater marsh that extends out into the reservoir and occupies part of the channel as well. It is bordered by areas of anthropogenic ruderal vegetation on the upland sites adjacent to the reservoir. The small tributary that traverses the coast live oak woodland along Poly Canyon Road and then flows under the paved flood plain into Brizzolara Creek has some species typical riparian vegetation but is lined entirely by coast live oaks.

6. Freshwater Marsh

Freshwater marsh vegetation occurs in patches along Brizzolara Creek and more extensively around the margin of Drumm Reservoir and along much of the drainage channel upstream from the reservoir. Freshwater marshes occur in nutrient-rich mineral soils that are saturated through much or all of the year. These communities are best-developed in locations with slow-moving or stagnant shallow water. Such sites commonly occur along the margins of creeks or along drainages where water is allowed to pool in depressions or move very slowly downslope. In areas where freshwater marshes occur there is not always standing water throughout the year. In some cases the water table is so close to the surface that it can be tapped by marsh plants. On hillsides, there are small seep areas associated with the drainages that provide a source of water much of the year.

A zone of tall reed-dominated freshwater marsh vegetation occupies part of the basin of Drumm Reservoir and the seasonal drainage channel that empties into the reservoir. Tall herbaceous monocots are dominant including native species such as *Scirpus californicus* (tule), *Typha* spp. (cattail), and *Phragmites australis* (common reed), and the introduced *Iris pseudoacorus* (water flag). The freshwater marsh vegetation grades into a narrow band of *Salix lasiolepis* (Arroyo Willow) which has developed along the east side of the reservoir and individual shrubs scattered upstream along the inlet channels. Other common species found along the Drumm Reservoir and its upstream channels are listed below.

Water bent grass

Rattail Fescue

Native Grasses, Sedges & Rushes

Cyperus eragrostis	Nutsedge	Epilobium brachycarpum	Annual willow-
Hordeum brachyantherum	Meadow Barley	Epilobium ciliatum	Willow-herb
Juncus bufonius	Toad rush		
Juncus patens	Spreading rush		
Juncus phaeocephalus	Brown-headed rush		
Scirpus pungens	Common Threes quare		
Typha latifolia	Broad-Leaved Cattail		
Alien Gras	sses	Alien Fo	rbs
Alien Gras	Ses Foxtail Barley	Alien Fo	r bs Italian Thistle
Hordeum murinum	Foxtail Barley	Carduus pycnocephalus	Italian Thistle
Hordeum murinum Leptochloa fascicularis	Foxtail Barley Bearded Sprangletop	Carduus pycnocephalus Dipsacus sativus	Italian Thistle Teasel
Hordeum murinum Leptochloa fascicularis Lolium multiflorum	Foxtail Barley Bearded Sprangletop Annual Ryegrass	Carduus pycnocephalus Dipsacus sativus Foeniculum vulgare	Italian Thistle Teasel Fennel
Hordeum murinum Leptochloa fascicularis Lolium multiflorum Lolium perenne	Foxtail Barley Bearded Sprangletop Annual Ryegrass Perennial Ryegrass	Carduus pycnocephalus Dipsacus sativus Foeniculum vulgare Hirschfeldia incana	Italian Thistle Teasel Fennel Perennial Mustard

Native Forbs

Curly Dock

Milk Thistle

7. Anthropogenic Communities

Polypogon viridis

Vulpia myuros

Communities dominated by plants introduced by humans and established or maintained by human disturbance are anthropogenic communities. Some of these are artificial communities such as plantations, cultivated row-crops, lawns, vineyards, etc. Others are assemblages of weedy species that have invaded disturbed areas, sometimes in spite of human efforts to control them. Weed-dominated communities often represent the early stages of natural succession. In the absence of disturbance many weedy plants do not persist, but are gradually replaced by native vegetation. Many of man's activities, however, cause continual disturbance.

Rumex crispus

Silybum marianum

Anthropogenic communities on the project site can be divided into the two types: ruderal and urban mix forest communities. Ruderal communities occur where frequent disturbances, caused by hiking trails, vehicles, dust, etc. Even a one-time tilling of the soil causes a shift from native species intolerant of such disturbance to native or alien species, often annuals, capable of colonizing and persisting on such disturbed lands. Urban mix forest communities are those that have been planted by humans and are maintained as exotic forests by humans. In some cases ornamental trees are capable of reproducing and becoming naturalized in the area. For example, Eucalyptus globulus (blue gum) have been planted in some areas on and near the site and have reproduced and spread naturally because they are adapted to the local conditions.

Ruderal Communities. Species of disturbed sites such as along roadways include various annual grasses and forbs of Eurasian origin that also occur in the grasslands. Even heavily disturbed pasture areas have been invaded by ruderal species. Many ruderal communities are successional in nature, covering the ground for a few years after a disturbance has taken place, and eventually giving way to the native and climax communities of the area when the disturbance factor is removed. Some of the introduced weeds, however, often maintain a position in the community as succession takes place, and the community may take vears to or in some cases never return to its original state.

Along the north-central boundary of the project site is an area flanking the creek bed that is presently thoroughly invaded by alien ruderals as a result of some unknown past disturbance to the previously existing California native grassland. Some of the common weedy species in

ruderal areas on site include:

Alien Gras	ses	Alien Forbs				
Avena barbata	Slender Wild Oats	Anthemis cotula	Mayweed			
Avena fatua	Common Wild Oats	Brassica nigra	Black mustard			
Brachypodium distachyon	False Brome Grass	Carduus pycnocephalus	Italian thistle			
Bromus diandrus	Ripgut Brome Grass	Dipsacus sativus	Teasel			
Bromus hordeaceus	Soft Chess	Erodium moschatum.	Green-Stem Filaree			
Bromus madritensis	Spanish Brome	Foeniculum vulgare	Fennel			
Hordeum murinum	Foxtail Barley	Hirschfeldia incana	Perennial Mustard			
Lolium multiflorum	Annual Ryegrass	Medicago polymorpha	Bur-clover			
Lolium perenne	Perennial Ryegrass	Picris echioides	Bristly ox-tongue			
Vulpia myuros	Rattail Fescue	Plantago lanceolata	English plantain			
		Polygonum arenastrum	Knotweed			
		Rumex crispus	Curly dock			
		Silybum marianum	Milk Thistle			
		Sonchus asper	Prickly sow-thistle			
		Sonchus oleraceus	Common sow-thistle			

Urban Mix communities include plantations, windbreaks, and ornamental plantings comprised of mostly non-native trees such as *Eucalyptus* sp. as well as other exotic species that have been planted or have escaped from cultivation and become part of the local vegetation. Native species may also be a component of these humaninfluenced communities. In the study area there are significant areas in the southeastern portion of the site with urban mix forest communities. In these areas ornamental trees have been planted along roads, parking lots, fences, agricultural fields, and pastures. The most extensive of these man-made forests are composed of large plantings of *Eucalyptus* spp., mostly *Eucalyptus* globulus (blue gum). Some of these plantations are characterized by having pure, dense stands of blue gum trees that grow tall and straight and form wind breaks and provide screening. Other common trees planted in various locations include: Acacia melanoxylon (Blackwood acacia), Casuarina sp. (She-oak), Grevillea robusta (Silky-oak), Olea europaea (olive), Phoenix dactylifera (date palm), Pistacia atlantica (pistachio), Prunus dulcis (almond), Prunus spp. (cherry, apple), Schinus molle (Peruvian pepper-tree), and various species of eucalyptus. Some of these exotic trees are successfully reproducing themselves and are invading some of the surrounding native communities. Some planted species are native to California but not to the Cal Poly campus such as Pinus radiata (Monterey pine). In some areas the exotic trees occur as windrows, in other areas they form a mixed man-made forest, and in still other areas they mix with native species. These mixtures of trees form what is sometimes referred to as an "urban mix" forest because they often occur at the interface of urban areas. The urban mix is common in several areas on campus and along some of the drainages and creek areas where ornamental trees mix with willows, oaks, and other natives.

RARE AND ENDANGERED PLANTS

Twelve special status plant species have been identified on or near the project site and could potentially be on the site. These species have been documented to occur northeast of the project site in Poly Canyon (DeRome 1997), or within the encompassing San Luis Obispo 7.5 minute Quadrangle (Skinner and Pavlick 1994). They are sufficiently rare to have been officially recognized as such by private or governmental agencies (see list below). Other rare plants listed in the Cal Poly Master Plan may also be potential on the project site. A rare plant is one that is limited in terms of number of individual plants still present in the wild, and also one that has a limited distribution. Usually rare plants are found in only a few highly restricted populations. This distribution is usually determined by the rarity of the habitat in which the plant is able to grow. While many rare plants are not at present threatened with extinction, they occur in such small numbers over such a limited range that they could be threatened if their remaining habitat is modified. An endangered species is one that is not only rare, but also threatened with extinction because the survival of existing populations and future reproduction are jeopardized. The main reason that most such plants in California are extinct or rare and endangered is that humans are gradually destroying their habitats through urbanization, forest destruction, agricultural practices and pollution. Attempts are being made to eliminate these practices and to protect the rare and/or endangered species in California.

The Basis for Recognizing Rare and Endangered Plants

California Native Plant Society (CNPS)—Since the 1970's the California Native Plant Society, an organization of professional and lay botanists that is dedicated to the preservation of California's native flora, has been involved in determining which plants in California are rare and endangered. The society has published five editions of a book entitled Inventory of Rare and Endangered Vascular Plants of California. The fifth edition of the CNPS Inventory (Skinner and Pavlik, 1994) lists plants in four categories: List 1—Plants of Highest Priority, with two sublists: 1A—Plants Presumed Extinct in California and 1B—Plants Rare and Endangered in California and Elsewhere; List 2— Plants Rare or Endangered in California, but More Common Elsewhere; List 3—Plants about which More Information is Needed; and List 4—Plants of Limited Distribution (A Watch List). Additionally each plant listed is given a R-E-D Code (Rarity, Endangerment, and Distribution) with numbers ranging from 1-3 in each category. For each of the values a higher number is an indication of greater sensitivity:

R (rarity)

- 1. Rare but found in sufficient numbers and distributed widely enough that the potential for extinction or extirpation is low at this time.
- 2. Occurrence confined to several populations or to one extended population.
- 3. Occurrence limited to one or a few highly restricted populations, or present in such small numbers that it is seldom reported.

E (endangerment)

- 1. Not endangered.
- 2. Endangered in a portion of its range.
- 3. Endangered throughout its range.

D (distribution)

- 1. More or less widespread outside California.
- 2. Rare outside California.
- 3. Endemic to California.

CNPS is revising its listing. In June 2000 the CNPS posted a list of the taxa included in the 6th edition of the CNPS Inventory which is not in hard copy yet but is

available on their web site (<u>http://www.cnps.org/rareplants/inventory/6thEdition.htm</u>). This list includes the RED codes that are to be adopted in the new version of the inventory.

U. S. Department of Fish and Wildlife—The Endangered Species Act in 1973 resulted in listing and protecting rare plants at the federal level by the U. S. Fish and Wildlife Service (USFWS). Their categories are summarized below:

- **Endangered Species (FE)** are taxa in danger of extinction throughout all or a significant portion of their range.
- **Threatened Species (FT)** are taxa likely to become endangered within the foreseeable future throughout all or a significant portion of their range.
- **Candidate Species** are taxa for which the Fish and Wildlife Service (Service) has sufficient information on their biological status and threats to propose them as endangered or

California Department of Fish and Game—The California Endangered Species Act in 1984 resulted in listing and protecting rare plants at the state level with the California Department of Fish and Game (DFG). Their categories are summarized below:

- **Rare Species (CR)** are taxa that are not presently threatened with extinction but occur is such small numbers that they could become endangered if habitat conditions worsen.
- **Threatened Species (CT)** are taxa likely to become endangered within the foreseeable future without special protection and management efforts.
- **Endangered Species (CE)** are taxa whose prospects of survival are in immediate jeopardy for one or more reasons. These taxa are in danger of extinction throughout all or a significant portion of their range.

California Environmental Quality Act (CEQA)—For all plant species listed on CNPS's List 1B and 2, it is mandatory that they be fully considered during preparation of environmental documents relating to CEQA. For species on Lists 3 and 4, CNPS strongly recommends that they be considered in preparation of such documents.

Rare Plants Potentially On or Near the Poly Canyon North Proposed Housing Site

The rare plant species listed in the table below have documented occurrences within, adjacent to, or in the vicinity of the project site. Most are typically found on soils derived from serpentinite rock. Serpentinite is a metamorphic, magnesium silicate rock, often green in color and slippery to the touch. (It is the California state rock). Serpentinite and the soils derived from it have a number of traits inimical to plant growth. It is low in some essential nutrients, especially calcium, and high in magnesium. In addition, it is often high in toxic elements such as nickel and chromium. As a result of these unusual conditions, serpentinite rock and soil support unusual, endemic floras including a large number of rare and endangered species. The hillsides adjacent to the northeastern border of the project site exhibit serpentinite outcrops and shallow soils that support some unusual plant species, many of which are listed as rare and/or endangered. Rock outcrops provide specialized habitats for both plants and animals. Some species are restricted to the rock crevices or to the bare, dry rock surfaces. Rock outcrops are mostly sparsely vegetated by extremely drought tolerant species on their surfaces and by moister requiring species in their crevices.

We have included the current listing from the 1994 *Inventory of Rare and Endangered Vascular Plants of California* (fifth edition). In November 1995, the CNPS circulated for comment a list of changes to the *Inventory* that are proposed for an upcoming 6th edition. These include proposals to add plants not previously listed, to delete plants previously listed but on the basis of new information determined to be too common for listing, and to change the status of plants previously listed. In June 2000 the CNPS posted on its website a list of the taxa to be included in edition 6 of the Inventory: http://www.cnps.org/rareplants/inventory/6thEdition.htm

For each taxon listed below, the current listed status for California is based on the July 2000 Special Plant List by the California Department of Fish and Game, and the current federal status is taken from the United States Fish and Wildlife website as of 2 October 2000 (<u>http://ecos.fws.gov/webpage/webpage_usa_lists.html?#CA</u>). Both are indicated in the table on the next page.

Scientific Name	Common Name	C.N.P.S. Listing	RED Code	State Listing	Federal Listing
Calochortus clavatus ssp. clavatus	club-haired mariposa lily	List 4	1-1-3	None	None
Calochortus obispoensis	San Luis mariposa lily	List 1B	2-2-3	None	None
Calystegia subacaulis var. episcopalis	Cambria morning glory	List 1B	3-2-3	None	Species of Concern
Chlorogalum pomeridianum var. minus	Dwarf soaproot	List 1B	2-2-3	None	None
Chorizanthe breweri	Brewer's spineflower	List 1B	3-1-3	None	None
Chorizanthe palmeri	Palmer's spineflower	List 4	1-2-3	None	None
Dudleya abramsii ssp. murina	San Luis Obispo dudleya	List 1B	2-1-3	None	None
Layia jonesii	Jones' layia	List 1B	3-2-3	None	Species of Concern
Lomatium parvifolium	small-leaved lomatium	List 4	1-2-3	None	None
Perideridia pringlei	pringle's yampah	List 4	1-1-3	None	None
Sanicula hoffmannii	Hoffmann;s sanicle	List 4	1-1-3	None	None
Senecio aphanactis	rayless groundsel	List 2	3-2-1	None	None

Potential Rare Plant Species of the Poly North Housing Site

Calochortus clavatus ssp. clavatus (club-haired mariposa lily) is a bulb-forming lily that produces one or two strap-shaped green leaves in early spring. These are beginning to wither by the time the plant flowers in May or June. The flowers are cup-

shaped with 3 narrow, yellow-green sepals and three, obtriangular, yellow petals marked by a jagged, transverse, purple-brown band across the inner face. Each petal bears a rounded, depressed nectary toward the base surrounded by club-shaped yellow hairs. The anthers are large and purple. After the flowers wither the ovary develops into a slender, 3-angled capsule with many dark seeds. The plant is generally completely dry by late summer. The dry remains can be identified by the shape of the capsule. Only the bulb and seeds remain alive until the next growing season.

Calochortus clavatus ssp. *clavatus* is restricted to San Luis Obispo County and Santa Barbara County in the western portion of the Coast Ranges, mostly on soils derived from serpentinite parent material. In San Luis Obispo County it is known from several locations in the Santa Lucia and San Luis Ranges. Four other rare subspecies occur to the north and south of subspecies *clavatus*. It is known from several sites in the area.

Club-haired mariposa lily has been documented in several sites in Poly Canyon and on the Pennington Creek Biological Reserve. It has been observed on slopes immediately adjacent to the proposed Poly Canyon North housing site within a few minutes walk from the proposed campus housing site. The attractive flowers of this species make it likely that it will occasionally be picked by curious students hiking in the canyon.

Calochortus obispoensis (San Luis Obispo mariposa lily is a bulb-forming lily that produces one or two strap-shaped green leaves in early spring. These are beginning to wither by the time the plant flowers in May or June. The flowers are star-like with 3 narrow, yellow-green sepals and three yellow petals that are bearded with long purple and yellow hairs. After the flowers wither the ovary develops into a slender, 3-angled capsule with many dark seeds. The plant is generally completely dry by late summer. The dry remains can be identified by the shape of the capsule. Only the bulb and seeds remain alive until the next growing season.

San Luis mariposa lily is restricted to central San Luis Obispo County where it occurs only on the hills and mountains in the vicinity of San Luis Obispo. It generally occurs associated with dry serpentinite rock outcrops and soils within chaparral, coastal scrub, and valley and foothill grassland habitats (Hickman, 1993; Skinner and Pavlik, 1994). It is a component of the serpentinite California native grassland community on the Cal Poly campus. San Luis mariposa lily has been documented in several sites in Poly Canyon, near the "P", and on the Pennington Creek Biological Reserve. It has been observed on slopes immediately adjacent to the proposed Poly Canyon North housing site within a few minutes walk from the proposed campus housing site. The unusual flowers of this species make it likely that it will occasionally be picked by curious students hiking in the canyon.

Calystegia subacaulis ssp. episcopalis (Cambria morning glory) is a perennial herb with trailing or sometimes weakly twining stems. It has alternate, broadly triangular leaves that are minutely hairy. The cream-colored, funnel-shaped flowers are produced from April to June. After the flowers wither the plant develops small, dry capsules with dark seeds. By late summer the above-ground parts of the plants are completely dry and only seeds and an underground rootstock persist through the dry season. The plant is difficult to identify in the dry season because the dry parts shatter.

Cambria morning glory is at present known only from San Luis Obispo and northern Santa Barbara counties. In San Luis Obispo County it ranges from the Hearst Ranch in the northwestern corner of the county south to the vicinity of San Luis Obispo where it usually occurs in grassy sites with clay-rich soils often in association with serpentinite parent material. It has been observed on the proposed Poly Canyon North and Poly Canyon South housing sites, in the vicinity of Smith Reservoir, and in the Pennington Creek Biological Reserve.

During April and May 2000, scattered flowering stems of *Calystegia subacaulis* ssp. *episcopalis* were observed within the project site near Poly Canyon Road and near Drumm Reservoir in association with remnant California native grassland and coastal scrub. Additional non-flowering stems were observed as well. Because this species is relatively small and often obscured by overtopping grasses and forbs, it is easily overlooked when not in flower. Individuals present in a vegetative state, but not in flower this season, may have been missed. This species also produces underground stems that may arise aboveground some distance apart so as to give the appearance of separate individuals. However, these shoots may be part of the same genetic individual.

The population of Cambria morning glory may be directly impacted by the construction of the proposed campus housing. This species occurs on the approved Poly Canyon South housing site as well and near Shepherd Reservoir adjacent to the new Sports Complex. It is likely to occur on other nearby sites, but these have not yet been investigated. Plants off site would be subject to foot traffic from residents of the proposed buildings.

Chlorogalum pomeridianum var. minus (dwarf soaproot) is a perennial herb that grows from a large bulb with fibrous outer bulb scales. In spring it produces a rosette of wavy-margined, strap-shaped leaves. A branched inflorescence arises from the bulb, and flowers develop in late spring or early summer. Flower buds of dwarf soaproot are externally purple, but the open flowers are white. The flowers are nocturnal, opening in the evening and closing the next morning. Seed capsules about 5 mm diameter mature in summer. Plants of *Chlorogalum pomeridianum* are easily identified in spring by their characteristic leaves and in summer by the seed capsules. Plants of var. *minus* have comparatively short stems 20–40 cm tall, and the bulb coats are membranous or have relatively few fibers.

Dwarf soaproot grows mostly in grassy areas or openings in chaparral, coastal scrub, and coastal live oak woodland. It occurs from the coast ranges north of the San Francisco Bay region to the vicinity of San Luis Obispo. Around San Luis Obispo it occurs mostly on soils derived from serpentine. On the Cal Poly campus dwarf soaproot is known to occur in Poly Canyon and the Pennington Creek Biological Reserve and is probably present elsewhere as well. *Chlorogalum pomeridianum* was observed within the project site but could not be determined to variety because mature inflorescences could not be found during the field survey [deer and other herbivores often eat the immature flower clusters]. Because verified populations of dwarf soaproot (var. *minus*) are known to grow in Poly Canyon within a few minutes walk from the proposed campus housing site, we consider it probable that the plants found on site are var. *minus* as well.

The major impact of the proposed housing project would be removal of the existing individuals on the project site, and the activities of students in nearby natural areas. Foot traffic would be likely to have a negative impact on these plants by breaking their brittle stems and crushing the bulbs and leaves.

Chorizanthe breweti (Brewer's spineflower) is a brittle-stemmed annual herb. In early spring it produces a rosette of stalked, oval basal leaves. Typically a solitary flower is produced and three spreading, reddish-purple stems radiate away from the rosette. Stem leaves are generally in widely separated pairs and most are much smaller than the basal leaves. In vigorous plants the stems branch repeatedly. The tips of the branches bear clusters of tiny white to pale pink six-parted flowers, each surrounded by a tubular cluster of six red-purple, spine-tipped bractlets. Each flower produces a tiny, one-seeded dry fruit. After flowering the plant dies and only seeds survive through the dry season. The dry plant shatters very easily, but its remains can often be identified through the summer.

Chorizanthe breweri is an endemic to San Luis Obispo County where most occurrences are on serpentine or serpentine-derived soils. It occurs only in the vicinity of San Luis Obispo where it has a range similar to that of *Calochortus obispoensis*. Brewer's spineflower is known from about twenty occurrences. This species occurs in coastal scrub, closed-cone conifer forest, chaparral and cismontane woodland communities. Brewer's spineflower has been documented from Poly Canyon and from the Pennington Creek Biological Reserve.

Brewer's spineflower has not been observed within the proposed Poly Canyon North housing site, but it has been observed on nearby serpentine slopes within a few minutes walk from the proposed dormitories. Foot traffic would have a negative impact on populations of these brittle-stemmed plants.

Chorizanthe palmeri (Palmer's spineflower) is a brittle-stemmed annual herb. In early spring it produces a rosette of stalked, oval basal leaves. Usually a single stem 1– 12 inches high arises from the rosette, and it bears one or two, well-separated rings of leaves. Typically a solitary flower is produced at the end of the main stem and three spreading, reddish-purple stems radiate away from the upper leaf cluster. Stem leaves above this point are generally in widely separated pairs and most are much smaller than the leaves of the main stem. In vigorous plants the stems branch repeatedly. The tips of the branches bear dense, head-like clusters of tiny purple, six-parted flowers, each surrounded by a tubular cluster of six red-purple, spine-tipped bractlets. Each flower produces a tiny, one-seeded dry fruit. After flowering the plant dies and only seeds survive through the dry season. The dry plant shatters easily, but its remains can often be identified through the summer.

Chorizanthe palmeri is known definitely from Monterey and San Luis Obispo counties and may occur as well in San Benito and Santa Barbara counties. Most occurrences are on serpentine or serpentine-derived soils. In San Luis Obispo County it occurs in the Santa Lucia and San Luis Ranges from the northwestern corner of the county to the serpentine hills around San Luis Obispo.

Palmer's spineflower has not been observed within the proposed Poly Canyon North housing site, but it has been observed on nearby serpentine slopes within a few minutes walk from the proposed dormitories. Foot traffic would have a negative impact on populations of these brittle-stemmed plants.

Dudleya abramsii ssp. murina (San Luis Obispo dudleya) is a succulent perennial herb with a thick, fleshy taproot. It produces a dense rosette of narrow, fleshy, leaves with a dull, gray-green coloration. In late spring and early summer clusters of 5-petaled, cream-colored to dull purplish flowers are produced on stalks arising from the rosettes. The ovaries of these flowers mature as clusters of small, dry fruits that split open and release many tiny seeds. These plants tough it out during the dry season and their somewhat shriveled leaves and old dry flower clusters are easy to recognize.

San Luis Obispo dudleya is endemic to San Luis Obispo County and it is apparently limited to stony serpentinite soils and serpentinite rock outcrops, usually associated with California native grassland. Its range is limited to the hills bordering the San Luis Valley in the foothills of the Santa Lucia Mountains from Chorro Creek to Corral de Piedra Creek and in the San Luis Range from upper Prefumo Canyon to the Froom Ranch and the hills south of Broad Street. San Luis Obispo dudleya is known to occur in Poly Canyon and in the Pennington Creek Biological Reserve, and is to be expected in similar habitats elsewhere on campus.

Dudleya abramsii ssp. *murina* has not been observed within the proposed Poly Canyon North housing site, but it has been observed on nearby serpentine slopes within a few minutes walk from the proposed dormitories. Foot traffic would have a negative impact on populations of these plants by crushing their succulent leaves and dislodging rocks on the hillsides where the plants grow.

Layia jonesii (Jones' layia) is a slender, erect, spring-flowering herb. The basal and lower stem leaves are generally lobed and the upper have smooth margins. The stems and leaves bear a mixture of short stiff hairs and small glandular hairs. Usually there is a single main stem and several ascending branches. In April and May flowers are produced in daisy-like heads at the branch tips. There are 13–27 petal-like ray flowers in a double row around the periphery of the flower head. These are yellow with three creamy white tips. The center of the head contains many small, yellow disk flowers with purple anthers. When the plants go to seed, the flower heads shatter and the many tiny one-seeded dry fruits drop to the ground. By late June the plants are withered and completely dry. In the dry season the remains are generally not recognizable.

Jones layia is an annual herb that occurs in Monterey and San Luis Obispo counties. It grows in chaparral and California native grassland communities, primarily on open serpentine or clay slopes (Hickman, 1993). Within San Luis Obispo County this species occurs from the San Luis Obispo area to coastal hills north of Cayucos and the vicinity of Cypress Mountain. It occurs locally in Poly Canyon and may be expected in suitable habitats elsewhere on the Cal Poly campus including the project site.

Layia jonesii was not observed within the project site but it grows in Poly Canyon within a few minutes walk from the proposed campus housing site. The attractive daisylike flower heads of this species make it likely that it will occasionally be picked by

curious students hiking in the canyon. Foot traffic would have a negative impact on populations of these plants.

Lomatium parvifolium (small-leaf lomatium) is a spring-flowering perennial herb with a slender, woody rootstock. Leaves are produced through beginning in March or April and flowering generally begins in April and may continue into June. The smooth green leaves have expanded, sheathing bases and blades divided into many segments. The small yellow flowers are borne in flat-topped clusters up to 5 inches across. The flattened, dry fruits are often tinged with purple and have membranous wings. The mature fruit clusters shatter during the summer as the leaves wither. By mid-summer the above -ground parts of the plants are completely dry. The old fruiting stalks may persist in identifiable condition during the drought season.

Small leaved lomatium occurs from Santa Cruz County to Santa Barbara County in the western portion of the Coast Ranges, mostly on soils derived from serpentinite parent material. It is a component of coastal scrub, chaparral, California native grassland, and rock outcrop communities. It is known from several sites in the San Luis Obispo area. On the Cal Poly campus it has been documented from Poly Canyon, Serrano Canyon, and the Pennington Creek Biological Reserve, and probably occurs in other sites as well.

Lomatium parvifolium was not observed within the project site, but it grows on serpentine slopes in Poly Canyon within a few minutes walk of the proposed campus housing site. Foot traffic is likely to impact populations of these plants by crushing the leaves and stems and dislodging rocks on the hillsides where the plants grow.

Perideridia pringlei (adobe yampah) is a perennial herb that arises from a deeply buried tuber. In the spring one or two basal leaves are produced from the tuber. These leaves are divided into numerous linear segments. The basal leaves often wither before the flower stalks are produced. Slender, erect flowering stems arise in late spring or early summer. The few leaves become progressively smaller and less divided up the stem. The small white flowers are borne in a flat-topped cluster that is elevated above the leaves. After the petals have fallen the ovaries develop into small, 2-seeded dry fruits that shatter when the plants dry up in summer. Old dry fruit clusters may occasionally be recognizable through the dry season.

Adobe yampah is known to occur in coastal locations from Monterey to Los Angeles counties and in the interior from Nevada to Kern counties. In San Luis Obispo County it has been documented from a few widely scattered locations on serpentinite soils in the vicinity of San Luis Obispo, from dry hills east of Creston, and the summit of the Caliente Range. It grows in California native grasslands, open shrub-dominated communities, and rock outcrop communities. On the Cal Poly campus adobe yampah has been documented from Poly Canyon and may be expected in areas with serpentine soils elsewhere on campus.

Perideridia pringlei was not observed within the project site. However, it grows in Poly Canyon within a few minutes walk of the proposed campus housing site. Foot traffic is likely to impact populations of these plants by crushing the leaves and stems and dislodging rocks on the hillsides where the plants grow.

Sanicula hoffmannii (Hoffmann's sanicle) is a perennial herb 1–2 feet tall, threeparted leaves, and numerous, tiny yellow-orange flowers borne in dense, rounded balls at the ends of naked branches that emerge from a common origin like the spokes of an inverted umbrella. The fruits are small, flattened and beset with many hooked barbs around the top.

Hoffmann's sanicle occurs within a variety of communities including, chaparral, coastal prairie, and valley foothill grassland. It commonly occurs at the ecotone between chaparral or coastal scrub and grassland communities, but sometimes grows beneath the canopy of coast live oak trees. On the Cal Poly campus it has been documented from the Stenner Creek drainage and from the Pennington Creek Biological Reserve.

Sanicula hoffmannii was not observed within or in the immediate vicinity of the project site. Although it has not been observed in Poly Canyon it is likely to be present. Foot traffic is likely to impact populations of these plants by breaking the flowering or fruiting stems.

Senecio aphanactis (rayless groundsel) is a spring-flowering annual herb with a slender taproot. Stems are simple or branched and hairless. Leaves are linear to oblong, coarsely toothed, hairless, and borne directly on the stem. The flowering heads are small, urn-shaped, and clustered at the main stem and branch tips. The outer bracts are green and surround the inconspicuous flowers that all lack ray corollas. The dry dandelion-like fruits are hairy and bear numerous whitish bristles from the top.

Rayless groundsel is an inconspicuous annual that occurs in vernally moist openings in low elevation coastal scrub on the mainland from Solano County south to northern Baja California, and on Santa Rosa, Santa Cruz, and Santa Catalina Islands. It usually occurs in sparsely vegetated areas with shallow stony soil. In San Luis Obispo County, it is known from a few widely scattered sites from Montaña de Oro State Park to Creston. On the Cal Poly campus it has been documented from serpentine soils on "School Ridge" and on hills west of Poly Canyon. It is easily mistaken for the much more common weedy *Senecio vulgaris* (common groundsel).

Senecio aphanactiswas not observed within the project site but it has been documented to occur within a few minutes walk of the proposed campus housing site. Foot traffic might have a negative impact on populations of these plants.

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Native

Asteraceae

Hazardia squarrosa

APPENDIX 1. PLANT SPECIES LIST FOR POLY CANYON NORTH PROPOSED HOUSING SITE

 \mathbf{NG} = California Native Grassland \mathbf{CS} = Coastal Scrub \mathbf{R} = Riparian \mathbf{CG} = Anthropogenic Pastoral \mathbf{AU} = Anthropogenic Urban

 \bullet = occurs in that community & others; \bullet = occurs in that community principally or exclusively

ORIGIN	FAMILY	SCIENTIFIC NAME	COMMON NAME	NG	CS	R	CG	AU
		TREES						
Cultivate d	Fabaceae	Acacia melanoxylon	Blackwood Acacia					•
Cultivate d	Casuarinaceae	Casuarina <i>sp.</i>	She-Oak					•
Cultivate d	Pinaceae	Cedrus deodara	Deodar Cedar					•
Cultivate d	Myrtaceae	Eucalyptus globulus	Blue Gum			+		+
Cultivate d	Myrtaceae	Eucalyptus sideroxylon	Red Ironbark			+		+
Cultivate d	Myrtaceae	Eucalyptus viminalis	Manna Gum			+		+
Cultivate d	Proteaceae	Grevillea robusta	Silk Oak					•
Cultivate d	Juglandaceae	Juglans californica	Black Walnut			•		
Cultivate d	Moraceae	Morus sp.	Mulberry				•	
Cultivate d	Oleaceae	Olea europaea	Olive		+	+	+	+
Cultivate d	Arecaceae	Phoenix dactylifera	Date Palm			٠		
Cultivate d	Pinaceae	Pinus radiata	Monterey Pine					•
Cultivate d	Anacardiaceae	Pistacia atlantica	Pistacio					•
Native	Platanaceae	Platanus racemosa	Sycamore			٠		
Native	Fagaceae	Quercus agrifolia	Coast Live Oak		+	+		+
Native	Salicaceae	Salix laevigata	Red Willow			٠		
Cultivate d	Anacardiaceae	Schinus molle	Peruvian Pepper-Tree			+		+
Cultivate d	Anacardiaceae	Schinus terebinthifolius	Brazilian Pepper-Tree			+		+
Native	Anacardiaceae	Umbellularia californica	California Bay-Laurel			•		
		SHRUBS						
Native	Asteraceae	Artemisia californica	California Sagebrush		•			
Native	Asteraceae	Baccharis pilularis	Coyote Bush		+	+		
Native	Asteraceae	Baccharis salicifolia	Seep-willow			•		
Cultivate d	Fabaceae	Cercis occiden talis	Redbud					•
Native	Ranunculaceae	Clematis ligusticifolia	Virgin's Bower			•		

Saw-Toothed

•

ORIGIN	FAMILY	SCIENTIFIC NAME	COMMON NAME	NG	CS	R	CG	AU
			Goldenbush					
Native	Rosaceae	Heteromeles arbutifolia	Toyon		+	+		
Native	Scrophulariacea e	Keckiella cordifolia	Climbing Penstemon		•			
Native	Caprifoliaceae	Lonicera subspicata var. denudata	Chaparral Honeysuckle		•			
Native	Fabaceae	Lupinus albifrons	Bush Lupine		•			
Alien	Lamiaceae	Marrubium vulgare	Horehound				•	
Native	Scrophulariacea e	Mimulus aurantiacus	Bush Monkeyflower		•			
Alien	Solanaceae	Nicotiana glauca	Tree Tobacco		+	+		
Cultivate d	Rosaceae	Prunus dulcis	Almond				•	
Native	Rosaceae	Prunus ilicifolia	Holly-Leaved Cherry		•			
Native	Rhamnaceae	Rhamnus californica	Coffee-Berry		+	+		
Native	Rhamnaceae	Rhamnus crocea	Redberry		•			
Native	Grossulariaceae	Ribes speciosum	Fuchsia-Flowered Gooseberry		•			
Alien	Euphorbiaceae	Ricinus communis	Castor-Bean			٠		
Native	Rosaceae	Rubus ursinus	California Blackberry			•		
Native	Salicaceae	Salix lasiolepis	Arroyo Willow			•		
Native	Lamiaceae	Salvia mellifera	Black Sage		•			
Native	Caprifoliaceae	Sambucus mexicana	Elderberry		+	+		
Native	Anacardiaceae	Toxicodendron diversilobum	Poison-Oak		+	+		
		FERNS & FERN AL	LIES					
Native	Equisetaceae	Equisetum telmateia	Giant Horsetail			٠		
		PERENNIAL FOR	RBS					
Native	Asteraceae	Achillea millefolium	Yarrow	•				
Native	Asteraceae	Acourtia microcephala	Sacapellote		•			
Native	Asteraceae	Artemisia douglasiana	Mugwort			•		
Native	Asclepiadaceae	Asclepias fascicularis	Milkweed	+		+		
Alien	Liliaceae	Asparagus asparagoides	Garden Smilax			•		
Native	Asteraceae	Baccharis douglasii	Marsh Baccharis			•		
Native	Apiaceae	Berula erecta	Cutleaf water-parsnip			•		
Native	Liliaceae	Bloomeria crocea	Golden Stars	•				
Native	Convolvulaceae	Calystegia macrostegia	Wild Morning Glory	•				
Native	Convolvulaceae	Calystegia subacaulis ssp. episcopalis	Cambria Morning Glory	•				
Alien	Asteraceae	Centaurea calcitrapa	Purple star-thistle				+	+
Native	Chenopodiaceae	Chenopodium californicum	California Goosefoot			•		
Native	Liliaceae	Chlorogalum pomeridianum	Soap Plant	•				
Alien	Apiaceae	Conium maculatum	Poison Hemlock			•		
Alien	-	Convolvulus arvensis	Bindweed			•		
Native	Liliaceae	Dichelostemma capitatum	Blue Dicks	•				
Alien	Dipsacaceae	Dipsacus sativus	Teasel			•		
Native	Onagraceae	Epilobium canum	California-fuchsia	•				

Alien

Alien

Alien

Asteraceae

Cirsium vulgare

Chenopodiaceae Chenopodium album

Chenopodiaceae Chenopodium murale

ORIGIN	FAMILY	SCIENTIFIC NAME	COMMON NAME	NG	CS	R	CG	AU
Native	Onagraceae	Epilobium ciliatum	Willow-herb			•		
Alien	Apiaceae	Foeniculum vulgare	Fennel			+	+	
Native	Asteraceae	Gnaphalium californicum	Everlasting	+		+		
Native	Asteraceae	Gnaphalium canescens	Everlasting		٠			
Native	Asteraceae	Helenium puberulum	Sneezeweed			•		
Alien	Brassicaceae	Hirschfeldia incana	Perennial Mustard			+	+	
Native	Fabaceae	Lathyrus vestitus var. vestitus	Sweet Pea		•			
Native	Apiaceae	Lomatium caruifolium	Biscuit Root	•				
Alien	Fabaceae	Lotus corniculatus	Bird's-foot Trefoil			+	+	+
Native	Cucurbitaceae	Marah fabaceus	Wild Cucumber Vine		•			
Native	Scrophulariacea	Mimulus guttatus	Common			•		
	e	C	Monkeyflower					
Alien	Oxalidaceae	Oxalis pescaprae	Bermuda-Buttercup			٠		
Native	Verbenaceae	Phyla nodiflora	Phyla			•		
Alien	Plantaginaceae	Plantago lanceolata	English Plantain			•		
Alien	Brassicaceae	Rorippa nasturtium-aquaticum	Watercress			٠		
Alien	Polygonaceae	Rumex conglomeratus	Knotted Dock			٠		
Alien	Polygonaceae	Rumex crispus	Curly Dock			٠		
Alien	Polygonaceae	Rumex kerneri	Kerner's Dock			٠		
Alien	Polygonaceae	Rumex pulcher	Fiddle Dock			•		
Native	Polygonaceae	Rumex salicifolius	Willow Dock			٠		
Native	Lamiaceae	Salvia spathacea	Hummingbird Sage		•			
Native	Apiaceae	Sanicula crassicaulis	Sanicle	•				
Native	Iridaceae	Sisyrinchium bellum	Blue-Eyed-Grass	•				
Native	Solanaceae	Solanum americanum	Black Nightshade		•			-
Native	Solanaceae	Solanum douglasii	Black Nightshade		•			
Native	Urticaceae	Urtica dioica ssp. holosericea	Stinging Nettle			•		
Native	Urticaceae	Urtica urens	Stinging Nettle			•		
Native	Verbenaceae	Verbena lasiostachys	Vervain			•		
Alien	Apocynaceae	Vinca major	Periwinkle			•		
		ANNUAL OR BIENNIA	AL FORBS					
Alien	Amaranthaceae	Amaranthus albus	Amaranth				+	
Alien	Primulaceae	Anagallis arvensis	Scarlet Pimpernel		+	+	+	+
Alien	Asteraceae	Anthemis cotula	Mayweed			+	+	
Alien	Chenopodiaceae	Atriplex suberecta	Peregrine Saltbush				•	
Alien	Brassicaceae	Brassica nigra	Black Mustard				+	
Alien	Brassicaceae	Capsella bursa-pastoris	Shepherd's Purse			+	+	
Alien	Asteraceae	Carduus pycnocephalus	Italian Thistle			+	+	
Alien	Asteraceae	Carthamus lanatus	Distaff Thistle				•	
Alien	Euphorbiaceae	Chamaesyce maculata	Spotted Spurge					•
Native	Euphorbiaceae	Chamaesyce serpyllifolia	Prostrate Spurge					•
Alien	Asteraceae	Chamomilla suaveolens	Pineapple Weed				•	
			rr					

Goosefoot

Goosefoot

Bull Thistle

ullet

•

•

ORIGIN	FAMILY	SCIENTIFIC NAME	COMMON NAME	NG	CS	R	CG	AU
Native	Portulacaceae	Claytonia perfoliata	Miner's Lettuce			٠		
Alien	Asteraceae	Conyza bonariensis	South American Horseweed			+		+
Alien	Asteraceae	Conyza canadensis	Common Horseweed			+		+
Alien	Asteraceae	Cotula australis	Australian Cotula				•	
Escaped	Asteraceae	Cynara scolymus	Artichoke					•
Native	Onagraceae	Epilobium brachycarpum	Annual willow-herb					•
Alien	Geraniaceae	Erodium cicutarium	Redstem Filaree			+	+	
Alien	Geraniaceae	Erodium moschatum	Green-Stem Filaree			+	+	
Alien	Rubiaceae	Galium aparine	Common Bedstraw			•		
Alien	Geraniaceae	Geranium dissectum	Annual Geranium				•	
Alien	Asteraceae	Gnaphalium luteoalbum	Cudweed			+	+	
Native	Asteraceae	Hemizonia congesta ssp. luzulifolia	Hayfield Tarweed				•	
Alien	Scrophulariacea	Kicksia elatine	Fluelin			Kic		
	e					ksia		
						elat		
						ine		
Alien	Lythraceae	Lythrum hyssopifolium	Loosestrife			•		
Alien	Malvaceae	Malva nicaeensis	Bull Mallow					•
Alien	Malvaceae	Malva parviflora	Common Mallow			•		
Alien	Fabaceae	Medicago polymorpha	Bur-Clover			•		
Alien	Asteraceae	Picris echioides	Bristly Ox -Tongue			+	+	
Alien	Polygonaceae	Polygonum arenastrum	Knotweed			•		
Alien	Brassicaceae	Raphanus sativus	Radish				•	
Alien	Chenopodiaceae		Russian-Thistle					•
Alien	Apiaceae	Scandix pecten-veneris	Darning Needle			•		
Alien	Asteraceae	Senecio vulgaris	Common Groundsel			•		
Alien	Asteraceae	Silybum marianum	Milk-Thistle			+	+	
Alien	Brassicaceae	Sisymbrium officinale	Hedge Mustard				•	
Alien	Asteraceae	Sonchus asper	Prickly Sow-Thistle			+	+	
Alien	Asteraceae	Sonchus oleraceus	Common Sow-Thistle			+	+	
Alien	Caryophyllacea e	Spergularia rubra	Sand Spurry				•	
Alien	Caryophyllacea e	Stellaria media	Chickweed				•	
Alien	Caryophyllacea	Stellaria pallida	Chickweed				•	
Alien	Apiaceae	Torilis arvensis	Hedge-Parsley			•		
Alien	•	Tribulus terrestris	Puncture Vine					•
Alien	Fabaceae	Vicia sativa	Vetch				•	
Alien	Asteraceae	Xanthium strumarium	Cocklebur					
	. Istoracout					-		
. 1.		PERENNIAL GRAS						
Alien	Poaceae	Agrostis viridis	Water Bent Grass			•		
Native	Poaceae	Bromus carinatus	California Brome	+	+	+		+
Alien	Poaceae	Bromus catharticus	Rescue Grass			•		
Alien	Poaceae	Cynodon dactylon	Bermuda Grass			+	+	+

ORIGIN	FAMILY	SCIENTIFIC NAME	COMMON NAME	NG	CS	R	CG	AU
Alien	Poaceae	Dactylis glomerata	Orchard Grass			+	+	+
Native	Poaceae	Distichlis spicata	Salt grass			۲		
Native	Poaceae	Hordeum brachyantherum	Native Barley			٠		
Native	Poaceae	Leymus condensatus	Giant Wild Rye			٠		
Native	Poaceae	Leymus triticoides	Creeping Wild Rye	+		+		
Alien	Poaceae	Lolium perenne	Ryegrass			+	+	
Native	Poaceae	Melica californica	California Melic	+	+			
Native	Poaceae	Melica imperfecta	Coast Range Melic	•				
Native	Poaceae	Nassella lepida	Foothill Needlegrass	+		+	+	
Native	Poaceae	Nassella pulchra	Purple Needlegrass	+		+	+	
Alien	Poaceae	Paspalum dilatatum	Dallis Grass			•		
Alien	Poaceae	Pennisetum clandestinum	Kikiyu Grass			٠		
Alien	Poaceae	Pennisetum setaceum	Fountain Grass					٠
Alien	Poaceae	Phalaris aquatica	Harding Grass			+	+	+
Native	Poaceae	Phragmites australis	Common Reed			٠		
Alien	Poaceae	Piptatherum miliaceum	Smilo			+	+	+
Native	Poaceae	Poa secunda	Bluegrass	+	+			
Alien	Poaceae	Sorghum halepense	Johnson Grass			٠		
		ANNUAL GRAS	SES					
Alien	Poaceae	Avena barbata	Slender Wild Oat				•	
Alien	Poaceae	Avena fatua	Common Wild Oat			+	+	
Alien	Poaceae	Avena sativa	Cultivated Oats				+	+
Alien	Poaceae	Brachypodium distachyon	False Brome Grass		+	+	+	+
Alien	Poaceae	Bromus catharticus	Rescue Grass			+	+	+
Alien	Poaceae	Bromus diandrus	Ripgut Brome	+	+	+	+	+
Alien	Poaceae	Bromus hordeaceus	Soft Chess	+	+	+	+	+
Alien	Poaceae	Bromus madritensis ssp.	Spanish Brome				٠	
		madritensis						
Alien	Poaceae	Bromus madritensis ssp. rubens	Red Brome				٠	
Alien	Poaceae	Bromus sterilis	Poverty Brome				٠	
Alien	Poaceae	Hordeum marinum ssp.	Mediterranean Barley			+	+	
	D	gussoneanum	ר איז ד			-		
Alien	Poaceae	Hordeum murinum	Foxtail Barley			+	-	
Alien	Poaceae	Hordeum vulgare	Cultivated Barley	+	+	+	•	
Alien	Poaceae	Lolium multiflorum	Ryegrass	T	T	+	- <u>-</u> -	<u> </u>
Alien	Poaceae	Poa annua	Annual Bluegrass				-	
Alien Alien	Poaceae	Polypogon monspeliensis Triticum aestivum	Rabbitfoot Grass Wheat			•		
	Poaceae						•	
Alien	Poaceae	Vulpia bromoides	Annual Fescue Small Fescue	-	-	•		
Native	Poaceae	Vulpia microstachys		+	+	-	-	
Alien	Poaceae	Vulpia myuros	Rattail Fescue	+	+	+	+	–
<u>NT ··</u>		RUSHES, SEDGES & OTHER MON						
Native	Cyperaceae	Cyperus eragrostis	Umbrella Sedge			•		
Native	Cyperaceae	Scirpus californicus	California Tule			•		
Native	Cyperaceae	Scirpus cernuus	Dwarf Bulrush			•		
Native	Cyperaceae	Scirpus maritimus	Common Bulrush			•		

ORIGIN	FAMILY	SCIENTIFIC NAME	COMMON NAME	NG	CS	R	CG	AU
Native	Cyperaceae	Scirpus pungens	Common threesquare			•		
Native	Cyperaceae	Eleocharis macrostachya	Spikerush			•		
Introduce d	Iridaceae	Iris pseudoacorus	Water flag			•		
Native	Cyperaceae	Scirpus pungens	Common Threesquare			•		
Native	Juncaceae	Juncus bufonius	Toad Rush			•		
Native	Juncaceae	Juncus effusus ssp. pacificus	Soft Rush			•		
Native	Juncaceae	Juncus patens	Spreading Rush			•		
Native	Juncaceae	Juncus phaeocephalus	Brown-Headed Rush			•		
Native	Potamogetonace	Potamogeton foliosus?	Pondweed			•		
	ae							
Native	Typhaceae	Typha domingensis	Cattail			٠		
Native	Typhaceae	Typha latifolia	Cattail			•		

BOTANICAL SURVEY

Slack Street Proposed Campus Housing Site

Cal Poly State University Campus San Luis Obispo, California

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EXECUTIVE SUMMARY

This report presents the results of a botanical survey conducted during April, May, June, and September 2000 on a site proposed for new student housing near the intersection of Grand Avenue and Slack Street at the southern entrance to the campus of Cal Poly, San Luis Obispo. Special attention was given to potential occurrences of several rare, endangered or special-status plant species known to exist within the San Luis Obispo Quadrangle (Skinner and Pavlik 1994), and to any sensitive habitats present on the site.

We identified 98 plant species (Appendix 1), 48 natives and 50 aliens, and five general plant communities: (1) coastal scrub; (2) coast live oak woodland; (3) riparian (dominated by exotic trees); (4) freshwater marsh; and (5) coastal valley grassland. Historically, the area was largely California native grassland, coastal scrub, and coast live oak woodland but historical and recent changes due to human activities and land use patterns have greatly modified the site. The site now has a large number of introduced trees, forbs, and grasses although many native plants are still present on the site. The historic California native grassland is currently being used for pasture and has been converted to grassland of mostly alien grasses and forbs. Coastal scrub is present on the upper slopes, along with some Coast live oak woodland; however, these associations have been invaded by many introduced species and Mission cactus is prevalent in several areas. Stands of eucalyptus, Peruvian pepper, and olive trees line the two seasonal drainages that traverse the site from northeast to southwest and also occur in other upland areas as well.

Although extensive serpentinite rock outcrops exist on the slope above the Slack Street site, no serpentinite outcrops, or any of the rare species known to occur on such outcrops in the San Luis Obispo area, were found on the study site.

INTRODUCTION

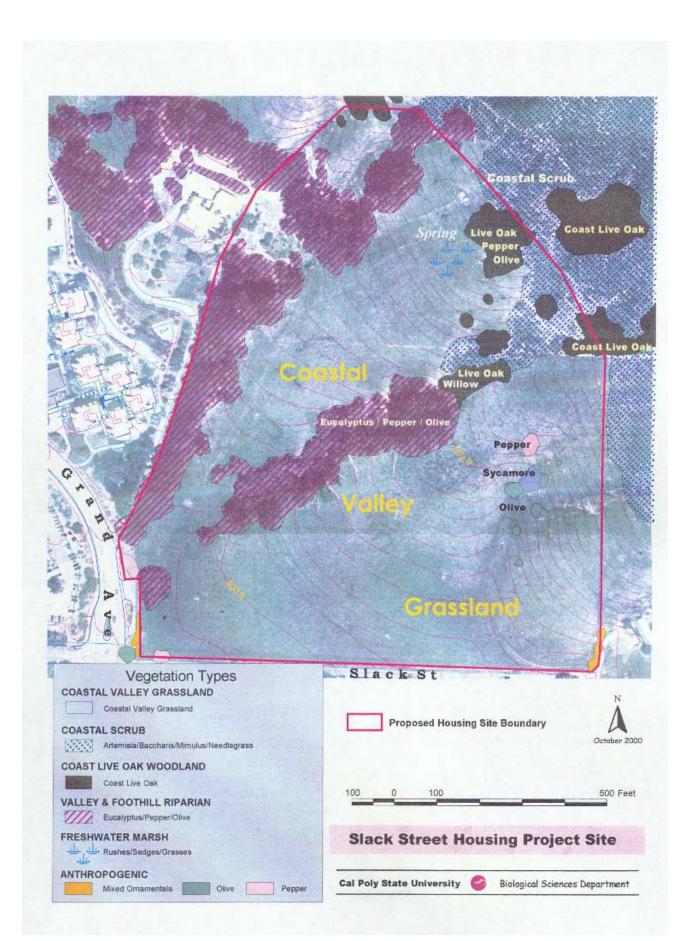
The Slack Street study site consists of approximately 17 acres of the Cal Poly campus at the intersection of Grand Avenue and Slack Street in the southeastern quarter of Section 13 of Township 30 South from the Mt Diablo Base Line and Range 12 East from the Mt Diablo Meridian, near 35°17′50″N, 120°39′45″N. The area is bounded on the west by Grand Avenue and existing student housing, on the northwest by a private residence, on the north to east by steep hillsides of the campus, on the southeast by a private residence, and on the south by Slack Street (see site map).

From the intersection of Grand Avenue and Slack Street the slope is initially shallow but rises steeply at the foot of the main ridge that runs from northwest to southeast from Stenner Creek across Brizzolara and San Luis Obispo Creeks. Elevations range from approximately 390 to over 600 feet. The general topographic aspect is southwest. A small drainage traverses the site from northeast to southwest.

The general climate is the cool summer phase of the dry-summer Mediterranean type of humid mesothermal climates (Trewartha 1968). Winter high temperatures average near $62^{\circ}F$ (16.7°C) with low averages near 41°F (5°C). Winter lows below $32^{\circ}F$ (0°C) are not uncommon, and a low of 9°F (–12.7°C) has been recorded on the Cal Poly campus. Summer high temperatures average near 77°F (25°C) with low averages near 52°F (11°C). Summer highs above 90°F (32°C) are not uncommon, and a high of 109°F (42.8°C) has been recorded on the Cal Poly campus. Precipitation falls as rain primarily from October through April, and averages about 22 inches (558 mm) per year. Less than one inch of precipitation is typically recorded from May 1 to September 30, but overnight and morning fog with near 100% humidity occurs nearly every day unless drier, downsloping winds descend from the Salinas Valley over the Santa Lucia Range to overwhelm the onshore flow of marine air (Felton 1965)

Upland soils are of the Diablo-Cibo Clay Loam Series on the lower slope and of the Los Osos-Diablo Clay Loam Series in the northeast where the slopes rise. Both soil series consist of slowly permeable, well-drained, residual soils derived from sandstone, shale, or mudstone. Diablo Clay Loam is moderately alkaline, with a moderately deep A horizon to over 30 inches, but no welldefined clay (B) horizon. Los Osos Clay Loam is moderately acid and does exhibit a well-defined clay (B) horizon under the 12-inch thick A horizon. Cibo Clay Loam is neutral with a moderately deep A horizon to over 30 inches and no clay (B) horizon (Ernstrom 1977). Extensive serpentinite outcrops occur to the northeast of the site.

Present land use on the site is agricultural, and it is fenced into one large pasture for intermittent grazing by cattle. The large number of olive trees suggest that olives may have been grown on the site historically.



OVERVIEW OF VEGETATION

The vegetation of the study site has developed in response to the interaction of a complex of environmental features that are variable over the area and result in a mosaic of plant communities. Local climate (wind, temperature, rainfall, fog, etc.), topography, parent materials, soils, biotic components, fire, location of waterways, and natural historical events are all variables that have affected the vegetation on the site. Past and present land-use and other human caused events have also resulted in significant changes in the vegetation.

The former native vegetation on the site probably consisted of California native grassland on the upland slopes with a mixture of more pristine coastal scrub and coast live oak woodland. Small areas of riparian vegetation persist in the canyons and around seeps of the upper slope dominated by arroyo willows. The spring along the upper slope likely supported a small area of less disturbed freshwater marsh. Presently, the historic California native grassland is almost entirely converted to annual grassland vegetation thoroughly dominated by non-native grasses and forbs. This is the dominant vegetation cover on the site. There are two drainages that traverse the site and support highly modified riparian woodlands. Both traverse the site from northeast to southwest. One drainages traverses the center of the site, and the other is located along the northern boundary. Both are now dominated by introduced trees, grasses, and forbs, although a few native shrubs, forbs, and grasses still persist. Exotic species have also invaded the coast live oak woodland and coastal scrub on the hillsides, and the freshwater marsh has been modified by cattle grazing and trampling.

The most significant natural resource elements remaining on or near this site are the hillside spring, and the patches of coast live oak woodland and coastal scrub on the upper slopes along the northeastern boundary.

VEGETATION DYNAMICS

Plant communities are dynamic assemblages of plants that interact among themselves and their environment within a space-time boundary. Some of these communities are well defined and distinct while others are not. No two sites within a given community are exactly the same in environmental conditions, vegetation structure, or species composition. This complexity makes defining plant communities and mapping their areal coverage sometimes difficult and arbitrary.

Spatial boundaries between plant communities (also referred to as ecotones or transition areas) may be abrupt where environmental features change sharply, such as between terrestrial and aquatic habitats. However, usually there is an environmental gradient and plant communities change more gradually in response to that gradient.

Another complicating factor in vegetation analyses and mapping is that plant communities are not static but change through time in response to both natural and human induced environmental changes. As a result, some areas are mixtures of plant assemblages at varying successional stages. The invasion of exotics into native communities further complicates our study.

DESCRIPTION OF THE VEGETATION AND FLORA

The floristic inventory of the study site took place in April, May, June, and September 2000. The diversity of plant species and habitats are illustrated by the species list and vegetation map.

The vegetation and floristic survey consisted of canvassing the site on foot, recording the plant species in identifiable condition, and describing the plant communities and habitats.

We identified 98 plant species (Appendix 1), 48 natives and 50 aliens, and five general plant communities. However, it is important to note that this may not be a complete list of the plants present on the site. Plant species composition, especially herbaceous cover, varies seasonally and annually. Although our survey was both extensive and intensive, repeated surveys over one or more years would be necessary for a complete listing of the flora found on the project site.

The vegetation of the area can be somewhat arbitrarily divided into five general plant communities, as classified by Holland and Keil (1995): **(1) coastal valley grassland (used as pasture); (2) coastal scrub**; **(3) coast live oak woodland**; **(4) riparian (dominated by introduced trees)**; **(5) freshwater marsh**; and **(5).** Each is discussed separately below.

1. Coastal valley grassland

Coastal valley grasslands are areas in which the dominant plants are various species of native and introduced grasses and forbs (dicot herbs). Often there are numerous species of herbaceous plants and sometimes scattered shrubs present. The grasses that dominate a grassland area may be annuals, perennials or a mixture of the two depending on location. Many of the grasslands on campus are now dominated by grasses and forbs introduced into California during the period of Spanish settlement.

Grasslands often occur on fine textured, clay rich soils of valleys and alluvial deposits at the base of hillsides. They integrate with coastal live oak woodlands on mesic hillside slopes, with coastal scrub and chaparral on xeric, steep, rocky slopes, and with riparian and freshwater marsh communities in aquatic and semi-aquatic areas along the creek. Many of the grassland species occur as understory species in the other communities.

Some areas of the Cal Poly campus have an impressive number of native grasses in the grassland areas, much more than most grasslands in other local areas. The stands of perennial, native bunch grasses, which dominated the grassland prior to Spanish settlement, have gradually been reduced on the Slack Street study site and are now found as only scattered components of the upper grasslands and coastal scrub on site. Historically, the changes in the composition of the grassland in this area are mostly a function of the introduction and invasion of alien plant species and changes in livestock grazing and their grazing patterns.

The coastal valley grassland communities of the Slack Street site have been modified by both historical and present-day human influences. These past influences and the current pastoral land-use patterns have shaped the grasslands that occur on the open, upland slopes today. Prior to this, these areas were covered by California native grasslands and perhaps larger areas of coastal scrub. However, repeated disturbance to the vegetation and soil by grazing animals maintains a pastoral influence on the grassland and results in a grassland composed of mostly introduced species tolerant to this type of repeated disturbance regime.

Communities dominated by plants introduced by humans and established or maintained by human disturbance are anthropogenic communities. The coastal valley grassland used as heavily grazed pastures reflect the influence of humans by their species composition. These grasslands are composed of a mixture of plant species typical of coastal valley grasslands along with species intentionally grown for grazing livestock to consume. In the dry-summer subtropical climate region of California, the intentionally seeded pasture grasses are all cool-season Eurasian species, and mostly annual. The perennial species used, such as *Dactylis glomerata* (orchardgrass), *Festuca arundinacea* (tall fescue), *Lolium perenne* (perennial ryegrass), and *Phalaris aquatica* (Harding grass) generally need at least 15 inches of annual precipitation to persist. Common coastal grassland species found in these pastures are those capable of invading and tolerating the existing grazing regime. These include a variety of mostly annuals, such as *Avena* spp. (wild oats), *Bromus* spp. (bromes), *and Lolium* spp. (ryegrasses). These species persist through the dry summers as quiescent seeds that await the first autumn rains. Other invaders of pastures are frequently Eurasian forbs, but some natives are able to persist in pastures if they have some inherent chemical or physical attribute that renders them unpalatable to livestock.

Historically, these upland grassland areas were probably dominated by a mixture of the perennial grasses *Nassella lepida* (Foothill needlegrass), *Nassella pulchra* (Purple needlegrass), *Danthonia californica* (California oatgrass), *Elymus elymoides* (Squirreltail), and *Poa secunda* (Malpais bluegrass), along with many perennial and annual forbs. Prior to introduction of cattle by the Spanish, coastal California had no large mammals that grazed all year, and grasslands were never heavily grazed. Native grassland species lack adaptations to heavy grazing and have declined markedly partly because grazing during their reproductive cycle greatly reduces seed production and the stored food reserves necessary to get them through dormant phases. The annual grasses introduced from the Old World are more tolerant of grazing, reproduce quickly, and do not need to store food reserves. Over the years their seedlings have out-competed and replaced native species. Native forbs have suffered a similar fate. On the Cal Poly campus, cultivation as well pastoral land use have played roles in the nearly complete conversion to alien dominated herb lands.

Much of the Slack Street grassland areas are dominated by only a few different species. Moderately dense stands of alien *Phalaris aquatica* (Harding grass) occur throughout the lower areas where is mixes with the common alien annual grasses *Brachypodium distachyon* (False brome grass), *Bromus hordeaceus* (Soft chess), *Lolium multiflorum* (Annual ryegrass), *Avena fatua* (Common wild oats), *Hordeum murinum* (Wild barley), and *Vulpia myuros* (Rattail fescue). Other common alien forbs, such as *Picris echioides* (Bristly ox-tongue), *Foeniculum vulgare* (Fennel), and *Brassica nigra* (Black mustard), occur in stands or as scattered individuals throughout these grasslands. Other associate species are listed in Appendix 1.

Within this upland pasture, both *Nassella lepida* (Foothill needlegrass) and *Nassella pulchra* (Purple Needlegrass) persist on the steeper slopes. Other indicators of California native grasslands are no longer present.

2. Coastal Scrub

This community is typically dominated by small to medium sized (3-6 feet tall) shrubs with a herbaceous understory. Both the density and the composition of the shrub cover vary from site to site, as does the herbaceous understory. The dominant shrubs in this plant community are comparatively soft-stemmed plants that undergo significant dieback during the summer drought. For this reason, coastal scrub is sometimes referred to as "soft chaparral" as opposed to the "hard chaparral" or "true or hard chaparral".

The coastal scrub community is the dominant vegetation on the hillsides above the Slack Street site and a portion of it extends onto the northeast portion of the site. This stand extends downslope along the drainage and mingles with a stand of coast live oak woodland invaded by *Opuntia ficus-indica* (Mission cactus), *Olea europaea* (Olive), and *Schinus molle* (Peruvian peppertree). The dominant shrubs of the coastal scrub stands on site are *Artemisia californica* (California sagebrush), *Baccharis pilularis* (Coyote Bush), *Salvia mellifera* (Black Sage), and *Toxicodendron diversilobum* (Poison Oak). The herbaceous associates are mostly the same introduced grasses and forbs present in the adjacent coastal valley grassland, but some native *Eriogonum elongatum* (Tall buckwheat), *Nassella lepida* (Foothill needlegrass), *Nassella pulchra* (Purple needlegrass), *Bromus carinatus* (California brome), and *Elymus glaucus* (Blue wild rye) still persist with the shrubs. The overall quality of the coastal scrub community on the site has been modified by the invasion of Mission cactus and other exotics.

3. Coast Live Oak Woodland

Small stands of coast live oak woodland occur in the canyons and north facing slopes of the hillsides above the Slack Street site. These stands extend onto the study site in the northwest portion of the site where they form a mosaic with the stands of coastal scrub and grassland. Along the upper portion of the central drainage, coast live oak woodland integrates with the human made stand of eucalyptus, Peruvian pepper, and olive. In these areas, individuals and small groups of *Quercus agrifolia* (coast live oak) are found mixed with the exotic trees that form the urban mix forest. The coast live oaks in this woodland are small, mostly less than fifteen feet, and fairly uniformly sized. Along the upper drainage a few shrubby *Salix lasiolepis* (arroyo willow) occur with the oaks. *Artemisia californica* (California sagebrush) occurs as an understory along with many of the alien grasses and forbs present in the adjacent grasslands. Some native *Bromus carinatus* (California brome), *Elymus glaucus* (Blue wild rye), *Nassella lepida* (Foothill needlegrass), and *Nassella pulchra* (Purple needlegrass) still persist. Other common associates are listed in Appendix 1.

4. Riparian

Riparian vegetation forms a tall woodland cover of mostly alien trees along much of the two narrow seasonal drainages that originate on the steep slopes above the Slack Street site. These drainages have no surface water during summer; thus, the species composition of both the overstory trees and understory associates is different and diminished as compared with riparian communities of perennial streams such as Brizzolara Creek to the north on the Cal Poly campus.

The tree overstory is dense and dominated by four alien trees: *Eucalyptus globulus* (Blue gum), *Eucalyptus sideroxylon* (Red ironbark), *Schinus molle* (Peruvian pepper tree), and *Olea europaea* (Olive). In the upper portions of these drainages (northeast corner of the site) small patches of native riparian trees such *Platanus racemosa* (California sycamore), *Quercus agrifolia* (Coast live oak), and *Salix lasiolepis* (Arroyo willow) persist and form the riparian woodland. The understory consists of coastal scrub species, such as *Artemisia californica* (California sagebrush), *Baccharis pilularis* (Coyote bush), *Mimulus aurantiacus* (Bush monkeyflower), *Toxicodendron diversilobum* (Poison-oak), *Bromus carinatus* (California brome), and *Elymus glaucus* (Blue wild rye). Significant stands of such aliens as *Opuntia ficus-indica* (Mission cactus) have invaded the riparian woodland and adjacent coastal scrub and grassland communities in the northeastern portion of the site. *Phalaris aquatica* (Harding grass) and many of the same weeds present in the surrounding pasture are also common in the riparian areas on site. These and other associated species are listed in Appendix 1.

Historically, the narrow, seasonal drainages on the Slack Street site were probably flanked by scattered *Quercus agrifolia* (coast live oak), *Salix lasiolepis* (arroyo willow), and *Platanus racemosa* (California sycamore) with patches of coastal scrub in the open areas. This assumption is based on both the presence of these tree species along the upper portions of these drainages and by the persistence of shrub species found along these drainages under the dense alien tree canopy.

5. Freshwater Marsh

Freshwater marshes occur in nutrient-rich mineral soils that are saturated through much or all

of the year. These communities are best-developed in locations with slow-moving or stagnant shallow water. Such sites commonly occur along the margins of creeks or along drainages where water is allowed to pool in depressions or move very slowly downslope. In areas where freshwater marshes occur there is not always standing water throughout the year. In some cases the water table is so close to the surface that it can be tapped by marsh plants. On hillsides, there are small seep areas associated with the drainages that provide a source of water much of the year.

On the Slack Street site, a relatively small stand of freshwater marsh vegetation has developed around and downslope from a spring and also along the margin of a very small perennial stock pond created near the spring. This hillside spring probably supported some of the same plant species that still persist in the area; however, it was likely more diverse in terms of species composition before being persistently grazed and trampled by cattle. Presently, species diversity and overall plant cover is low with only a few species, such as the natives *Cyperus eragrostis* (Umbrella sedge), *Juncus patens* (Spreading rush), and *Verbena lasiostachys* (Vervain), along with the alien wetland indicators *Cynodon dactylon* (Bermuda grass), *Phalaris aquatica* (Harding grass), *Polypogon monspeliensis* (Rabbitfoot grass), and *Picris echioides* (Bristly ox-tongue), covering most of the saturated soil downslope of the spring. Around the small stock pond is a small colony of the large alien grass *Arundo donax* (Giant reed) which is a noxious weed in many riparian and wetland areas along the central coast. Other associates are listed in Appendix 1. Overall, the hillside spring is in poor condition from persistent grazing. Trampling by cattle has rendered an evident waffle pattern to the soil surface from deep hoof prints.

RARE AND ENDANGERED PLANTS

Eight native plant species documented to occur northeast of the project site in Poly Canyon (DeRome 1997), or within the encompassing San Luis Obispo 7.5 minute Quadrangle (Skinner and Pavlick 1994), are sufficiently rare to have been officially recognized as such by private or governmental agencies (see list below). A rare plant is one that is limited in terms of number of individual plants still present in the wild, and also one that has a limited distribution. Usually rare plants are found in only a few highly restricted populations. This distribution is usually determined by the rarity of the habitat in which the plant is able to grow. While many rare plants are not at present threatened with extinction, they occur in such small numbers over such a limited range that they could be threatened if their remaining habitat is modified. An endangered species is one that is not only rare, but also threatened with extinction because the survival of existing populations and future reproduction are jeopardized. The main reason that most such plants in California are extinct or rare and endangered is that humans are gradually destroying their habitats through urbanization, forest destruction, agricultural practices and pollution. Attempts are being made to eliminate these practices and to protect the rare and/or endangered species in California.

The Basis for Recognizing Rare and Endangered Plants

Since the 1970's the **California Native Plant Society** (CNPS), an organization of professional and lay botanists that is dedicated to the preservation of California's native flora, has been involved in determining which plants in California are rare and endangered. The society has published five editions of a book entitled *Inventory of Rare and Endangered Vascular Plants of California*. The fifth edition of the CNPS Inventory (Skinner and Pavlik, 1994) lists plants in four categories: **List 1**—Plants of Highest Priority, with two sublists: **1A**—Plants Presumed Extinct in California and **1B**—Plants Rare and Endangered

in California and Elsewhere; **List 2**—Plants Rare or Endangered in California, but More Common Elsewhere; **List 3**—Plants about which More Information is Needed; and **List 4**— Plants of Limited Distribution (A Watch List). Additionally each plant listed is given an R-E-D Code (*Rarity, Endangerment, and Distribution*) with numbers ranging from 1-3 in each category. For each of the values a higher number is an indication of greater sensitivity:

R (rarity)

- 1. Rare but found in sufficient numbers and distributed widely enough that the potential for extinction or extirpation is low at this time.
- 2. Occurrence confined to several populations or to one extended population.
- 3. Occurrence limited to one or a few highly restricted populations, or present in such small numbers that it is seldom reported.

E (endangerment)

- 1. Not endangered.
- 2. Endangered in a portion of its range.
- 3. Endangered throughout its range.

D (distribution)

- 1. More or less widespread outside California.
- 2. Rare outside California.
- 3. Endemic to California.

In November 1995, the CNPS circulated for comment a list of changes to the *Inventory* that are proposed for an upcoming 6th edition. These include proposals to add plants not previously listed, to delete plants previously listed but on the basis of new information determined to be too common for listing, and to change the status of plants previously listed. Among the seven rare species potentially found on the site, one will be a new addition that is not currently listed and two will be moved to a new list. In June 2000 the CNPS posted on its website a list of the taxa to be included in edition 6 of the Inventory: http://www.cnps.org/rareplants/inventory/6thEdition.htm

U. S. Department of Fish and Wildlife—The Endangered Species Act in 1973 resulted in listing and protecting rare plants at the federal level by the U. S. Fish and Wildlife Service (USFWS). Their categories are summarized below:

- **Endangered Species (FE)** are taxa in danger of extinction throughout all or a significant portion of their range.
- **Threatened Species (FT)** are taxa likely to become endangered within the foreseeable future throughout all or a significant portion of their range.

Candidate Species are taxa for which the Fish and Wildlife Service (Service) has sufficient information on their biological status and threats to propose them as endangered or threatened under the Endangered Species Act, but for which development of a proposed listing regulation is precluded by other higher priority listing activities.

California Department of Fish and Game—The California Endangered Species Act in 1984 resulted in listing and protecting rare plants at the state level with the California Department of Fish and Game (DFG). Their categories are summarized below:

Rare Species (CR) are taxa that are not presently threatened with extinction but occur in such small numbers that they could become endangered if habitat conditions worsen.

Threatened Species (CT) are taxa likely to become endangered within the foreseeable future

without special protection and management efforts.

Endangered Species (CE) are taxa whose prospects of survival are in immediate jeopardy for one or more reasons. These taxa are in danger of extinction throughout all or a significant portion of their range.

California Environmental Quality Act (CEQA)—For all plant species listed on CNPS's List 1B and 2, it is mandatory that they be fully considered during preparation of environmental documents relating to CEQA. For species on Lists 3 and 4, CNPS strongly recommends that they be considered in preparation of such documents.

RARE PLANTS POTENTIALLY ON OR NEAR THE SLACK STREET PROPOSED HOUSING SITE

No rare plants were verified to occur on the proposed Slack Street housing site ¹. The rare plant species listed in the table below have documented occurrences on the Cal Poly campus in the vicinity of the project site. Impacts of the project will include students hiking off site from the dormitories and this could have impacts on the rare plants of the vicinity as described below.

Most of the rare plants listed below are typically found on soils derived from serpentinite rock. Serpentinite is a metamorphic, magnesium silicate rock, often green in color and slippery to the touch. (It is the California State rock). Serpentinite and the soils derived from it have a number of traits inimical to plant growth. It is low in some essential nutrients, especially calcium, and high in magnesium. In addition, it is often high in toxic elements such as nickel and chromium. As a result of these unusual conditions, serpentinite rock and soil support unusual, endemic floras including a large number of rare and endangered species. The hillsides adjacent to the northeastern border of the project site exhibit serpentinite outcrops and shallow soils that support some unusual plant species, many of which are listed as rare and/or endangered. Rock outcrops provide specialized habitats for both plants and animals. Some species are restricted to the rock crevices or to the bare, dry rock surfaces. Rock outcrops are mostly sparsely vegetated by extremely drought tolerant species on their surfaces and by moister requiring species in their crevices.

We have included the current listing from the 1994 *Inventory of Rare and Endangered Vascular Plants of California* (fifth edition) along with the proposed new listing (sixth edition which is available on the CNPS website) for those that are changing. For each taxon, the current listed status for California is based on the January 2000 Special Plant List by the California Department of Fish and Game, and the current federal status is taken from the United States Fish and Wildlife website as of October 2, 2000

(<u>http://ecos.fws.gov/webpage/webpage_usa_lists.html?#CA</u>). Both are indicated in the table below.

¹ Plants of *Chlorogalum pomeridianum* were observed on the site but we were unable to determine if these are var. *minus* (dwarf soaproot). See discussion below.

Scientific Name	Common Name	C.N.P.S. Listing	RED Code	State Listing	Federal Listing
Calochortus clavatus ssp. clavatus	club-haired mariposa lily	List 4	1-1-3	None	None
Calochortus obispoensis	San Luis mariposa lily	List 1B	2-2-3	None	None
Calystegia subacaulis var. episcopalis	Cambria morning glory	List 1B	3-2-3	None	Species of Concern
Chlorogalum pomeridianum var. minus	Dwarf soaproot	List 1B	2-2-3	None	None
Chorizanthe breweri	Brewer's spineflower	List 1B	3-1-3	None	None
Chorizanthe palmeri	Palmer's spineflower	List 4	1-2-3	None	None
Dudleya abramsii ssp. murina	San Luis Obispo dudleya	List 1B	2-1-3	None	None
Layia jonesii	Jones' layia	List 1B	3-2-3	None	Species of Concern
Lomatium parvifolium	small-leaved lomatium	List 4	1-2-3	None	None
Perideridia pringlei	pringle's yampah	List 4	1-1-3	None	None
Sanicula hoffmannii	Hoffmann;s sanicle	List 4	1-1-3	None	None
Senecio aphanactis	rayless groundsel	List 2	3-2-1	None	None

Calochortus clavatus ssp. clavatus (club-haired mariposa lily) is a bulb-forming lily that produces one or two strap-shaped green leaves in early spring. These are beginning to wither by the time the plant flowers in May or June. The flowers are cup-shaped with 3 narrow, yellow-green sepals and three, obtriangular, yellow petals marked by a jagged, transverse, purple-brown band across the inner face. Each petal bears a rounded, depressed nectary toward the base surrounded by club-shaped yellow hairs. The anthers are large and purple. After the flowers wither the ovary develops into a slender, 3-angled capsule with many dark seeds. The plant is generally completely dry by late summer. The dry remains can be identified by the shape of the capsule. Only the bulb and seeds remain alive until the next growing season.

Calochortus clavatus ssp. *clavatus* is restricted to San Luis Obispo County and Santa Barbara County in the western portion of the Coast Ranges, mostly on soils derived from serpentinite parent material. In San Luis Obispo County it is known from several locations in the Santa Lucia and San Luis Ranges. Four other rare subspecies occur to the north and south of subspecies *clavatus*. It is known from several sites in the area.

Club-haired mariposa lily has been documented in several sites in Poly Canyon and on the Pennington Creek Biological Reserve. It has been observed on slopes within a few minutes walk from the proposed Slack Street campus housing site. The attractive flowers of this species make it likely that it will occasionally be picked by curious students hiking in the canyon.

Calochortus obispoensis (San Luis Obispo mariposa lily) is a bulb-forming lily that produces one or two strap-shaped green leaves in early spring. These are beginning to wither by the time the plant flowers in May or June. The flowers are star-like with 3 narrow, yellow-green sepals and three yellow petals that are bearded with long purple and yellow hairs. After the flowers wither the ovary develops into a slender, 3-angled capsule with many dark seeds. The plant is generally completely dry by late summer. The dry remains

can be identified by the shape of the capsule. Only the bulb and seeds remain alive until the next growing season.

San Luis mariposa lily is restricted to central San Luis Obispo County where it occurs only on the hills and mountains in the vicinity of San Luis Obispo. It generally occurs associated with dry serpentinite rock outcrops and soils within chaparral, coastal scrub, and valley and foothill grassland habitats (Hickman, 1993; Skinner and Pavlik, 1994). It is a component of the serpentinite California native grassland community on the Cal Poly campus. San Luis mariposa lily has been documented in several sites in Poly Canyon, near the "P", and on the Pennington Creek Biological Reserve. It has been observed on slopes within a few minutes walk from the proposed Slack Street campus housing site. The unusual flowers of this species make it likely that it will occasionally be picked by curious students hiking in the canyon.

Calystegia subacaulis ssp. episcopalis (Cambria morning glory) is a perennial herb with trailing or sometimes weakly twining stems. It has alternate, broadly triangular leaves that are minutely hairy. The cream-colored, funnel-shaped flowers are produced from April to June. After the flowers wither the plant develops small, dry capsules with dark seeds. By late summer the above-ground parts of the plants are completely dry and only seeds and an underground rootstock persist through the dry season. The plant is difficult to identify in the dry season because the dry parts shatter.

Cambria morning glory is at present known only from San Luis Obispo and northern Santa Barbara counties. In San Luis Obispo County it ranges from the Hearst Ranch in the northwestern corner of the county south to the vicinity of San Luis Obispo where it usually occurs in grassy sites with clay-rich soils often in association with serpentinite parent material. It has been observed on the proposed Poly Canyon North and Poly Canyon South housing sites, in the vicinity of Smith Reservoir, and in the Pennington Creek Biological Reserve.

During April and May 2000, scattered flowering stems of *Calystegia subacaulis* ssp. *episcopalis* were observed near Poly Canyon Road in the approved housing site at that location in association with remnant California native grassland and coastal scrub. Additional non-flowering stems were observed as well.

This species was not found on the Slack Street site but is can easily be overlooked when not in flower because it is relatively small and often obscured by overtopping grasses and forbs. Individuals present in a vegetative state, but not in flower this season, may have been missed. This species also produces underground stems that may arise aboveground some distance apart so as to give the appearance of separate individuals. However, these shoots may be part of the same genetic individual.

Cambria morning glory has been observed on slopes within a few minutes walk from the proposed Slack Street campus housing site. It is likely to occur on other nearby sites, but these have not yet been investigated. Plants off site would be subject to foot traffic from residents of the proposed buildings.

Chlorogalum pomeridianum var. minus (dwarf soaproot) is a perennial herb that grows from a large bulb with fibrous outer bulb scales. In spring it produces a rosette of wavy-margined, strap-shaped leaves. A branched inflorescence arises from the bulb, and

flowers develop in late spring or early summer. Flower buds of dwarf soaproot are externally purple, but the open flowers are white. The flowers are nocturnal, opening in the evening and closing the next morning. Seed capsules about 5 mm diameter mature in summer. Plants of *Chlorogalum pomeridianum* are easily identified in spring by their characteristic leaves and in summer by the seed capsules. Plants of var. *minus* have comparatively short stems 20–40 cm tall, and the bulb coats are membranous or have relatively few fibers.

Dwarf soaproot grows mostly in grassy areas or openings in chaparral, coastal scrub, and coastal live oak woodland. It occurs from the Coast Ranges north of the San Francisco Bay region to the vicinity of San Luis Obispo. Around San Luis Obispo it occurs mostly on soils derived from serpentinite. On the Cal Poly campus dwarf soaproot is known to occur in Poly Canyon and the Pennington Creek Biological Reserve and is probably present elsewhere as well. *Chlorogalum pomeridianum* was observed within the project site but could not be determined to variety because mature inflorescences could not be found during the field survey [deer and other herbivores often eat the immature flower clusters]. Because verified populations of dwarf soaproot (var. *minus*) are known to grow in Poly Canyon within a few minutes walk of the proposed campus housing site, we consider it likely that the plants found on the proposed Slack Street campus housing site are var. *minus* as well.

Foot traffic would be likely to have a negative impact on these plants by breaking their brittle stems and crushing the bulbs and leaves.

Chorizanthe breweti (Brewer's spineflower) is a brittle-stemmed annual herb. In early spring it produces a rosette of stalked, oval basal leaves. Typically a solitary flower is produced and three spreading, reddish-purple stems radiate away from the rosette. Stem leaves are generally in widely separated pairs and most are much smaller than the basal leaves. In vigorous plants the stems branch repeatedly. The tips of the branches bear clusters of tiny white to pale pink six-parted flowers, each surrounded by a tubular cluster of six red-purple, spine-tipped bractlets. Each flower produces a tiny, one-seeded dry fruit. After flowering the plant dies and only seeds survive through the dry season. The dry plant shatters very easily, but its remains can often be identified through the summer.

Chorizanthe breweri is an endemic to San Luis Obispo County where most occurrences are on serpentinite or serpentinite-derived soils. It occurs only in the vicinity of San Luis Obispo where it has a range similar to that of *Calochortus obispoensis*. Brewer's spineflower is known from about twenty occurrences. This species occurs in coastal scrub, closed-cone conifer forest, chaparral and cismontane woodland communities. Brewer's spineflower has been documented from Poly Canyon and from the Pennington Creek Biological Reserve.

Brewer's spineflower has been observed on serpentinite slopes within a few minutes walk from the proposed Slack Street campus housing site. Foot traffic would have a negative impact on populations of these brittle-stemmed plants.

Chorizanthe palmeri (Palmer's spineflower) is a brittle-stemmed annual herb. In early spring it produces a rosette of stalked, oval basal leaves. Usually a single stem 1–12 inches high arises from the rosette, and it bears one or two, well-separated rings of leaves. Typically a solitary flower is produced at the end of the main stem and three spreading,

reddish-purple stems radiate away from the upper leaf cluster. Stem leaves above this point are generally in widely separated pairs and most are much smaller than the leaves of the main stem. In vigorous plants the stems branch repeatedly. The tips of the branches bear dense, head-like clusters of tiny purple, six-parted flowers, each surrounded by a tubular cluster of six red-purple, spine-tipped bractlets. Each flower produces a tiny, one-seeded dry fruit. After flowering the plant dies and only seeds survive through the dry season. The dry plant shatters easily, but its remains can often be identified through the summer.

Chorizanthe palmeri is known definitely from Monterey and San Luis Obispo counties and may occur as well in San Benito and Santa Barbara counties. Most occurrences are on serpentinite or serpentinite-derived soils. In San Luis Obispo County it occurs in the Santa Lucia and San Luis Ranges from the northwestern corner of the county to the serpentinite hills around San Luis Obispo.

Palmer's spineflower has been observed on serpentinite slopes within a few minutes walk from the proposed Slack Street campus housing site. Foot traffic would have a negative impact on populations of these brittle-stemmed plants.

Dudleya abramsii ssp. murina (San Luis Obispo dudleya) is a succulent perennial herb with a thick, fleshy taproot. It produces a dense rosette of narrow, fleshy, leaves with a dull, gray-green coloration. In late spring and early summer clusters of 5-petaled, creamcolored to dull purplish flowers are produced on stalks arising from the rosettes. The ovaries of these flowers mature as clusters of small, dry fruits that split open and release many tiny seeds. These plants tough it out during the dry season and their somewhat shriveled leaves and old dry flower clusters are easy to recognize.

San Luis Obispo dudleya is endemic to San Luis Obispo County and it is apparently limited to stony serpentinite soils and serpentinite rock outcrops, usually associated with California native grassland. Its range is limited to the hills bordering the San Luis Valley in the foothills of the Santa Lucia Mountains from Chorro Creek to Corral de Piedra Creek and in the San Luis Range from upper Prefumo Canyon to the Froom Ranch and the hills south of Broad Street. San Luis Obispo dudleya is known to occur in Poly Canyon and in the Pennington Creek Biological Reserve and is to be expected in similar habitats elsewhere on campus.

Dudleya abramsii ssp. *murina* has not been observed within the proposed Slack Street housing site, but it has been observed on nearby serpentinite slopes within a few minutes walk from the proposed dormitories. Foot traffic would have a negative impact on populations of these plants by crushing their succulent leaves and dislodging rocks on the hillsides where the plants grow.

Layia jonesii (Jones' layia) is a slender, erect, spring-flowering herb. The basal and lower stem leaves are generally lobed and the upper have smooth margins. The stems and leaves bear a mixture of short stiff hairs and small glandular hairs. Usually there is a single main stem and several ascending branches. In April and May flowers are produced in daisy-like heads at the branch tips. There are 13–27 peta-like ray flowers in a double row around the periphery of the flower head. These are yellow with three creamy white tips. The center of the head contains many small, yellow disk flowers with purple anthers. When the plants go to seed, the flower heads shatter and the many tiny one-seeded dry

fruits drop to the ground. By late June the plants are withered and completely dry. In the dry season the remains are generally not recognizable.

Jones layia is an annual herb that occurs in Monterey and San Luis Obispo counties.. It grows in chaparral and California native grassland communities, primarily on open serpentinite or clay slopes (Hickman, 1993). Within San Luis Obispo County this species occurs from the San Luis Obispo area to coastal hills north of Cayucos and the vicinity of Cypress Mountain. It occurs locally in Poly Canyon and may be expected in suitable habitats elsewhere on the Cal Poly campus including the project site.

Layia jonesii was not observed within the project site, but it grows in Poly Canyon within a few minutes walk from the proposed Slack Street campus housing site. The attractive daisylike flower heads of this species make it likely that it will occasionally be picked by curious students hiking in the canyon. Foot traffic would have a negative impact on populations of these plants.

Lomatium parvifolium (small-leaf lomatium) is a spring-flowering perennial herb with a slender, woody rootstock. Leaves are produced through beginning in March or April and flowering generally begins in April and may continue into June. The smooth green leaves have expanded, sheathing bases and blades divided into many segments. The small yellow flowers are borne in flat-topped clusters up to 5 inches across. The flattened, dry fruits are often tinged with purple and have membranous wings. The mature fruit clusters shatter during the summer as the leaves wither. By mid-summer the above-ground parts of the plants are completely dry. The old fruiting stalks may persist in identifiable condition during the drought season.

Small leaved lomatium occurs from Santa Cruz County to Santa Barbara County in the western portion of the Coast Ranges, mostly on soils derived from serpentinite parent material. It is a component of coastal scrub, chaparral, California native grassland, and rock outcrop communities. It is known from several sites in the San Luis Obispo area. On the Cal Poly campus it has been documented from Poly Canyon, Serrano Canyon, and the Pennington Creek Biological Reserve, and probably occurs in other sites as well.

Lomatium parvifolium was not observed on the Slack Street site, but it grows on serpentinite slopes in Poly Canyon within a few minutes walk of the proposed Slack Street campus housing site. Foot traffic is likely to impact populations of these plants by crushing the leaves and stems and dislodging rocks on the hillsides where the plants grow.

Perideridia pringlei (adobe yampah) is a perennial herb that arises from a deeply buried tuber. In the spring one or two basal leaves are produced from the tuber. These leaves are divided into numerous linear segments. The basal leaves often wither before the flower stalks are produced. Slender, erect flowering stems arise in late spring or early summer. The few leaves become progressively smaller and less divided up the stem. The small white flowers are borne in a flat-topped cluster that is elevated above the leaves. After the petals have fallen the ovaries develop into small, 2-seeded dry fruits that shatter when the plants dry up in summer. Old dry fruit clusters may occasionally be recognizable through the dry season.

Adobe yampah is known to occur in coastal locations from Monterey to Los Angeles counties and in the interior from Nevada to Kern counties. In San Luis Obispo County it

has been documented from a few widely scattered locations on serpentinite soils in the vicinity of San Luis Obispo, from dry hills east of Creston, and the summit of the Caliente Range. It grows in California native grasslands, open shrub-dominated communities, and rock outcrop communities. On the Cal Poly campus adobe yampah has been documented from Poly Canyon and may be expected in areas with serpentinite soils elsewhere on campus.

Perideridia pringlei was not observed within the Slack Street site. However, it grows in Poly Canyon within a few minutes walk of the proposed campus housing site. Foot traffic is likely to impact populations of these plants by crushing the leaves and stems and dislodging rocks on the hillsides where the plants grow.

Sanicula hoffmannii (Hoffmann's sanicle) is a perennial herb 1–2 feet tall, threeparted leaves, and numerous, tiny yellow-orange flowers borne in dense, rounded balls at the ends of naked branches that emerge from a common origin like the spokes of an inverted umbrella. The fruits are small, flattened and beset with many hooked barbs around the top.

Hoffmann's sanicle occurs within a variety of communities including, chaparral, coastal prairie, and valley foothill grassland. It commonly occurs at the ecotone between chaparral or coastal scrub and grassland communities, but sometimes grows beneath the canopy of coast live oak trees. On the Cal Poly campus it has been documented from the Stenner Creek drainage and from the Pennington Creek Biological Reserve.

Sanicula hoffmannii was not observed within or in the immediate vicinity of the Slack Street site. Although it has not been observed in Poly Canyon it is likely to be present. Foot traffic is likely to impact populations of these plants by breaking the flowering or fruiting stems.

Senecio aphanactis (rayless groundsel) is a spring-flowering annual herb with a slender taproot. Stems are simple or branched and hairless. Leaves are linear to oblong, coarsely toothed, hairless, and borne directly on the stem. The flowering heads are small, urn-shaped, and clustered at the main stem and branch tips. The outer bracts are green and surround the inconspicuous flowers that all lack ray corollas. The dry dandelion-like fruits are hairy and bear numerous whitish bristles from the top.

Rayless groundsel is an inconspicuous annual that occurs in vernally moist openings in low elevation coastal scrub on the mainland from Solano County south to northern Baja California, and on Santa Rosa, Santa Cruz, and Santa Catalina Islands. It usually occurs in sparsely vegetated areas with shallow stony soil. In San Luis Obispo County, it is known from a few widely scattered sites from Montaña de Oro State Park to Creston. On the Cal Poly campus it has been documented from serpentinite soils on "School Ridge" and on hills west of Poly Canyon. It is easily mistaken for the much more common weedy *Senecio vulgaris* (common groundsel).

Senecio aphanactiswas not observed within the study site but it has been documented to occur within a few minutes walk of the proposed Slack Street campus housing site. Foot traffic might have a negative impact on populations of these plants.

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APPENDIX 1. PLANT SPECIES LIST FOR PROPOSED SLACK STREET HOUSING SITE

 \mathbf{CG} = Coastal Valley Grassland $\mathbf{C/O}$ = Coastal Scrub/Oak Woodland \mathbf{R} = Riparian

 \mathbf{M} = Freshwater Marsh (at hillside spring)

 \bullet = occurs in that community & others; \bullet = occurs in that community exclusively

ORIGIN	FAMILY	SCIENTIFIC NAME	COMMON NAME	CG C/O	R	М
		TREES				
Cultivate d	Hippocastanace ae	Aesculus californica	Buckeye	:	•	
Cultivate d	Myrtaceae	Eucalyptus globulus	Blue Gum		•	
Cultivate d	Myrtaceae	Eucalyptus sideroxylon	Red Ironbark		•	
Cultivate d	Moraceae	Ficus carica	Edible Fig		•	
Cultivate d	Oleaceae	Olea europaea	Olive	+ +	+	
Cultivate d	Pinaceae	Pinus radiata	Monterey Pine		•	
Native	Platanaceae	Platanus racemosa	Sycamore	+	+	
Native	Fagaceae	Quercus agrifolia	Coast Live Oak	•		
Native	Fagaceae	Quercus lobata	Valley Oak		•	
Native	Salicaceae	Salix lasiolepis	Arroyo Willow	•		
Cultivate d	Anacardiaceae	Schinus molle	Peruvian Pepper-Tree	+ +	+	

SHRUBS

Native	Asteraceae	Artemisia californica	California Sagebrush		•	
Native	Asteraceae	Baccharis pilularis	Coyote Bush		•	
Escaped	Rosaceae	Cotoneaster pannosa	Cotoneaster			•
Native	Asteraceae	Hazardia squarrosa	Saw-Toothed Goldenbush	+	+	
Native	Rosceae	Heteromeles arbutifolia	Toyon		•	
Native	Scrophulariacea e	Mimulus aurantiacus	Bush Monkeyflower		+	+
Escaped	Cactaceae	Opuntia ficus-indica	Indian-Fig Cactus	+	+	+
Cultivate d	Rosaceae	Prunus dulcis	Almond			•
Native	Rhamnaceae	Rhamnus crocea	Redberry		•	
Native	Rosaceae	Rosa spithamea	Rose			•
Native	Rosaceae	Rubus ursinus	California Blackberry			•
Native	Lamiaceae	Salvia mellifera	Black Sage		•	
Native	Caprifoliaceae	Sambucus mexicana	Elderberry			•
	Connifoliococo	Symphoricarpos mollis	Snowberry			+
Native	Caprifoliaceae	Symphonical positionins	bilowberry			-

ORIGIN	FAMILY	SCIENTIFIC NAME	NAME COMMON NAME		R	M
		PERENNIAL FO	ORBS			
Native	Asteraceae	Achillea millefolium	Yarrow	٠		
Native	Asteraceae	Agoseris grandiflora	Mountain Dandelion	•		
Native	Asteraceae	Artemisia douglasiana	Mugwort		+	
Alien	Liliaceae	Asparagus asparagoides	Garden Smilax		+	
Native	Convolvulaceae	Calystegia macrostegia	Wild Morning Glory	+ +		
Native	Liliaceae	Chlorogalum pomeridianum	Soap Plant	•		
Alien	Asteraceae	Cirsium vulgare	Bull Thistle		+	+
Alien	Asteraceae	Cynara scolymus	Artichoke		•	
Native	Liliaceae	Dichelostemma capitatum	Blue Dicks	•		
Alien	Dipsacaceae	Dipsacus sativus	Teasel		•	
Natuve	Polygonaceae	Eriogonum elongatum	Tall Buckwheat	•		
Alien	Apiaceae	Foeniculum vulgare	Fennel	+ +	+	
Native	Rubiaceae	Galium californicum	California Bedstraw	•		
Native	Asteraceae	Gnaphalium californicum	Everlasting	•		
Alien	Brassicaceae	Hirschfeldia incana	Perennial Mustard	+		
Native	Cucurbitaceae	Marah fabaceus	Wild Cucumber Vine	•		
Alien	Myoporaceae	Myoporum laetum	Myoporum		•	
Alien	Oxalidaceae	Oxalis pescaprae	Bermuda-Buttercup		+	+
Native	Paeoniaceae	Paeonia californica	California Peony		•	
Alien	Plantaginaceae	Plantago lanceolata	English Plantain		+	+
Native	Ranunculaceae	Ranunculus californicus	California Buttercup			•
Alien	Polygonaceae	Rumex crispus	Curly Dock	+		+
Native	Polygonaceae	Rumex pulcher	Fiddle Dock			•
Native	Lamiaceae	Salvia spathacea	Hummingbird Sage	+		
Native	Apiaceae	Sanicula crassicaulis	Sanicle	•		
Native	Iridaceae	Sisyrinchium bellum	Blue-Eyed-Grass	•		
Native	Lamiaceae	Stachys bullata	Hedge-Nettle			•
Native	Lamiaceae	Stachys pycnantha	Hedge-Nettle			•
Native	Urticaceae	Urtica dioica ssp. holosericea	Stinging Nettle			•
Native	Verbenaceae	Verbena lasiostachys	Vervain			•
		ANNUAL FOR	RBS			
A 11		Anagallis arvensis				

Alien	Primulaceae	Anagallis arvensis	Scarlet Pimpernel	+
Alien	Brassicaceae	Brassica nigra	Black Mustard	+
Alien	Brassicaceae	Capsella bursa-pastoris	Shepherd's Purse	+
Alien	Asteraceae	Centaurea melitensis	Tocolote	+
Native	Onagraceae	Epilobium densiflorum	Boisduvalia	•
Alien	Geraniaceae	Erodium botrys	Storkbill Filaree	+
Alien	Geraniaceae	Erodium cicutarium	Redstem Filaree	+
Alien	Geraniaceae	Erodium moschatum	Green-Stem Filaree	+

ORIGIN	FAMILY	SCIENTIFIC NAME	COMMON NAME	CG C/O	R	М
Native	Asteraceae	Helianthus annuus	Sunflower	+		
Native	Asteraceae	Hemizonia congesta ssp. luzulifolia	Hayfield Tarweed	+		
Alien	Asteraceae	Hypochaeris glabra	Smooth Cat's Ear +			
Alien	Malvaceae	Malva parviflora	Mallow	+		
Alien	Fabaceae	Medicago polymorpha	Bur-Clover	+		
Alien	Asteraceae	Picris echioides	Bristly Ox -Tongue	+	+	+
Alien	Asteraceae	Silybum marianum	Milk-Thistle	•		
Alien	Brassicaceae	Sisymbrium officinale	Hedge Mustard	•		
Alien	Asteraceae	Sonchus asper	Prickly Sow-Thistle	•		
Alien	Asteraceae	Sonchus oleraceus	Common Sow-Thistle	•		
Alien	Fabaceae	Vicia benghalensis	Purple Vetch	•		
Alien	Fabaceae	Vicia sativa	Vetch	•		
Alien	Fabaceae	Vicia villosa	Vetch	•		
		PERENNIAL GRAS	SES			
Alien	Poaceae	Agrostis viridis	Water Bent Grass			•
Alien	Poaceae	Arundo donax	Giant Reed			•
Native	Poaceae	Bromus carinatus	California Brome		•	
Alien	Poaceae	Cynodon dactylon	Bermuda Grass	+		+
Native	Poaceae	Elymus glaucus	Blue Wild Rye	+	+	
Alien	Poaceae	Festuca arundinacea	Tall Fescue	+	+	
Native	Poaceae	Nassella lepida	Foothill Needlegrass	•		
Native	Poaceae	Nassella pulchra	Purple Needlegrass	•		
Alien	Poaceae	Pennisetum setaceum	Fountain Grass	•		
Alien	Poaceae	Phalaris aquatica	Harding Grass	+	+	
		ANNUAL GRASS	ES			
Alien	Poaceae	Avena fatua	Common Wild Oats	+ +		
Alien	Poaceae	Brachypodium distachyon	False Brome Grass	+ +	+	+
Alien	Poaceae	Bromus catharticus	Rescue Grass	•		
Alien	Poaceae	Bromus hordeaceus	Soft Chess Brome	+ +	+	+
	_		Grass			
Alien	Poaceae	Hordeum murinum	Wall Barley	+ +		+
Alien	Poaceae	Lolium multiflorum	Annual Ryegrass	+ +	+	+
Alien	Poaceae	Polypogon monspeliensis	Rabbitfoot Grass		+	+
Alien	Poaceae	Vulpia myuros	Rattail Fescue	+ +	+	+
Nativo	Cuparaacaa	RUSHES / SEDG			-	
Native	Cyperaceae		Santa Barbara Sedge		•	
Native	Cyperaceae	Cyperus eragrostis Eleocharis macrostachya	Umbrella Sedge		+	+
Native	Cyperaceae	-	Spike-Rush		-	•
Native	Juncaceae	Juncus patens	Spreading Rush		+	+

BOTANICAL SURVEY

Goldtree Area

Cal Poly State University Campus San Luis Obispo, California

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Cal Poly Master Plan October 2000

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EXECUTIVE SUMMARY

This report presents the results of a botanical survey conducted during September 2000 on the Goldtree Area of the Cal Poly campus. Special attention was given to potential occurrences of several rare, endangered or special-status plant species known to exist within the San Luis Obispo Quadrangle (Skinner and Pavlik 1994) and to any sensitive habitats present on the site.

The site contains rolling to steep hillsides west of Stenner Creek that are mostly covered by coastal valley grassland used as sheep pastures. Historically the area was covered by California native grassland but has been converted to coastal grasslands now dominated by alien grasses and forbs. Only scattered remnants of the native grasses persist. Heavy disturbance to these grasslands have resulted in the invasion of yellow star thistle, an extremely noxious, unpalatable weed that is invading many of the foothill range areas of California.

Two drainages traverse the site from northwest to southeast and support riparian and freshwater marsh vegetation. Much of the riparian corridor is dominated by a narrow band of aquatic and semi-aquatic rushes, spike-rushes, sedges, and cattails; however, the northern drainage supports a well-developed stand of coast live oak woodland. Small stands of coastal scrub are present along the same drainage in the northwestern portion of the site and form a mosaic with the coast live oak woodland in this area. Vineyards have replaced the grasslands along part of the eastern boundary of the site, and a stand of eucalyptus grows around the human-made pond just south of the vineyards.

Although serpentinite rock outcrops exist on hilltops within the otherwise coastal valley grassland pasture, none of the contingent of rare species known to occur on such outcrops in the San Luis Obispo area were found during our survey.

INTRODUCTION

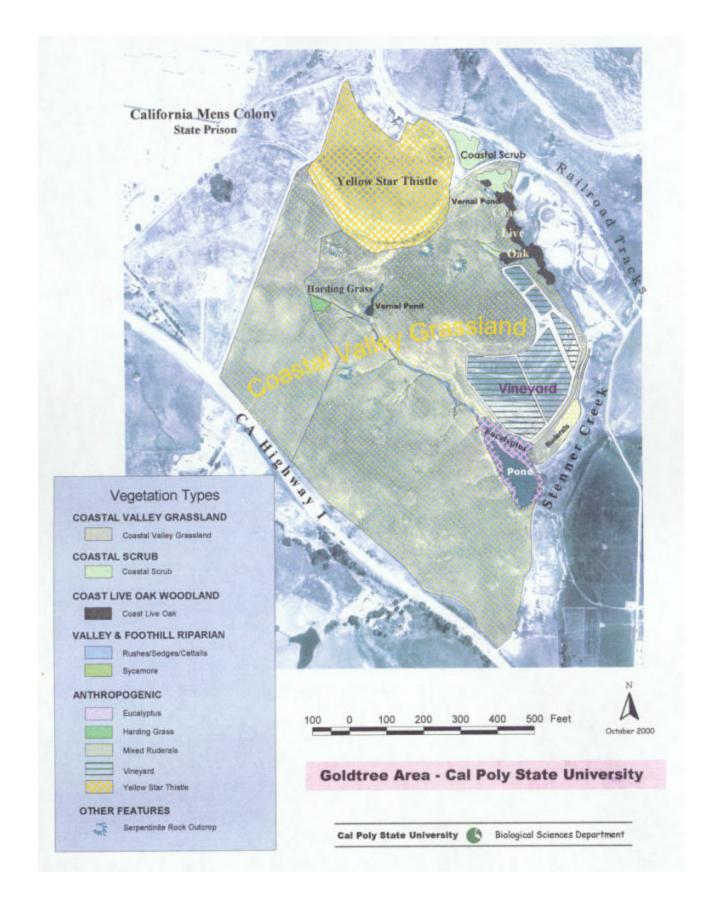
The Goldtree Area consists of approximately 180 acres of the Cal Poly Campus near 35.32°N, 120.68°W, UTM Zone 10, N 3911009, E 710768, in the eastern half of Section 16 of Township 30 South from the Mt Diablo Base Line and Range 12 East from the Mt Diablo Meridian. The area is bounded on the north by the Southern Pacific Railroad tracks, on the west by the California Men's Colony, on the south by California Highway 1, and on the east by Stenner Creek (see site map). The area is named for Morris Goldtree, San Luis Obispo merchant of the late 1800's, who donated the land used as a siding by the Southern Pacific Railroad to encourage the founding of a new town that never developed (Hall-Patton 1994).

Topography is moderately undulating with rounded hills dissected by shallow-sided drainages. Two small tributaries of Stenner Creek traverse the area from northwest to southeast. The northern tributary originates in the slopes off site to the north. The southern tributary originates in the west-central portion of the Goldtree Area and traverses through the center the site to the human-made pond. Slopes are moderate, ranging from about 5% to over 25%. Elevations range from approximately 400 to 610 feet, and the largest and tallest hill is in the southern portion of the site.

The general climate is the cool summer phase of the dry-summer Mediterranean type of humid mesothermal climates (Trewartha 1968). Winter high temperatures average near 62°F (16.7°C) with low averages near 41°F (5°C). Winter lows below 32°F (0°C) are not uncommon, and a low of 9°F (–12.7°C) has been recorded on the Cal Poly campus. Summer high temperatures average near 77°F (25°C) with low averages near 52°F (11°C). Summer highs above 90°F (32°C) are not uncommon, and a high of 109°F (42.8°C) has been recorded on the Cal Poly campus. Precipitation falls as rain primarily from October through April, and averages about 22 inches (558 mm) per year. Less than one inch of precipitation is typically recorded from May through September, but overnight and morning fog with near 100% humidity occurs nearly every day unless drier, downsloping winds descend from the Salinas Valley over the Santa Lucia Range to overwhelm the onshore flow of marine air (Felton 1965)

Upland soils form a complex mosaic of Diablo Clay Loam, Los Osos Clay Loam, and Lodo Clay Loam, all slowly permeable, well-drained, residual soils derived from sandstone, shale, or mudstone. Diablo Clay Loam is moderately alkaline, with a moderately deep A horizon to over 30 inches, but no well-defined clay (B) horizon. Los Osos Clay Loam is moderately acid and does exhibit a well-defined clay (B) horizon under the 12-inch thick A horizon. Lodo Clay Loam is slightly acid, and shallow, with a depth to rock of about 12 inches, and no clay (B) horizon (Ernstrom 1977). Serpentinite outcrops occur on several hilltops in the northwest portion.

Present land use is agricultural with most of the area fenced into paddocks for sheep grazing. Active vineyards have been planted along the eastern boundary of the site near Stenner Creek.



OVERVIEW OF VEGETATION

The vegetation of the study site has developed in response to the interaction of a complex of environmental features that are variable over the area. Local climate (wind, temperature, rainfall, fog, etc.), topography, parent materials, soils, biotic components, fire, location of waterways and natural historical events are all variables that have affected the vegetation on the site. Past and present land-use and other human caused events have also resulted in significant changes in the vegetation.

The former natural vegetation of the site consisted of California native grassland on the upland slopes with a narrow band of riparian and freshwater marsh along the two small tributaries of Stenner Creek that traverse the site. Presently, the California native grassland is entirely converted to coastal valley grassland thoroughly dominated by nonnative grasses and forbs. The riparian and freshwater marsh is now fragmented and thoroughly invaded by the alien grasses and forbs the grow in the adjacent grasslands.

The most significant natural resource elements remaining on or near this site are the narrow riparian and freshwater marsh areas along the two small tributaries of Stenner Creek, even though they have many invasives, and the band of coast live oak woodland along the northern tributary of Stenner Creek.

VEGETATION DYNAMICS

Plant communities are dynamic assemblages of plants that interact among themselves and their environment within a space-time boundary. Some of these communities are well defined and distinct while others are not. No two sites within a given community are exactly the same in environmental conditions, vegetation structure, or species composition. This complexity makes defining plant communities and mapping their areal coverage sometimes difficult and arbitrary.

Spatial boundaries between plant communities (also referred to as ecotones or transition areas) may be abrupt where environmental features change sharply, such as between terrestrial and aquatic habitats. However, usually there is an environmental gradient and plant communities change more gradually in response to that gradient.

Another complicating factor in vegetation analyses and mapping is that plant communities are not static but change through time in response to both natural and human induced environmental changes. As a result, some areas are mixtures of plant assemblages at varying successional stages. The invasion of exotics into native communities further complicates our study.

DESCRIPTION OF THE VEGETATION AND FLORA

The floristic inventory of the study site took place in September 2000. The diversity of plant species and habitats are indicated in the species list and on the vegetation map. The vegetation and floristic survey consisted of canvassing the site on foot, recording the plant species in identifiable condition, and describing the plant

communities and habitats.

We identified 70 plant species (Appendix 1), 26 natives, 44 aliens, and six general plant communities. However, it is important to note that this may not be a complete list of the plants present on the site. Plant species composition, especially herbaceous cover, varies seasonally and annually. During September 2000 most herbaceous plant species were represented by the dried remains of last year's stand crop. Others may have been overlooked or may bloom in spring and summer. A survey through the entire year, especially in the spring, would be necessary for a complete listing of the flora found on the project site.

The vegetation of the area can be somewhat arbitrarily divided into five general plant communities, as classified by Holland and Keil (1995): (1) coastal valley grassland; (2) coastal scrub; (3) coast live oak woodland; (4) riparian and freshwater marsh; (5) serpentinite rock outcrops; and (6) anthropogenic communities (ruderal, vineyards, and plantations). Each is discussed separately below. Additionally, serpentinite rock outcrops occur within the Anthropogenic Pastoral Community and are discussed under that heading.

1. Coastal Valley Grasslands

Coastal valley grasslands, which cover the majority of the site, are currently composed of various species of native and introduced grasses and forbs (dicot herbs), and sometimes occasional shrubs are present. The grasses that dominate this grassland include annuals, perennials, or a mixture of the two depending on location. Many of the grasslands on campus are now dominated by grasses and forbs tolerant to grazing that were introduced into California during the period of Spanish settlement.

Grasslands often occur on fine textured, clay rich soils of valleys and alluvial deposits at the base of hillsides, although they also extend on some steep hillsides. They integrate with coastal live oak woodlands on mesic hillside slopes, with coastal scrub and chaparral on xeric, steep, rocky slopes, and with riparian woodland and freshwater marsh communities in aquatic and semi-aquatic areas along the creek and reservoir. Many of the grassland species occur as understory species in the other communities.

Some areas of the Cal Poly campus have an impressive number of native grasses in the grassland areas, much more than most grasslands in locally and in California. However, the Goldtree site has few native grasses except on the surroundings steep hillsides. The stands of perennial, native bunch grasses, which dominated the grassland prior to Spanish settlement, have gradually been reduced on the study site and replaced by introduced annuals. In heavily grazed pastures, which dominate much of the grasslands on the study site, few if any native grasses have survived. However, outside these heavily grazed areas on the surrounding hillsides, stands of California native grassland persist. Historically, the changes in the composition of the grassland in this area are mostly a function of the introduction and invasion of alien plant species and changes in livestock grazing and their grazing patterns.

The Coastal valley grassland communities of the site have been used for pasture and have been modified by both historical and present-day human influences. These past influences and the current pastoral land-use patterns have shaped the grasslands that occur on site today. Repeated disturbance to the vegetation and soil by grazing animals maintains a pastoral influence on the grassland and results in grassland composed of mostly introduced species tolerant to this type of repeated disturbance regime.

Communities dominated by plants introduced by humans and established or maintained by human disturbance are anthropogenic communities. The coastal valley grassland used as heavily grazed pastures reflect the influence of humans by their species composition. These grasslands are composed of a mixture of plant species typical of coastal valley grasslands along with species intentionally grown for grazing livestock to consume. In the dry-summer subtropical climate region of California, the intentionally seeded pasture grasses are all cool-season Eurasian species, and mostly annual. The perennial species used, such as *Dactylis glomerata* (Orchardgrass), *Festuca arundinacea* (Tall Fescue), *Lolium perenne* (Perennial Ryegrass), and *Phalaris aquatica* (Harding Grass) generally need at least 15 inches of annual precipitation to persist. Annuals, such as *Avena* spp. (Wild Oats), *Bromus* spp. (Bromes), *Lolium* spp. (Ryegrasses), persist through the dry summers as quiescent seeds that await the first autumn rains. Invaders of pastures are frequently Eurasian forbs, but some natives are able to persist in pastures owing to some inherent chemical or physical attribute that renders them unpalatable to livestock.

Goldtree grasslands are dominated by a nearly complete cover consisting of only a few different species. The annual grasses *Bromus hordeaceus* (Soft Chess), *Lolium multiflorum* (Annual Ryegrass), *Avena fatua* (Common Wild Oat), *Vulpia myuros* (Rattail Fescue) form the matrix across most of the area, augmented by sizable stands of *Picris echioides* (Bristly Ox-Tongue), *Foeniculum vulgare* (Fennel), *Raphanus sativus* (Wild Radish), *Dipsacus sativus* (Teasel), *Silybum marianum* (Milk Thistle), and *Brassica nigra* (Black Mustard). Thus, portions of these paddocks support large stands of weedy aliens unpalatable to sheep. Other associate species are listed in Appendix 1.

These upland pastures were originally California native grassland dominated by a mixture of mostly the perennial grasses Nassella lepida (Foothill Needlegrass), Nassella pulchra (Purple Needlegrass), Danthonia californica (California Oatgrass), Elymus elymoides (Squirreltail), and Poa secunda (Malpais Bluegrass), along with many perennial and annual forbs (non-grassy herbs). Historically, changes in the composition of these grasslands are mostly due to introduction and invasion of alien plant species and changes in the kinds of animals (especially grazing livestock) and their grazing patterns. Native grassland species have declined markedly because of their lack of adaptations to heavy grazing. Prior to introduction of cattle by the Spanish, coastal California had no large mammals that grazed all year. Perennial native grasses have declined in part because grazing during their reproductive cycle greatly reduces seed production and the stored food reserves necessary to get them through dormant phases. The annual grasses introduced from the Old World are more tolerant of grazing, reproduce guickly, and do not need to store food reserves. Over the years their seedlings have out-competed and replaced native species. Native forbs have suffered a similar fate. Locally, cultivation and fire have played roles in the nearly complete conversion to alien dominated herblands.

Within these upland pastures on Goldtree, both *Nassella lepida* (Foothill Needlegrass) and *Nassella pulchra* (Purple Needlegrass) persist on the steeper slopes. Other indicators of California native grassland are no longer present.

2. Coastal Scrub Community

This community is typically dominated by small to medium sized (3-6 feet tall) shrubs with a herbaceous understory. Both the density and the composition of the shrub cover vary from site to site, as does the herbaceous understory. The dominant shrubs in this plant community are comparatively soft-stemmed plants that undergo significant dieback during the summer drought. For this reason, coastal scrub is sometimes referred to as "soft chaparral" as opposed to the "hard chaparral" or "true chaparral".

The coastal scrub community is not well represented on the site but does form a sparse cover on the hillsides flanking the northern branch of Stenner Creek and mingles with the coast live oak woodland along this drainage. Therefore, we have included it in our discussion. The dominant shrubs on site are *Artemisia californica* (California sagebrush) and *Baccharis pilularis* (Coyote bush). Other shrubs present include *Epilobium canum* (California fuchsia), and *Eriophyllum confertiflorum* (Golden-yarrow). The herbaceous associates are mostly the same alien grasses and forbs present in the adjacent pastoral uplands, but some native *Nassella lepida* (Foothill needlegrass) and *Nassella pulchra* (Purple needlegrass) still persist with the shrubs.

3. Coast Live Oak Woodland

On the hillsides flanking the northern branch of Stenner Creek, a narrow band of *Quercus agrifolia* (coast live oak) forms a nearly closed canopy over the creek bed. Oak trees in this woodland are small, mostly less than fifteen feet, and fairly uniformly sized. *Artemisia californica* (California sagebrush) occurs as an understory along with many of the alien grasses and forbs present in the adjacent pastoral uplands. Some native *Nassella lepida* (Foothill needlegrass) and *Nassella pulchra* (Purple needlegrass) still persist. Other common associates are listed in Appendix 1.

4. Riparian and Freshwater Marsh

Freshwater marsh vegetation has developed around the margins of the humanmade pond in the southeastern corner of the site, and in narrow bands along much of the drainage channel upstream. Consequently, this community is present in part because of human influences that have impeded the flow of these small tributaries to Stenner Creek. Freshwater marshes occur in nutrient-rich mineral soils that are saturated through much or all of the year. These communities are best-developed in locations with slow-moving or stagnant shallow water. Such sites commonly occur along the margins of creeks or along drainages where water is allowed to pool in depressions or move very slowly downslope. In areas where freshwater marshes occur there is not always standing water throughout the year. In some cases the water table is so close to the surface that it can be tapped by marsh plants. On hillsides, there are small seep areas associated with the drainages that provide a source of water much of the year.

Because perennial water is unusual in the coastal lowlands of San Luis Obispo County, riparian communities typically exhibit much greater plant species diversity as compared with the adjacent uplands. Of the 70 species catalogued during this inventory, 47 (67%) occur within the riparian and freshwater marsh communities, and 30 (43%) are present on site only in these communities.

Along the southernmost tributary to Stenner Creek are two mature, but small, individuals of *Platanus racemosa* (California sycamore). Larger individuals of this

species are common along the main channel of Stenner Creek. Surrounding the largest pond is a band of mature *Eucalyptus* spp., and large, dense stands of *Scirpus pungens* (Common threesquare), with some *Typha angustifolia* (Narrow-leaved cattail) and *Arundo donax* (Giant reed).

At the head of the southernmost tributary to Stenner Creek is a stand of *Phalaris aquatica* (Harding grass). Downstream, *Phalaris aquatica*, *Festuca arundinacea* (Tall fescue), and *Paspalum dilatatum* (Dallis grass) are common along the drainage. The smaller stock ponds of the area support stands of *Typha angustifolia* (Narrow-leaved cattail), *Crypsis schoenoides* (Swamp grass), *Polypogon monspeliensis* (Rabbitfoot grass), and *Cynodon dactylon* (Bermuda grass). This drainage is also thoroughly invaded by many of the same weeds present in the adjacent upland paddocks. These and other associate species are listed in Appendix 1.

5. Serpentinite Rock Outcrops

Rock outcrops provide specialized habitats for both plants and animals. Some species are restricted to the rock crevices or to the bare, dry rock surfaces. Rock outcrops are mostly sparsely vegetated by extremely drought tolerant species on their surfaces and by moister requiring species in their crevices. In the case of the subject property the outcrops are mostly of serpentine. Serpentinite is a metamorphic, magnesium silicate rock, often green in color and slippery to the touch. Serpentinite and the soils derived from it have a number of traits inimical to plant growth. It is low in some essential nutrients, especially calcium, and high in magnesium. In addition, it is often high in toxic elements such as nickel and chromium. As a result of these unusual conditions serpentinite rock and soil support unusual, endemic floras including a large number of rare and endangered species.

Several hills in the northwestern portion are topped by serpentinite outcrops and shallow soils that support a few plant species not found in the surrounding coastal valley grassland matrix, but none of the rare and/or endangered species often associated with such outcrops in the San Luis Obispo area (see discussion of rare species below). One or more of these rare species may have occurred on these outcrops historically, but these sites are now so thoroughly degraded after years of livestock grazing and concomitant invasion by alien weeds that few native species persist among the rocks today. Among these are *Epilobium canum* (California fuchsia), *Lessingia filaginifolia* var. *californica* (California-aster), *Nassella lepida* (Foothill needlegrass) and *Nassella pulchra* (Purple needlegrass), and the frequent follower of disturbance, *Eremocarpus setigerus* (Turkey mullein).

6. Anthropogenic Communities

Communities dominated by plants introduced by humans and established or maintained by human disturbance are anthropogenic communities. Some of these are entirely artificial communities such as cultivated row-crops, lawns, vineyards, etc. Others are assemblages of weedy species that have invaded disturbed areas, sometimes in spite of human efforts to control them. Weed-dominated communities often represent the early stages of natural succession. In the absence of disturbance many weedy plants do not persist, but are gradually replaced by native vegetation. Many of man's activities, however, cause continual disturbance.

In the case of the Goldtree area, anthropogenic communities on the project site

can be divided into the three types: pastoral, *ruderal*, and *plantation* communities. The coastal valley grasslands, discussed previously, have a pastoral influence due to human modifications. These communities occur in the upland pasture areas created from California native grassland where repeated disturbance to the vegetation and soil by grazing animals maintains a plant community of few species tolerant of this repeated disturbance regime. Ruderal communities occur where frequent disturbances, caused by vehicles, oil, dust, etc., or even a one-time tilling of the soil, causes a shift from native species intolerant of such disturbance to native or alien species, often annuals, capable of colonizing and persisting on such disturbed lands. The other anthropogenic communities include the small plantation of eucalyptus trees that surrounds the stock pond and the vineyard that has been planted along the eastern boundary of the site.

Ruderal Communities. The corridors along roads and railroads are influenced by human activities associated with past construction and ongoing maintenance. This disturbance continues to affect the roadside long after construction has ceased. Everyday cars or trains move past, each creating its own windstorm and adding its pollutants to the air and pavement. Periodically roadsides and railroad tracks are mowed or sprayed with herbicides by maintenance crews. Only plants capable of withstanding these conditions and disturbances are able to grow in ruderal communities.

Although many of California's native plant species are able to grow along transportation corridors they often fail to become established because of competition from aggressive Eurasian species. Most successful weeds produce large quantities of seeds and readily invade disturbed sites. Many have features that allow their seeds to be widely dispersed. As a result, many of the species of the ruderal communities have also invaded the adjacent coastal valley grasslands on the Goldtree site.

The most significant invader present is *Centaurea solsticialis* (Yellow Star Thistle), a spiny noxious weed that now dominates the highly disturbed area created by the construction and removal of the Goldtree Siding in the northwestern portion of the area.

Plantations: *Eucalyptus viminalis* (Manna gum) has been planted around the stock pond in the southeastern corner of the site. This area represents an area entirely created and influenced by human activities.

Vineyards: Planting of vineyards completely replaces the grassland and any native vegetation in the area. This agricultural area represents an area entirely created and influenced by human activities.

RARE AND ENDANGERED PLANTS

Fourteen native plant species documented to occur northeast of the project site in Poly Canyon (DeRome 1997), or within the encompassing San Luis Obispo 7.5 minute Quadrangle (Skinner and Pavlick 1994), and with potential to occur in the Goldtree Area, are sufficiently rare to have been officially recognized as such by private or governmental agencies (see list below). A **rare plant** is one that is limited in terms of number of individual plants still present in the wild, and also one that has a limited distribution. Usually rare plants are found in only a few highly restricted populations. This distribution is usually determined by the rarity of the habitat in which the plant is able to grow. While many rare plants are not at present threatened with extinction, they occur in such small numbers over such a limited range that they could be threatened if their remaining habitat is modified. An **endangered species** is one that is not only rare, but also threatened with extinction because the survival of existing populations and future reproduction are jeopardized. The main reason that most such plants in California are extinct or rare and endangered is that humans are gradually destroying their habitats through urbanization, forest destruction, agricultural practices and pollution. Attempts are being made to eliminate these practices and to protect the rare and/or endangered species in California.

The Basis for Recognizing Rare and Endangered Plants

California Native Plant Society (CNPS)—Since the 1970's the California Native Plant Society, an organization of professional and lay botanists that is dedicated to the preservation of California's native flora, has been involved in determining which plants in California are rare and endangered. The society has published five editions of a book entitled Inventory of Rare and Endangered Vascular Plants of California. The fifth edition of the CNPS Inventory (Skinner and Pavlik, 1994) lists plants in four categories: List 1—Plants of Highest Priority, with two sublists: 1A—Plants Presumed Extinct in California and 1B—Plants Rare and Endangered in California and Elsewhere; List 2—Plants Rare or Endangered in California, but More Common Elsewhere; List 3—Plants about which More Information is Needed; and List 4—Plants of Limited Distribution (A Watch List). Additionally each plant listed is given a R-E-D Code (Rarity, Endangerment, and Distribution) with numbers ranging from 1-3 in each category. For each of the values a higher number is an indication of greater sensitivity:

Categories of rarity, endangerment, and distribution are described below.

R (rarity)

- 1. Rare but found in sufficient numbers and distributed widely enough that the potential for extinction or extirpation is low at this time.
- 2. Occurrence confined to several populations or to one extended population.
- 3. Occurrence limited to one or a few highly restricted populations, or present in such small numbers that it is seldom reported.

E (endangerment)

- 1. Not endangered.
- 2. Endangered in a portion of its range.
- 3. Endangered throughout its range.

D (distribution)

- 1. More or less widespread outside California.
- 2. Rare outside California.
- 3. Endemic to California.

CNPS is revising its listing. In June 2000 the CNPS posted a list of the taxa to be included in the 6th edition of the CNPS Inventory but hard copies have not been published yet (<u>http://www.cnps.org/rareplants/inventory/6thEdition.htm</u>). This list includes the RED codes that are to be adopted in the new version of the inventory.

U. S. Department of Fish and Wildlife—The Endangered Species Act in 1973 resulted in listing and protecting rare plants at the federal level by the U. S. Fish and Wildlife Service (USFWS). Their categories are summarized below:

- Endangered Species (FE) are taxa in danger of extinction throughout all or a significant portion of their range.
- **Threatened Species (FT)** are taxa likely to become endangered within the foreseeable future throughout all or a significant portion of their range.
- **Candidate Species** are taxa for which the Fish and Wildlife Service (Service) has sufficient information on their biological status and threats to propose them as endangered or

California Department of Fish and Game—The California Endangered Species Act in 1984 resulted in listing and protecting rare plants at the state level with the California Department of Fish and Game (DFG). Their categories are summarized below:

- **Rare Species (CR)** are taxa that are not presently threatened with extinction but occur in such small numbers that they could become endangered if habitat conditions worsen.
- **Threatened Species (CT)** are taxa likely to become endangered within the foreseeable future without special protection and management efforts.
- **Endangered Species (CE)** are taxa whose prospects of survival are in immediate jeopardy for one or more reasons. These taxa are in danger of extinction throughout all or a significant portion of their range.

California Environmental Quality Act (CEQA)—For all plant species listed on CNPS's List 1B and 2, it is mandatory that they be fully considered during preparation of environmental documents relating to CEQA. For species on Lists 3 and 4, CNPS strongly recommends that they be considered in preparation of such documents.

Rare Plants Potentially On or Near the Goldtree Area

The rare plant species listed in the table below have documented occurrences on the Cal Poly campus or elsewhere in the vicinity of the project site. None, however, were actually located during the field survey of the project site.

Most are typically found on soils derived from serpentinite rock. Serpentinite is a metamorphic, magnesium silicate rock, often green in color and slippery to the touch. (It is the California State rock). Serpentinite and the soils derived from it have a number of traits inimical to plant growth. It is low in some essential nutrients, especially calcium, and high in magnesium. In addition, it is often high in toxic elements such as nickel and chromium. As a result of these unusual conditions serpentinite rock and soil support unusual, endemic floras including a large number of rare and endangered species. The hillsides adjacent to the north border of the project site exhibit serpentinite outcrops and shallow soils that support some unusual plant species, many of which are listed as rare and/or endangered. Rock outcrops provide specialized habitats for both plants and animals. Some species are restricted to the rock crevices or to the bare, dry rock surfaces. Rock outcrops are mostly sparsely vegetated by extremely drought tolerant

species on their surfaces and by moister requiring species in their crevices.

CNPS is revising its listing. We have listed the currently listing in the 1994 *Inventory of Rare and Endangered Vascular Plants of California* (fifth edition) along with the proposed new listing (sixth edition) for those that are changing. For each taxon, the current listed status for California is based on the July 2000 Special Plant List by the California Department of Fish and Game, and the current federal status is taken from the United States Fish and Wildlife website as of 2 October 2000 (http://ecos.fws.gov/webpage/webpage_usa_lists.html?#CA). Both are indicated in the table below.

Scientific Name	Common Name	C.N.P. S. Listing	RED Code	State Listing	Federal Listing
Calochortus clavatus ssp. clavatus	club-haired mariposa lily	List 4	1-1-3	None	None
Calochortus obispoensis	San Luis mariposa lily	List 1B	2-2-3	None	None
Calystegia subacaulis var. episcopalis	Cambria morning glory	List 1B	3-2-3	None	Species of Concern
Chlorogalum pomeridianum var. minus	Dwarf soaproot	List 1B	2-2-3	None	None
Chorizanthe breweri	Brewer's spineflower	List 1B	3-1-3	None	None
Chorizanthe palmeri	Palmer's spineflower	List 4	1-2-3	None	None
Dudleya abramsii ssp. murina	San Luis Obispo dudleya	List 1B	2-1-3	None	None
Hemizonia parryi var. congdonii	Congdon's Tarplant	List 1B	3-3-3	None	Species of Concern
Layia jonesii	Jones' layia	List 1B	3-2-3	None	Species of Concern
Lomatium parvifolium	small-leaved lomatium	List 4	1-2-3	None	None
Perideridia pringlei	pringle's yampah	List 4	1-1-3	None	None
Sanicula maritima	Adobe Sanicle	List 1B	3-3-3	Rare	Species of Concern
Sanicula hoffmannii	Hoffmann;s sanicle	List 4	1-1-3	None	None
Senecio aphanactis	rayless groundsel	List 2	3-2-1	None	None

Calochortus clavatus ssp. clavatus (Club-Haired Mariposa Lily) is a bulbforming lily that produces one or two strap-shaped green leaves in early spring. These are beginning to wither by the time the plant flowers in May or June. The flowers are cup-shaped with 3 narrow, yellow-green sepals and three, obtriangular, yellow petals marked by a jagged, transverse, purple-brown band across the inner face. Each petal bears a rounded, depressed nectary toward the base surrounded by club-shaped yellow hairs. The anthers are large and purple. After the flowers wither the ovary develops into a slender, 3-angled capsule with many dark seeds. The plant is generally completely dry by late summer. The dry remains can be identified by the shape of the capsule. Only the bulb and seeds remain alive until the next growing season.

Calochortus clavatus ssp. *clavatus* is restricted to San Luis Obispo County and Santa Barbara County in the western portion of the Coast Ranges, mostly on soils derived from serpentinite parent material. In San Luis Obispo County it is known from several locations in the Santa Lucia and San Luis Ranges. Four other rare subspecies occur to the north and south of subspecies *clavatus*. It is known from several sites in the area. It flowers in spring.

Calochortus clavatus ssp. *clavatus* was not observed within or in the immediate vicinity of the Goldtree project site.

Calochortus obispoensis (San Luis Obispo Star-Tulip) is a bulb-forming lily that produces one or two strap-shaped green leaves in early spring. These are beginning to wither by the time the plant flowers in May or June. The flowers are star-like with 3 narrow, yellow-green sepals and three yellow petals that are bearded with long purple and yellow hairs. After the flowers wither the ovary develops into a slender, 3-angled capsule with many dark seeds. The plant is generally completely dry by late summer. The dry remains can be identified by the shape of the capsule. Only the bulb and seeds remain alive until the next growing season.

Calochortus obispoensis occurs only in San Luis Obispo County where most occurrences are on serpentinite or serpentinite-derived soils. It occurs only in the vicinity of San Luis Obispo where it ranges from the Cuesta Grade south to Indian Knob and northeastern Arroyo Grande and west to the summit area of the Prefumo–See Canyon Road. It flowers in spring.

Calochortus obispoensis was not observed within or in the immediate vicinity of the Goldtree project site.

Calystegia subacaulis ssp. **episcopalis (Cambria Morning Glory)** is a perennial herb with trailing or sometimes weakly twining stems. It has alternate, broadly triangular leaves that are minutely hairy. The cream-colored, funnel-shaped flowers are produced from April to June. After the flowers wither the plant develops small, dry capsules with dark seeds. By late summer the above-ground parts of the plants are completely dry and only seeds and an underground rootstock persist through the dry season. The plant is difficult to identify in the dry season because the dry parts shatter.

Calystegia subacaulis ssp. *episcopalis* is at present known only from San Luis Obispo and northern Santa Barbara counties. In San Luis Obispo County it ranges from the Hearst Ranch in the northwestern corner of the county south to the vicinity of San Luis Obispo where it usually occurs in grassy sites with clay-rich soils often in association with serpentinite parent material. The species was observed in flower during May 2000 on sites also proposed for student housing around the entrance to Poly Canyon on the sites dubbed Poly Canyon North and Poly Canyon South (see those botanical reports for details). These plants flower in the spring and early summer.

Calystegia subacaulis ssp. *episcopalis* was not observed within or in the immediate vicinity of the Goldtree project site.

Chlorogalum pomeridianum var. minus (dwarf soaproot) is a perennial herb that grows from a large bulb with fibrous outer bulb scales. In spring it produces a rosette of wavy-margined, strap-shaped leaves. A branched inflorescence arises from the bulb, and flowers develop in late spring or early summer. Flower buds of dwarf soaproot are externally purple, but the open flowers are white. The flowers are nocturnal, opening in the evening and closing the next morning. Seed capsules about 5 mm diameter mature in summer. Plants of *Chlorogalum pomeridianum* are easily identified in spring by their characteristic leaves and in summer by the seed capsules. Plants of var. *minus* have comparatively short stems 20–40 cm tall, and the bulb coats are membranous or have relatively few fibers.

Dwarf soaproot grows mostly in grassy areas or openings in chaparral, coastal scrub, and coastal live oak woodland. It occurs from the Coast Ranges north of the San Francisco Bay region to the vicinity of San Luis Obispo. Around San Luis Obispo it occurs mostly on soils derived from serpentine. On the Cal Poly campus dwarf soaproot is known to occur in Poly Canyon and the Pennington Creek Biological Reserve and is probably present elsewhere as well. It flowers in spring.

Chlorogalum pomeridianum var. *minus* was not observed within or in the immediate vicinity of the Goldtree project site.

Chorizanthe breweti (Brewer's spineflower) is a brittle-stemmed annual herb. In early spring it produces a rosette of stalked, oval basal leaves. Typically a solitary flower is produced and three spreading, reddish-purple stems radiate away from the rosette. Stem leaves are generally in widely separated pairs and most are much smaller than the basal leaves. In vigorous plants the stems branch repeatedly. The tips of the branches bear clusters of tiny white to pale pink six-parted flowers, each surrounded by a tubular cluster of six red-purple, spine-tipped bractlets. Each flower produces a tiny, one-seeded dry fruit. After flowering the plant dies and only seeds survive through the dry season. The dry plant shatters very easily, but its remains can often be identified through the summer.

Chorizanthe breweri is an endemic to San Luis Obispo County where most occurrences are on serpentine or serpentine-derived soils. It occurs only in the vicinity of San Luis Obispo where it has a range similar to that of *Calochortus obispoensis*. Brewer's spineflower is known from about twenty occurrences. This species occurs in coastal scrub, closed-cone conifer forest, chaparral and cismontane woodland communities. Brewer's spineflower has been documented from Poly Canyon and from the Pennington Creek Biological Reserve. It flowers in late spring and early summer.

Chorizanthe breweti was not observed within or in the immediate vicinity of the Goldtree project site.

Chorizanthe palmeri (Palmer's spineflower) is a brittle-stemmed annual herb. In early spring it produces a rosette of stalked, oval basal leaves. Usually a single stem 1–12 inches high arises from the rosette, and it bears one or two, well-separated rings of leaves. Typically a solitary flower is produced at the end of the main stem and three spreading, reddish-purple stems radiate away from the upper leaf cluster. Stem leaves above this point are generally in widely separated pairs and most are much smaller than the leaves of the main stem. In vigorous plants the stems branch repeatedly. The tips of the branches bear dense, head-like clusters of tiny purple, six-parted flowers, each surrounded by a tubular cluster of six red-purple, spine-tipped bractlets. Each flower produces a tiny, one-seeded dry fruit. After flowering the plant dies and only seeds survive through the dry season. The dry plant shatters easily, but its remains can often be identified through the summer.

Chorizanthe palmeri is known definitely from Monterey and San Luis Obispo counties and may occur as well in San Benito and Santa Barbara counties. Most occurrences are on serpentine or serpentine-derived soils. In San Luis Obispo County it occurs in the Santa Lucia and San Luis Ranges from the northwestern

corner of the county to the serpentine hills around San Luis Obispo. It flowers in late spring and early summer.

Chorizanthe palmeri was not observed within or in the immediate vicinity of the Goldtree project site.

Dudleya abramsii ssp. murina (San Luis Obispo dudleya) is a succulent perennial herb with a thick, fleshy taproot. It produces a dense rosette of narrow, fleshy, leaves with a dull, gray-green coloration. In late spring clusters of 5-petaled, creamcolored to dull purplish flowers are produced on stalks arising from the rosettes. The ovaries of these flowers mature as clusters of small, dry fruits that split open and release many tiny seeds. These plants tough it out during the dry season and their somewhat shriveled leaves and old dry flower clusters are easy to recognize.

Dudleya abramsii ssp. murina is endemic to San Luis Obispo County and it is apparently limited to stony serpentinite soils and serpentinite rock outcrops. Its range is limited to the hills bordering the San Luis Valley in the foothills of the Santa Lucia Mountains from Chorro Creek to Corral de Piedra Creek and in the San Luis Range from upper Prefumo Canyon to the Froom Ranch and the hills south of Broad Street. These plants flower in the spring and early summer.

Dudleya abramsii ssp. *murina* was not observed within or in the immediate vicinity of the Goldtree project site.

Hemizonia parryi var. congdonii (Congdon's Tarplant) is a prostrate to firmly erect, slender-stemmed annual herb with short, awl-like leaves borne in fascicles directly on the stems. Unlike most tarplants, Congdon's Tarplant does not produce copious resin glands. Flowers are of two types, disk and ray, borne in heads at the branch tips, and subtended by longer awl-like bracts. Disk flowers are fairly inconspicuous, central in each head, and bear yellow anthers. Ray flowers produce conspicuous, asymmetrical, three-lobed, yellow corollas in a ring encircling the disk flowers. Fruits are small, dry, hardened, and somewhat crescent-shaped.

Historically, *Hemizonia parryi var. congdonii* occurred in grasslands from Solano County through the San Francisco Bay Area, south through coastal Monterey County, to San Luis Obispo. Today, Congdon's Tarplant is known from only a few locations in northern Monterey County, and from near San Luis Obispo. These plants flower in the summer to autumn.

Hemizonia parryi var. congdonii was not observed within or in the immediate vicinity of the Goldtree project site.

Layia jonesii (Jones' layia) is a slender, erect, spring-flowering herb. The basal and lower stem leaves are generally lobed and the upper have smooth margins. The stems and leaves bear a mixture of short stiff hairs and small glandular hairs. Usually there is a single main stem and several ascending branches. In April and May flowers are produced in daisy-like heads at the branch tips. There are 13–27 petal-like ray flowers in a double row around the periphery of the flower head. These are yellow with three creamy white tips. The center of the head contains many small, yellow disk flowers with purple anthers. When the plants go to seed, the flower heads shatter and the many tiny one-seeded dry fruits drop to the ground. By late June the plants are withered and completely dry. In the dry season the remains are generally not recognizable.

Layia jonesii is known to occur only in Monterey and San Luis Obispo Counties where it grows mostly on clay soils in areas of serpentinite. In San Luis Obispo County it is known from the vicinity of Cayucos (where it has apparently been extirpated) to the hills around San Luis Obispo. It flowers in the spring.

Layia jonesii was not observed was not observed within or in the immediate vicinity of the Goldtree project site.

Lomatium parvifolium (Small-Leaved Lomatium) is a spring-flowering perennial herb with a slender, woody rootstock. Leaves are produced through beginning in March or April and flowering generally begins in April and may continue into June. The smooth green leaves have expanded, sheathing bases and blades divided into many segments. The small yellow flowers are borne in flat-topped clusters up to 5 inches across. The flattened, dry fruits are often tinged with purple and have membranous wings. The mature fruit clusters shatter during the summer as the leaves wither. By mid-summer the above-ground parts of the plants are completely dry. The old fruiting stalks may persist in identifiable condition during the drought season.

Lomatium parvifolium occurs from Santa Cruz County to Santa Barbara County in the western portion of the Coast Ranges, mostly on soils derived from serpentinite parent material. It is known from several sites in the San Luis Obispo area. It flowers in the spring.

Lomatium parvifolium was not observed within or in the immediate vicinity of the Goldtree project site.

Perideridia pringlei (Adobe Yampah) is a perennial herb that arises from a deeply buried tuber. In the spring one or two basal leaves are produced from the tuber. These leaves are divided into numerous linear segments. The basal leaves often wither before the flower stalks are produced. Slender, erect flowering stems arise in late spring or early summer. The few leaves become progressively smaller and less divided up the stem. The small white flowers are borne in a flat-topped cluster that is elevated above the leaves. After the petals have fallen the ovaries develop into small, 2-seeded dry fruits that shatter when the plants dry up in summer. Old dry fruit clusters may occasionally be recognizable through the dry season.

This species is included in the CNPS List 4 (Plants of Limited Distribution). It has an R-E-D code of 1-1-3. It is not a candidate for either state or federally listing, but is included in the California Department of Fish and Game Natural Diversity Data Base list of Special Plants.

Perideridia pringlei is known to occur in coastal locations from Monterey to Los Angeles counties and in the interior from Nevada to Kern counties. In San Luis Obispo County it has been documented from a few widely scattered locations—serpentinite soils in the vicinity of San Luis Obispo, from dry hills east of Creston, and the summit of the Caliente Range. It flowers in the spring.

Perideridia pringlei was not observed within or in the immediate vicinity of the Goldtree project site.

Sanicula hoffmannii (Hoffmann's sanicle) is a perennial herb 1–2 feet tall, three-parted leaves, and numerous, tiny yellow-orange flowers borne in dense, rounded balls at the ends of naked branches that emerge from a common origin

like the spokes of an inverted umbrella. The fruits are small, flattened and beset with many hooked barbs around the top.

Hoffmann's sanicle occurs within a variety of communities including, chaparral, coastal prairie, and valley foothill grassland. It commonly occurs at the ecotone between chaparral or coastal scrub and grassland communities, but sometimes grows beneath the canopy of coast live oak trees. On the Cal Poly campus it has been documented from the Stenner Creek drainage and from the Pennington Creek Biological Reserve. It flowers in spring.

Sanicula hoffmannii was not observed within the Goldtree project site but it has been documented within the Stenner Creek drainage.

Sanicula maritima (Adobe Sanicle) is a carrot-like perennial herb with a thick root, stems to about one foot tall, leaves entire to three-parted, and numerous, tiny yellow flowers borne in dense, rounded balls at the ends of naked branches that emerge from a common origin like the spokes of an inverted umbrella. The fruits are small, flattened and beset with many hooked barbs around the top.

Historically, *Sanicula maritima* occurred from the San Francisco Bay area southward along the coast through Monterey County to the San Luis Obispo area. Today, the Adobe Sanicle occurs in fewer than ten locations along the coast of Big Sur, south to Morro Bay, inland to near San Luis Obispo. It flowers in the spring.

Sanicula maritima was not observed within or in the immediate vicinity of the Goldtree project site.

Senecio aphanactis (Rayless Groundsel) is a spring-flowering annual herb with a slender taproot. Stems are simple or branched and hairless. Leaves are linear to oblong, coarsely toothed, hairless, and borne directly on the stem. The flowering heads are small, urn-shaped, and clustered at the main stem and branch tips. The outer bracts are green and surround the inconspicuous flowers that all lack ray corollas. The dry dandelion-like fruits are hairy and bear numerous whitish bristles from the top.

Senecio aphanactis occurs in vernally moist openings in low elevation coastal scrub on the mainland from Solano County south to northern Baja California, and on Santa Rosa, Santa Cruz, and Santa Catalina Islands. In San Luis Obispo County it is known from the vicinity of San Luis Obispo where it occurs mostly on serpentinitederived soils. It flowers in the early spring.

Senecio aphanactis was not observed within or in the immediate vicinity of the Goldtree project site.

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 APPENDIX 1. PLANT SPECIES LIST FOR GOLDTREE AREA

 CG = Coastal Valley Grassland
 SO = Serpentinite Outcrops
 C/O = Coastal Scrub/Oak Woodland
 R/M =
 Riparian/Marsh

 \bullet = occurs in that community & others; \bullet = occurs in that community exclusively

ORIGIN	FAMILY	SCIENTIFIC NAME	COMMON NAME	AP	SO	C/O	R/M
		TREES					
Native	Fagaceae	Quercus agrifolia	Coast Live Oak			+	
Alien	Myrtaceae	Eucalyptus viminalis	Manna Gum				٠
Native	Platanaceae	Platanus racemosa	Sycamore				٠
		SHRUBS					
Native	Asteraceae	Artemisia californica	California Sagebrush			٠	
Native	Asteraceae	Baccharis pilularis	Coyote Bush			٠	
Native	Onagraceae	Epilobium canum	California-Fuchsia		٠		
		PERENNIAL FOR	RBS				
Alien	Apiaceae	Foeniculum vulgare	Fennel	+	+		+
Alien	Asteraceae	Chondrilla juncea	Skeleton Weed				٠
Alien	Asteraceae	Cichorium intybus	Chicory	•			
Native	Asteraceae	Gnaphalium californicum	Everlasting	+			
Native	Asteraceae	Lessingia filaginifolia var. californica	California-Aster		•		
Alien	Brassicaceae	Hirschfeldia incana	Perennial Mustard	+			
Alien	Brassicaceae	Raphanus sativus	Wild Radish	+			
Native	Convolvulacea e	Calystegia macrostegia	Wild Morning Glory	+			
Alien	Dipsacaceae	Dipsacus sativus	Teasel				+
Alien	Polygonaceae	Rumex conglomeratus	Knotted Dock				٠
Alien	Polygonaceae	Rumex crispus	Curly Dock				•
Alien	Polygonaceae	Rumex pulcher	Fiddle Dock				•
Native	Polygonaceae	Rumex salicifolius	Willow-Leaved Dock				•
		ANNUAL FORB	S				
Alien	Asteraceae	Carduus pycnocephalus	Italian Thistle				٠
Alien	Asteraceae	Centaurea solstitialis	Yellow Star-Thistle	+			•
Native	Asteraceae	Hemizonia congesta ssp. luzulifolia	Hayfield Tarweed	+			

		Iuzumonu				
Native	Asteraceae	Hemizonia pungens ssp. pungens	Common Tarweed	+	+	
Alien	Asteraceae	Lactuca serriola	Prickly Lettuce	+		
Alien	Asteraceae	Picris echioides	Bristly Ox -Tongue	+		+
Alien	Asteraceae	Silybum marianum	Milk-Thistle	+		+
Alien	Asteraceae	Xanthium spinosum	Spiny Cocklebur	+		+

ORIGIN	FAMILY	SCIENTIFIC NAME	COMMON NAME	AP	SO	C/O	R/M
Alien	Brassicaceae	Brassica nigra	Black Mustard	+			
Native	Euphorbiaceae	Eremocarpus setigerus	Turkey Mullein		٠		
Alien	Fabaceae	Lotus corniculatus	Bird's Foot Trefoil	+			+
Native	Fabaceae	Lupinus succulentus	Succulent Lupine	٠			
Alien	Geraniaceae	Erodium botrys	Storkbill Filaree	٠			
Alien	Geraniaceae	Erodium cicutarium	Redstem Filaree	٠			
Alien	Geraniaceae	Erodium moschatum	Green-Stem Filaree	٠			
Native	Onagraceae	Epilobium pygmaeum	Smooth Boiduvalia				•
Native	Plantaginaceae	Plantago elongata	Annual Plantain	+			+
Native	Plantaginaceae	Plantago erecta	Plantain				•
Alien	Polygonaceae	Polygonum arenastrum	Knotweed	+			+
		PERENNIAL GRAS	SES				
Alien	Poaceae	Arundo donax	Giant Reed				•
Alien	Poaceae	Cynodon dactylon	Bermuda Grass				•
Alien	Poaceae	Festuca arundinacea	Tall Fescue				•
Alien	Poaceae	Lolium perenne	Perennial Ryegrass	+	+	+	+
Native	Poaceae	Nassella lepida	Foothill Needlegrass		+	+	
Native	Poaceae	Nassella pulchra	Purple Needlegrass		+	+	
Alien	Poaceae	Paspalum dilatatum	Dallis Grass				•
Alien	Poaceae	Pennisetum clandestinum	Kikiyu Grass				•
Alien	Poaceae	Phalaris aquatica	Harding Grass				•
Alien	Poaceae	Piptatherum miliaceum	Smilo				•
		ANNUAL GRASS	SES				
Alien	Poaceae	Avena barbata	Slender Wild Oats	+	+		
Alien	Poaceae	Avena fatua	Common Wild Oats	+	+	+	+
Alien	Poaceae	Brachypodium distachyon	False Brome Grass	+	+	+	+
Alien	Poaceae	Bromus catharticus	Rescue Grass				•
Alien	Poaceae	Bromus diandrus	Ripgut Brome	+	+	+	+
Alien	Poaceae	Bromus hordeaceus	Soft Chess	+	+	+	+
Alien	Poaceae	Crypsis schoenoides	Swamp Grass				•
Alien	Poaceae	Hordeum marinum ssp. gussoneanum	Mediterranean Barley	+			+
Alien	Poaceae	Hordeum murinum ssp. leporinum	Foxtail Barley	+			+
Alien	Poaceae	Lamarckia aurea	Goldentop		٠		
Alien	Poaceae	Lolium multiflorum	Annual Ryegrass	+	+	+	+
Alien	Poaceae	Poa annua	Annual Bluegrass				•
Alien	Poaceae	Polypogon monspeliensis	Rabbitfoot Grass				٠
Alien	Poaceae	Vulpia myuros	Rattail Fescue	+	+	+	+

ORIGIN	FAMILY	SCIENTIFIC NAME	COMMON NAME	AP	SO	C/O	R/M
		RUSHES / SEDGES / MONOCOT	HYDROPHYTES				
Native	Cyperaceae	Cyperus eragrostis	Umbrella Sedge				٠
Native	Cyperaceae	Eleocharis macrostachya	Spike-Rush				•
Native	Cyperaceae	Eleocharis parishii	Spike-Rush				•
Native	Cyperaceae	Scirpus pungens	Common Threesquare				٠
Native	Juncaceae	Juncus patens	Spreading Rush				•
Native	Juncaceae	Juncus phaeocephalus	Brown-Headed Rush				•
Native	Juncaceae	Juncus bufonius	Toad Rush				•
Native	Typhaceae	Typha angustifolia	Narrow-Leaved Cattail				•

Appendix C Traffic and Parking Study (abridged)

CAL POLY MASTER PLAN UPDATE CAL POLY SAN LUIS OBISPO, CALIFORNIA

TRAFFIC AND PARKING STUDY

August 2, 2000 Updated January 19, 2001 ATE Project #99081

Prepared for:

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TRAFFIC, CIRCULATION AND PARKING STUDY FOR THE CAL POLY MASTER PLAN UPDATE, SAN LUIS OBISPO, CALIFORNIA

Associated Transportation Engineers (ATE) is pleased to submit the following traffic, circulation and parking study for the Cal Poly Master Plan Update. It is our understanding that the results of the study will be incorporated into the EIR being prepared for the Master Plan Update.

We appreciate the opportunity to assist you and the University with the Master Plan Update.

Associated Transportation Engineers

Scott A. Schell, AICP Principal Transportation Planner

Updated January 19, 2001 by Nicole Phillips based on new data from ATE

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TRAFFIC & PARKING

The following section, prepared by Associated Transportation Engineers (ATE), contains an analysis of potential traffic and parking impacts associated with the Cal Poly Master Plan Update. Existing and future traffic conditions are addressed for both onand off-campus transportation facilities. The study also evaluates the affects of the Master Plan on parking supplies and demands throughout the campus.

ISSUES

Implementation of the Master Plan components would accommodate increases in student enrollment and faculty/staff personnel at the campus. This would increase the number of vehicular trips on streets and intersections serving the University. The project is also proposing to modify a portion of the circulation system for the campus, including the extensions of Highland Avenue and California Boulevard and planned interior street network revisions, thus existing circulation patterns will change in and around the campus. Several new parking structures are proposed for the campus to offset the loss of parking which will occur as a result of the Master Plan. The new parking structures have been located near campus access points to reduce the need for on-campus vehicle travel. Pedestrian traffic near residence halls and apartments will be regulated with designated crossing areas and proposed grade separated pedestrian crossing. Thus, reductions in on-campus conflicts between pedestrians and vehicles is anticipated with implementation of these elements of the Master Plan.

The Master Plan components include new residence apartments and halls, parking structures and surface parking areas that will serve both current and future students that live on and off-campus. The Master Plan provides for an enrollment increase of 3,000 students, all of which would be accommodated by on-campus housing. Campus redevelopment would result in a small increase in the number of parking spaces; however, the Master Plan elements are predicated upon the fact that parking demand ratios would decrease from current levels based on the proposed revisions to the campus layout, transportation demand management (TDM) plans, and parking restrictions.

SETTING

Existing Street Network

The campus is served by a circulation system comprised of highways, arterial streets, and collector streets, which are illustrated in Figure 1. The major components of the existing street network are discussed in the following text.

U.S. Highway 101, located one-half mile south of the University, is a multi-lane freeway which serves as a major arterial within the City of San Luis Obispo and is the principal inter_city route along the Central Coast. Within the vicinity of the campus, U.S. 101 is a four-lane freeway generally following an east-west alignment.

State Route 1 (SR 1) - Santa Rosa Street. State Route 1 extends north-south through the City of San Luis Obispo as Santa Rosa Street. West of Cal Poly, Santa Rosa Street is a four-lane major arterial that provides regional access to the college via Highland Drive. The Santa Rosa Street/Highland Drive and Santa Rosa Street/Foothill Boulevard intersections are controlled by traffic signals.

California Boulevard is a two- to three-lane arterial that serves the residential neighborhood east of the Union Pacific railroad tracks and provides one of the primary entrances to Cal Poly. The City of San Luis Obispo classifies California Boulevard as a Residential Arterial from Taft Street (near U.S. Highway 101) to the edge of the University north of Foothill Boulevard; and as an Arterial from Taft Street across U.S. Highway 101 to Monterey Street.

Foothill Boulevard is a two- to four-lane undivided arterial street with signalized intersections at California Boulevard and Santa Rosa Street. The City's Circulation Element classifies the roadway as either an Arterial, Parkway Arterial or Residential Arterial which varies the desired maximum speed limit, number of travel lanes and desired maximum traffic on the roadway. Foothill Boulevard serves as a major route to Cal Poly, via California Boulevard, from locations south and west of the campus.

Grand Avenue serves as one of the primary entrances to Cal Poly. From U.S. Highway 101, Grand Avenue is a four-lane roadway and follows a north-south alignment to its intersection with Slack Street, which is controlled by all-way stop signs. North of Slack Street, Grand Avenue narrows to a two-lane roadway and curves in a northwestsoutheast alignment towards its intersection with South Perimeter Road, which is also controlled by all-way stop signs. The City of San Luis Obispo Circulation Element classifies Grand Avenue as a Residential Arterial south of Slack Street to U.S. Highway 101. The Monterey Street/Slack Street intersection is signalized.

Perimeter Road is a two-lane roadway that is the main roadway for on-campus vehicular travel. Perimeter Road is U-shaped, starting at College Avenue in the southwest part of campus and then curving north-south around the University's administrative buildings, eventually curving back in an east-west alignment along the north core of the campus where it terminates at Dexter Drive near the library.

Highland Drive is a two-lane arterial that serves the residential neighborhood west of

Santa Rosa Street and serves as one of the primary entrances to Cal Poly east of Santa Rosa Street. The City of San Luis Obispo classifies Highland Drive as an Arterial from Ferrini Road (just west of Santa Rosa Road) to the Union Pacific railroad tracks within the campus.

Existing Roadway Operations

Existing average daily traffic (ADT) volumes for the project-area roadways are illustrated in Figure 2. Existing ADT volumes for the project-area street segments were obtained from new traffic counts conducted by ATE. Levels of service (LOS) for the area roadways were determined based on roadway capacity standards presented in the City of San Luis Obispo Circulation Element, which are summarized in the Technical Appendix. Levels of Service A through F are used to rate roadway operations, with LOS A indicating free flow operations and LOS F indicating congested operations (more complete definitions of levels of service are included in the Technical Appendix).

The existing ADT volumes presented in Figure 2 indicate that the project-area street segments are generally operating acceptably within their respective design capacities. The four-lane segment of Grand Avenue south of Slack Street is operating in the LOS C range during peak travel periods.

Existing Intersection Operations

Because traffic flow on arterial street networks is most constrained at intersections, a detailed analysis of traffic flow must examine the operating conditions of critical intersections during peak travel periods. The level of service rating system discussed previously for roadway segments is also used to rate intersections.

Figure 3 and 4 illustrate the existing A.M. and P.M. peak hour turning volumes for the project-area intersections. Levels of service for the intersections were calculated using the signalized and unsignalized calculation methodology outlined in the Highway Capacity Manual (HCM)². Table 1 lists the A.M. and P.M. peak hour levels of service for each of the key intersections in the project area. Level of service calculation worksheets are contained in the Technical Appendix.

² <u>Highway Capacity Manual</u>, Transportation Research Board, 1997.

Intersection	Control Type	A.M.		P.N	1.
		Delay	LOS	Delay	LOS
Santa Rosa Street (SR 1)/Highland Drive	Signal	13.8 SEC	LOS B	11.8 SEC	LOS B
Santa Rosa Street (SR 1)/Foothill Boulevard	Signal	16.3 SEC	LOS B	26.2 SEC	LOS C
California Boulevard/Foothill Boulevard	Signal	12.2 SEC	LOS B	21.7 SEC	LOS C
California Boulevard/Taft Street	One-way stop	12.7 SEC	LOS B	16.5 SEC	LOS C
California Boulevard/U.S. 101 NB Ramps	One-way stop	13.8 SEC	LOS B	18.7 SEC	LOS C
So. Perimeter Road/Grand Avenue	All-way stop	9.4 SEC	LOS A	17.1 SEC	LOS C
Grand Avenue/Slack Street	All-way stop	11.0 SEC	LOS B	12.7 SEC	LOS B
Grand Avenue/U.S. 101 SB On-Ramp- Loomis	One-way stop	17.7 SEC	LOS B	12.7 SEC	LOS B
Grand Avenue/U.S. 101 NB Off-Ramp- Abbot	One-way stop	14.1 SEC	LOS B	18.3 SEC	LOS C
Grand Avenue/Monterey Street	Signal	12.2 SEC	LOS B	11.6 SEC	LOS B

Table 1Existing Intersection Levels of Service

Levels of service based on average seconds of delay per vehicle.

The data presented in Table 1 indicate that the study-area intersections currently operate at LOS C or better. Vehicle delay data collected during the A.M. peak hour at the South Perimeter Road/Grand Avenue intersection shows that congestion occurs during the peak 15 to 20 minute surge period when the school classes begin. This congestion is caused by both vehicular and pedestrian traffic flows. The University assigns Public Safety Services personnel to control the intersection during this peak period.

The Grand Avenue/Slack Street intersection also experiences very sharp directional

traffic flows each weekday morning and evening, due to University employee and staff arrivals and departures via Grand Avenue. The reported level of service (LOS B), which is considered relatively good, was validated by field observations. Many vehicles roll through the stop signs in groups of up to four vehicles (two deep, two abreast).

THRESHOLDS OF SIGNIFICANCE

The City of San Luis Obispo Circulation Element³ standards were used to determine the significance of project-generated traffic impacts to off-campus roadways and intersections. The City's Circulation Element has adopted LOS D as the minimum service level for the majority of roadway and intersection operations. Mitigations are required for operations at LOS E or worse (exclusive of downtown arterial roadways and intersections where LOS E is considered acceptable).

The University does not have an adopted policy for determining the significance of traffic impacts at roadways and intersections located on the campus. LOS D was considered to be the minimum service level for roadway and intersection operations in order to provide an infrastructure system on par with the City's.

BASELINE TRAFFIC VOLUMES

"Baseline" traffic volumes were forecast to provide a point of comparison for measuring the effects of the additional traffic that would be generated by implementation of the Master Plan. The Baseline forecasts assume implementation of the roadway extensions and realignments proposed in the initial phases of Master Plan development. These roadway projects, which will change the traffic patterns in the project area, are listed below:

- Highland Drive Extension. Highland Drive will be extended easterly to form a new perimeter road section in the northern portion of the campus.
- California Boulevard Extension. California Boulevard will be northerly to connect with Highland Drive.
- South Perimeter Road Closure. The section of South Perimeter Road west of Slack Street is proposed to be closed to vehicular through traffic.

Table 2 compares the existing campus distribution pattern and the campus distribution

³ <u>Circulation Element</u>, City of San Luis Obispo Public Works Department, 1994.

pattern associated with implementation of the Master Plan roadway projects. Baseline traffic volumes are presented in Figures 5 through 7.

Origin/Destination	Direction (to/from)	Existing Distribution Percentage	Master Plan Distribution Percentage
California Boulevard	South	28%	40%
Highland Drive	West	28%	20%
Grand Avenue	Southeast	39%	35%
Surrounding areas	Local	5%	5%
Total		100%	100%

Table 2Existing & Master Plan Traffic Patterns

MASTER PLAN TRAFFIC VOLUMES

Trip Generation

Trip generation estimates for the Master Plan project were calculated using rates developed by ATE from traffic counts conducted at a resident-only parking lot located on-campus specifically for this study, as well as other trip studies collected at California colleges. These estimates are shown in Table 3.

Master Plan Component	Size	ADT		A.M. Peak		k P.M. Peak	
		Rate	Trips	Rate	Trips	Rate	Trips
Upperclassmen	2,500 Students	2.504	6,260	0.074	185	0.192	480
Freshmen	500 Students	1.72	860	0.051	26	0.132	66
Faculty/Staff	465 Personnel	1.189	553	0.123	62	0.107	54
Total			7,673	<u>.</u>	273	<u>.</u>	600

Table 3Master Plan Potential Trip Generation

As indicated in Table 3, the Master Plan could generate 7,673 ADT, 273 A.M. peak hour trips and 600 P.M. peak hour trips. These project-generated trips would be the number expected if the reduction measures that are part of the Master Plan are not implemented.

Table 4 shows the decrease in trips that would be associated with implementation of the policies and TDM trip reductions provided for in the Master Plan. Policy guidelines include implementation of the following measures: on-campus parking restrictions for resident freshman (limiting permits issued to freshman), commuter control measures which incorporate restricted parking permits for students that live within a certain distance of the campus; implementation of a transit/shuttle service to serve key campus areas and continuation of the successful faculty/staff incentives already in-place to promote car-pooling, van-pooling, bicycle use, telecommuting, etc. for new campus personnel.

Project Component	Size	ADT		A.M. Peak		P.M. Peak	
		Rate	Trips	Rate	Trips	Rate	Trips
Freshmen	1,200 Students	1.720	-2,064	0.051	-61	0.132	-158
Commute	650 Students	1.170	-761	0.117	-76	0.166	-108
Faculty/Staff TDM	150 Personnel	1.189	-178	0.123	-18	0.107	-16
Total	<u>.</u>		-3,003		-155		-282

Table 4Master Plan Potential Trip Reductions

The Master Plan trip reduction strategies rely on several elements. The trip generation analysis assumes that 10-15% of freshman would allowed to obtain parking permits (about 55% of resident freshman are currently issued parking permits). A combination of TDM measures would be implemented to decrease the number of trips generated by commuting students and faculty/staff members. Implementation of these measure would likely generate a demand for a local shuttle bus/transit service to transport those students to key campus areas during peak times. In addition to parking restrictions, enhanced bicycle facilities and an improved on-campus commercial environment and community atmosphere, as well as telecommuting incentives, would reduce trips to and from the campus. The trip generation analysis assumes continuation of the TDM program for faculty and staff. Survey data indicate that approximately 35-40% of faculty and staff members utilize alternative transportation modes (carpool, vanpool, bicycle, walk, local transit, etc). The trip generation analysis assumes between 30 and 35% of new faculty/staff personnel would continue in this same trend.

The net change in traffic expected by implementation of all the Master Plan components and policies is summarized in Table 5.

Project Component	ADT	A.M. Peak Hour Trips	P.M. Peak Hour Trips
Master Plan Additions Master Plan Reductions	7,673 -3,003	273 -155	600 -282
Net Project Change	+4,670	+118	+318

Table 5 Master Plan Trip Generation

As shown, the Master Plan is expected to generate a net increase of 4,670 ADT, 118 A.M. peak hour trips and 318 P.M. peak hour trips.

Trip Distribution

Table 6 and Figure 8 show the trip distribution percentages used to assigned the Master Plan traffic to the project-area street system. Project trip distribution percentages are based on the analysis of existing trip distributions throughout the campus, the planned roadway extensions and realignments outlined in the Master Plan, as well as existing/proposed locations of on-campus housing and parking.

Origin/Destination	Direction	Percentage
California Boulevard	South	40%
Highland Drive	West	20%
Grand Avenue	Southeast	35%
Surrounding areas	Local	5%
Total		100%

Table 6Master Plan Trip Distribution

The concentration of Master Plan traffic (as well as existing traffic rerouted due to roadway changes) would be expected on the extension of California Boulevard for several reasons: 1) new on-campus housing facilities are centralized northeast of N.

Perimeter Road and the re-alignment of Highland Drive creates a more direct route to California Boulevard; 2) the location of proposed surface parking facilities and structures are near the campus entry-points on California Boulevard; and 3) the eventual closure of South Perimeter Road, south of Grand Avenue, would further circulate campus traffic through to California Boulevard.

Figures 9, 10 and 11 present the Master Plan generated traffic volumes for the studyarea roadways and intersections.

BASELINE + PROJECT TRAFFIC OPERATIONS

Roadways Operations

Figure 12 illustrates the Baseline + Project ADT volumes. Table 7 presents the results of the Baseline and Baseline + Project roadway analyses.

Roadway	Roadway Type	Scenario			
		Baseline ADT	Master Plan Added ADT	Baseline + Master Plan ADT	LOS
Grand Ave California Blvd Highland Dr Foothill Blvd Santa Rosa - North Santa Rosa - South	 4-Lane Res. Art. 2-Lane Res. Art. 2-Lane Arterial 2-Lane Arterial 4-Lane Highway 4-Lane Arterial 	12,200 ADT 14,800 ADT 6,500 ADT 20,600 ADT 24,600 ADT 30,400 ADT	1,485 ADT 1,870 ADT 935 ADT 935 ADT 390 ADT 755 ADT	13,700 ADT 16,700 ADT 7,400 ADT 21,500 ADT 25,000 ADT 31,200 ADT	LOS A LOS C LOS A LOS D LOS A LOS C

Table 7Baseline and Baseline + Project Roadway Operations

All of the project-area roadways are forecasted to operate at acceptable levels of service under Baseline and Baseline + Project operating conditions.

Campus Roadways

<u>South Perimeter Road</u>. The closure of South Perimeter Road, as identified for the latter phase of the Master Plan, would displace approximately 5,000 ADT. This campus-related traffic originates primarily at Highland Drive, where vehicles use South Perimeter to gain access to California Boulevard and the existing parking lots located along South Perimeter. The extension of California Boulevard and realignment of Highland Drive,

along with the relocation of parking areas as proposed in the Master Plan Update, would reduce the need to use South Perimeter to "cut-through" to California Boulevard.

Phasing of the Master Plan should be implemented to ensure that the extension of California Boulevard and realignment of Highland Drive are completed prior to the closure of South Perimeter Road.

Intersection Operations

Figures 13 and 14 present the Baseline + Project peak hour traffic volumes and Table 8 compares the Baseline and Baseline + Project levels of service for the A.M. and P.M. peak hour periods.

Intersection	A.M. Peak Hour		P.M. Peak Hour	
	Baseline Delay ^a /LO S	Baseline + Project Delay ^a /LOS	Baseline Delay ^a /LOS	Baseline + Project Delay ^a /LOS
Santa Rosa Street (SR 1)/Highland Drive	7.4/LOS A	7.6/LOS A	10.3/LOS B	10.9/LOS B
Santa Rosa Street (SR 1)/Foothill Boulevard	16.0/LOS B	16.5/LOS B	26.4/LOS C	27.4/LOS C
California Boulevard/Foothill Boulevard	13.8/LOS B	14.3/LOS B	25.5/LOS C	30.4/LOS C
California Boulevard/Taft Street	14.0/LOS B	14.2/LOS B	18.4/LOS C	22.6/LOS C
California Boulevard/U.S. 101 NB Ramps	15.5/LOS C	15.9/LOS C	21.6/LOS C	22.7/LOS C
So. Perimeter Road/Grand Avenue	8.8/LOS A	9.1/LOS A	13.2/LOS B	17.3/LOS C
Grand Avenue/Slack Street	10.2/LOS B	10.5/LOS B	11.5/LOS B	12.5/LOS B
Grand Avenue/U.S. 101 SB On-Ramp- Loomis	11.1/LOS B	11.3/LOS B	11.8/LOS B	12.5/LOS B
Grand Avenue/U.S. 101 NB Off-Ramp- Abbot	12.7/LOS B	13.2/LOS B	15.5/LOS C	17.7/LOS C
Grand Avenue/Monterey Street	12.5/LOS B	12.3/LOS B	11.3/LOS B	11.4/LOS B

Table 8 Baseline and Baseline + Project Intersection Levels of Service

^a Levels of service based on average seconds of delay per vehicle.

The data presented in Table 8 indicate that all of the project-area intersections are forecast to operate at acceptable levels based on City criteria. The Master Plan roadway network changes would also improve operations at the South Perimeter Road/Grand Avenue intersection and at the Grand Avenue/Slack Street intersection. The intersections in the California Boulevard corridor are forecast to operate at acceptable levels of service with the forecast volumes.

Campus Intersections

<u>Mount Bishop Road/Highland Drive</u>. This location will need to have all-way stop-control removed at some time prior to full implementation of the Master Plan. The delay on Highland Drive will increase due to directional peak traffic flows as future volumes are realized. Further study would need to be completed at this location to determine the appropriate traffic control measure for implementation. Implementation of traffic signals or possibly a roundabout at this location would be dependent upon roadway slopes, intersection geometry and future traffic volumes.

<u>California Boulevard/Highland Drive.</u> The extension of California Boulevard to Highland Drive would result in a new at-grade three-way intersection. Monitoring the intersection's operation during the course of Master Plan implementation will be required to determine the appropriate traffic control device. The A.M. and P.M. peak hour traffic volumes associated with the Baseline + Project scenarios, as well as the intersection geometrics (T-configuration) suggest a likely location for traffic signal control.

<u>Via Carta/Highland Drive.</u> Via Carta north of its intersection with Highland Drive will need to be widened to Master Plan specifications to accommodate vehicular and pedestrian traffic associated with the new residential and parking areas. The new intersection, with the extension of Highland Drive, should be monitored during the course of Master Plan implementation to determine if signalization is necessary. Due to the slope of Via Carta, a round about design at this location would not be recommended.

<u>South Perimeter Road/Grand Avenue</u>. Implementation of the roadway projects that are included in the Master Plan would reduce traffic at this location, a beneficial impact.

<u>Grand Avenue/Slack Street</u>. Implementation of the roadway projects that are included in the Master Plan would reduce traffic at this location, a beneficial impact.

TRANSIT CENTER AND ON-CAMPUS SHUTTLE

Currently the majority of on-campus bus stops are located on South Perimeter Road and Grand Avenue. The expected closure of South Perimeter would necessitate alternative shuttle or bus stop locations. It is recommended that on-campus transit facilities operate from centralized ?hub? locations; preferably at the primary campus centers (Central District, Northwest Satellite Center, Northeast Satellite Center and the Residential Centers). Cal Poly will need to work with SLO Transit (City operated local bus service) and CCAT (Central Coast Area Transit) to develop the transit plan for the campus.

In addition to public transit facilities, it is recommended that the University establish a shuttle service that would provide frequent on-campus service between housing and instructional areas. The shuttle service should provide access to/from the off-campus areas within a one-mile radius (approximate) in order to make the Master Plan traffic and parking reduction strategies successful.

PEDESTRIAN CIRCULATION

Pedestrian crossings and vehicle conflicts has been a long-standing issue on Grand Avenue approaching South Perimeter Road and Perimeter Road near the student housing and parking areas. Primary on-campus pedestrian circulation routes would be throughout the redeveloped campus core area. Housing areas and parking facilities would be accessed from major traffic-controlled pedestrian crossings. Pedestrian traffic control devices should be installed at various locations along Grand Avenue (to cross from dormitory housing to parking facilities) and on both Perimeter Road and Highland Drive. Currently the Master Plan envisions approximately 8 traffic-controlled pedestrian crossing facilities along these roadways. These would adequately accommodate pedestrian crossings if designed and placed properly. It is recommended that some pedestrian crossing devices be interconnected along the major vehicular routes to reduce vehicular delays during peak travel periods.

The need for grade-separated crossings should monitored at the Grand Avenue/South Perimeter Road and the Poly Canyon Road/Highland Drive intersections. The need for grade-separated crossings at these locations should monitored as the Master Plan elements are implemented and the campus develops and evolves.

PARKING ANALYSIS

Existing Parking Supply

A total of 5,802 permanent and temporary spaces are currently provided on the

campus. This number does not include the 931 spaces that will be provided in the new parking structure that is currently under construction. When this structure is completed, 6,733 parking spaces would be available on the campus.

Existing Parking Demands

Table 9 shows the peak parking occupancies for the campus. This data was collected by Cal Poly parking staff in the 2000 Winter Quarter.

Scenario	Spaces	Number Occupied	Occupancy Statistic
Existing Conditions	5,802	5,692	98%

Table 9Existing Parking Demands

The data show that peak parking occupancies were measured at 98% of the supply. Although there were some spaces available, parking facilities are generally considered full when such levels are reached unless lot access is controlled and the facility has real-time occupancy equipment. Thus, the parking demands in the core area are fully utilized during peak daytime periods.

Master Plan Parking Supply

Table 10 summarizes the parking supply statistics proposed in the Master Plan. The spaces lost by the campus redevelopment are shown as a negative number.

Project Component	Parking Spaces
Surface Parking Spaces	5,802
Parking Structure I	+931
Lost Spaces	-3,185
Absorbed Redevelopment Areas	+700
Absorbed Housing Areas	+300
Parking Structure P1	+1,236
Parking Structure P2	+700
Surface Lots	+700
TOTAL FUTURE SUPPLY	7,184
NET INCREASE	1,382

Table 10 Master Plan Parking Supply

Master Plan Parking Demands

Table 11 shows the parking demand analysis completed for the Master Plan. The parking demands were forecast assuming the increase in students, faculty and staff proposed under the Master Plan. The data presented in the table also accounts for the decrease in existing and future parking demands associated with implementation of the policies and TDM trip reductions provided for in the Master Plan. As reviewed previously, these policy guidelines include implementation of on-campus parking restrictions for resident freshman (limiting permits issued to freshman), commuter control measures which incorporate restricted parking permits for students that live within a certain distance of the campus; implementation of a transit/shuttle service to serve key campus areas and continuation of the successful faculty/staff incentives already in-place to promote car-pooling, van-pooling, bicycle use, telecommuting, etc.

for new campus personnel. Parking supply and demand calculation worksheets are included in the Technical Appendix for reference.

Project Component	Parking Spaces
Existing Demands	5,692
Interim Dorms/Structure Projects	+277
Future Upperclassmen (80% Permits)	+2,000
Future Freshman (60% Permits)	+300
Future Faculty/Staff (85% Peak Demand)	+425
Subtotal Future Demand	8,694
Freshman Restrictions	-1,200
Commuter Students	-650
Faculty/Staff TDM Measures	-150
Subtotal Future Reductions	-2,000
TOTAL FUTURE DEMAND	6,694

Table 11Master Plan Parking Demands

Table 12 summarizes the future parking supply and demand forecasts for the Master Plan. As shown, the Master Plan parking supply is forecast to accommodate future demands. Therefore, no parking impacts would be generated.

Scenario	Spaces	Peak	Percent	Reserve
	Supplied	Demand	Occupancy	Spaces
Existing Conditions	5,802	5,692	98.1%	110
Existing + Parking Structure	6,733	5,969	88.7%	764
Master Plan	7,184	6,694	93.2%	490

Table 12Future Parking Conditions Summary

CUMULATIVE TRAFFIC CONDITIONS

Cumulative traffic volumes were forecast assuming development of approved and pending projects located within the San Luis Obispo area, as provided by City Staff. Traffic generated by the approved and pending projects was added to existing traffic volumes to estimate cumulative conditions. Table 13 lists the project description and City planning log number, the ADT, A.M. and P.M. peak hour trips associated with each development project.

(Planning Log #) - Project Description	ADT	A.M. Trips	P.M. Trips
1. (1-00) SLO Senior Housing - 19 unit complex	66	1	2
2. (9-00) Apple Farm - 58 room hotel	477	33	36
3. (11-99) SLO Housing - 11-unit apartments	73	6	7
4. (12-98) 8,437 SF office project	93	14	12
5. (17-98) ^{<i>a</i>} Gas station remodel w/new conv. mart	169	92	122
6. (21-00) 2-Story 14.5 KSF commercial building	590	55	62

Table 13 Pending Projects

7. (32-00) ^{<i>a</i>} 2,047 SF am/pm w/6 pump stations	1,259	41	46
8. (38-00) 4,319 SF office/retail building	113	4	10
9. (75-00) Expand exist. Motel by 15-units	123	8	9
10. (90-99) 9,925 SF Office building	109	16	15
11. (93-99) Child care center - 6,240 SF	203	36	39
12. (97-99) New 20 KSF office building	220	31	30
13. (114-99) 5,300 SF Expansion school facilities	290	19	29
14. (120-98) 6,000 SF Bank Building	939	24	200
15. (138-98) ^{<i>a</i>} Gas station w/conv. Store - 12 pumps	2,604	82	92
16. (146-98) 10-Single Family Homes	96	8	10
17. (152-99) New 7,876 SF Office Building	91	14	14
18. (153-98) Mall Redevelopment -Replace 150 KSF Retail Space (assume 70% existing vacancy rate)	4,270	0	272
19. (156-98) New Motel - 74 Units	609	41	45

^{*a*} Pass-by reduction included in calculations. *Table Continued on Following Page*

20. (165-98) 8,750 SF Office Complex	96	14	13
21. (176-97) 13 KSF Car Dealership	488	29	36
22. (192-99) Housing complex - 8 apartments			
- 8 double-occ. du?s	107	8	11
23. (207-98) New Hotel - 25 rooms	206	14	15
24. (067-121-022) ^{<i>a</i>} Marketplace Project -500 KSF Retail	16,202	389	1,412
25. Cuesta College - 2,300 student enrollment increase	3,680	115	294
26. (217-98) ^{<i>a</i>} 1,787 SF Convenience store to replace existing pumps (3-bays removed)	618	15	38

Table 13 (Continued) Pending Projects

^a Pass-by reduction included in calculations

Cumulative traffic volumes are shown in Figures 15, 16 and 17; while Cumulative + Project volumes are shown in Figures 18, 19 and 20.

Cumulative Roadway Operations

Table 14 shows the Cumulative and Cumulative + Project roadway traffic volume forecasts and levels of service. The data presented in the table show that all of the project-area roadway segments are forecast to operate within their respective design capacities with Cumulative and Cumulative + Project traffic. No cumulative roadway impacts would be generated.

Roadway	Roadway Type	Scenario			
		Cumulative ADT	Project Added ADT	Cumulative + Project ADT	Roadway LOS
Grand Ave California Blvd Highland Dr Foothill Blvd Santa Rosa - North Santa Rosa - South	4-Lane Res. Art. 2-Lane Res. Art. 2-Lane Arterial 2-Lane Arterial 4-Lane Highway 4-Lane Arterial	14,100 ADT 17,100 ADT 6,900 ADT 21,800ADT 27,500 ADT 34,200 ADT	1,485 ADT 1,870 ADT 935 ADT 935 ADT 390 ADT 755 ADT	15,735 ADT 18,970 ADT 7,835 ADT 22,735 ADT 27,890 ADT 34,955 ADT	LOS A LOS D LOS A LOS E LOS A LOS E

Table 14Cumulative Roadway Volumes

Cumulative Intersection Operations

Table 14 summarizes the Cumulative and Cumulative + Project level of service forecasts. As shown, two of the project-area intersections are forecast to operate below acceptable levels (based upon City Standards) under Cumulative + Project conditions. Both the California Boulevard/Taft Street and California Boulevard/U.S. 101 NB Ramps intersections are forecast to operate at LOS E during the P.M. peak hour under Cumulative + Project conditions.

 Table 15

 Cumulative and Cumulative + Project Intersection Levels of Service

Intersection	A.M. Peak Hour		P.M. Peak Hour	
	Cumulativ e Delay ^a /LO S	Cumulative + Project Delay ^a /LOS	Cumulative Delay ^a /LOS	Cumulative + Project Delay ^a /LOS
Santa Rosa Street (SR 1)/Highland Drive	7.8/LOS A	7.9/LOS A	12.0/LOS B	12.9/LOS B
Santa Rosa Street (SR 1)/Foothill Boulevard	16.8/LOS B	16.8/LOS B	31.9/LOS C	33.3/LOS C

California Boulevard/Foothill Boulevard	16.3/LOS B	16.8/LOS B	36.1/LOS D	42.7/LOS D
California Boulevard/Taft Street	15.0/LOS B	15.3/LOS C	29.3/LOS D	35.7/LOS E
California Boulevard/U.S. 101 NB Ramps	18.1/LOS C	18.5/LOS C	33.0/LOS D	36.5/LOS E
So. Perimeter Road/Grand Avenue	8.4/LOS A	8.7/LOS A	11.9/LOS B	13.3/LOS B
Grand Avenue/Slack Street	10.4/LOS B	10.6/LOS B	15.1/LOS C	17.8/LOS C
Grand Avenue/U.S. 101 SB On-Ramp- Loomis	11.1/LOS B	11.4/LOS B	14.1/LOS B	15.3/LOS C
Grand Avenue/U.S. 101 NB Off-Ramp- Abbot	13.9/LOS B	14.6/LOS B	25.2/LOS D	33.2/LOS D
Grand Avenue/Monterey Street	12.1/LOS B	11.8/LOS B	12.5/LOS B	12.7/LOS B

^a Levels of service based on average seconds of delay per vehicle.

Cumulative Mitigation Measures

California Boulevard/Taft Street. The peak hour traffic forecasts meet traffic signal warrants (signal warrant calculations are provided in the Technical Appendix). Installation of traffic signals would provide for LOS B-C operations during the P.M. peak hour under Cumulative + Project conditions (LOS calculations are provided in the Technical Appendix for reference).

California Boulevard/U.S. 101 NB Ramps. The peak hour traffic forecasts meet warrants for consideration of traffic signals (signal warrant calculations are provided in the Technical Appendix). Installation of traffic signals would provide LOS B-C operations during the P.M. peak hour under Cumulative + Project conditions (LOS calculations are provided in the Technical Appendix for reference).

REFERENCES AND PERSONS CONTACTED

Associated Transportation Engineers

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Persons Contacted

Bochum, Tim, Deputy Director of Public Works, City of San Luis Obispo Campbell, Cindy, Cal Poly San Luis Obispo Parking and Commuter Services, Cal Poly Codron, Michael, Planning Technician, City of San Luis Obispo Dalton, Linda, Vice Provost for Institutional Planning, Cal Poly Hanson, Jim, Associate Transportation Engineer, City of San Luis Obispo Sanville, Terry, City of San Luis Obispo Stinson, Bret, RRM Design Group

TECHNICAL APPENDIX

CONTENTS:

ROADWAY DESIGN CAPACITIES

LEVEL OF SERVICE DEFINITIONS

INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS:

Reference 1 - Santa Rosa Street (Highway 1)/Highland Drive Reference 2 - Santa Rosa Street/Foothill Boulevard Reference 3 - California Boulevard/Foothill Boulevard

Reference 4 - California Boulevard/Taft Street

Reference 4 - California Boulevard/Tatt Street Reference 5 - California Boulevard/U.S. 101 NB Ramps Reference 6 - So. Perimeter Road/Grand Avenue Reference 7 - Grand Avenue/Slack Street Reference 8 - Grand Avenue/101 SB On-ramp - Loomis Street Reference 9 - Grand Avenue/101 SB Off-ramp - Abbott Street Reference 10 - Grand Avenue/Monterey Street

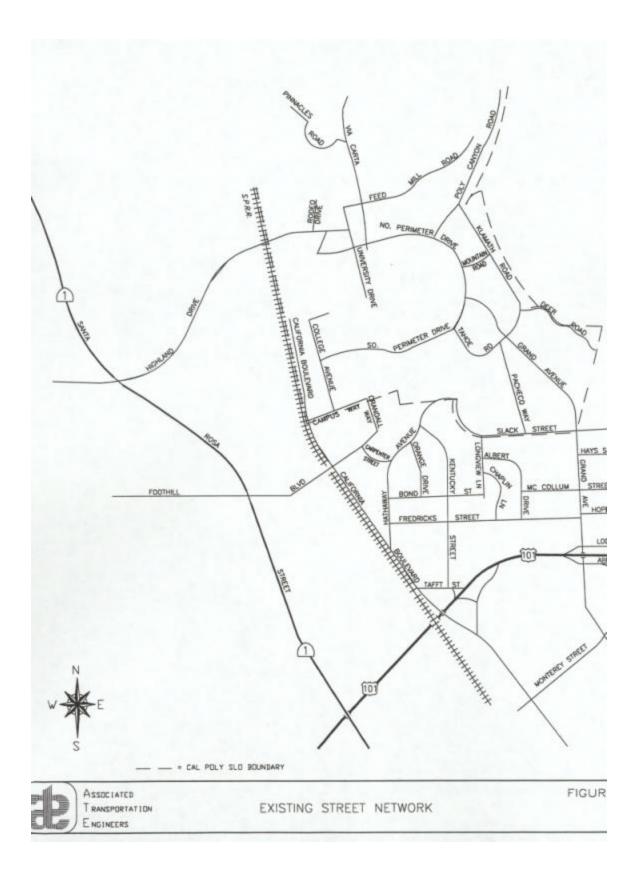
TRAFFIC SIGNAL WARRANT CALCULATION WORKSHEETS

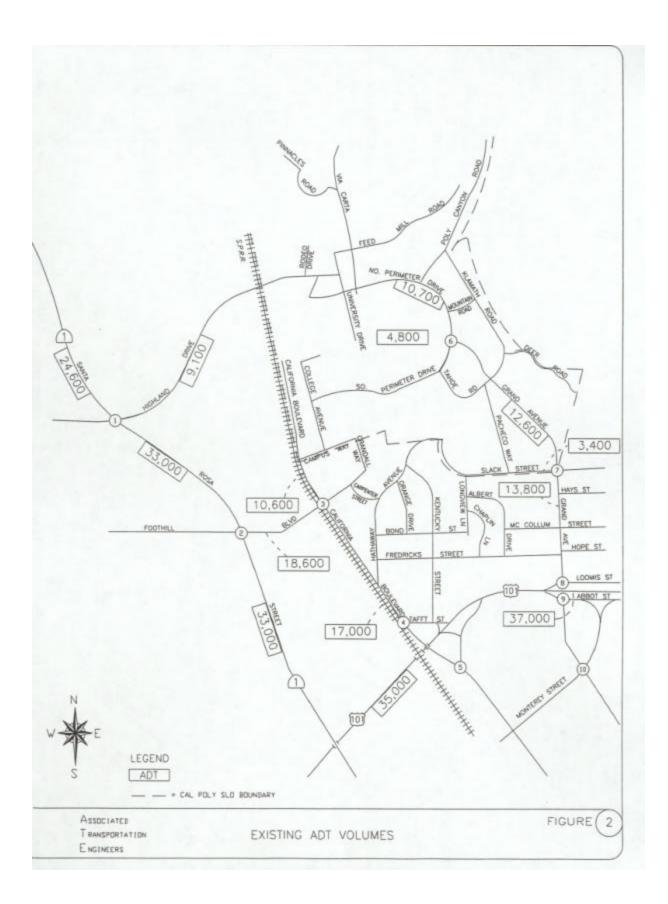
PARKING DATA INFORMATION

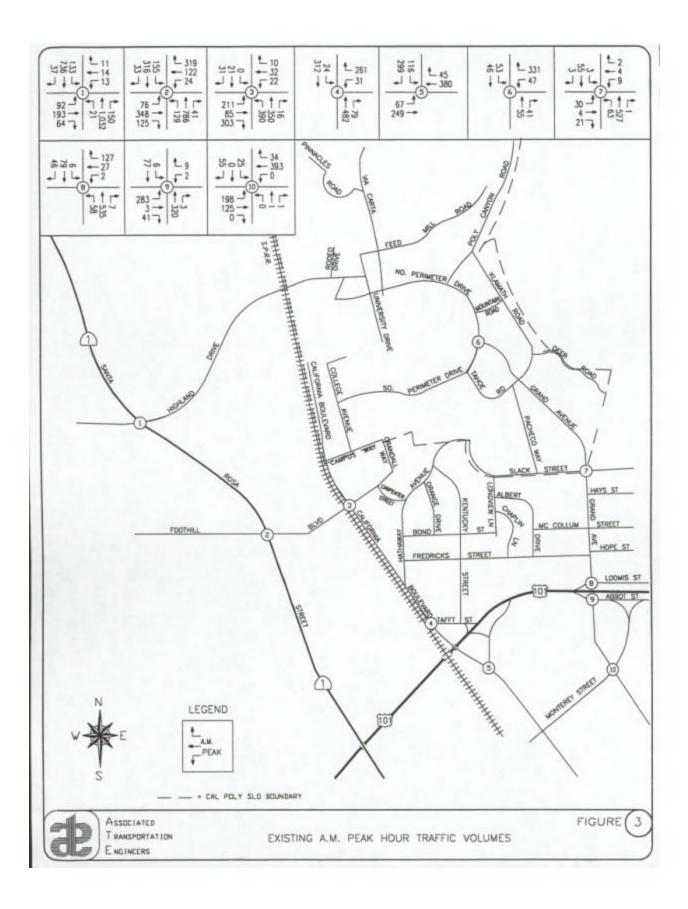
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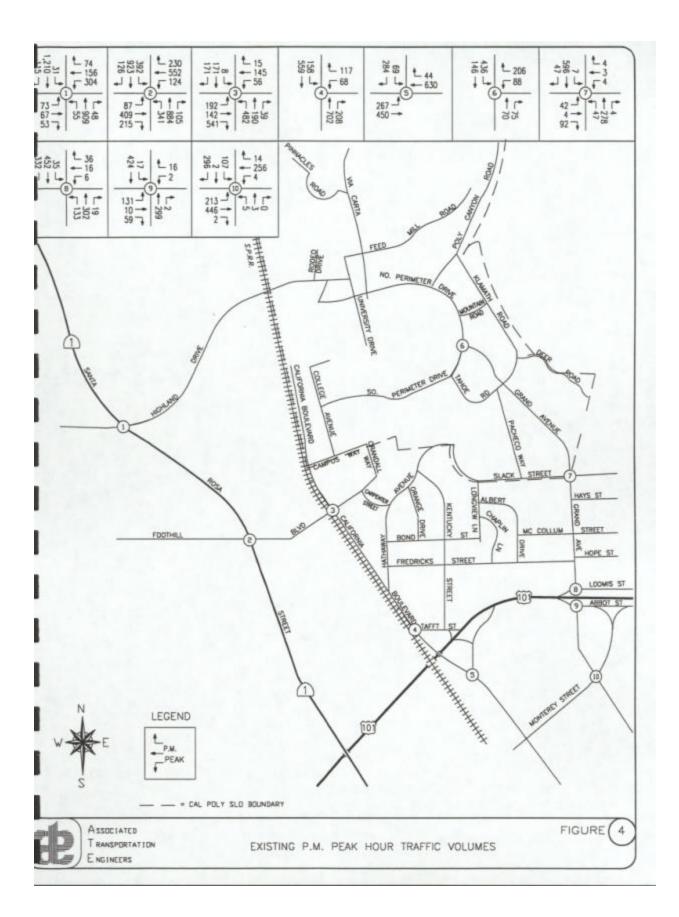
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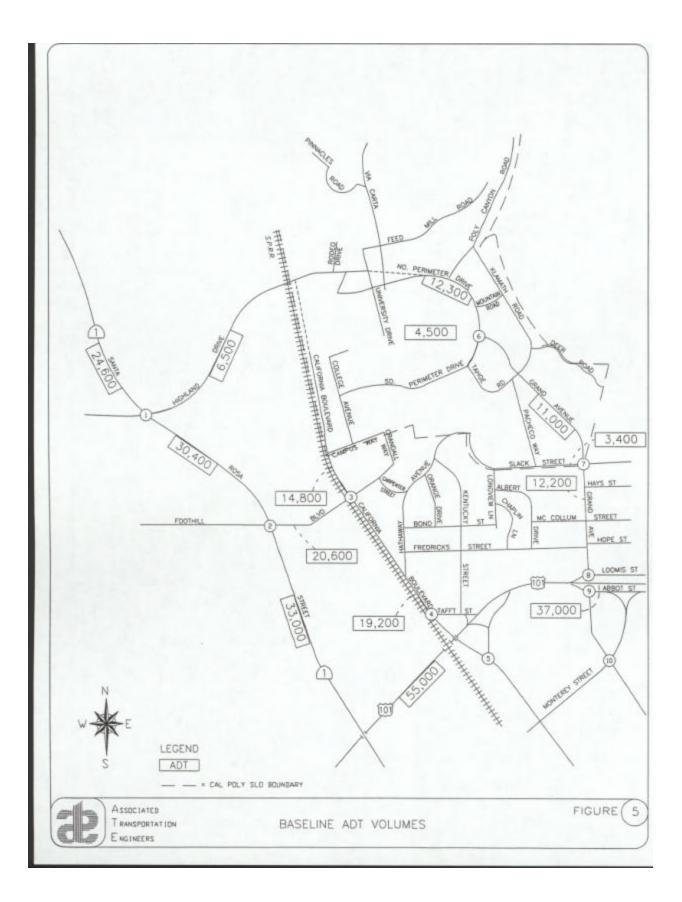
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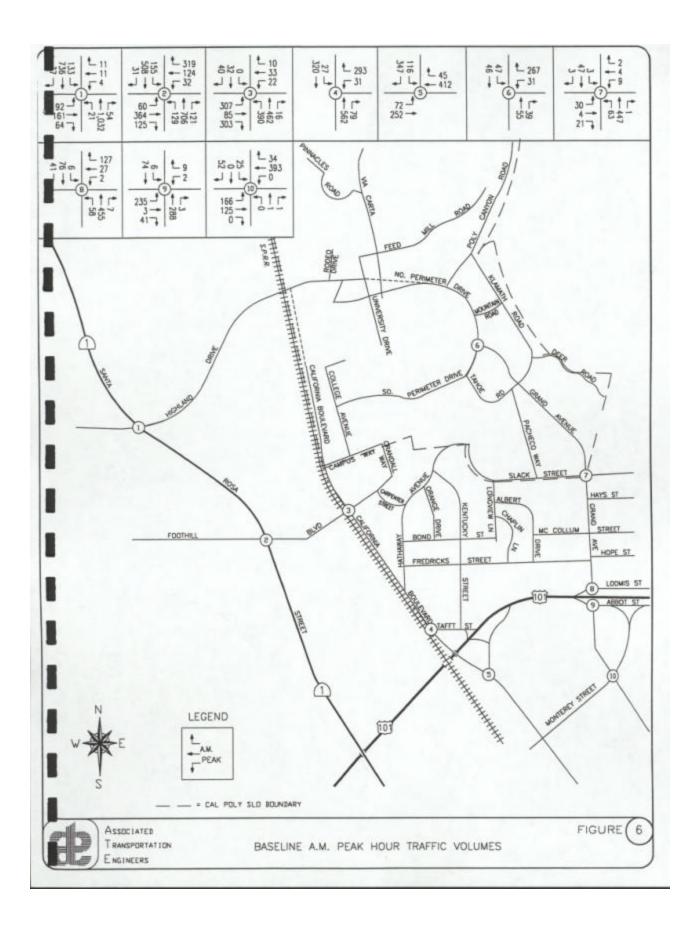


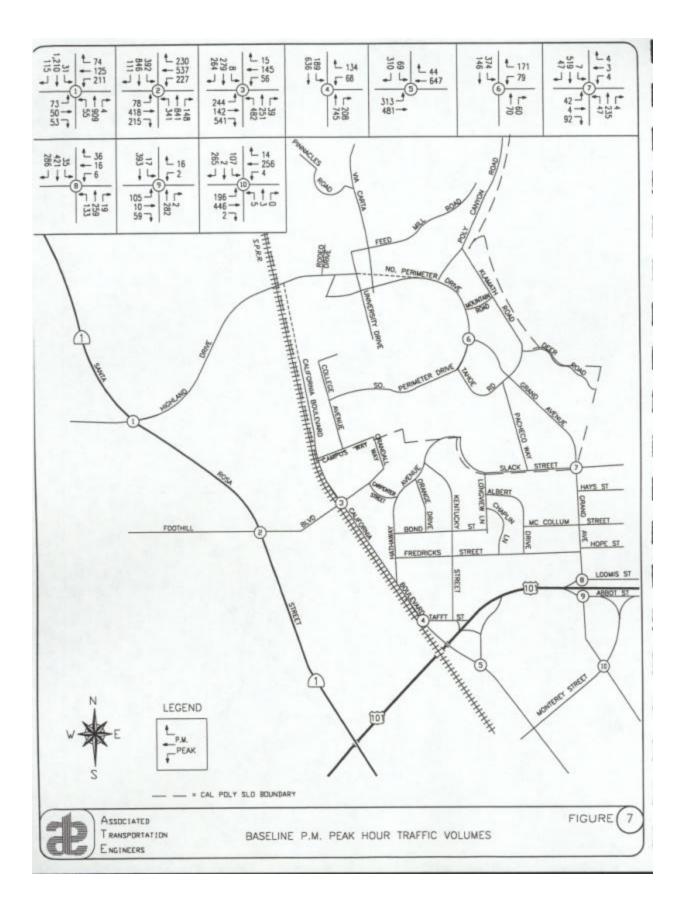


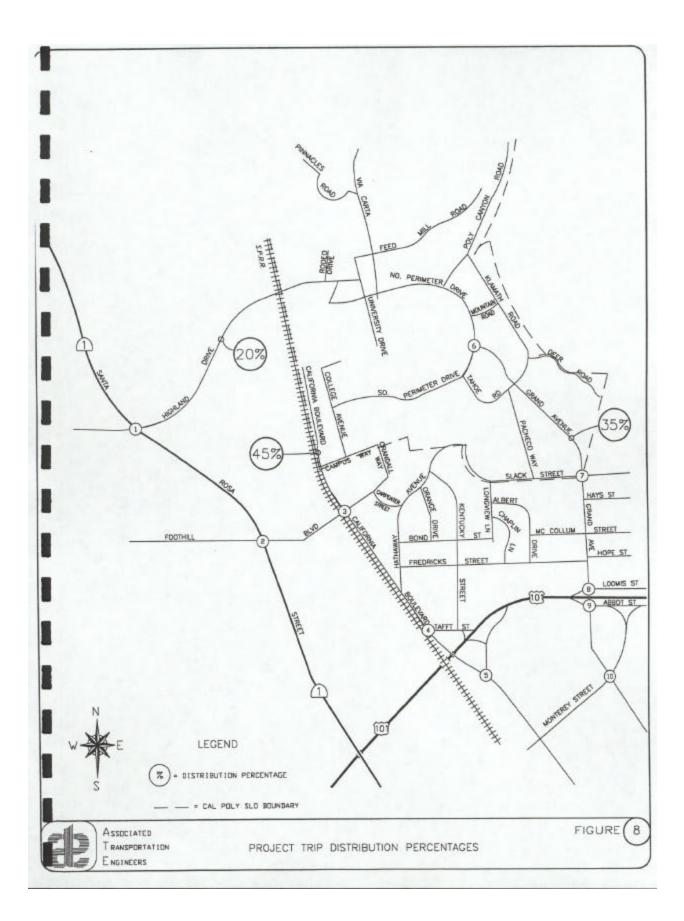


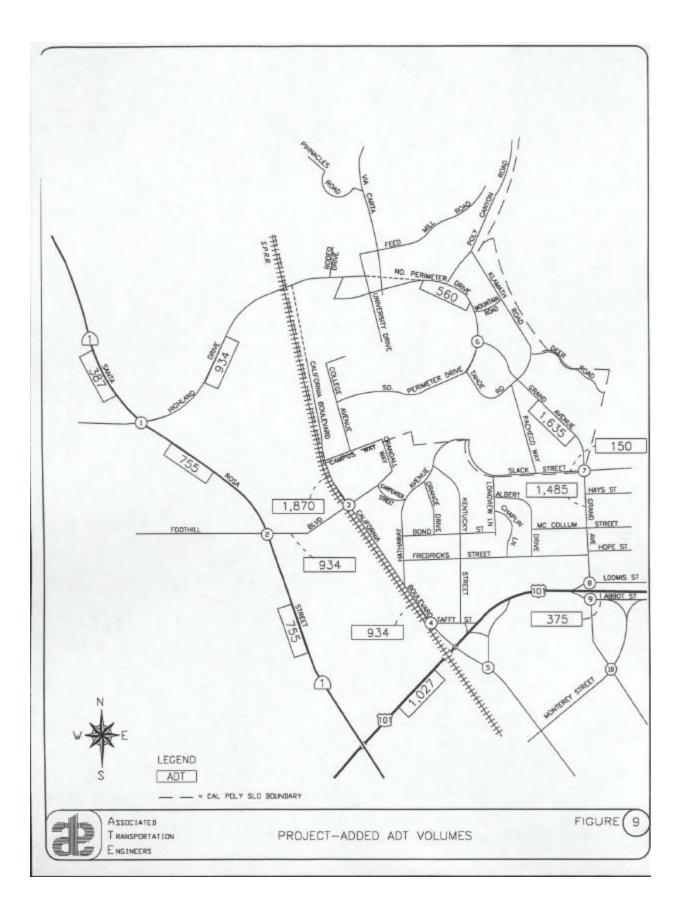


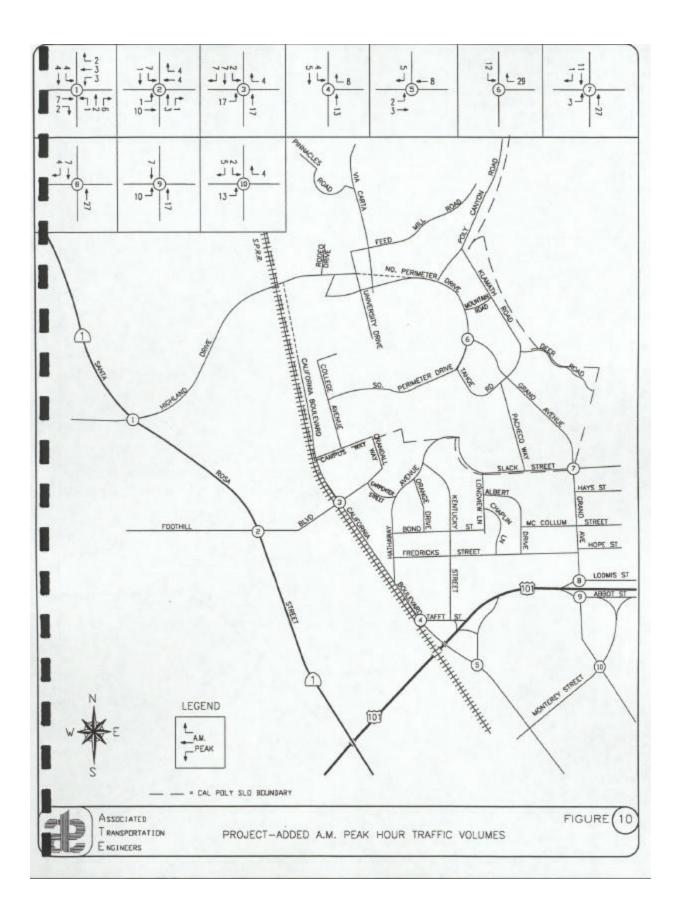


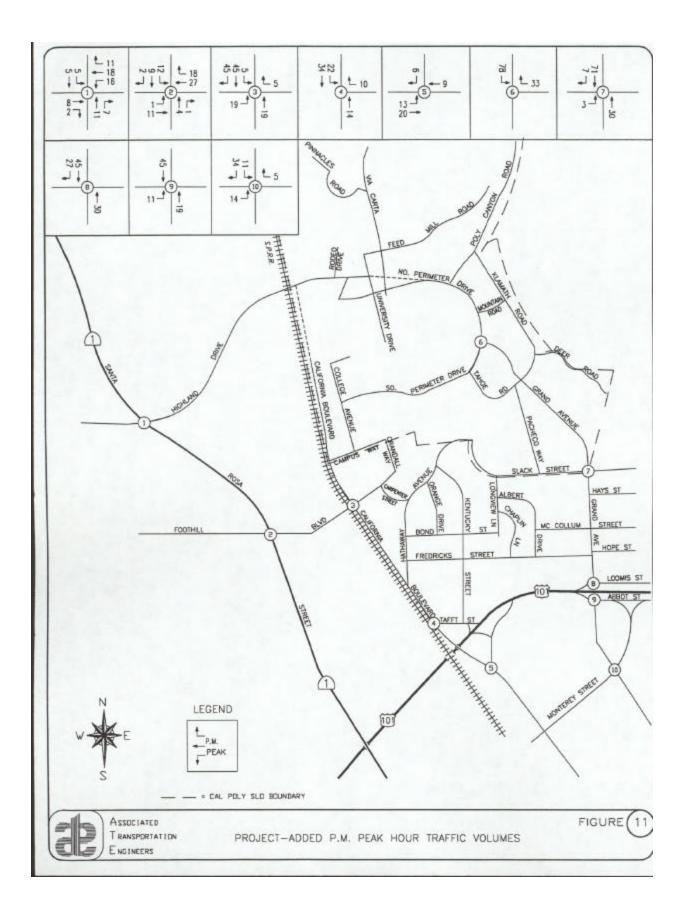


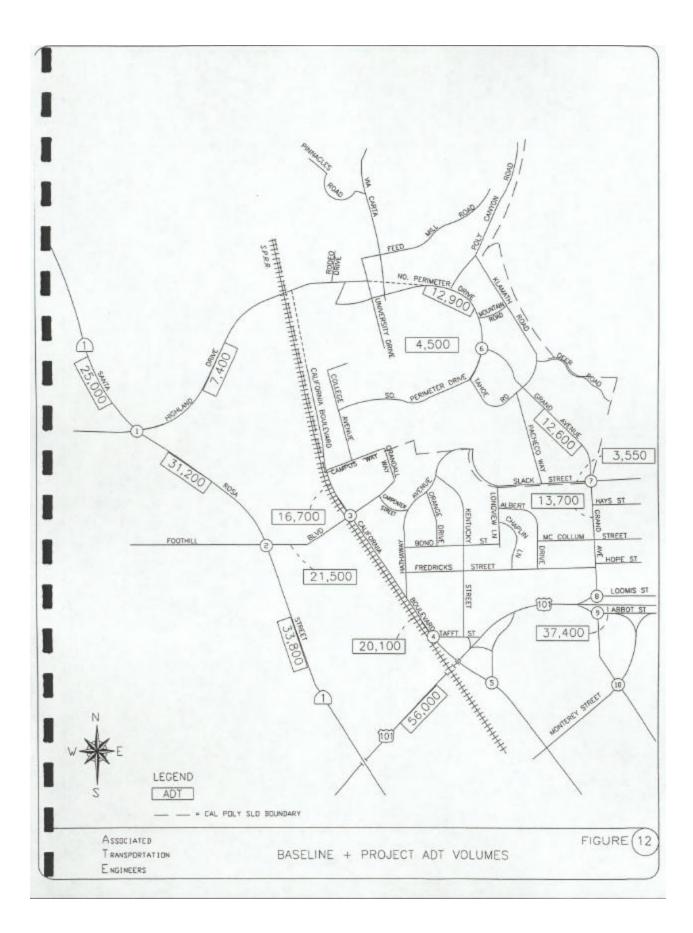


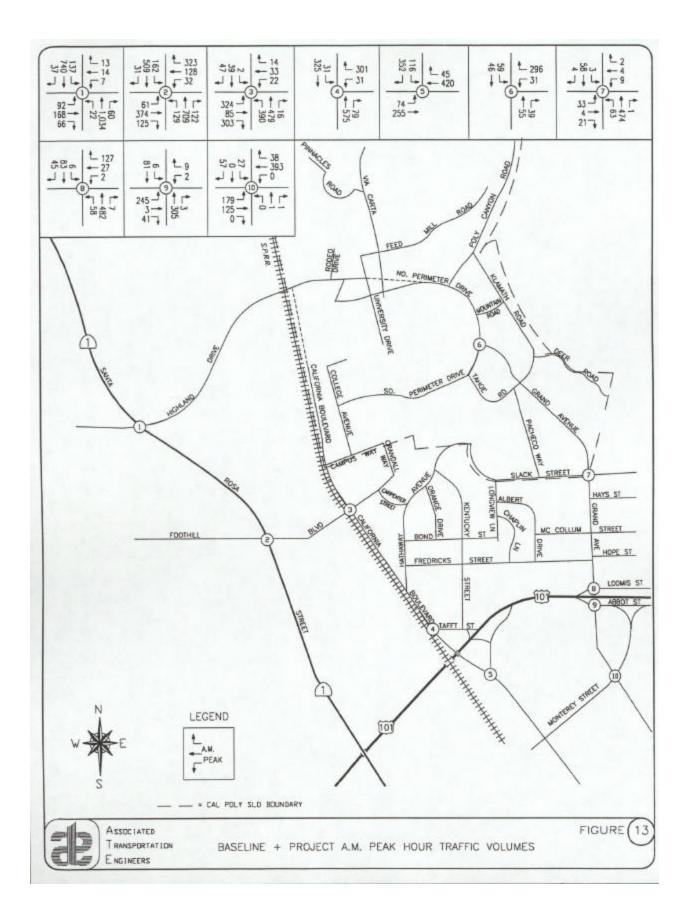


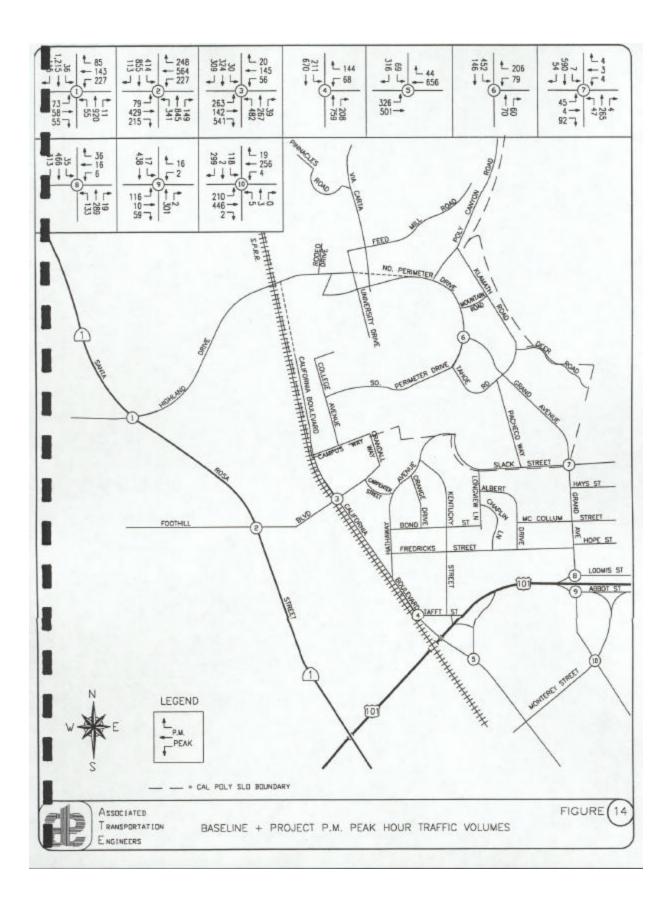


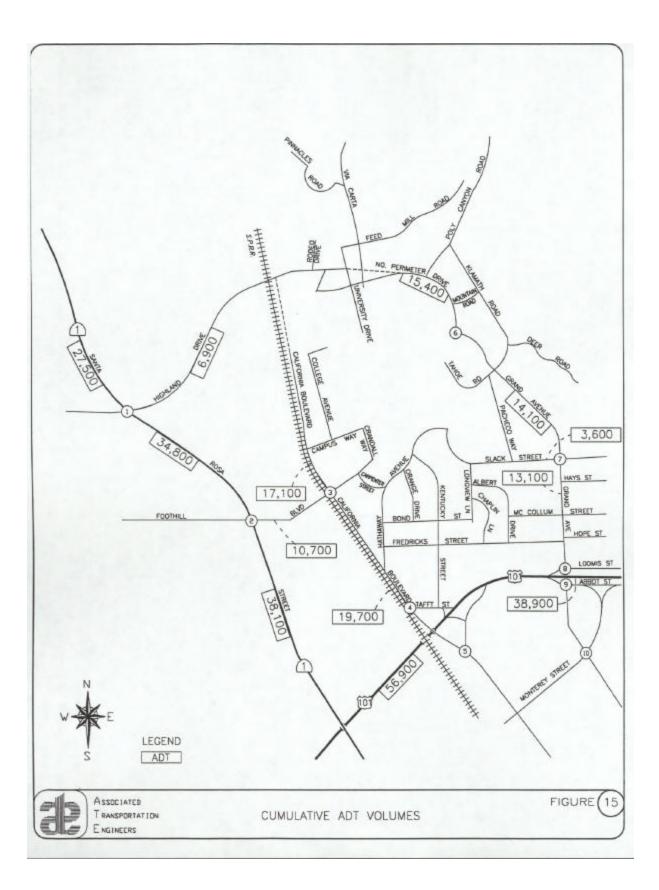


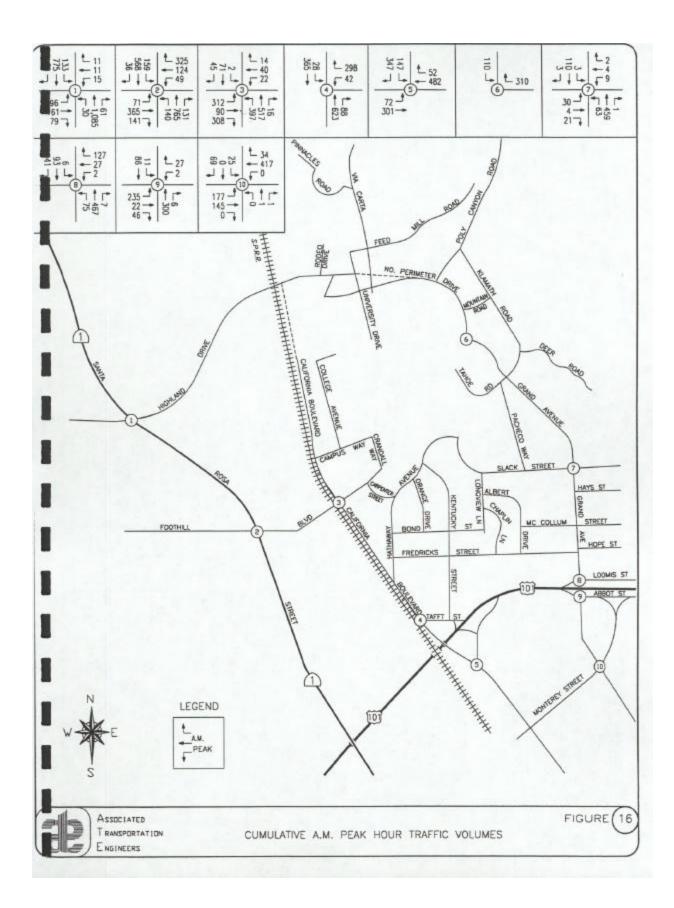


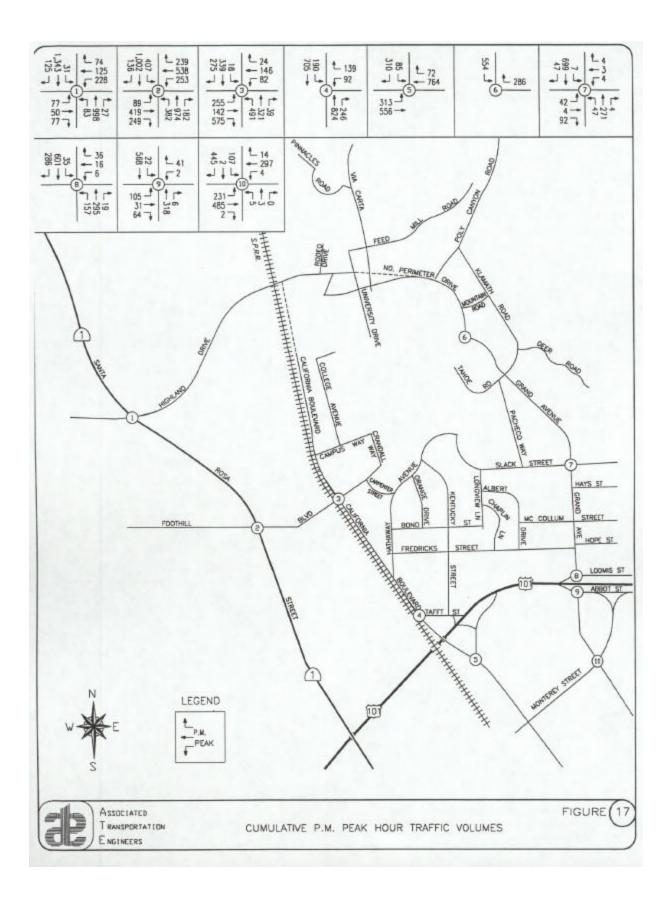


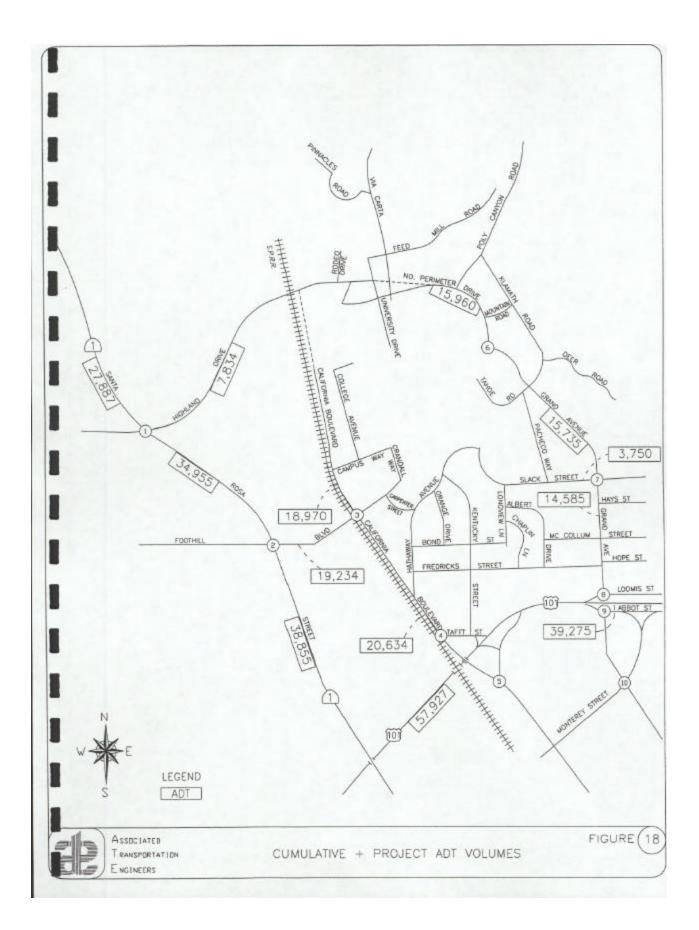


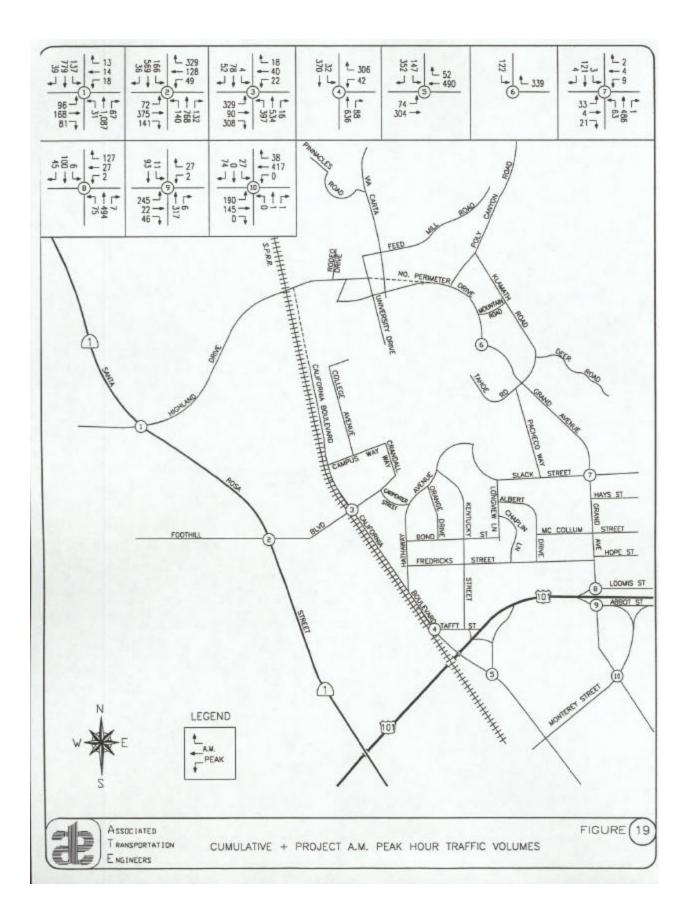


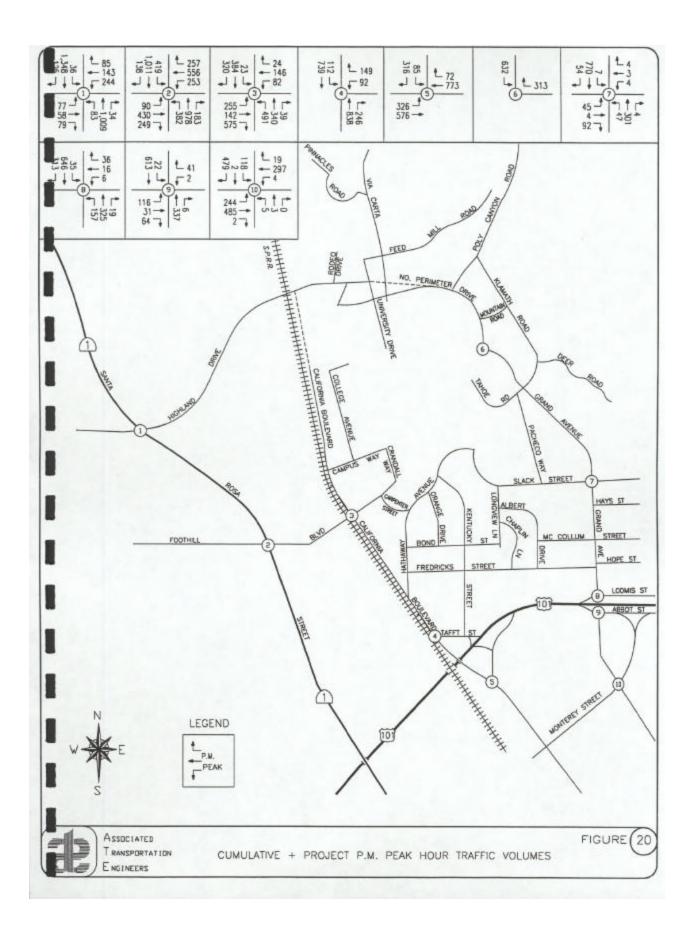












Appendix D Air Quality Calculations

URBEMIS 7G: Version 3.1

File Name: Project Name: Project Location:

Master Plan San Luis Obispo County

DETAILED REPORT - Summer

calpoly.URB

Total Land Use Area to be Developed (Estimated): 797 acres Institutional Square Footage: 759,000 Housing Units: 755

AREA SOURCE EMISSION ESTIN Source	ROG	NOx	CO	PM10
Natural Gas	0.83	10.7	4.6	0.002
Wood Stoves - No summer emiss	ions			
Fireplaces - No summer emission	IS			
Landscaping	0.27	0.01	1.79	0.01
TOTALS (ppd, unmitigated)	1.1	10.7	6.39	0.012

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2020 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC7G (10/96)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Housing	1.00 trips / dwelling unit	755.00	755.00
Cal Poly	5.10 trips / 1000 sq. ft.	759.000	3,870.90

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent	Type	Non-Catalyst	Catalyst	Diesel	
Light Duty Autos	75.00	1.16	98.58	0.26		
Light Duty Trucks	10.00	0.13	99.54	0.33		
Medium Duty Trucks	3.00	1.44	98.56			
Lite-Heavy Duty Trucks	1.00	19.56	40.00	40.44		
MedHeavy Duty Trucks	1.00	19.56	40.00	40.44		
Heavy-Heavy Trucks	5.00				100.00	
Urban Buses	2.00				100.00	
Motorcycles	3.00	100.00	% all fuels			

Travel Conditions

		Resi	dential		Commercial	
	Home-	Home-	Home-	Commute	Non-Work	Customer
	Work	Shop	Other			
Urban Trip Length (r	niles) 12.0	7.8	10.0	10.0	4.7	4.7
Rural Trip Length (m	ules) 15.0	10.0	10.0	15.0	15.0	15.0
Trip Speeds (mph)	40	40	40	40	40	40
% of Trips - Resident	ial 27.4	17.7	54.9			
% of Trips - Commer Cal Poly	cial (by land	use)		20.0	10.0	70.0
Carrory				20.0	10.0	70.0
UNM	ITIGATED I	EMISSIO	NS			
	ROG	NOx	со	PM10		
Housing	10.50	17.20	49.09	0.70		
Cal Poly	19.59	52.21	152.15	2.03		
TOTAL (lbs/day)	30.09	69.41	201.24	2.73		

Does not include correction for passby trips. Does not include double counting adjustment for internal trips.

Appendix E Mitigation Monitoring Plan

Mitigation Monitoring Program Master Plan Update Final EIR California Polytechnic State University, San Luis Obispo

Section 21081.6 of the Public Resources Code requires all state and local agencies to establish monitoring or reporting programs whenever approval of a project relies upon a mitigated negative declaration or an environmental impact report (EIR). The monitoring or reporting program must ensure implementation of the measures being imposed to mitigate or avoid the significant adverse environmental impacts identified in the mitigated negative declaration or EIR.

The mitigation monitoring program (MMP) is required for all mitigation measures adopted by California Polytechnic State University San Luis Obispo (Cal Poly) as conditions of the project. Should Cal Poly adopt the Final EIR (FEIR), Cal Poly would agree to adopt all mitigation measures identified in the FEIR for the Master Plan Update and the mitigation measures shall be required to avoid potentially significant adverse environmental impacts.

A memorandum will be prepared at the specified phase of construction or planning which will state that each of the listed mitigation measures has been satisfactorily completed.

Discussion	When to Implement	Responsible Person/ Agency	Report Due
Geology			
Landslide. Mitigation measures would need to be developed on the basis of site-specific study of the landslide. The general degree of required mitigation would depend on the findings, which could range from: 1) finding that the existing landslide is relatively stable and therefore no significant mitigation is needed; to 2) the existing landslide is marginally stable and will require extensive strengthening and/or subsurface drainage improvements to provide adequate factors of safety for design and construction. This EIR therefore recommends that such a study be performed to estimate the factor of safety of the existing landslide for existing static and earthquake loading conditions, and to evaluate what impact the proposed site improvements could have on the stability of the landslide. The study will specify mitigation measures for any site improvements that are needed.	Planning of H- 4, H-6 and Grand/Slack ancillary facilities	Cal Poly	Completion
Biological Resources			
Goldtree. A site-specific spring botanical survey will be completed prior to construction. Areas supporting sensitive plant species shall be avoided; disturbed populations will be replanted in a suitable area at a ratio deemed appropriate by a qualified biologist.	Planning/ design	Cal Poly	Completion
Drainage plan. Prior to construction of the Bull Test facility, a construction and operational drainage plan will be drafted with contingencies for storm event and system failures. Limitation of Cattle Access. Cattle will not be allowed to enter the creek.	Construction/ operation	Cal Poly	Completion

Discussion	When to Implement	Responsible Person/ Agency	Report Due
Reservoir maintenance should be scheduled outside of the breeding and nesting periods of sensitive species that may inhabit the area, and should be approved by jurisdictional agencies where appropriate.	Ongoing	Cal Poly	Prior to initiation of activity
Future development at the Design Village shall be restricted to areas not limited by serpentine soils, Army Corps jurisdictional wetlands greater that 1/10 th of an acre in size, and other areas populated by sensitive plant species, unless impacts to plants can be mitigated by replanting and /or relocation. Prior to construction, a site-specific biological and jurisdictional wetlands delineation shall be prepared.	Construction	Cal Poly	Initiation
Pedestrian Restriction. The northern and eastern portions of the H-1 and H-2 projects will be designed to prevent direct pedestrian access to the native grassland and biological preserve. In general, access to buildings and recreation areas will be oriented towards the main campus and away from sensitive areas to the north and east. Pedestrian traffic in the area of Brizzolara Creek will be designed in accordance with the "Goals and Guidelines for the Cal Poly Creek Management and Enhancement Plan" included as Appendix F. Signs will be posted to indicate the sensitivity of the areas.	Planning/ design	Cal Poly	Completion
populations or individuals of <i>Calochortus obispoensis</i> disturbed by the construction of the H-1 and H-2 housing projects will be replanted in suitable areas at ratios deemed suitable by a qualified biologist.			
The Highland Drive realignment shall be designed with drainage systems sensitive to the creek corridor. Drainage shall incorporate silt and grease traps and/or vegetative buffer strips to prevent pollution and sedimentation of the creek. Landscaping shall consider native vegetation compatible with the riparian area where it is appropriate. Inlets that drain to the creek will be marked accordingly.	Planning/ design	Cal Poly	Completion
Cultural Resources			
Buildings deemed potentially eligible for listing on the NRHP will be studied to determine their significance. If they are determined to be significant, Cal Poly will undertake proper documentation of the resource. Given the number of buildings on campus that are over 50 years old, determination of historical significance shall be made by a historic architect (with a historic preservation background) prior to removal or substantial remodeling of any such structure.	Planning/ design	Cal Poly	Completion
Prior to design, Phase II archaeological studies will be completed at known sites; determination of significance will be made, and appropriate mitigation measures followed, as suggested by the archaeologist.	Planning/ design	Cal Poly	Completion
Where soil surfaces are undeveloped and visible and where no previous survey has been completed, Phase I archaeological surveys will take place prior to construction.	Construction	Cal Poly	Completion
Circulation			1
Mount Bishop Road/Highland Drive. This location will need to have all-way stop control removed at some time prior to the full implementation of the Master Plan.	Planning/ design	Cal Poly	Completion
California Boulevard/Highland Drive. The extension of California Blvd. to Highland would result in a new at- grade three-way intersection. Monitoring the intersection will be required; however, it seems likely that a signal			

Discussion	When to Implement	Responsible Person/ Agency	Report Due
will be needed.			
Via Carta/Highland Drive. Via Carta north of its intersection with Highland Drive will need to be widened to accommodate vehicular and pedestrian traffic. The intersection should be monitored to see if signalization is necessary.			
The University will need to implement a campus shuttle or other alternative transportation modes to accomplish parking reduction goals.	Prior to build- out of the Master Plan	Cal Poly	Completion
The following mitigation measures has been added to reinforce the need for improved transit and reduced parking:	Waster Flam		
Cal Poly will institute the following measures, or measures achieving equivalent results, in order to meet its stated policy of 2,000 parking space reduction, in addition to improving circulation on local streets: freshman restrictions, Bike/pedestrian enhancement, geographic controls, continued bus subsidy, car/vanpools, faculty/staff incentives, parking fee increases, entertainment/services on campus, on-campus shuttle, modified enrollment scenarios, city transit improvements, and remote parking.			
California Boulevard/Taft Street. The peak hour traffic forecasts meet warrants for consideration of traffic signals. California Boulevard/U.S. 101 north bound ramps. The peak hour traffic forecasts meet warrants for	Prior to build- out of the Master Plan	Cal Poly	Completion
consideration of traffic signals.			
Air Quality No additional mitigation are required for traffic-related impacts.	Planning	Cal Poly	Completion
Stationary source emissions. Cal Poly shall implement the following or similar APCD-approved energy-reducing measures to reduce stationary source emissions:	T latting	Carrory	Completion
Shade tree planting along the southern exposures of buildingsBuilding orientation to take advantage of natural light and heating and cooling			
Design. The structures shall be designed with multiple exits in order to reduce the time required to vacate the cars. Walls should be generally open allowing for free passage of outside air through the structures.	Planning/ design	Cal Poly	Completion
Parking payment options. Prepayment of parking fees should be considered to prevent vehicle queuing when leaving.			
Reduction of exit time. The University shall incorporate management strategies contained in Section 2 of the Cal Poly Parking and Commuter Services Event Parking Management Plan (Draft) for the structures.			

When to Implement	Responsible Person/ Agency	Report Due
Planning/ design	Cal Poly	Completion
Planning/ design	Cal Poly	Completion
Planning/ design	Cal Poly	Completion
Planning/ design	Cal Poly	Plan Check
Planning/ design	Cal Poly	Plan check
	Implement Planning/ design Planning/ design Planning/ design Planning/ design Planning/ design	When to Implement Person/ Agency Planning/ design Cal Poly Planning/ design Cal Poly

Discussion	When to Implement	Responsible Person/ Agency	Report Due
Mustang Stadium. If this project were to occur, final design should include measures to reduce light and glare visible to area residents. The stadium will be redesigned from that which is shown in the Heery Plan in order to accomplish the following measures: All lights must be shielded to avoid glare and spillover onto adjacent areas and onto public right of way areas	Planning/ design	Cal Poly	Plan check/ Environ- mental review
The use of reflective materials will be minimized Landscape illumination will be accomplished with low-level, unobtrusive fixtures Minimum safe lighting levels will be used in adjacent parking and other facilities.			
Further analysis of the lighting and glare impacts would be required as part of future environmental review for this project.			
Highway 1 (Gateway to the City of San Luis Obispo) City Consultation. Prior to design finalization, the University shall consult with the City regarding the visual impact of the proposed off-campus housing on the City gateway.	Design/ planning	Cal Poly	completion
Compliance with County Guidelines. If the proposed facilities lie within 100 feet of Highway 1, the bull test and Goldtree facility will comply with County Guidelines for design near scenic highways. In any case, the University shall consult with the County regarding reduction of visual impacts to sensitive areas such as the Highway 1 corridor.			
Public Services	•	•	
Police. The University will provide for at least the equivalent of 3.3 additional police personnel to serve the anticipated growth. The University will work with the campus police to determine an adequate level of service ratio for the campus and will plan for provision of needed personnel.	Prior to buildout of the Plan	Cal Poly	Completion
Because future water demand will begin to tax the University's supply of Whale Rock water, the following programs should be instituted:	Prior to buildout of the plan or	Cal Poly	Inception
 Water Conservation Program. The University should develop a program designed to reduce overall water consumption on campus. The program will incorporate water-saving fixtures into new development, retrofit older facilities over time, and modify landscaping irrigation requirements. Drought contingency plan. As part of implementation of the Master Plan, the University will draft a drought contingency plan to address potential water shortages associated with extended drought conditions. 	during a drought event; conservation program as part of early implemen- tation of the		
Additional Water Supply. The University should investigate the availability of additional water supplies over the next twenty-year horizon.	Plan		

Discussion	When to Implement	Responsible Person/ Agency	Report Due
Construction Impacts			
Aesthetics. Off-campus Projects. Construction at the Goldtree and off-campus housing facilities will locate stockpiling and staging areas shall be located out of view where feasible	Construction	Contractor	Plan check
Air Quality	Construction	Contractor	Plan check
DUST CONTROL			
 A. Employ measures to avoid the creation of dust and air pollution. B. Unpaved areas shall be wetted down, to eliminate dust formation, a minimum of twice a day to reduce particulate matter. When wind velocity exceeds 15 mph, site shall be watered down more frequently. C. Store all volatile liquids, including fuels or solvents in closed containers. D. No open burning of debris, lumber or other scrap will be permitted. E. Properly maintain equipment to reduce gaseous pollutant emissions. F. Exposed areas, new driveways and sidewalks shall be seeded, treated with soil binders, or paved as soon as possible. G. Cover stockpiles of soil, sand and other loose materials. H. Cover trucks hauling soil, debris, sand or other loose materials. J. Appoint a dust control monitor to oversee and implement all measures listed in this Article. K. The Contractor shall maintain continuous control of dust resulting from construction operations. Particular care must be paid to door openings to prevent construction dust and debris from entering the adjacent areas. L. When wind conditions create considerable dust, such that a nuisance would generate complaints, the Contractor shall either suspend grading operations, and/or water the exposed areas. M. Water down the project site, access routes, and lay down areas whenever generate dust becomes a nuisance. N. The campus reserves the right to request watering of the site whenever dust complaints are received. O. It shall be the University's sole discretion as to what constitutes a nuisance. EQUIPMENT EMISSION CONTROL To the extent feasible, the applicant shall utilize newer construction equipment (manufactured after 1990) that produces fewer emissions, especially for the highest emitting pieces of diesel-fired heavy equipment. In any case, all equipment shall be properly tuned and maintained. Additional measures that would reduce construction rel			
Retarding fuel injection timing two degrees from the manufacturer's recommendation.			

Discussion	When to Implement	Responsible Person/ Agency	Report Due
Using high-pressure fuel injectors. The use of reformulated diesel fuel. The use of Caterpillar pre-chamber, diesel-fired engines (or equivalent low NO _x engine design) in heavy equipment used to construct the project to further reduce NO _x emissions. The project shall require that all fossil-fueled equipment shall be properly maintained and tuned according to manufacturers specifications. The project proponent shall require that all off-road and portable diesel-powered equipment including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, shall be fueled exclusively with CARB certified diesel fuel. During construction activities at each of the locations identified above where equipment emissions are projected to exceed the District's thresholds, the project proponent shall install catalytic soot filters on the two pieces of equipment (per site) projected to generate the greatest emissions. Where the catalytic soot filters are determined to be unsuitable, the project proponent shall install and use an oxidation catalyst. Suitability is to be determined by an independent California Licensed Mechanical Engineer who will submit for District approval, a Suitability Report identifying and explaining the particular constraints to using the preferred catalytic soot filter.			
DUST CONTROL			
Dust generated by construction activities shall be kept to a minimum by full implementation of the following measures: During construction, the amount of disturbed area shall be minimized. Onsite vehicle speeds should be reduced to 15 mph or less; Exposed ground areas that are left exposed after project completion should be sown with a fast- germinating native grass seed and watered until vegetation is established; After clearing, grading, earth moving, or excavation is completed, the entire area of disturbed soil shall be treated immediately by watering or revegetating or spreading soil binders to minimize dust generation until the area is paved or otherwise developed so that dust generation will be minimized; All roadways, driveways, and sidewalks associated with construction activities should be paved as soon as possible. In addition, building and other pads shall be laid as soon as possible after grading, unless seeding or soil binders are used.			
Construction drainage plan. Prior to construction, the contractor shall draft a drainage and activity plan to protect channels on the Goldtree, Grand/Slack, H-1, H-2 and H-3 housing sites, Highland Drive, Parking Structure III and the Brizzolara Creek Enhancement Projects and their associated habitats. The plan will emphasize avoidance, and erosion and runoff control. The University will consult with appropriate jurisdictional agencies prior to activity.	Construction	Contractor	Plan check

Grand/Slack - northern drainage: The University will consult with the Army Corps of Engineers well in advance Planning Cal Poly Completion of construction to determine permitting requirements. Biological Resources. Develop, for each enhancement project and other direct alteration, a set of performance standards, incorporating the following requirements: Planning Cal Poly Plan check • Timing - Highly invasive activities shall be scheduled to avoid breeding and nesting periods of sensitive species, including steelhead, and southwestern pool turtle Planning Cal Poly Plan check • Timing - Highly invasive activities shall be scheduled to avoid breeding and nesting periods of sensitive species, including steelhead, and southwestern pool turtle Planning Cal Poly Plan check • Timing - Disturbed areas shall be revegetated with native species to provide nesting babitat, and connections to adjacent areas for migration Construction Construction Construction The University shall consult with appropriate jurisdictional agencies prior to activity Construction Construction Plan Check Cal Poly Standard Requirements A. The requirements of the Article are in addition to those of Article 4.02 of the Contract General Conditions. So feet as measured under the noisiest operating conditions. For all other equipment, noise levels ball not exceed 98 dBA at 50 feet. Congretions devels for trenchers, pavers, graders and trucks shall not exceed 90 dBA at 50 feet as measured under the n	Discussion	When to Implement	Responsible Person/ Agency	Report Due
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Discussion	When to Implement	Responsible Person/ Agency	Report Due
they must be scheduled after normal work hours.H. All work in the area of the residence halls will be restricted to 10:00 a.m. to 10:00 p.m., seven days per week, throughout the year. No work will be allowed in the residence hall areas during the finals week. University reserves the right to stop construction work, including but not limited to noisy work, during the following events: Spring and Winter Commencement, Open House, Finals Week, residence hall move-in, or at other times that may be identified by the University. University reserves the right to stop noisy work at any time when said work disrupts classes or other planned events.			
In addition to these standard measures, the following measures are recommended:			
• A haul route plan shall be prepared for review and approval by the University which designates hall routes as far as possible from sensitive receptors.			
• Stockpiling and vehicle staging areas shall be located as far as practical from occupied structures.			
• Whenever practical, the noisiest construction operations shall be scheduled to occur together in the construction program to avoid continuous periods of noise generation. Scheduling of noisier construction activities shall also take advantage of summer sessions and other times when classes are not in session.			
• Project construction activities that generate noise in excess of 60 dB at the project site boundary shall be limited to the hours of 7 a.m. to 6 p.m.			
Pile Driver Use. If possible, the use of pile drivers shall be minimized in construction. Alternative techniques that produce less noise, such as drilled or bored piles, shall be considered.			
Circulation Plan. Where vehicle and pedestrian routes and residential areas conflict with construction activities, a circulation plan will be developed, which will include warning signs and detours, as well as efforts to minimize noise in residential areas.	Construction	Contractor	Plan Check

Cal Poly Master Plan

C H A P T E R

What happens next? How will Cal Poly continue to work with the campus and community as we implement the Master Plan? How will we monitor progress and update the Plan? What further analysis needs to be done?



IMPLEMENTATION ACTIVITIES

Introduction

The Master Plan establishes a number of principles and expectations regarding the future of the campus that require a number of additional detailed plans to implement. The Physical Plan elements in Chapter 5 identify many of these. However, many of them involve operational issues that are too specific for the Master Plan and require further study. Thus, the Master Plan focuses on the purposes and principles, with the expectation that follow up studies and plans will provide the necessary operational flexibility to achieve the desired results.

Design Guidelines and Facility Standards

The most visible outcome of the Master Plan will be in the design and details of future projects. Design Guidelines and Facility Standards will be the primary tool to achieve the aesthetic vision of the Master Plan. Campus construction did not stop during the three-year Master Plan process and future facilities and site improvements are now on the drawing boards. The development of Design Guidelines and Facility Standards is the next critical step in the implementation of the Master Plan. See the end of this chapter for a list of proposed Design Guidelines and Facility Standards.

Focused Studies

Issues as diverse as bicycle transportation and Best Management Practices (BMPs) for water quality will be the subject of Focused Studies. This Master Plan and Environmental Impact Report used studies that addressed campus-wide, regional, or multi-impact issues. Future Focused Studies will delve deeper with a narrower focus and will be used to implement the Master Plan or meet other regulatory and reporting requirements. See the end of this chapter for a list of possible Focused Studies.

Area Studies

The Master Plan identifies areas for redevelopment and enhancement. Detailed Area Studies of a sector, node or corridor will be undertaken as required by the timelines of project implementation. Aided by Design Guidelines and Focused Studies, these future Area Studies will enable the realization of the Master Plan vision. See the end of this chapter for a list of possible Area Studies.



Phasing Strategies

Master Plan phasing strategies will be published in future 5-year and 10-year Capital Outlay Proposals, updated annually. The discussion below presents some assumptions and considerations that will affect phasing.

Assumptions and Present Funding Practices for State-Funded Projects

Timing -- State-Funded Projects

- Major capital outlay requests are submitted to the Chancellor's Office for review by the Trustees approximately two years prior to initial funding.
- Projects are funded for completion during a three-year design and construction period.
- Thus, Cal Poly follows the following schedule for a major project. Funding years coincide with the start of the fiscal year (July 1), and depend on authorization as part of the annual State Budget Act.
 - Year -1 submittal
 - Year 0 approval
 - Year 1 initial funding, including design
 - Year 2 construction
 - Year 3 construction, including equipment funding
 - Year 4 fall occupancy
- No growth project can be submitted prior to the approval of the new master plan.

State-Funded Projects in the Queue Prior to Expected Approval of the Master Plan Update Will Continue as Scheduled (e.g., College of Engineering replacement building).

Master Plan Phasing Considerations

- Provide enrollment growth potential to meet some portion of Tidal Wave II demand prior to peak. The number of high school graduates will reach a peak in 2007 and 2008, which means that the effect on college education will peak from approximately 2007 through 2014.
- Obtain operating budget support for enrollment in the disciplines identified for enrollment growth.
- Relocate facilities or uses in a form to meet future needs prior to demolition or removal of facilities from existing site.



- Free-up sites for enrollment growth and housing projects.
- Link enrollment growth to amount of housing that can be provided based on sites available.
- Obtain funding for enrollment growth project prior to committing to housing construction for that phase.
- Meet support needs associated with enrollment growth and housing through facilities and/or policy adjustments (e.g., parking).
- Accommodate renovation and replacement requirements for major capital outlay funds as well as enrollment growth projects.

Phasing Characteristics

- Each phase may have the following components:
 - Relocation of existing facilities or uses to free up space for new use.
 - Instruction/instructional support facility to accommodate increase in enrollment during the academic year.
 - Student housing and related services to accommodate Fall headcount associated with enrollment growth.
 - Operating budget to provide for instruction and support services (faculty, staff and equipment)
 - Parking and alternative transportation programs for students, faculty and staff to accommodate increase in enrollment during the academic year.
 - Renovation and replacement to enhance existing capacity.
 - Non-state funded projects that contribute toward instructional and related needs.
- Each phase may focus on a particular site planning area, but may involve projects in additional locations to support the primary components of the phase.
- Each phase should enable subsequent phases.
- In order to meet instructional needs for both major and service courses, and instructional support requirements, all instructional buildings must combine classrooms, laboratories, offices, etc. for related disciplines.

Project Financing and Delivery Considerations

As a public institution, the California State University system must follow State requirements with respect to project financing and delivery.



However, to the extent possible, the University should explore a range of alternatives, such as public-private partnerships, Foundation support, enterprise partnerships and collaborative "design-build" project development techniques.

Future Environmental Review

Many projects developed under the Master Plan will need little or no additional environmental review. Larger construction projects (large buildings, parking structures) will need negative declarations or, at most, focused EIRs. This analysis will be conducted just before a specific project is undertaken. Presuming the project was contemplated under the Master Plan, the analysis would relate directly to the individual project site and general issues would be referred back to, or "tiered" off the Program EIR. This means there will be no further need for broad analysis of campus impacts in such areas as long-term air quality, traffic/parking, housing, and cumulative impacts (unless, of course, there are dramatic changes in the information relied upon). For example, the focused analysis would deal with site geology, but there would be no need to discuss regional seismic issues, as these would be covered in the Program EIR.

Records and Archives

Data collection and record keeping support all implementation efforts but are activities in themselves. Data types include digital Graphical Information System (GIS), historical Master Plan documents, and records of planning processes. The goals are:

- Appropriate and consistent level of detail for all Cal Poly land.
- Open and accessible storage of data for use in implementing the Master Plan and any other academic uses. Extensive use of the WorldWide Web in publishing the data.
- Accessible catalog of data collected to date. Maintain and publish the catalog as additional data is collected. Establish 'ownership' of data with a clear understanding of expectations for currency, maintenance and access. There will be a variety of owners for different areas.
- Use of student projects and faculty research and projects where possible and appropriate.



COMMUNICATIONS AND CONSULTATION

Introduction

Planning and project review process issues that have arisen during the Master Plan Update process can be grouped in two categories: (1) communication with the broader community regarding physical planning issues, and (2) structure on campus for consultation, comment and recommendations regarding such issues. The campus should establish the detailed structure and procedures for addressing physical planning issues through a set of Land Use and Project Review Procedures as part of the implementation of the Master Plan.

Community Communications

The Master Plan and specific projects generate significant interest on and off campus. Because Cal Poly is the largest institution in the local area, anything the University does with respect to enrollment and its physical facilities is highly visible.

Cal Poly's impact can be measured in at least the following ways:

- Housing units occupied
- Purchases made
- Jobs created and jobs needed
- Tax revenues generated
- Events attracted to the area
- Community leadership provided
- Community organizations to which students, faculty and staff contribute
- Services offered and services used
- Resources consumed and waste generated
- Miles traveled/trips taken; cars driven; bicycles and buses ridden

It is no wonder then, that residents, businesses, organizations, and local government agencies in San Luis Obispo city and county are very interested in Cal Poly's activities.

Cal Poly's impact on the community can be seen as a balance between benefit and burden. To be sure, Cal Poly adds to traffic congestion, uses resources, requires public services, and its students, faculty, and staff compete with other local households for housing. At the same time, though, the University clearly contributes to the intellectual life of the community, the regional economy and tax base, and it provides community leadership and service.

A study by the College of Business estimated conservatively that Cal Poly accounted for a contribution of over \$485 million to the City and County economy in 1998-99, up from \$400 million in 1996-97.



At the same time as it is a member of its local community, Cal Poly is first and foremost a member of the higher education community. As a university in the California State University system it is accountable to its Board of Trustees, State elected officials, and, ultimately, California voters and taxpayers. The campus should balance its role in the community with its responsibility as a state institution of higher education. Thus, campus enrollment and physical planning take place within both local and State contexts.

Communication Principles

Cal Poly wants to enjoy a friendly and constructive relationship with its surrounding community and adjoining jurisdictions. Within the framework of its academic mission, the University recognizes that it is also a part of a larger community, sharing the same regional environment with many neighbors. To this end, the University will work to maintain good communication and relations with the City of San Luis Obispo, the county, and its immediate neighbors. This section sets forth principles that will guide University communications with its many publics.¹

Communication

The University will seek opportunities to broaden its communication both on and off campus. These include:

- Regular communication with the elected officials of the city and county about the physical plans Cal Poly is considering.
- Meetings with neighbors early in project planning and design about projects that may affect them and cooperative discussions on ways to relieve possible impacts.
- Widely published information about campus plans, activities and process available on the Web and through other media.

Planning

The University will include the City and County of San Luis Obispo and its immediate neighbors in discussions about its physical plans for the future. The development of the Master Plan has been shared broadly



¹ These principles address issues identified by campus and community members during Fall 1998, at public meetings during Winter 1999, during task force discussions in Spring 1999, and at subsequent meetings with campus and community groups in Fall 1999 and Winter 2000. Two campus/community task forces in particular - Neighborhood Relations and Intergovernmental Relations - recommended a number of very specific processes and procedures for physical planning and project review with the community. Some of these were too specific for the Master Plan, while others will be addressed as part of Master Plan implementation.

with the public, and this approach should be continued with other major physical planning efforts.

Consultation

The University will provide the City and County of San Luis Obispo and permitting authorities with a clear avenue of consultation regarding physical planning projects on campus. Cal Poly recognizes that it is a large organization with many divisions. Cal Poly will identify appropriate personnel and procedures through a set of Land Use and Project Review Procedures as part of the implementation of the Master Plan so that those interacting with the University are able to do so effectively and efficiently.

Cal Poly follows two formal consultation processes that involve local elected officials and the broader community - the Campus Planning Committee and environmental assessments.

Campus Planning Committee

The Campus Planning Committee serves review functions typically provided by both a city planning commission and a design review committee in local government. Its responsibilities include review of the campus Master Plan, five-year capital improvement program, environmental assessments related to major capital outlay projects, and design review of major capital outlay projects at the programming, conceptual and schematic design phases. The Campus Planning Committee is a standing committee of the University, mandated by the Board of Trustees. Members include the President, all four Vice Presidents, Vice Provost for Institutional Planning, Director of Facilities Planning, two deans (Agriculture and Architecture and Environmental Design), two faculty (appointed by the Academic Senate), an ASI student representative, a CSU system representative, the official campus architect, and City and County representatives. Once projects are formulated, the Facilities Planning Office places them on the agenda of the Campus Planning Committee for review, comment, and recommendations before the President forwards them to the CSU Chancellor's Office. With the completion of the Master Plan update, Cal Poly will post Campus Planning Committee meeting schedules and agendas in a timely manner in advance of meetings and will make summary minutes available on a Web site.

Environmental Assessment

Cal Poly follows the requirements of the California Environmental Quality Act (CEQA) with respect to physical planning and major capital



A study by the College of Business estimated conservatively that Cal Poly accounted for a contribution of over \$485 million to the City and County economy in 1998-99, up from \$400 million in 1996-97. outlay projects. The California State University Board of Trustees serves as the lead agency for certifying environmental determinations regarding projects subject to CEQA. Cal Poly prepares initial studies, "negative declarations" and environmental impact reports with the assistance of the campus environmental consultant and forwards these to the CSU. Cal Poly notifies and invites comments during the review process from elected officials, public agencies and the public, consistent with CEQA requirements.

Campus Planning Structure

Campus physical planning at Cal Poly follows both administrative and consultative processes. Ultimate responsibility for Master Plan approval lies with the California State University Board of Trustees - or the California Post-Secondary Education Commission for decisions associated with enrollment capacity. On campus, the Facilities Planning office in the Division of Administration and Finance is responsible for physical planning. This office works in consultation with the Provost's Office regarding academic projects and implications of all physical planning projects on academic issues. Within the Provost's Office, the Office of Institutional Planning and Analysis provides enrollment and space studies that inform campus planning efforts.

College and University Interests

The Master Plan addresses campus land uses beyond the instructional core at some length. The Natural Environment element identifies environmentally sensitive areas. The Outdoor Teaching and Learning element describes uses of campus lands by nearly all colleges. Some colleges clearly have jurisdiction over certain activities - e.g., agricultural units, botanical garden, Design Village. However, outdoor teaching and learning uses also overlap with one another on some lands - e.g., grasslands used for grazing and field study. In addition, students, faculty and staff, and members of the larger community take advantage of Cal Poly's natural setting for outdoor recreation - hiking, mountain biking, horseback riding. Sometimes these overlapping uses come into conflict, particularly when issues of environmental protection, degradation, and restoration arise, but also when one user proposes a change that affects others - e.g., conversion of grasslands to cultivated crops.

The implementation of the Master Plan will establish a structure in the Land Use and Project Review Procedures to review and adjudicate these land use management issues, based on analysis of the academic needs that are served by outdoor teaching and learning lands.



Land Use and Project Review Procedures

The Land Use and Project Review Procedures to be established to implement the Master Plan will include the following considerations.

- Establishment of a project development team that represents all affected University interests;
- Identification of responsibility for liaison with elected officials and local and regional agencies, as appropriate to the nature of the project;
- Identification of the appropriate neighborhood areas that may be affected by the project so that meetings may be held early in project planning and design regarding ways to relieve possible impacts;
- Determination of which implementation guidelines and standards are applicable to the project.

Master Plan Monitoring and Review

One of the responsibilities of the Campus Planning Committee (CPC) is to monitor the implementation of the Master Plan. The CPC sees project proposals as part of the five-year capital improvement program, submitted annually to the California State University (CSU). When a specific building or landscape project is being designed, the CPC assesses its consistency with the Master Plan and sees the environmental assessment. If the proposal differs from the Master Plan, the campus, with CPC approval, may forward a request for amendment to the CSU Board of Trustees. As the CSU is most concerned with enrollment capacity and physical construction, the system requires campus review of enrollment levels and facilities annually.

The Campus Planning Committee will assume responsibility for an annual review of the assumptions underlying the master plan and its policies, so as to advise the campus when a major update may be required. This annual review will include an update on compliance with the Master Plan environmental mitigation monitoring program. The Academic Senate has urged that the University assess the impacts of enrollment growth on academic quality for each phase of Master Plan implementation. This analysis should occur as part of Cal Poly's assessment and accountability efforts, including academic program review. New section - Land Use and Project Review Procedures

New section - Master Plan Monitoring and Review

See also the Mitigation Monitoring Program, Appendix E of the Environmental Impact Report. Many of these activities may be related to implementation studies.



STUDIES, STANDARDS AND GUIDELINES

Introduction

Following is a list of proposed activities that may be useful in implementing the Master Plan. Critical activities are shown in *underlined italics*, in-progress or complete activities are shown in **bold**.

Design Guidelines and Facility Standards

Design Guidelines

Guidelines that refer to the architectural, urban and campus design aspects of the University. These may include, but not be limited to, site planning issues, architectural treatment, campus furnishings and amenities, signage, urban design elements, resource conservation and sustainability.

Campus Landscape Plan

Includes the design and development of a Campus Landscape Plan to enrich the campus's aesthetic beauty and provide a cohesive treatment of exterior space and a living laboratory for study.

Facility Standards

Nuts and bolts standards dealing with everything from door hardware to high voltage electrical connections. Typically re-evaluated and republished for each major capital project

Focused Studies

Access and Alternative Transportation

Alternative transportation evaluation and recommendations including operational issues and financial feasibility of alternative transportation options.

Agriculture Facilities Plan

Prepare a facilities plan for the entire college and Campus Farm, incorporating all elements described in the 2000 report issued to the master planning team including a thorough inventory of existing facilities and fields.



Air Conditioning Plan

Evaluate current and projected needs for air conditioned spaces and implications to the campus infrastructure.

Best Management Practices (BMP's)

BMP's for environmentally sensitive areas, including riparian areas.

Bicycle System

Study of bicycle routes, access, and storage.

Botanical Preserve Study

Mapping of existing preserves, and evaluation of potential new preserves.

Creek Management and Enhancement Plan

Coordinate with Biological Sciences Advisory Committee, Landscape Advisory Committee, College of Agriculture Land Use Committee and other interested groups to develop and implement stream protection programs.

Design Village Development Standards

Standards to protect the natural resources of the site while allowing its' continued use for building experimental structures.

The Foundation Element of the Master Plan

Planning the role of the Cal Poly Foundation in the implementation of the Master Plan.

Grazing Land Management Program

Implementing best practices for grazing while maintaining the ecological value of the land.

Historical Building and District Study

Inventory and evaluate all campus facilities over fifty years old.

Inventory of Natural Resources

Assist the Biological Sciences Department and College of Agriculture to identify and map various natural resource areas and assist in developing management and use guidelines including a thorough inventory of sensitive plants, animals, and habitats.

Inventory of Outdoor Teaching and Learning Land Use

Inventory of student and faculty 'contact hours' with outdoor facilities.



Life-Cycle Costing and Energy Efficiency

Parking Management

Pedestrian System

Focus on pedestrian access to campus.

Recreational Trails Plan

Identification of appropriate recreational trails, hiking, biking and the necessary management procedures on all Cal Poly lands. Coordinate with San Luis Obispo County Trails Plan.

Shuttle Service

Area and Related Service Connections.

Student, Faculty and Staff Housing Studies

Periodic update of local housing market conditions, supply and demand, preferences and affordability.

Utility Capacity and Distribution Studies

Includes water conservation program, drought contingency plan and evaluation of potential future additional water supplies.'

Water Quality Management Plan

As required by the Regional Water Quality Control Board.

Area Studies

Agriculture Pavilion

Work with the College of Agriculture to refine program and prepare site plan studies, including traffic circulation, parking facility layout.

Brizzolara Creek Enhancement Plan

Coordinate with Biological Sciences Advisory Committee and Landscape Advisory Committee to establish boundaries, program and site plan for Brizzolara Creek.

Bull Test Facility at Chorro Creek Watershed

Work with CAG to refine program and prepare site design studies, including traffic access, parking and facility layout, and drainage and runoff retention plan.



California Boulevard

Prepare parking impact and relocation studies in preparation to connect through to highland.

Centennial Green

In coordination with The Center for Science and Mathematics project, refine the green space and building placement plan for this redevelopment area.

Dexter Green

Prepare a refined plan for this central green space.

East Ridge Landslide Study

Mapping and evaluation of the ancient landslide that underlies the eastern edge of campus.

Engineering III Parking Expansion

Prepare parking studies to capture interim parking space east of Engineering III.

Goldtree Area

Concepts for program use, development potential, environmental issues, access and coordination with Master Plan Team, various colleges and foundations.

Grand Avenue Corridor

Develop a plan for the corridor of similar nature to the Highland Drive plan.

Highland Drive Corridor

Coordinate with University, City, CalTrans on the design requirements at the entrance to Cal Poly from Highway 1.

Highway 1 Faculty / Staff Housing Sites

Coordination with Foundation Architects, prepare density and product studies, CalTrans and City coordination integration with Master Plan.

Kennedy Library Expansion

Prepare refined study for building footprint and space needs.

Key Intersections

Via Carta and Highland Drive, California Boulevard and Highland Drive, California Boulevard and Foothill Boulevard.



Cal Poly Master Plan

Northeast Area

Prepare detailed study of concept building footprints, site plan, product and density-3D sketches of area.

Northwest Area

Prepare detailed study of concept building footprints, site plan, product and density-3D sketches of area.

R-1 Parking Lot

Prepare lot efficiency studies, reconfiguration, grading and traffic flow to integrate new H-5 housing and increased demand.

Southwest Corner

Child care facility, alumni center, mustang stadium, housing, air conditioning facility. Studies to accommodate expansion and new child care services, site planning and concept designs.

Sports Arena and Parking Structure III

Study ingress and egress, refined site design parking structure capacity and connection to new sports arena.

University Union Plaza and South Perimeter

Prepare study for the entire area similar to California Boulevard or Highland Drive.

University Union & Student Services Plan

A plan for the future of the University Union and the expansion of student services as the campus develops.

Via Carta Corridor

Develop a plan for the corridor of similar nature to the Highland Drive plan.



GOALS AND GUIDELINES FOR THE CAL POLY CREEK MANAGEMENT AND ENHANCEMENT PLAN

INTRODUCTION

There are a number of significant creeks and tributaries that traverse Cal Poly lands and support biologically diverse aquatic and semi-aquatic habitats comprising communities of hydrophilic trees, shrubs, herbs and the associated diversity of animal life. This report provides some goals and guidelines that should be implemented in a Creek Management and Enhancement Plan for the Cal Poly campus.

CREEK HABITATS—AN OVERVIEW

Riparian and creek ecosystems support a diversity of plant and wildlife species. These ecosystems are complex habitats that provide water and moist areas in otherwise arid areas of the campus. The variety of vertical habitats created by the trees, shrubs and herbs provide nesting and foraging sites for a diversity of animal species. These habitats are critical for many wildlife species because they provide a rather permanent source of water and moist microhabitats in otherwise dry environments.

Many riparian and wetland plants and animals are restricted to the creek channel, banks, and/or flood plains of waterways; others integrate with the riparian community from adjacent upland areas. Sometimes the riparian trees are tall and dense forming a forest-like community, and at other times the trees form more open woodland. The lateral extent of the riparian vegetation depends on the size and nature of the creek banks and flood plain of the creek, the amount of water carried by the creek and on the depth and lateral extent of subterranean aquifers. Additionally historical patterns of land use and human impacts often determine the actual extent of the existing riparian and stream corridor, an important consideration on Cal Poly lands. The extent of the riparian and wetland communities varies depending on the interaction of the above factors, as well as others not listed.

There are several creeks and drainages on the Cal Poly campus that support various forms of riparian and wetland vegetation ranging from broad corridors of dense riparian forests to small corridors of mostly aquatic and semi-aquatic shrubs and herbs. Freshwater marsh habitats are found along creeks where permanent, slow moving pools of standing water occur. In these areas, the riparian woodland and freshwater marsh communities overlap and form a mosaic along the creek. Small freshwater marsh areas occur in scattered locations along the creeks on the Cal Poly campus.

Riparian communities have a significant effect on the environment along creeks or streams. There is seasonal fluctuation in light available to riparian understories because most of the dominant trees are deciduous. When the trees are in their winter-dormant leafless condition, direct sunlight can reach the ground or the water surface of the stream. Some herbaceous species and shrubs actively grow and flower while the trees are leafless. When deciduous trees are in full leaf, they cast dense shade, reducing the light energy that reaches the ground or water and moderating diurnal temperature fluctuation. Daytime temperatures beneath the tree canopy are often several degrees lower than temperatures in full sunlight. The tree cover also decreases wind velocity. Relative humidity is increased in a riparian corridor by moisture evaporated from leaves, the soil, and water. The evaporation also tends to decrease the temperature. Overall, the environment within a riparian woodland or forest is more mesic than that in adjacent areas. The presence of mesic conditions along streams permits some plants from adjacent communities to grow as riparian species in areas that are otherwise outside their limits of drought tolerance. For example, *Quercus agrifolia* (coast live oak) and *Umbellularia californica* (California baylaurel), which occur in upland woodlands, are common in many riparian areas on Cal Poly lands.

Unlike the plants of many other communities of California, riparian dominants are summer-active and winter-dormant. Many of the understory plants are similarly summer growing species. The availability of either surface water or shallow subsurface water in a riparian corridor allows the plants to remain metabolically active at times of the year when moisture stress is extreme in adjacent upland areas. Most of the riparian dominants, however, lose their leaves during the winter when active growth is taking place among the members of many lowland communities. Consequently the riparian plants often seem out of phase with the surrounding vegetation.

Riparian areas are very important as wildlife habitats. The multilayered canopy provided by the assorted trees, shrubs, and herbs provides a diversity of nesting and feeding sites for birds and mammals. Riparian areas are productive habitats, especially at times when plants of other communities are dormant. The moisture of the stream is an important summer water source in the dry California landscape. The nutrients added to the stream and the alternating shaded and sunny zones of the patchy vegetation are important in stream ecology. The vegetation is an important component of the habitat for fish and other aquatic animals as well as terrestrial species.

Riparian woodland vegetation influences fish habitats by moderating the temperature and providing cover and food. Loss of riparian trees and shrubs and undercut banks can decrease the amount of suitable habit, reducing creek productivity and decreasing fish populations. Riparian vegetation is also an important source of fish food and nutrients. Small fish use slower water along margins of larger rivers and depend on terrestrial organisms such as insects that live in the riparian vegetation for food because most aquatic other organisms escape them.

Stream flow velocity, water depth, and riparian cover are important factors that affect fish populations. In general, vegetation cover slows the water velocity, providing resting areas for fish and increasing habitat complexity, which can lead to greater species diversity. Riparian vegetation provides hiding places for both adult fish and fry to escape predation and may also provide increased substrate for fish food and for egg attachment.

Riparian vegetation decreases erosion from stream banks and adjacent uplands, which important in maintaining stream purity and decreased sedimentation. This is very important because streams that are inundated by heavy silt loads become useless as fish and invertebrate habitat.

RIPARIAN AND FRESHWATER MARSHES ARE SENSITIVE HABITATS

Over half of the wetland and riparian vegetation in the coterminous 48 States and over 90% of the wetlands in California have been destroyed, and few of the remaining riparian and wetland areas have not been adversely impacted. Because of their location in floodplains, destruction of riparian ecosystems is largely associated with human activities, especially clearing for agriculture, building structures and paving in flood plains, stream-channel modifications, water impoundments, mining, and urbanization. Even recreational development can destroy natural plant diversity and structure, lead to soil compaction and erosion, and disturb wildlife.

Wise management of remaining riparian ecosystems and restoration of disturbed riparian areas is extremely important because of their high value as fish and wildlife habitat as well as important values to humans and human existence. Riparian ecosystems generally compose a minor proportion of surrounding areas, but typically are more structurally diverse and more productive in plant and animal biomass than adjacent upland areas. Riparian areas supply food, cover, and water (especially important in arid regions) for a large diversity of animals, and serve as migration routes and forest connectors between habitats for a variety of wildlife.

The area occupied by riparian communities in California has decreased over 90 percent in the past 100 years. There has been a similar decrease in area occupied by freshwater marshes. With the loss of these wetland communities has come a comparable decrease in the habitat available for various types of wildlife, particularly resident and migratory birds. Today riparian communities occupy less than one percent of California, but in pre-colonial times these communities occupied considerably larger areas.

Much of the decrease in riparian and freshwater wetlands has been incremental — a little bit here, a little bit there. Individually these changes are minor. Collectively they represent a serious loss of wetland habitats. Freshwater marshes, riparian and other wetland areas are important wildlife habitats. They are particularly important to migratory birds of the Pacific Flyway. The piecemeal draining of marsh areas and removal of riparian woodlands throughout California along with the massive draining of marshlands in some areas of California such as the Central Valley have reduced the overall area covered by marshes by over 90 percent. Still other areas of marshland are threatened by pollution. Loss of these wetlands in California makes the protection and management of those on Cal Poly lands even more significant.

The original riparian forests in California covered several million acres. Today they are measured in thousands, and many of the remaining riparian ecosystems have been degraded as a result of human activities. Prior to 1960 few people showed any concern for the

demise of California's Riparian Woodlands and very little biological data was collected. Today many scientists and governmental agencies are expressing concerns that have led to several symposia and workshops dealing with the ecology and conservation of riparian communities in California. Both the California Department of Fish and Game and the U. S. Fish and Wildlife Service consider Riparian and freshwater marsh communities to be sensitive habitats. The sensitivity of riparian woodlands and marshlands make it extremely important that Cal Poly take a leadership role in addressing the proper management, enhancement, and protection of these habitats on the Cal Poly lands.

CAL POLY STREAMS AND HABITATS

Several of the largest tributaries in the San Luis Obispo Creek and Chorro Creek watersheds traverse significant sections of Cal Poly lands. The survival and sustainability of the diversity of riparian, aquatic, and semi-aquatic biota found along these creeks depend upon Cal Poly's proper management, protection, and enhancement of the stream and streamside habitats. Protection of these sensitive wetland habitats must involve creating and maintaining critical habitat features such as high quality water, sufficient water to support the aquatic and semi-aquatic plant and animal life, and high quality riparian habitats. The riparian habitats and buffer zone along these creeks must be large enough to protect the creek and provide essential wildlife habitats, including habitat for the special status and sensitive species. This will require developing a comprehensive Creek Management and Enhancement Plan based on wise, science-based land and water use decisions by Cal Poly. This plan should develop acceptable management and enhancement goals and guidelines for the creek systems that are found on Cal Poly lands.

As a leading institution of higher education, Cal Poly must acknowledge and address the regional impacts the campus may have on the creek systems that traverse our lands. We must recognize how activities on our campus affect freshwater aquatic, estuarine, and marine habitats downstream in the both the City and the County of San Luis Obispo and in the Morro Bay area The potential impacts on the Morro Bay estuary from Cal Poly's land use activities in the Chorro Creek drainage and on the marine environment near Avila Beach from Cal Poly's activities in the San Luis Creek drainage must be evaluated.

The sensitive riparian and aquatic habitats found on Cal Poly lands must be addressed not only as sensitive creek habitats that support rare, threatened, and endangered species but also because they provide a diversity of educational opportunities for our students, staff, faculty, and the community.

GOALS AND GUIDELINES FOR THE CAL POLY CREEK MANAGEMENT AND ENHANCEMENT PLAN

The comprehensive Cal Poly Creek Management and Enhancement Plan should include the following management and enhancement goals and the guidelines for the creek systems that are found on Cal Poly land. The preceding discussion provides the scientific basis for the following goals and guidelines that might affect all present and future projects undertaken by Cal Poly near the steam and riparian ecosystems.

- 1. Develop a Creek Management and Enhancement Plan.
- 2. Reestablish natural flood plain areas for flood control purposes while protecting the Instructional Campus Core.
- 3. Protect the streams, stream channels, and adjacent banks, flood plains, and riparian habitats on campus, and be consistent with sound, long-term hydrologic principles.
- 4. Maintain and/or create stream and riparian corridors that provide adequate buffer zones that protect habitats for the riparian and aquatic plant and animal species.
- 5. Within the stream and riparian ecosystem maintain and create essential habitat features which include water quality, water flow, water temperature, and complex vertical and horizontal plant cover.
- 6. Reduce point and non-point sources of pollution to ensure that only high quality water enters the stream and riparian ecosystem in accordance with best management practices developed in the Cal Poly Water Quality Management Plan.
- 7. Identify and control stream bank and upland area soil erosion that may contaminate or add sediments to the stream and riparian system.
- 8. Control exotic invasive species within stream and riparian ecosystem.
- 9. Provide habitat for the special status species known to occur or likely to occur in the stream and riparian ecosystem.
- 10. Develop a maintenance program as part of the Cal Poly Creek Enhancement and Management Plan.
- 11. Identify all structures, concrete, pavement, etc. that affect the stream and riparian ecosystems. Obstacles to proper management and/or enhancement shall be removed from designated stream and riparian corridors.
- 12. Maximize the use of the stream and riparian ecosystem as a living laboratory and educational resource.
- 13. Provide limited public access to and from the housing units on designated paths and bridges, designed to have insignificant affect on the stream and riparian ecosystem. These paths should be outside buffer zones as much as feasible.
- 14. Provide access areas for the public as well as well as designated wildlife areas with limited human access.
- 15. Restrict safety lighting and light spillage, where possible, to designated paths and bridges only.

16. Restrict recreational use of riparian and creek areas to designated trails. Recreation uses will be restricted to passive or resource based recreation such as nature walks and hiking.

SUMMARY

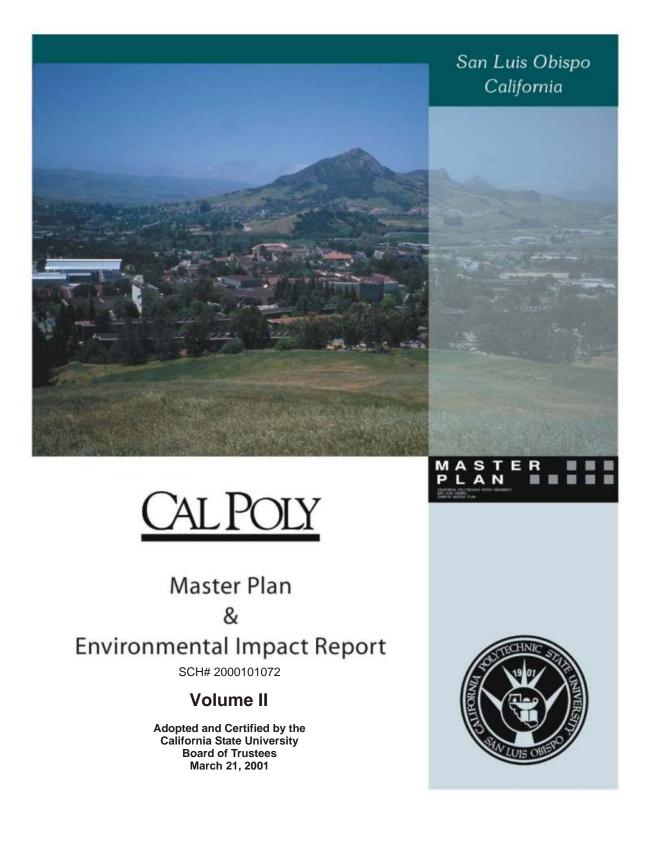
A Cal Poly Creek Enhancement and Management Plan shall be prepared that addresses methods to protect, restore, manage, and enhance the biodiversity and stability to the creek and riparian corridor on the campus. Protection of existing riparian and creek ecosystems from impact by creating adequate riparian and buffer zones should be of utmost importance.

All disturbed sections of the creeks shall be restored and enhanced as directed by the plan. One of the main problems when restoring disturbed creek and riparian ecosystems to their pre-disturbance condition is that the historical conditions of creeks is not well known. Investigations of relatively undisturbed sections of the creek near the restoration and enhancement areas may be useful in gaining some knowledge of predisturbance conditions of the creeks.

The plan shall address methods to restore riparian habitat diversity and stability to the creek corridors and shall provide methods and procedures to manage, restore, and enhance valuable biological habitats that will support a diversity of plant and animal species, including sensitive species. The plan shall also create public trails and lookouts in appropriate but restricted areas that will provide resource-based recreation for the campus residents and visitors to the site, such as bird watching and hiking. The plan, once implemented will be monitored and the area managed to make sure the goals of the plan are achieved. Success of the plan will be evaluated regularly.

Restoration involves returning the ecosystem to as near predisturbance conditions as possible and involves revegetation and the removal of exotic, invasive vegetation. Enhancement of riparian ecosystems consists of improving existing conditions to increase habitat values. This is usually accomplished by increasing plant or community diversity for plants, wildlife, fish, and other animal life. Managing riparian and creek ecosystems typically involves enhancement techniques as well as proper management and monitoring. However, in some areas creation and restoration projects may involve use of techniques considered more management-oriented (e.g., land shaping and fencing until planted vegetation of the created or restored wetland is established).

Comments and Responses to Comments Received on the Public Draft EIR (October 10, 2000)



CAL POLY MASTER PLAN ~ Volume II

This section of the Final EIR (FEIR) presents the responses to public comments made on the Cal Poly Master Plan and Draft EIR (DEIR). Each letter commenting on the Plan and DEIR has been assigned a number, from 1 to 59. Within each letter, comments have been numbered in ascending order. A unique number that consists of the number assigned to the comment letter, followed by the comment number, identifies comments and responses. For example, the comment and responses identified as 1-1 represents the first comment in the first letter. Subsequent comment from that letter would be identified as 1-2, 1-3, etc. The second comment letter would commence with 2-1, 2-2, etc. The person making the comment is the "commental issues, but responses are included to provide additional information for use by decision-makers. Many of the comments spoke directly to issues with the Master Plan. Responses to these are included here. Also included in the FEIR are staff-initiated text changes and errata.

1	Terry Roberts	State Clearing House	5-Dec
2	Allen Settle	SLO City Mayor	13-Dec
3	John Mandeville/Arnold Jonas	SLO City Council	7-Dec
4	John Moss	Utilities Director	5-Dec
5	Michael McCluskey	SLO City-Director of Public Works	12-Dec
6	Barry Lajoie	Air Pollution Control District	7-Dec
7	Roger W. Briggs	CA Reg. Water Quality Cont. Bd.	16-Nov
8	Larry Newland	CA Dept. of Transportation	8-Dec
9	Ron DeCarli	SLOCOG	7-Dec
10	Harvey Greenwald	Academic Senate	29-Nov
11	Jasmine Watts	Student	4-Dec
12	Ali Schlageter	Student	4-Dec
13	Andre von Muhlen	Student	1-Dec
14	Bob Ladd		4-Dec
15	Anonymous	Student	4-Dec
16	Brianna Holan	Student	4-Dec
17	Brooke Saavedra	Student	4-Dec
18	Chad Gifford	Student	4-Dec
19	Chad Gifford	Student	5-Dec
20	Anonymous		4-Dec
21	Dale Sutliff	LAC/College of Architecture	18-Nov
22	Doug Piirto	Professor-NRM (CAGRLUC)	5-Dec
23	Dr. Richard Kranzdorf	Professor-Pol Sci. Dept.	5-Dec
24	Eugene Jud	Professor- CE	8-Dec
25	Glen Lawson	Student (Senior Project)	6-Dec

List of Persons Commenting on the Cal Poly Master Plan and DEIR

26	James Vilkitis	Professor-NRM	6-Dec			
27	Anonymous					
28	Jenny Wong	/ Wong Student				
29	Ken Scotto	CAGR Land Use Committee	8-Dec			
30	Ken Solomon	Bio-Resource/Ag. Engineering	15-Nov			
31	Mark Shelton	College of Agriculture	26-Oct			
32	Norm Pillsbury	NRM Dept. Head	5-Dec			
33	Obadiah Bartholomy	Student - ME (via Paul Zingg)	4-Dec			
34	Phil Ashley	Bio. Science Dept.	8-Dec			
35	Rick Johnson	ASI	6-Dec			
36	Rob Rutherford	Animal Sciences	29-Nov			
37	Roger Gambs	Biological Science	20-Sep			
38	Sarah Brown	Student	4-Dec			
39	Scott Cooke	Resident (& Staff at Cal Poly)	30-Nov			
40	Scott Steinmaus	Crop Sciences				
41	Simon Robertshaw	Student	22-Nov			
42	Stephen Kaminaka	Professor-Bio Res/Ag. Eng.	6-Dec			
43	Steven Marx	English Dept., Resident	26-Nov			
44	Tyson Carroll	Student (Landscape Arch.)	5-Dec			
45	V.L. Holland	Chair-Biological Sciences	6-Dec			
46	Yasman Okano	Student	4-Dec			
47	Anonymous		4-Dec			
48	Carlyn Christianson	Action for Healthy Communities	16-Nov			
49	Donna Duerk	Foundation Board Member				
50	Frank Mumford	Foundation Director	14-Dec			
51	John Beccia	Life on Planet Earth	6-Dec			
52	Neighbors	Bishops Peak Neighbor Assoc.	8-Dec			
53	Pamela M. Heatherington	ECOSLO	7-Dec			
54	Patricia Wilmore	Chamber of Commerce	7-Dec			
55	Terry Elfrink	Resident	8-Dec			
56	Ben Fine					
57	Shredder	New Times				
58		RQN				
59	Margot MacDonald					
60	Paul Zingg, Chair	University Planning And Budget Advisory Committee	25-Oct			

Letter 1



GOVERNOR

STATE OF CALIFORNIA Governor's Office of Planning and Research State Clearinghouse

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FACILITIES PLANNING

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Steve Nissen

December 1, 2000

Robert Kitamura California State Polytechnic University, San Luis Obispo c/o Facilities Planning San Luis Obispo, CA 93407

Subject: Cal Poly Master Plan SCH#: 2000101072

Dear Robert Kitamura:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on November 30, 2000, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Jerry Roberto Terry Roberts

Senior Planner, State Clearinghouse

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044 916-445-0613 FAX 916-323-3018 WWW.OPR.CA.GOV/CLEARINGHOUSE.HTML **1-1** No comments were received from the agencies receiving the EIR via the State Clearinghouse.

<u>Response</u> Other, local agencies have responded to the EIR and their comments follow. No response required

Letter 2



city of san luis obispc

OFFICE OF THE CITY COUNCIL 990 Palm Street
San Luis Obispo, CA 93401-3249
805/781-7119

December 13, 2000

Note: This letter revises and replaces letter dated 12/8/00

REVISED

Warren Baker, President California Polytechnic State University San Luis Obispo, CA 93407

Dear Dr. Baker:

The City of San Luis Obispo greatly appreciates the opportunity to again review the evolving Cal Poly Master Plan, now including the Draft Environmental Impact report. The extensive and inclusive process of community involvement during preparation and refinement of the plan is evident, and we have been most impressed with your use of public meetings, the Internet and even CD's.

As you recall, the City provided comments on the earlier draft of the plan, and we are gratified to see that, with few exceptions, those comments have been incorporated into the current Master Plan draft through changes to the plan itself, analysis in the Draft EIR, or by designation for analysis as part of future implementation studies. Our comments on the current draft are included as an attachment to this letter.

While the University is cognizant of the concerns of its neighbors, and is actively pursuing solutions to the issues presented, the comments provided by one of our citizen groups, the Residents for Quality Neighborhoods (RQN), were not incorporated to the same extent as those of the City. It is important to understand that members of RQN are residents of the City of San Luis Obispo, and that the City Council must represent their concerns to the best of its ability. While the University may be unable to guarantee the desired outcomes, we must insist that the plan and the EIR deal with the issues raised by '.' RQN, and believe that inclusion of the requested language (or a reasonable modification) are worthy of additional consideration. In some cases we even offer specific recommendations.

It should also be noted that RQN and the Bishop Peak area residents have also provided responses to the current draft of the plan. In accordance with the City Council's direction, those comments have been incorporated into the City's response to the plan.

Notwithstanding the extensive analysis given to housing, traffic and parking, environmental protection, and other significant issues, our strongest recommendation continues to be for realistic and sincere implementation, once the plan is adopted. The closing section of the plan, Communication and Consultation, holds great promise that a

Page 5

dynamic partnership of the University, the City, and its residents will continue unabated

city of san luis obispo

Letter 2

Warren Baker

December 13, 2000 Page 2

toward that end. A showing of good faith in this area would be Cal Poly's commitment to "fix" the problem with the current Sports Complex lighting, especially the unintended, tremendous light and light trespass from the four lower multi-use fields.

We look forward to working with you to the conclusion of the planning process, and the ultimate realization of its goals.

Sincerely, Allen K. Settle

Mayor

Attachments:

City comments on Master Plan draft and EIR Memo from Richard Kranzdorf Statement and letter from Naoma Wright

Residents for Quality Neighborhoods

Bishop Peak neighborhood residents

c:

Page 6

Letter 2 Mayor Allen Settle City of San Luis Obispo December 6, 2000

- The Mayor suggests that while most of the City's comments from the last draft were incorporated, a few remain. Further, many comments from RQN were not addressed in the draft.

Response See responses to letter number 58, Residents for Quality Neighborhoods. The remaining City responses are set forth in responses to letter number 3, below.

2-2 The mayor recommends that realistic and sincere implementation of the plan is important.

Response The comment is noted. Please refer to the revised text in Chapter 7 on implementation of the Master Plan. Following adoption of the Master Plan, Cal Poly will engage in a series of implementation studies (specified in Chapter 7). As projects are planned and built, they will be reviewed and monitored for compliance with the environmental analysis as well as with meeting plan expectations to reinforce the academic quality of the University. The Campus Planning Committee will review the Master Plan annually so as to determine whether conditions have changed sufficiently to warrant a major update.

One of the responsibilities of the Campus Planning Committee (CPC) is to monitor the implementation of the Master Plan. The CPC sees project proposals as part of the five-year capital improvement program, submitted annually to the California State University (CSU). When a specific building or landscape project is being designed, the CPC assesses its consistency with the Master Plan and sees the environmental assessment. If the proposal differs from the Master Plan, the campus, with CPC approval, may forward a request for amendment to the CSU Board of Trustees. As the CSU is most concerned with enrollment capacity and physical construction, the system requires campus review of enrollment levels and facilities annually.

The Campus Planning Committee will add responsibility for an annual review of the assumptions underlying the master plan and its policies, so as to identify when a major update may be required. This annual review will include an update on compliance with the Master Plan mitigation monitoring program. The Academic Senate has urged that the University assess the impacts of enrollment growth on academic quality for each phase of Master Plan implementation. This analysis should occur as part of Cal Poly's assessment and accountability efforts, including academic program review.

Letter 3

City of San Luis Obispo Recommendations For Cal Poly Master Plan and Draft Environmental Impact Report December 5, 2000

After reviewing the October 10, 2000, version of the Master Plan and draft EIR, the City of San Luis Obispo would like to provide the following input. We start with a list of general concepts and follow with specific references to the document itself.

Concepts Strongly Encouraged

- Commitment to neighborhood preservation through redesignation of the remaining "ancillary activities" area at the Grand Avenue / Slack Street intersection to "natural environment", and addition of another double-ended arrow indicating potential neighborhood conflicts.
- 2. Designate the hill area above the dorms to "natural environment".
- Incorporate provisions for retaining in open, undeveloped uses, the lands shown as "outdoor teaching and learning".
- Elevate Stenner Creek to the same level of environmental protection and enhancement as Brizzolara Creek.
- Insure that retail and other support activities do not conflict with, or establish inequitable advantage over, similar facilities and services in the off-campus community.
- 6. Reinforce the recognition that housing impacts are the major community concern for additional University growth, and make every effort to provide on-campus housing for the greatest possible number of students, including fraternities and sororities. Housing should be provided prior to increases in enrollment.
- 7. Based on testimony of several speakers at the City Council meeting expressing concern over the specific siting of on-campus student housing, the City respectfully requests that the University reevaluate the siting of those proposed units, but without reducing the level of housing proposed. Efforts should be taken to minimize impact to the campus's natural environment and particularly on important foraging habitat adjacent to Poly Canyon, Brizziolara Creek, and the hills adjacent thereto.
- Cite the Jones and Stokes Sound Study and its recommended mitigations and show their use in the evaluation and design of a new Mustang Stadium.
- 9. Cite the Heery Sports Facilities Master Plan in the references.
- 10. Include documentation on the generation of the 2,000 space parking reduction.

- Clarify the purpose and potential future uses of the Goldtree site, and assure that any development there will not conflict with, or inequitably compete with, off-campus community resources.
- Include a definitive process for Plan development and Plan amendment, which assures early community notification, involvement and consultation.

In addition, the City requests further effort be made to accommodate the suggestions provided via the Mayor's June, 2000, letter that are not reflected in the October 10 draft Master Plan, in particular those submitted by the Residents for Quality Neighborhoods (RQN).

Key Previous Comments Not Previously Addressed

- Additional consideration should be given to making a bolder, action based, statement promoting alternative transportation.
- Additional policy language should be added to the Master Plan text to insure that City
 design policies and standards are followed to the greatest extent possible for all offcampus housing developments.
- Cal Poly should make every effort to amend, or adapt, University System policy so that fraternal housing can be located on campus, as occurs at other state-funded universities.
- The Jones and Stokes noise study for the Cal Poly Sports Complex should be referenced in the Master Plan, and its use in the preparation of the Plan verified.
- The Plan should include a strong commitment to unified analysis and planning techniques with the City to facilitate a higher level of awareness and accuracy in both jurisdictions.
- The proposed Parking Management focused study, included as an implementation effort, should be given high priority considering the importance of parking impacts, and the need for strong commitment to effective mitigation measures.
- 7. Inclusion of the suggested language by the Residents for Quality Neighborhoods relating to light and glare is appropriate considering the EIR evaluation, an interest in reducing the need to refer to the EIR as well as the Plan, and for clarity in the Plan text.
- 8. The Constraints Summary Map should be amended to include designation of the Goldtree site, and a double-ended arrow should be added at the southeast corner of the Slack Street/Grand Avenue intersection to indicate potential neighborhood conflicts in that quadrant of the intersection.
- 9. The language proposed by the Residents for Quality Neighborhoods relating to environmental consequences of planned residential uses near existing neighborhoods, and Highway 1, should be included in the Plan text to insure compatible development in those areas.

Previous RQN comments included a number of specific text proposals, which for the most part have not been incorporated into the current document. Cal Poly staff states that the proposed text was not incorporated because the total elimination of impacts on established residential neighborhoods, a basic precept of the RQN comments, is not technically possible. As a consequence, the University cannot promise to entirely eliminate impacts. They do note that the current version of the plan, and the DEIR, contain various sections that address the underlying issues raised by the RQN, and mitigate related impacts to the greatest extent possible. University officials also commit to working closely with neighborhoods as actual projects are developed, as the City has urged, and as further discussed later in this report relative to Chapter 7 of the Plan.

RQN now proposes that the words "avoid" or "minimize to all extent feasible" be used in place of the word "eliminate" in their earlier comments, to facilitate the consideration of the underlying concepts. With such change, the suggestions need not be considered as absolutes, and the City urges their continued consideration and incorporation.

- 10. The Plan text should be amended to clarify what constitutes a "commercial component", as well as the nature of anticipated uses in the instructional core and the Goldtree site to insure avoidance of impacts on residential neighborhoods, and potential competition with community business interests.
- Additional environmental review for future projects, as appropriate and necessary, should be confirmed by additional plan text.

Specific Comments on the October 10, 2000, Master Plan and Draft EIR

Analysis of the current draft has generated the following comments in addition to those of the earlier review.

Ch.4, Existing Conditions

Page 58, Constraints Summary Map

The Constraints Summary Map includes several double-ended arrows showing general areas of potential neighborhood conflicts. An additional arrow should be added to the east side of Grand Avenue, south of Slack Street, to indicate that conflict potential will continue to exist in that area as well.

Ch. 5, Physical Plan Elements

Page 70, Land Use Map, San Luis Creek Watershed

This map includes several land use designations in the "outdoor teaching and learning" category, which covers the bulk of the campus property, encompassing all of the agricultural use and natural habitat areas. The steep hillside area to the east, or rear, of the residential dorm area is shown in the general outdoor classification, although it is otherwise surrounded by the "natural environment" category. Given the topography of

this area, which does not appear suitable for agricultural use, and its relation to the campus core, this area should also be shown as "natural environment".

Page 71, Campus Development Map (re: Grand/Slack Neighborhood Interface)

The Campus Development Map has been modified from earlier versions so that it provides a diagrammatic indication of the ancillary facilities (additional residential dorms, and a visitors center, described at pages 194-195)) now anticipated for the Grand Avenue/Slack Street site. The impression now created is that the remainder of the site, which is at the campus/community interface, will be left in a natural state. Given the sensitive nature of this location to the nearby residential neighborhood the area should, therefore, be shown as permanently in open space. This can be done by removing the pink shading indicating the possibility of future development from this map, and all other maps on which it may appear throughout the Master Plan, and replacing it with the Natural Environment land use category.

Page 78, Stewardship (re: Open Space Protection)

The Plan text discusses the concept of "outdoor teaching and learning" and "environmentally sensitive areas" (first paragraph, Plan Components – Land Use Designations, page 67) as designations for the natural and undeveloped open areas of the campus, setting them apart from the more typical "open space" designation found in most land use plans. The implication is that the campus lands are potentially more heavily used, at least in part, than their non-university, "open space" brethren. Regardless of these distinctions, the Plan should incorporate a commitment to retaining these lands in open, undeveloped uses in a fashion similar to that of the City of San Luis Obispo open space lands. The section at page 78, Natural Environment, Stewardship, would be a logical location for such a commitment.

Page 98, Other Creek Enhancement Activities (re: Protection/Restoration of Stenner Creek also)

This short paragraph deals with Stenner Creek, which flows in large part through lands used mainly for agricultural related uses. The text promotes activities to ensure no further degradation of the creek area. This is in contrast to the preceding discussion of Brizzolara Creek, its relationship to the campus core, and restorative and/or enhancement activities proposed for that waterway. The two streams comprise the major waterways on the heavily used part of the campus, and are shown in the same land use designation on page 70. Given that, they should be recognized as equivalent resources and be provided equivalent levels of protection and restoration. This would require a commitment to activities beyond arresting degradation on Stenner Creek, by extending and reinforcing the language on page 98 to activity levels afforded Brizzolara Creek.

Page 106, Uses (re: Provision of commercial activities on-campus)

The Plan anticipates provision of a variety of services and activities on-campus of a noninstructional character in support of the primary educational effort. General retail, franchised food outlets, personal services, rental of automobiles and recreation

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equipment, and entertainment facilities such as movie theaters, are examples listed. Cal Poly staff has stated that the recent University Union Master Plan was a major resource for defining the type and extent of the supporting uses, and will be attached to the Master Plan as an appendix. It would be helpful if the document were more readily available for community review prior to Plan adoption. The concept of providing such facilities and services, thus substantially reducing the need for off-campus trips by faculty and students, is sound. However, it needs to be balanced with community concern regarding duplication of services already provided off-campus, to assure that an atmosphere of unfair competition is not created, and that such uses do not draw from the larger community thus increasing impacts on adjoining residential areas. The provision of these facilities and services should be sufficiently explored prior to implementation to minimize community impact. If they are to be provided, utmost effort should be made for provision of the desired goods and services through contract, or other arrangements, with community sources. The potential of these services drawing non-students to the campus and further impacting the nearby neighborhoods should also be considered.

Page 128, Residential Communities, Feasibility

The Plan incorporates the admirable goal of providing new housing to accommodate any increase in the student population during the life of the plan. In this respect Plan policies conform to City General Plan policies (Land Use Element Section 1.4, and Housing Element Section 10.2.4) requiring mitigation of any additional impacts resulting from growth. New residential construction now underway (800 student beds) will be available early in the plan period, and development of the Request for Proposals for the next phases of student housing (approximately 1300 beds on two sites), as well as faculty and staff accommodations, is already underway. Given the incremental nature of housing production, during the early life of the plan this activity could actually result in an increase in housing supply that will exceed the growth in student population. The requirement that student housing be self-supporting, however, gives rise to community concerns that providing additional housing to accommodate all new students might not be realized under some circumstances. This section should more clearly elaborate on the source of housing development funds, the nature and operation of "partnerships", the likelihood of funds being available when needed, and the potential for the California State University System imposing their preferred 33% student growth rate on Cal Poly, rather than the locally proposed 17% increase that would be accommodated by planned new housing.

Page 137, Introduction (re: Heery Sports Facilities Master Plan citation)

Reference is made in the second sentence to the Heery Sports Facilities Master Plan, but a citation to this document does not appear elsewhere in the campus plan document, or the Draft EIR. Given the importance of the Heery Plan as a basis for the amount, location and development of sports facilities on campus, and the sensitivity of the adjoining community to potential impacts from the operation of the facilities, the availability of this document for reference should be made clear. If Cal Poly should build a new football stadium, it is the expectation of the City Council that it be designed with the full participation of the surrounding community. The Heery Plan should not be the sole or key basis for the design, size, or location of a new stadium. A new stadium design should

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avoid noise and light impacts on established neighborhoods and the City's open space areas to the greatest extent possible.

Page 138, third paragraph, last sentence (re: Mustang Stadium location clarification)

The Plan states: "The football program, however, will remain at its present location at Mustang Stadium during the initial phases of the Master Plan", and the Recreation/Sports Facilities Map on page 141 shows the stadium at its present location. However, succeeding discussion of the athletic field house, page 142, Mustang Stadium, page 143, and Mustang Stadium impacts in the Draft EIR at page 290, result in a concern among community residents that the "initial phases" of the plan (at least relative to the stadium location) may not be long-lived. These various sections, and perhaps others pertinent to this topic, should be better integrated and coordinated so that the adjoining residential community has a clear understanding of the actual potential for change of the stadium location. Any relocation of the stadium will likely be strongly opposed. As an alternative to moving the stadium, remodeling the present facility should be discussed in the Master Plan and EIR.

Page 164, Pedestrian Circulation Map

The designation: "Controls to Inhibit At-Grade Pedestrian Crossing" should also be shown along the railroad right-of-way bounding the west side of the instructional core.

Page 165, second bullet

The citation should be "Americans With Disabilities Act".

Page 165, third bullet (re: creek side trail)

The pedestrian path along Brizzolara Creek should be located outside the creek itself, or the adjacent riparian vegetation. The creek side trail should be shown to make use of the same creek crossing as the pedestrian path from the H-1, 2, and 3 residential areas to the campus instructional core to minimize the number of creek crossings.

Page 168, Campus Shuttle

An enhanced University leadership image, and additional air quality benefits, would result from employing electric or similar low-emissions vehicles for this service.

Page 170, second paragraph, last sentence

The referenced roadway section does not include an indication of pedestrian crossings.

Page 185, Parking Demand

The Plan proposes a reduction of 2,000 parking spaces at build-out as compared to the number required if present parking ratios were to continue. There appears to be no documentation in the Plan, or the Draft EIR, verifying the feasibility of this reduced

number of parking spaces, or the basis of its generation. Inadvertent omission of an appendix to the traffic study included in the EIR may be the cause. Thus, the reader cannot confirm the viability of this desirable goal. Additional text clarifying this situation is very important, as campus generated parking demand is of critical concern to adjoining residential neighborhoods, and overall community impact.

Page 194, Issues (re: Goldtree Site concerns)

The issues included in this section, Ancillary Activities and Facilities, appear to be only introspective to the campus environment. However, given the non-specific character of examples of potential uses for the Goldtree site, there is the unknown potential for significant community conflicts as well. Competition with community businesses, sprawl of urban uses into planned rural areas, and generation of urban impacts such as aesthetics, traffic, noise, and light and glare, as well as impacts to wildlife corridors and habitat, should be more thoroughly evaluated before committing to this land use on even a conceptual basis. As with the comments concerning retail and other non-instructional uses above (Page 106, Uses), there is substantial community concern for establishment by the University of subsidized competition with off-campus locations and providers of identical (or at least similar) services and facilities. The Plan should be made explicit regarding the nature of the proposed development, and that it will be non-competitive with off-campus community resources.

Page 210, Summary Environmental Impacts Table, Noise, Mitigation

The EIR should include the recommended mitigations from the 1997 Jones and Stokes Sound Study as feasible mitigations. Additional mitigation measures should be added as follows:

"Cal Poly will meet with neighbors early in project planning and design about projects that may affect them and have cooperative discussions on ways to relieve possible impacts."

"Other feasible mitigations that have been used for other stadiums such as berms, acoustical barriers, enclosing or partially enclosing the stadium, and sinking the stadium significantly below ground level, should be considered."

Page 211, Summary Environmental Impacts Table, Aesthetics, Residual Impact

The proposed Master Plan lighting mitigations are not adequate. The third box down in this column shows that Class II impacts would remain after mitigation of lighting and glare resulting from implementation of the Master Plan. The City Council finds that residual impacts of this magnitude, which affect off-campus neighborhoods, are unacceptable, and all such impacts should be mitigated to a Class III level. Cal Poly should consider a broader range of more effective lighting mitigations for the proposed football stadium, basketball stadium and large parting structure proposed for the sportsfield complex area in the Master Plan.

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Page 211, Summary Environmental Impacts Table, Aesthetics, Mitigation

The following statement should be added to the third box down to emphasize Cal Poly's commitment to community involvement: "Cal Poly will meet with neighbors early in project planning and design about projects that may affect them and have cooperative discussions on ways to relieve possible impacts".

Page 211, Summary Environmental Impacts Table, Aesthetics, Mitigation

The fourth box deals with lighting from parking structures. Fully shielded lights, or lights with internal and external louvers, avoid impacts on established neighborhoods and the City's open space to a greater extent than "hooded lights". City open space and some neighborhoods are not adjacent to Cal Poly. The following language should be added to this box: "All light fixtures must be fully shielded, or have internal and external louvers (whichever is most effective) to avoid glare and light spillover onto adjacent, and non-adjacent areas and onto public rights-of-way. Light trespass shall be avoided to all extent feasible".

Page 212, Summary Environmental Impacts Table, Aesthetics, Mitigation

In the second box down, and consistent with the immediately preceding recommendation, change the first sentence to read: "If this project were to occur, final design shall include all feasible mitigation measures possible to avoid light trespass, and light and glare visible to area residents".

Add the following statement: "All light fixtures must have internal and external louvers or be fully shielded (whichever is most effective) to avoid glare and light spillover onto adjacent, and non-adjacent areas and onto public rights-of-way. Light trespass shall be avoided to all extent feasible."

Add the following statement: "For new parking structures, new Mustang Stadium, the Slack and Grand area and the Goldtree area, add other feasible lighting mitigations such as: fully shielded lighting, internal and external louvered lighting, landscaping, enclosing or partially enclosing structures, lighting fixtures of non-reflective materials and horizontal lighting arms which are aimed in a downward direction".

Page 212, Summary Environmental Impacts Table, Noise and Aesthetics

The City Council requests that mitigation measures of all types, and particularly those dealing with noise, and light and glare impacts, be tied to standards of performance and enforceability. Mitigation monitoring plans should be created and implemented.

Page 213, Summary Environmental Impacts Table, Public Services, Mitigation

The third box down, first bullet, is a mitigation relating to water consumption on campus. The University should consider a policy statement in the Master Plan that the University will develop and implement a water demand management program which, at a minimum, will retrofit the existing campus with water-saving fixtures and ensure that all new development includes the installation of water-saving fixtures only.

The second bullet in this box deals with a drought contingency plan. The University should be aware that water shortage contingency planning is one of the required best management practices (BMP's) for all signatories to the California Urban Water Conservation Council's (CUWCC) MOA, and while the University may not be a member of the CUWCC, the City appreciates the University's consideration of adopting a drought contingency plan and recommends that the University consider adoption of all BMP's identified by the CUWCC. The City is signatory to the CUWCC MOA and does comply with the BMP's. The City would appreciate the University's consideration of adoption of the BMP's in the Master Plan, regardless of required mitigation.

Chapter 7, Implementation

Page 302, Table 6.23

It does appear that at least some information is lacking from Table 6.23 on page 302 of the DEIR and should be addressed in the FEIR. In the discussion of the Physical Plan Elements on pages 147 and 148 of the Master Plan, the discussion of the available water resources for the University includes two deep-water agricultural wells north of Brizzolara Creek that supply 450 acre feet of water per year for agricultural irrigation. The supply of water available from these two wells, and any corresponding demand they satisfy, should be included in table 6.23 for clarity. Once properly included, there may or may not be the identified deficit in available yield.

Page 333, Communication and Consultation (re: Community and Neighborhoods)

This four-page section is one of the most important to the long run success of the Plan, relative to the surrounding community. It documents a process of on-going communication and consultation that is intended to verify University concerns for its neighbors, and facilitate continuation of the interactive relationship established during plan preparation. It can be made even stronger through inclusion of a definitive description of the process that will be followed for Plan amendment, including early community notification, involvement and consultation.

Page 337, Studies, Standards and Guidelines

This section includes a number of proposals for Design Guidelines and Facility Standards, Focused Studies, and Area Studies that are intended to facilitate implementation of the adopted Master Plan. Some are already available, or in production. The list includes a significant number of items, but may not be comprehensive of all of the suggestions contained within the body of the plan text. The authors should assure that the list is comprehensive upon plan adoption.

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> Comments on the Proposed Ancillary Activities and Facilities Abutting Stack Street East of Grand Avenue

> In the interest of openness, I want to first be clear that my house at 160 Graves is only a stone's throw from where the proposed Visitors' Center and possibly other structures would be located according to the Master Plan. As one who may retire from full-time teaching in a year or two and possibly move, my comments are directed towards the future of the neighborhood where I have lived since 1983 rather than simply catering to my own wants.

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> The neighborhood is amazingly quiet given its proximity to the University and the fact that 50 percent or more of the houses are student rentals. One of the reasons for this happy state of affairs, I submit, is the buffer between the neighborhood and campus residence halls in particular and University structures in general. A second reason, already mentioned, is the mix of occupants in the immediate area.

> I wish I had been on campus last spring when, according to the DEIR, the proposal was first made to house a Visitors' Center adjacent to this quiet, residential neighborhood. Alas, I was teaching overseas and was thus not "in the loop" during the formative stages of the proposal. I realize I am submitting my comments at the 11th hour but that is, by itself, insufficient reason to have the proposal go forward if there are serious problems as I believe there are.

> When one talks about environmental considerations, you must be concerned both with natural habitat and human habitat. The maps and text of the DEIR designates the area in question as "Suitable for Facilities Expansion." In other words, it is not just a proposed Visitors' Center that is at issue but basically the reconstitution of the entire area. For instance, on page 195 one reads that the relatively small area may also be suitable for "additional conference facilities."

> What is particular disappointing is that those who put the DEIR together, I am told, refused to designate the ancillary structures as even leading to the possibility of "Potential Neighborhood Conflicts" (see map on page 58). Given that the map on page 61, for instance, shows the entire area in question as "Suitable for Facilities Expansion," it is hard to know how such a designation could escape being listed as one of Potential Neighborhood Conflict.

> In page xi of the Executive Summary it is stated that "the team [working on the DEIR], in most instances, [chose] the environmentally superior approach." I can only conclude that the word "most" was used because this case (and perhaps others) could not be classified as "environmentally superior." The Land Use Task Force, on which, as previously stated, I was a member, had a list of guiding principles. I'll quote six.

> 1. Strive for compact development of buildings and sites. New development should be concentrated in the campus core (There may be a difference in classification but I certainly question the proposal under discussion as being within the campus core.);

> 2. Campus land uses should be located so that adjacent uses are compatible with respect to their activities and environmental impacts;

> 3. Campus facilities, land use patterns, support facilities, signage, etc. should be compatible with their surroundings;

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> 4. The concerns of neighbors regarding traffic, noise, lighting, viewsheds, etc. need to be considered in conjunction with educational and facility needs of the campus;

> 5. Effective buffers should be established and maintained between campus lands and activities and natural or build environments of both campus & surrounding community;

> 6. Buffers should be provided to offer protection from dust, pesticide drift, odors, noise, visual, traffic and

public safety.

Letter 3

> The proposed ancillary projects will surely result in the destruction of a buffer between the campus and the adjacent community. The cumulative impacts including noise, lighting, traffic, aesthetics, and ambiance-will change this neighborhood forever. We often hear the phrase "urban sprawl." The proposed activities represent "campus sprawl."

> You will note that I have not uttered a single word about new housing south of Yosemite Hall. Development between Yosemite and the last line of trees before Slack Street is appropriate and still leaves the campus-neighborhood buffer. Perhaps the Visitors' Center or some other ancillary structure could be placed in that same general location. In other words, I understand the need for such a structure or even ancillary structures. The question is location, location, location. The DEIR location and the designation adjacent to Grand Avenue and Slack Street is simply wrong, wrong, wrong.

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> Other Aspects of the Plan

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> Others are commenting on the future student housing plans (designated as H-2 and H-3 on DEIR maps) near the north bank of Brizzolara Creek and the mouth of Poly Canyon. Again, as with Slack Street, there is the lack of adequate buffers. Similarly, the quarry south of Poly Canyon Road is an eyesore and an embarrassment. I shudder to think what close monitoring might discover.

> In order to lessen the "footprint" for future student housing, the planned parking component should be reconsidered. By building multilevel parking structures (either below- or above-surface), the land necessary for such structures can be reduced. In short, additional consideration should be given to building up or down, not out, when necessary.

> I am also unaware that provisions have been considered as to how students in the planned Brizzolara housing area will be fed. It's true that the new housing structures will consist of apartments with kitchens but I'm dubious how often they will be used. The last thing this campus needs are students driving off-campus for their meals or even driving to on-campus locations. This is an issue that needs to be confronted now, not later.

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> Concluding Statement

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> As mentioned at the outset, those steering the three-year Master Plan process are to be commended. Compared to other projects instituted during my almost three decades at Cal Poly, the Master Plan is a giant leap forward.

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> But as the Plan enters the crucial endgame, much remains to be done. Again, getting the job done quickly should not be the major goal; getting it done right is far more important. I know others have spent many hours in studying the Master Plan DEIR. So have I. We are talking about the next 20 years at least. Important matters have yet to be fully thought out. Having come this far we all need to make the extra effort to intelligently and with environmental-sensitivity deal with the remaining issues: As I wrote earlier, the remaining issues include both natural and human habitat.

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> Sincerely,

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> Dr. Richard Kranzdorf

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- > cc: San Luis Obispo Mayor Allen Settle
- > Councilmember John Ewan
- > Councilmember Jan Marx

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Councilmember Christine Mulholland Councilmember Ken Schwartz Sydney Holcomb, Chairperson, Residents for Quality Neighborhoods

Speech given by Naoma Wright at the December 5, 200 S.L.O. Council Meeting.

I believe that the future of the City of San Luis Obispo could hinge on the Cal Poly Master Plan.

If our City wants to attract clean industry such as the Computer industr it is obvious that we must have housing for the young families who will be em ployed in these industries.

If Cal Poly and Cuesta College will house the majority of their student: on their own large campuses as soon as possible, this would free our own San Luis Obispo housing stock for young families and maybe, just maybe, the "California Housing Crunch" which will become more severe as time goes on, wi be a little less severe in San Luis Obispo City. Otherwise, I believe that t future of S.L.O. and it's work force could stagnate with the conditions that exhist today.

We desperately need Cal Poly and Cuesta Colleges cooperation in this matter for the good of the University's fine graduates whom we wish to attra stay here and work here and live here, for the good of our industry, preand future, for the good of and the revitalization of our neighborhoods and for the good of young families who wish to live here for whatever reasons.

Working with Cal Poly and Cuesta College, we could become a model for t State of California by partially solving the housing crunch in our own area.

I am pleased and delighted that Chancelor Reed and President Baker and Cuesta College President Marie Rosenwasser will be working together to achi a solution to the student housing problem.

I wish to suggest here tonight that the City of San Luis Obispo make i a top priority to encourage these leaders to promote as much housing on the campuses as possible. I would also like to suggest that you appoint a Counc member and or a committee from the City to work with them as well.

Thank you for listening,

DAN WALTERS N SACRAMENTO Housing top issue

Did you hear about the young coutortain ple who sold their tract house for tool a million and a half bucks, bought a virtual mansion in Sacramento for a - 10 half-mil and are living high on investing the leftovers? Did you hear about the mayor

who resigned and moved to the Sacramento suburbs so that his family could afford a new home? Did you hear the one about the Silicon Valley techies who have formed a colony in lowcost Las Vegas and commute to

Dan Walters writes for the Sacramento

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and commute to San Jose by airliner?

Bee

California's population is growing by 550,000-600,000 people a year, which would translate into a need diary for something like 200,000 new housing units a year, based on tradi- 47 tional measures. But some economists believe that societal changes, CO such as the delay of marriage and .si2 the presence of millions of low-in-. 17 come immigrant workers, have slowed the formation of new house's the holds. Thus the true gross demand denti for housing in California is more like 150,000 units a year, just about what the housing industry is pro-1927. ducing.

That academic debate aside, there's no doubt that the geographic and economic imbalance exists, one that has raised local housing 'costs to stratospheric levels and is driving Bay Area workers to seek housing in more affordable areas, especially those in the Central Valley, and put up with daunting commutes. What's not so clear is what, if anything, political decision makers will do about it.

There are, in essence, three approaches to California's housing crunch. One is to build more, and probably much denser, housing near the burgeoning job centers; a second is to push job creation into areas with abundant housing, such as the Central Valley; and the third is to ease commuting through expansion of highways and mass transit.

While all three have their advocates, and are being pursued to one degree or another, there's nothing even approaching a statewide or even regional policy on correcting the housing-job imbalance because politicians are reluctant, for a variety of reasons, to confront the trade-offs the fashioning of such policy would require. Local officials are unwilling to relinquish their authority over land use, which tends to favor revenue-producing commercial or industrial projects over housing, state politicians are reluctant to intrude on land use because it would involve facing the equally touchy subject of local government financing, environmentalists more or less oppose any development anywhere, and business has shunned its implicit responsibility to balance jobs and housing.

Gov. Gray Davis and the Legislature have flung a little money at " housing — just enough to say that they've done something — but have balked at more direct involvement, such as assuming some land use authority or changing laws that discourage high-density condominium construction by making them atiraotive class-action lawsuit targets. And as long as that dereliction continues, and the economy remains strong, the housing crunch will become even more severe.

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Page 22

DECEMBER 3, 2000

STUDENT HOUSING

Cal Poly, Cuesta discuss project

COMMUNITY COLLEGE MULLS ON-CAMPUS DORM

SAN LUIS OBISPO

BY MATT LAZIER THE TRABUNE

Cal Poly and Cuesta College of ficials have begun meeting to discuss a possible joint student housing effort as both schools anticipate enrollment growth over the next decade.

Mike Hargett, Cuesta's vice president for administrative services, said Friday that the community college has started to look at how it could provide housing, particularly for those students who move to the area to attend Cuesta.

"The issue has gotten our attention," Hargelt said. "Until now, student housing hasn't even been in our vocabulary. We don't want to be in the business, but it looks as though we may have to.".

as though we may have to." Cal Poly officials have taken heat in recent years for not building more dormitories to handle their expanding student enrollment. But Poly brass are quick to point out that Cuesta enrollment has increased to more than 9,000 students, roughly half of them originally from outside San Luis Oblspo County.

Obispo County. Hargett met with his Cal Poly counterpart, Frank Lebens, and some of the university's administration and finance staff earlier this week to begin discussions that include the possibility of the two schools working together on a housing enterprise for the community college. Hargett described the discussions as very prelimi-

nary. Cal Poly President Warren Baker asid this week that he hopes to meet with Cuesta President Marie Rosenwasser in the coming weeks to further the discussion. The nature of such a coopera-

Please see HOUSING, A7

Housing

tive effort between the two schools is unclear. Baker said. But it could be key in helping to loosen San Luis Obispo's tight housing market. It may not provide a great deal of benefit to Cal Puly, but we do have ex-

"It may not provide a great deal of benefit to Cal Puly, but we do have experience in the area," Baker said. "It could help relieve the pressure in the community. It might involve us running it (a student housing complex) for them or consulting on the process." Cal Poly is also in the midst of developing plans for more housing on its campus, both for students and for new faculty.

Hargett emphasized that a partnership between Cuesta and Cal Poly is not yet written in stone. The community college will explore all sides of the issue, he said, and bring the information to the Cuesta College Board of Trustees.

"It all depends on what our board tells us to do," Hargett said. The maiter is expected to go to the board within a month.

The following pages were part of the original response to comments for Letter 3. The responses are keyed to these pages.

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CITY OF SAN LUIS OBISPO

FROM:

John Mandeville, Long Range Planning Manager

BY: Arnold Jonas, Consultant

agenda report

council

SUBJECT: Review and Comment on the October 10, 2000, Draft Cal Poly Master Plan Update and Environmental Impact Report

CAO RECOMMENDATION:

1. Consider the recommended comments outlined in the staff report, and any additional recommendations from Council Members and/or the public.

2. Authorize the Mayor to sign a letter forwarding the City's comments to the University.

REPORT IN BRIEF

This report provides the City Council with its second formal opportunity this year to provide comments to Cal Poly regarding its proposed Master Plan update. In addition, comments are also provided on the accompanying Environmental Impact Report.

The first opportunity for the City to comment on the Plan, the "Text Preview Draft", occurred on June 6, 2000. A number of suggestions were forwarded to University officials at that time. With few exceptions, City comments have been accommodated by revised text, evaluation in the Draft EIR, or will be addressed in further, more detailed studies that will follow adoption of the Master Plan document.

In this report, staff recommends that the University make further effort to accommodate the suggestions remaining from the June 6 review, in particular those submitted by the Residents for Quality Neighborhoods. In addition, the following concepts are strongly encouraged.

1.	Commitment to neighborhood preservation through redesignation of the remaining "ancillary activities" area at the Grand Avenue / Slack Street intersection to "natural	3-1
	environment", and addition of another double-ended arrow indicating potential neighborhood conflicts.	3-2
	·	

- 2. Designate the hill area above the dorms to "natural environment".
- 3. Incorporate provisions for retaining in open, undeveloped uses the lands shown as "outdoor teaching and learning".
- Elevate Stenner Creek to the same level of environmental protection and enhancement as Brizzolara Creek.

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Council Agenda Report—Cal Poly Master Plan Update Page 2

5.	Insure that retail and other support activities do not conflict with, or establish inequitable advantage over, similar facilities and services in the off-campus community.	3-6
6.	Reinforce the recognition that housing impacts are the major community concern for additional University growth, and make every effort to provide on-campus housing for the greatest possible number of students, including fraternities and sororities.	3-7 3-8
	Cite the Heery Sports Facilities Master Plan, and the Jones and Stokes Noise Study, and show their use in the evaluation of the future location of Mustang Stadium.	3-9
8.	Include documentation on the generation of the 2,000 space parking reduction.	3-4
9.	Clarify the purpose and potential future uses of the Goldtree site, and assure that any development there will not conflict with, or inequitably compete with, off-campus community resources.	3-12
10.	Include a definitive process for Plan amendment, which assures community involvement and consultation.	3-13

DISCUSSION

Background and Overview

The stated goal of Cal Poly's proposed new Master Plan is to provide principles and guidelines for the physical development of the University to sustain its distinctive mission as a polytechnic university into the 21st century. The Plan is designed to meet the educational needs of the campus, respond to external developments in higher education, and perhaps most importantly for the residents of San Luis Obispo, address the role of the University as a member of its larger community.

The current, or 4th, revision to the University Master Plan was adopted in 1970, and established an enrollment capacity of 15,000 Full Time Equivalent Students (FTES). Subsequent revisions to add or change building sites resulted from piecemeal planning for new projects - thus a major review was felt to be long overdue.

The projected increase in college-bound students in California referred to as 'Tidal Wave II' expands the need for higher education. The high demand for a Cal Poly education, particularly in programs not generally available at other public universities in California, brings that pressure to San Luis Obispo. The existing investment in specialized programs, the number and quality of applications for admission, and the economic and societal contributions of graduates all contribute to the perception of Cal Poly as a candidate for growth.

The Master Plan draft is the product of nearly four years, to date, of a joint Universitycommunity planning process at Cal Poly. During that time the University has involved large numbers of community members, including City residents, City Council members, City Advisory Body members, and staff, in various Task Forces and focus groups to assure that

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Page 3

community responsibility would be adequately accommodated in the final document. The Master Plan team applied principles from campus and community task forces to designate future land uses and develop physical plan elements.

As guidance for approximately the next 20 years, the Master Plan addresses academic program demand, physical and environmental constraints and opportunities, and capital and operating budget requirements to support a future enrollment of 17,500 net academic year, and 2,500 summer, full-time equivalent students (FTES). The Plan also anticipates a modest increase in technology-supported instruction and enhancements to curricula and advising to accelerate student progress to degree completion. Together these operational changes designed to increase summer enrollment, apply technology and facilitate student progress, are expected to increase college year enrollment by about 9 percent without increasing fall headcount.

The physical development portion of the Master Plan focuses on land use and circulation issues associated with increasing enrollment during the Academic Year, as this scenario involves the most extensive physical change on campus. Enrollment growth projections by Cal Poly, which are significantly below the 30% increase preferred by the Regents of the State University System, are for a 1.5% growth rate, considered a moderate growth rate by Cal Poly, translate into a Fall Quarter headcount (at the end of the Plan period) of approximately 20,900 students and about 3,200 regular faculty and staff - an increase of about 17 percent over present capacity. The increase is intended to be accomplished in phases, over approximately 20 years. The Master Plan redevelops and consolidates academic facilities within an expanded instructional core south of Brizzolara Creek.

At the same time, the Plan is designed to protect natural environmental features and agricultural lands that form the character of the campus. Two major components in this regard are the rehabilitation of a significant stretch of Brizzolara Creek currently used for instructional and support structures and related facilities, and administration of agricultural activities to minimize, or eliminate altogether, adverse impacts on sensitive habitat or biological areas on campus.

A central feature of the plan involves creating new student residential communities accommodating approximately 3,000 additional students on-campus, and provision of faculty and staff housing, outside the instructional core on University lands west of Highway 1, and possibly at other sites within the city. Student services, and recreational facilities, would be expanded commensurate with increased enrollment. Although parking may increase over existing numbers, the ratio of parking to students is planned to decrease during the planning period and emphasis on alternative forms of transportation to the automobile will be stressed.

The Master Plan takes a broad approach to the analysis of the most suitable future use of Cal Poly's lands in both San Luis Obispo and Santa Cruz counties, including management practices to protect the University's unique natural environment, and integration within the context of the larger surrounding environment (including the City of San Luis Obispo). The following is a summary of land use concepts included in the Plan.

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Natural Environment

Environmentally sensitive areas and assets are designated as an overlay, determined by physical and biological features of the land. Principle focus is on stewardship, protection and restoration.

Outdoor Teaching and Learning

"Living laboratories" (e.g., agricultural fields and units, ecological study areas, and design village) are central to Cal Poly's mission and will remain integrated with the campus. Sensitivity to the operation of these programs within the larger context of the campus ecosystem will be stressed.

Campus Instructional Core

Additional enrollment requires some expansion of the campus core for instruction and support. Principles focus on creating a compact, "student-friendly, learner-centered "area with more open space heavily emphasizing better pedestrian, bicycle, and alternative forms of transportation.

Residential Communities

New student housing complexes are conceived as living/learning communities, directly accessible to the campus instructional core. New undergraduate student housing on campus will reduce community impacts by providing housing to accommodate the whole of the projected student growth.

Recreation

Flexible outdoor recreational fields and indoor facilities will serve the changing student population.

Circulation, Alternative Transportation, and Parking

Circulation systems both provide access to the campus and movement within it. The Master Plan encourages alternative forms of transportation to reduce congestion and parking. Internal circulation focuses on "user-friendly" pedestrian, bicycle, and public transportation access.

Public Facilities and Utilities

Essential support facilities will be located outside the campus instructional core unless they require a central location to function effectively.

Support Activities and Services

A wide array of academic and support activities will be available to serve Cal Poly's diverse student, faculty, staff and visitor populations - in both the instructional core and new residential communities.

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Ancillary Activities and Facilities

A number of activities that serve the broader community as well as Cal Poly are considered complementary to the University's instructional mission. Not all of these facilities need to be provided within the campus instructional core, such as the applied research park, or conference center, being suggested for the Goldtree area in the northwest corner of the campus.

Master Plan Development Process

The Plan development process has extended over several years, and included direct community input via the various Task Forces established for that purpose, a number of public meetings, and circulation of a Text Preview Draft, the May 1, 2000 Preliminary Master Plan Draft, and now the October 10, 2000, Master Plan and Draft Environmental Impact report to Task Force members, interested regulatory agencies, and community organizations, groups and citizens, for review and comment.

Disposition of Previous City Comments

The May 1, 2000, Preliminary Draft plan was the subject of consideration by the City Council at their meeting held June 6, 2000. As a result of that meeting, a number of comments by city staff, Dr. and Mrs. Curtis Collins, and Residents for Quality Neighborhoods were forwarded to Cal Poly for consideration. Attachment A presents an annotated list of those comments, indicating their disposition relative to the current draft document. Cal Poly has prepared Attachment B, a response matrix for all comments received on the Preliminary Master Plan Draft.

With few exceptions, the city comments have been accommodated by revised text, evaluation in the Draft EIR, or will be addressed in further, more detailed, studies that will follow adoption of the Master Plan document. The Circulation and Parking section of the Plan, and the Draft EIR, addresses the Collins' comments. The RQN comments included a number of specific text proposals, which for the most part have not been incorporated into the current document. Cal Poly staff states that the proposed text was not incorporated because the total elimination of impacts on established residential neighborhoods, a basic precept of the RQN comments, is not technically possible. As a consequence, the University cannot promise to entirely eliminate impacts. They do note that the current version of the plan, and the DEIR, contain various sections that address the underlying issues raised by the RQN, and mitigate related impacts to the greatest extent possible. University officials also commit to working closely with neighborhoods as actual projects are developed, as the City has urged, and as further discussed later in this report relative to Chapter 7 of the Plan.

Cal Poly should continue to positively address the comments on the previous draft plan (Attachment 1) that were provided to them via the Mayor's June, 2000, letter. Although most of these earlier City comments have been addressed, as outlined in the analysis in Attachment 1, some continue to need further attention. Key among these are:

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1.	Additional consideration should be given to making a bolder, action based, statement promoting alternative transportation.	3-14		
2.	Additional policy language should be added to the Master Plan text to insure that City design policies and standards are followed to the greatest extent possible for all off-campus housing developments.	3-15		
3.	Cal Poly should make every effort to amend, or adapt, University System policy so that fraternal housing can be located on campus, as occurs at other state-funded universities.	3-16		
4.	The Jones and Stokes noise study for the Cal Poly Sports Complex should be referenced in the Master Plan, and its use in the preparation of the Plan verified.	3-17		
5.	The Plan should include a strong commitment to unified analysis and planning techniques with the City to facilitate a higher level of awareness and accuracy in both jurisdictions.	3-18		
6.	The proposed Parking Management focused study, included as an implementation effort, should be given high priority considering the importance of parking impacts, and the need for strong commitment to effective mitigation measures.	3-19		
7.	Inclusion of the suggested language by the Residents for Quality Neighborhoods relating to light and glare is appropriate considering the EIR evaluation, an interest in reducing the need to refer to the EIR as well as the Plan, and for clarity in the Plan text.	3-20		
8.	The Constraints Summary Map should be amended to include designation of the Goldtree site, and a double-ended arrow should be added at the southeast corner of the Slack Street/Grand Avenue intersection to indicate potential neighborhood conflicts in that quadrant of the intersection.	3-21 3-22		
9.	The language proposed by the Residents for Quality Neighborhoods relating to environmental consequences of planned residential uses near existing neighborhoods, and Highway 1, should be included in the Plan text to insure compatible development in those areas.	3-25		
10). The Plan text should be amended to clarify what constitutes a "commercial component", as well as the nature of anticipated uses in the instructional core and the Goldtree site to insure avoidance of impacts on residential neighborhoods, and potential competition with community business interests.	3-24		
1	1. Additional environmental review for future projects, as appropriate and necessary, should be confirmed by additional plan text.	3-2		
Comments on the October 10, 2000, Master Plan and Draft EIR				
Analy	vsis of the current draft has generated the following comments in addition to those of the			

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Ch.4, Existing Conditions

Page 58, Constraints Summary Map

The Constraints Summary Map includes several double-ended arrows showing general areas of potential neighborhood conflicts. An additional arrow should be added to the east side of Grand Avenue, south of Slack Street, to indicate that conflict potential will continue to exist in that area as well.

Ch. 5, Physical Plan Elements

Page 70, Land Use Map, San Luis Creek Watershed

This map includes several land use designations in the "outdoor teaching and learning" category, which covers the bulk of the campus property, encompassing all of the agricultural use and natural habitat areas. The steep hillside area to the east, or rear, of the residential dorm area is shown in the general outdoor classification, although it is otherwise surrounded by the "natural environment" category. Given the topography of this area, which does not appear suitable for agricultural use, and its relation to the campus core, this area should also be shown as "natural environment".

Page 71, Campus Development Map (re: Grand/Slack Neighborhood Interface)

The Campus Development Map has been modified from earlier versions so that it provides a diagrammatic indication of the ancillary facilities (additional residential dorms, and a visitors center, described at pages 194-195)) now anticipated for the Grand Avenue/Slack Street site. The impression now created is that the remainder of the site, which is at the campus/community interface, will be left in a natural state. Given the sensitive nature of this location to the nearby residential neighborhood the area should, therefore, be shown as permanently in open space. This can be done by removing the pink shading indicating the possibility of future development, and replacing it with the Natural Environment land use category.

Page 78, Stewardship (re: Open Space Protection)

The Plan text discusses the concept of "outdoor teaching and learning" and "environmentally sensitive areas" (first paragraph, Plan Components – Land Use Designations, page 67) as designations for the natural and undeveloped open areas of the campus, setting them apart from the more typical "open space" designation found in most land use plans. The implication is that the campus lands are potentially more heavily used, at least in part, than their non-university, "open space" brethren. Regardless of these distinctions, the Plan should incorporate a commitment to retaining these lands in open, undeveloped uses in a fashion similar to that of the City of San Luis Obispo open space lands.. The section at page 78, Natural Environment, Stewardship, would be a logical location for such a commitment. 3-26

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Page 8

Page 98, Other Creek Enhancement Activities (re: Protection/Restoration of Stenner Creek also)

This short paragraph deals with Stenner Creek, which flows in large part through lands used mainly for agricultural related uses. The text promotes activities to ensure no further degradation of the creek area. This is in contrast to the preceding discussion of Brizzolara Creek, its relationship to the campus core, and restorative and/or enhancement activities proposed for that waterway. The two streams comprise the major waterways on the heavily used part of the campus, and are shown in the same land use designation on page 70. Given that, they should be recognized as equivalent resources and be provided equivalent levels of protection and restoration. This would require a commitment to activities beyond arresting degradation on Stenner Creek, by extending and reinforcing the language on page 98 to activity levels afforded Brizzolara Creek.

Page 106, Uses (re: Provision of commercial activities on-campus)

The Plan anticipates provision of a variety of services and activities on-campus of a noninstructional character in support of the primary educational effort. General retail, franchised food outlets, personal services, rental of automobiles and recreation equipment, and entertainment facilities such as movie theaters, are examples listed. Cal Poly staff has stated that the recent University Union Master Plan was a major resource for defining the type and extent of the supporting uses, and will be attached to the Master Plan as an appendix. It would be helpful if the document were more readily available for community review prior to Plan adoption. The concept of providing such facilities and services, thus substantially reducing the need for off-campus trips by faculty and students, is sound. However, it needs to be balanced with community concern regarding duplication of services already provided off-campus, to assure that an atmosphere of unfair competition is not created, and that such uses do not draw from the larger community thus increasing impacts on adjoining residential areas. The provision of these facilities and services should be sufficiently explored prior to implementation to minimize community impact. If they are to be provided, utmost effort should be made for provision of the desired goods and services through contract, or other arrangements, with community sources. The potential of these services drawing non-students to the campus and further impacting the nearby neighborhoods should also be considered.

Page 128, Residential Communities, Feasibility

The Plan incorporates the admirable goal of providing new housing to accommodate any increase in the student population during the life of the plan. In this respect Plan policies conform to City General Plan policies (Land Use Element Section 1.4, and Housing Element Section 10.2.4) requiring mitigation of any additional impacts resulting from growth. New residential construction now underway (800 student beds) will be available early in the plan period, and development of the Request for Proposals for the next phases of student housing (approximately 1300 beds on two sites), as well as faculty and staff accommodations, is already underway. Given the incremental nature of housing

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production, during the early life of the plan this activity could actually result in an increase in housing supply that will exceed the growth in student population. The requirement that student housing be self-supporting, however, gives rise to community concerns that providing additional housing to accommodate all new students might not be realized under some circumstances. This section should more clearly elaborate on the source of housing development funds, the nature and operation of "partnerships", the likelihood of funds being available when needed, and the potential for the California State University System imposing their preferred 33% student growth rate on Cal Poly, rather than the locally proposed 17% increase that would be accommodated by planned new housing.

Page 137, Introduction (re: Heery Sports Facilities Master Plan citation)

Reference is made in the second sentence to the Heery Sports Facilities Master Plan, but a citation to this document does not appear elsewhere in the campus plan document, or the Draft EIR. Given the importance of the Heery Plan as a basis for the amount, location and development of sports facilities on campus, and the sensitivity of the adjoining community to potential impacts from the operation of the facilities, the availability of this document for reference should be made clear.

Page 138, third paragraph, last sentence (re: Mustang Stadium location clarification)

The Plan states: "The football program, however, will remain at its present location at Mustang Stadium during the initial phases of the Master Plan", and the Recreation/Sports Facilities Map on page 141 shows the stadium at its present location. However, succeeding discussion of the athletic field house, page 142, Mustang Stadium, page 143, and Mustang Stadium impacts in the Draft EIR at page 290, result in a concern among community residents that the "initial phases" of the plan (at least relative to the stadium location) may not be long-lived. These various sections, and perhaps others pertinent to this topic, should be better integrated and coordinated so that the adjoining residential community has a clear understanding of the actual potential for change of the stadium location. Any relocation of the stadium will likely be strongly opposed.

Page 164, Pedestrian Circulation Map

The designation: "Controls to Inhibit At-Grade Pedestrian Crossing" should also be shown along the railroad right-of-way bounding the west side of the instructional core.

Page 165, second bullet

The citation should be "Americans With Disabilities Act".

Page 165, third bullet (re: creek side trail)

The pedestrian path along Brizzolara Creek should be located outside the creek itself, or the adjacent riparian vegetation. The creek side trail should be shown to make use of the **3**-37

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Council Agenda Report—Cal Poly Master Plan Update Page 10

same creek crossing as the pedestrian path from the H-1, 2, and 3 residential areas to the campus instructional core to minimize the number of creek crossings.

Page 168, Campus Shuttle

An enhanced University leadership image, and additional air quality benefits, would result from employing electric or similar low-emissions vehicles for this service.

Page 170, second paragraph, last sentence

The referenced roadway section does not include an indication of pedestrian crossings.

Page 185, Parking Demand

The Plan proposes a reduction of 2,000 parking spaces at build-out as compared to the number required if present parking ratios were to continue. There appears to be no documentation in the Plan, or the Draft EIR, verifying the feasibility of this reduced number of parking spaces, or the basis of its generation. Inadvertent omission of an appendix to the traffic study included in the EIR may be the cause. Thus, the reader cannot confirm the viability of this desirable goal. Additional text clarifying this situation is very important, as campus generated parking demand is of critical concern to adjoining residential neighborhoods, and overall community impact.

Page 194, Issues (re: Goldtree Site concerns)

The issues included in this section, Ancillary Activities and Facilities, appear to be only introspective to the campus environment. However, given the non-specific character of examples of potential uses for the Goldtree site, there is the unknown potential for significant community conflicts as well. Competition with community businesses, sprawl of urban uses into planned rural areas, and generation of urban impacts such as aesthetics, traffic, noise, and light and glare, as well as impacts to wildlife corridors and habitat, should be more thoroughly evaluated before committing to this land use on even a conceptual basis. As with the comments concerning retail and other non-instructional uses above (Page 106, Uses), there is substantial community concern for establishment by the University of subsidized competition with off-campus locations and providers of identical (or at least similar) services and facilities. The Plan should be made explicit regarding the nature of the proposed development, and that it will be non-competitive with off-campus community resources.

Chapter 7, Implementation

Page 333, Communication and Consultation (re: Community and Neighborhoods)

This four-page section is one of the most important to the long run success of the Plan, relative to the surrounding community. It documents a process of on-going communication and consultation that is intended to verify University concerns for its

Council Agenda Report---Cal Poly Master Plan Update Page 11

neighbors, and facilitate continuation of the interactive relationship established during plan preparation. It can be made even stronger through inclusion of a definitive description of the process that will be followed for Plan amendment.

Page 337, Studies, Standards and Guidelines

This section includes a number of proposals for Design Guidelines and Facility Standards, Focused Studies, and Area Studies that are intended to facilitate implementation of the adopted Master Plan. Some are already available, or in production. The list includes a significant number of items, but may not be comprehensive of all of the suggestions contained within the body of the plan text. The authors should assure that the list is comprehensive upon plan adoption.

Conclusion

The Master Plan is a well-written, logical document that deals with a number of issue areas associated with operation of the University. Once adopted and implemented, it has the potential for bringing order and greater efficiency to use of University resources, while fulfilling an even larger educational role than at present. Plan implementation should also reduce the impact of the University on the surrounding community, even with an expanding student population. The Plan contains proposals for reorganization, redevelopment and intensification of various land uses that are consistent with contemporary urban planning theory. Intensification of the instructional core, relocation and extension of circulation facilities, provision of perimeter parking facilities convenient to major university entrances, promotion of alternative modes of transportation, designation of protected natural areas, and an enlightened housing policy exemplify beneficial design features. At its heart, the Plan is driven by the educational function of the University, and thus contains a number of curriculum, organizational structure, and other elements that are of little direct concern to the city residents.

While this may be true, most persons in the community are concerned with those aspects of the plan that directly impact them and their daily lives, such as student housing, automobile traffic parking, and noise. The City provides a vital link between the University and the community and has, therefore, focused its earlier comments, and those proposed in this report, on these concerns. A continued responsiveness to our comments, along with those offered by RQN, can go a long way toward addressing long-standing concerns and will usher in a new era of cooperation regarding campus growth and development issues.

Finally, one of the most significant contributions of the Master Plan is the open and inclusive process that has been followed during its development. A new paradigm of campus-community interaction has been established by utilizing community task forces, multiple, progressive draft document review, and public meetings for comment. University President Baker has stated that the Plan is intended to be a living document, and that he expects cooperative interaction to continue into the future. Continuing review and improvement activities could begin as early as the first quarter of 2001. The City is enthusiastic about participating in this opportunity to jointly guide the future development of our community and its surroundings. Through such cooperation,

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realization of the University's educational goals can be achieved in the most effective and least disruptive manor to the larger community in which it is located.

CONCURRENCES

The Police Chief, Neighborhood Services Manager, Transportation Planner, Assistant City Administrative Officer, Assistant to the CAO, Economic Development Manager, Natural Resources Manager, and Long Range Planning Manager participated in the preparation of this report.

ATTACHMENTS

- 1. June 12, 2000, letter from Mayor Settle
- 2. Disposition of City Comments from the June 6, 2000, City Council Meeting
- 3. Response Matrix for all comments received on the Preliminary Draft Master plan, prepared by Cal Poly
- 4. Draft letter from the Mayor concerning the current Draft Master Plan





city of san luis obispo

OFFICE OF THE CITY COUNCIL 990 Palm Street = San Luis Obispo, CA 93401-3249 = 805/781-7119 = FAX 805/781-7109

June 12, 2000

Warren Baker, President California Polytechnic State University San Luis Obispo, CA 93407

Dear Dr. Baker:

First, on behalf of the San Luis Obispo City Council, we wish to thank you for the inclusive and open process that has been followed in your preparation of the Preliminary Draft of the Cal Poly Master Plan. Allowing the various stakeholder groups to have early, substantive input has resulted in a document that appears to be very well done and broadly supported. Everyone associated with production of the document are to be commended for the effort.

As you know, the Preliminary Draft was initially introduced to the City Council in April. Since that time our staff has had the opportunity to review it in detail. On June 6, 2000, the City Council considered our staffs' recommendations, along with added public input. We now offer our formal comments on the draft, which are attached. We ask that you incorporate into the final draft as many of our suggestions as possible.

To put our comments into context, we recognize that the Master Plan effort is primarily driven by the University's educational function, and so it contains several elements that are of little direct concern to our residents (i.e. curriculum, organization). Therefore, we have focused our comments on what most of residents are concerned with, which are those plan aspects that directly impact them in their neighborhoods – for example, student housing, automobile traffic and parking, lighting and noise. In this regard, we are also forwarding suggestions provided by Residents for Quality Neighborhoods (RQN). RQN represents those most directly affected by on-campus activities and development, and we ask that you give their suggestions very serious consideration.

Our single, strongest recommendation has to do with implementing the plan. We ask that you assure that the necessary resources are in place – and accountability appropriately assigned – so that future changes on campus are managed with a sincere commitment toward protecting existing neighbors. "Keeping the faith" in this regard is simply essential, if we are to overcome trust and other issues that have surrounded enrollment and campus growth issues for many years.

In closing, we wish to thank you once again for your diligence and inclusiveness in preparing a plan that not only addresses the needs of the University, but that is also sensitive to the very legitimate concerns of residents. This kind of continuing partnership bodes well for the future. We look forward to working with you as the plan is implemented over the next several years.

Sincerely,

Allen K. Settle Mayor

Attachments: 1. City Comments 2. RQN Comments

6

The City of San Luis Obispo is committed to include the disabled in all of its services, programs and active **13** Telecommunications Device for the Deal (805) 781-7410

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ATTACHMENT 2 RG. 1

DISPOSITION OF CITY COMMENTS FROM THE JUNE 6, 2000, CITY COUNCIL MEETING

Bold, italicized text relates to the disposition of each comment based on the October 10, 2000, Cal Poly Master Plan and Draft Environmental Impact Report

Ch. 2 - Guiding Framework

Pg. 13, Transportation Programs (Question 3, second bullet) Page 1 of 15

Solving transportation and access issues for the Cal Poly population is equally important with that of the housing issue. Commitment should be shown for addressing this area by having the transportation policy read as follows:

1. "Taking actions that cause students, faculty and staff to shift away from automobiles toward alternative transportation systems..."

Language unchanged. Additional consideration should be given to making a bolder, action biased, statement promoting alternative transportation.

Pg. 35, Question 3 - f.

Should include specific mention of resources such as sewer, water, etc. If the Plan is to be "self mitigating" there needs to be more focus on essential services (particularly water and sewer), and close coordination with service provider – the City.

The Master Plan includes a listing of current and projected Studies, Standards and Guidelines, starting at page 337, that are intended to facilitate implementation of the adopted Master Plan. Included is an item titled "Utility Capacity and Distribution Studies", which will respond to this comment. The Plan also includes a specific section titled "Communications and Consultation", page 333, which defines a commitment to interaction with appropriate community agencies, groups and individuals during Plan implementation.

Ch.3, Long-Range Enrollment Scenarios

Pg. 25, No More On-Campus Academic Year Enrollment

Cal Poly should give additional consideration to the use of evening programs to increase student capacity without increasing the Full Time Equivalent Students (FTES) maximum. A well-planned and administered evening program would provide class availability to regular students who have employment or similar

ATTACHMENT 2 PG. 2

conflicts during the day, as well as other community members who might not otherwise be able to take advantage of the University resource.

Reflected in revised text, pages 26 and 27.

Pg. 27, Cal Poly Past and Alternate Future Growth Rates

Cal Poly should work with the City when considering significant growth scenarios, relative to impacts to services and resource capacity. The City plans its resource capacities, e.g. sewage treatment upgrades, based upon a 1% planning growth rate. If Cal Poly accelerates its growth, it may outpace the capacity of shared City services. This should be recognized and addressed by the Master Plan.

Utilities Capacity and Distribution Studies, and consultation with the City, are proposed, pages 333 through 338. Cal Poly staff indicates that the preferred 1.5% growth rate would not result in deficiencies in water supply when evaluated using the City's stringent drought analysis criteria.

Pg. 27, Enrollment Projections (table of numbers)

Re-title "1999 Baseline – no increase in FTE" to "Current master plan limit: 15,000 FTE." By including the date the reader can confuse the "Base Line" scenario with the actual 1999 enrollment forecasts.

Title changed.

Ch.4, Existing Conditions

Pg. 46, Existing Conditions, Constraints and Opportunities Analysis: Railroad

Union Pacific is probably not the only constraint to the location or relocation of "at grade crossings." The California Public Utilities Commission (PUC) may also be involved in approving new locations.

Text amended to reference Public Utilities Commission.

Pg. 49, Existing Conditions, Constraints and Opportunities Analysis: Traffic

Highland Drive west of the Cal Poly campus is another student-impacted area where residents have complained about traffic speeds and volumes. The Murray Street area and bridging streets between California Boulevard and Grand Avenue – e.g. Fredericks Street – would also likely be affected.

Reference to Highland Drive included in revised text.

ATTACHMENT 2 PG. 3

Ch. 5, Physical Plan Elements

Pg. 59, Circulation, Alternative Transportation and Parking

The first sentence of this section states, "... most students, faculty and staff continue to commute by car." This plan section would benefit from a clear policy statement concerning how people should access the campus, and the purpose of on-campus parking.

Identified text (now located on page 69) is unchanged. However, pages 176 through 180 of the current text accommodate a specific section titled "Alternative Transportation". The initial sentence of that section indicates the importance of alternative transportation concepts to the campus community and the successful implementation of the plan. It reads: "The need to bring people to campus in a more efficient and environmentally responsible way is so important that the subject merits a separate element in the Master Plan".

Pg. 62, Faculty Housing West of Highway 1 (paragraph 3).

The plan states that faculty and staff housing may be built west of Route 1. One the physical challenges in developing this site is the potential visual impact of multistory housing at this location. The City's Scenic Highway Section of its Circulation Element shows the adjoining highway section as having high value and the panoramic views of the Morros, with the City in the foreground. Therefore, lower scale structures should be considered – regardless of the type of urban land use that is established there.

A Master Plan implementation study titled "Highway 1 Housing Sites Study" is proposed at page 339, including coordination with CalTrans and the City. The Draft EIR also notes that consultation will be required. Additional policy language should be added to the Master Plan text to insure that City design policies and standards are followed to the greatest extent possible.

Pg. 71, Riparian Corridor Protection and Restoration.

This section should mention recognition of Cal Poly's responsibility for "watershed protection" as well, to ensure that on campus activities, e.g. agricultural operations, don't negatively impact water quality. Riparian buffers may be insufficient on their own to ensure water quality protection. Nowhere in this chapter is water quality mentioned as either an issue, or as a plan component.

Water quality is addressed in the Draft EIR, pages 230 – 233. The conclusions are that water quality impacts resulting from plan implementation will be at, or can be mitigated to less than, significant levels.

ATTACHMENT 2 FG.4

Pg. 73, Best Management Practices.

Best Management Practices should extend beyond physical features, e.g. slope banks and riparian corridors, and include greater emphasis on operational programs, such as agricultural practices, dairy operations, farm waste disposal/management, and hazardous waste management.

The development of Best Management Practices (BMP) is included in the Implementation Chapter, page 338. BMPs are referenced in the Outdoor Teaching and Learning section, pages 86-99, relative to program issues as well as physical concerns.

Pg. 45, Plan Components - Overall Future Land Use (paragraph 4)

Presumably, the environmental impact report being prepared will evaluate the traffic impacts on the parking garage planned near the California-Foothill intersection. The EIR needs to look at alternative designs for the intersection including the western leg of Foothill Boulevard where it crosses the railroad. Under current conditions, the presence of the railroad complicates this intersection's operation. And, it is especially unfriendly for bicycle and pedestrian access.

This issue is evaluated in the Draft EIR, with the Foothill/California intersection being projected at Level of Service (LOS) D following Master Plan implementation. LOS D is acceptable by City standards.

Pg. 112, Residential Communities, Existing Conditions and Issues, Issues (Off Campus Student Housing)

The plan mentions competition between Cal Poly and Cuesta students for offcampus housing. From the community's perspective, another issue that must be addressed is competition of non-student households for rental housing with both Cal Poly and Cuesta students, and the cost disadvantage that they face. Maybe this could be identified as a positive effect of accommodating enrollment increases through the expansion of on-campus housing and through mandatory Freshman residency.

Non-student housing needs are recognized in the revised text at page 126.

Pg. 121, Off-Campus Student Housing Programs

There will be continued interest in cooperative efforts between the City and Cal Poly to explore on-campus options for locating fraternities. If it has not already been done, this factor could be explored as part of the residential communities component of the Plan.

ATTACHMENT 2 PG.5

The Plan notes at page 136 that State University policy requires nondiscrimination in all on-campus housing. Fraternal and other organizations having qualified membership must, therefore, be located off-campus. In the short-run this approach conforms to City General Plan Housing Element Policy 8.3.4. However, that same policy promotes the long-run location of fraternity/sorority living groups on-campus.

Pg. 130, "Environmental Consequences" boxes

The 1997 EIR for the Cal Poly Sports Complex is referenced in these boxes. In addition, the August, 1997, Final Sound Study for the Cal Poly Sports Complex, prepared for the City by Jones and Stokes Associates, Inc., should be referenced and utilized during preparation of the environmental impact report for the Plan.

The Draft EIR discusses noise impacts on page 290 through 292. The Jones and Stokes study is not currently referenced, but should be to indicate and verify its use in preparing the document.

Pg. 141 (paragraph 4), Circulation

The plan seems to imply that off-campus bikeways are discontinuous. While this statement may apply to east-west pedestrian travel (which is complicated by the railroad), the City has installed continuous bike lanes leading to campus on Foothill and California Boulevards and on Grand Avenue. Bike lanes are also provided by the State on Route 1. Bike lanes may also be considered on Slack Street west of Grand Avenue (an active study item of the City's Bicycle Committee). In any case, the coordination and integration of bicycle routes on and off campus is critical to achieving the greatest level of success from this transportation mode. Also, the City has provided bicycle lanes and sidewalks that connect adjoining neighborhoods to the south of the Cal Poly Campus, thereby helping facilitate two additional alternative modes. In fact, installing bike lanes on all streets leading to the campus was our top priority.

Plan text, page 156, was modified to recognize this comment.

Pg. 143, Bicycle Friendly

Based on random-sample surveys conducted by the City of San Luis Obispo in 1990, 1997 and 1999, Cal Poly students have steadily reduced their use of bicycles while vehicle usage has increased. Improving bikeways on campus and reducing conflicts with motor vehicle traffic can help to reverse this trend. Cal Poly should also look at other incentives that might be provided such as the "Trip Reduction Incentive Program" established by the City for its employees – which might be adapted to address student and Cal Poly employee modal choices.

ATTACHMENT 2 PG 6

Incentives are discussed on page 178, and a Bicycle System study is included as a Master Plan implementation effort at page 338.

Pg. 158, Principles

Cal Poly should provide for specific consideration of the future use of recycled water as a component or principal of this Master Plan. Cooperation with the City in the development of its water reuse program where feasible, would fit nicely with many of the principals for sustainability, resource conservation and integration of the campus with the community that already contained in the Plan.

Development of a "second use" water system for landscape irrigation is now included at page 154.

Pg. 162, Alternative Transportation, Plan Components

Here are a few additional thoughts:

- Involve the Transportation Engineering, Architecture, City and Regional Planning, Natural Resources Management Departments, and others, in integrating multi-modal concepts into their curricula and sponsoring demonstration projects and activities.
- Ensure that all new student housing projects include conveniently located and secure enclosed storage space for overnight bicycle parking, and short term bike racks for daytime access.
- Include in the Plan modal split objectives that allow for measuring the performance of transportation and parking programs, as recommended by the Circulation Task Force. Including them will allow translation of the associated goals into measurable targets that then can be tied to monitoring programs.
- Prepare and adopt an Alternative Transportation Enhancement Plan (ATEP) that spells out exactly how the broad programs described on page 123 will be implemented. This plan would also address mechanisms for reducing parking demand referenced on page 126.

These and related ideas will be addressed in the focused implementation study "Access and Alternative Transportation", noted on page 337, that is now underway.

Pg. 163, Modal Split Table

ATTACHMENT 2 PG.7

The modal split information included in the Plan indicates that almost 40% of the students are commuting to school by walking. The City's own random sample of households with San Luis Obispo show significantly different results, although both show a significant decline in the use of bicycles. Cal Poly and the City should work together to develop a unified approach that provides the best information.

No change in current text. The Communication and Implementation section, beginning on page 333, promotes cooperation between the University and the City in these types of planning activities. University commitment to this type of cooperation will facilitate a higher level of awareness and accuracy in both jurisdictions.

Pg. 170, Parking, Parking Demand

It is difficult to evaluate the significance of the 2,000 parking space reduction without understanding what percentage of the new parking demand this figure represents. This percentage would better illustrate Cal Poly's commitment to demand reduction strategies. Also, it would be helpful to present the change in parking ratios between the current base year situation and the forecast year of 2021.

The revised text does not include a percentage relationship of the parking demand numbers. Page 185 does include a statement regarding the production of a campus access and parking management plan to implement the Master Plan, and a Parking Management focused study is included in the Implementation section, page 338. This study should be given high priority considering the importance of parking impacts, and the need for strong commitment to effective mitigation measures.

Pg. 170, Parking, Freshman Parking

Strict controls on the use of automobiles by Freshmen, and all students who live within a specified distance from campus (say one mile), are especially attractive and are strongly supported by the City. Combined with other measures, they represent a proactive method for Cal Poly to address an important part of the parking and traffic congestion issues.

Freshman Parking, and Geographic (parking) Controls are included at page 185.

COMMUNITY COMMENTS

By telephone message to City staff, Dr. and Mrs. Curtis Collins, residents of Fredericks Street, expressed concern for exacerbation of parking and traffic problems in their neighborhood, particularly if the student population increases.

Parking and traffic problems in residential neighborhoods adjacent to campus are the concern of a number of community residents. The Circulation and Parking

ATTACHMENT 2 PG.

sections of the Master Plan, as well as the Draft EIR analysis pay particular attention to these issues. A number of policies and mitigations are included in various sections that aim to alter the use of automobiles by faculty and students, and thus reduce these impacts to acceptable levels.

RECOMMENDATIONS FROM RESIDENTS FOR QUALITY NEIGHBORHOODS FOR PRESERVATION AND PROTECTION OF RESIDENTIAL NEIGHBORHOODSIN THE CAL POLY MASTER PLAN (AND INITIAL ENVIRONMENTAL STUDY)

1. RECOMMENDATION:

The Cal Poly Neighborhood Relations Task Force, hereinafter referred to as the "Task Force" contains the following simple Guiding Principle for Planning New Development on Campus";

"New development on campus shall be designed to <u>eliminate</u> impacts on established neighborhoods, rather than to create designs that generate ongoing conflicts between the University and residential neighborhoods."

Action: Add this guiding principle directly in the text of the master plan.

Rationale: This demonstrates a real commitment to neighborhoods.

Recommended text not added to Master Plan. Cal Poly staff feels that the Master Plan and its associated Draft EIR mitigate the anticipated impacts (on and off campus) to the greatest extent possible, but that it cannot be promised to eliminate impacts entirely in either area.

2. OTHER RECOMMENDATIONS: (additions are in underlined italics)

Page 13, Question 3, last bullet

Action: Change to read: "Planning future campus facilities so as to mitigate environmental impacts <u>on and off campus</u> as part of the project design"

Rationale: Question 3 deals with impacts of enrollment growth on the character and resource capacity of the surrounding communities. This answer makes that clearer.

Cal Poly staff states that the Master Plan / EIR process was structured to mitigate impacts (on and off campus) as the Plan was developed, through various appropriate changes to the Plan design. In many cases, future implementation of the various Plan programs and projects will require additional environmental evaluation to assure adequate mitigation based on a more complete understanding of project details. .

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ATTACHMENT 2 PG. 9

Page 28. Paragraph 4

Action: Add the following, so that the paragraph reads: "First, campus policy regarding the number or proportion of students to be housed on campus contributes directly to the continuation and reinforcement of Cal Poly's character as a residential university. <u>There</u> is an existing shortage of affordable, desirable housing on campus. <u>This should be corrected</u>. The assumption guiding the Master Plan is the principle that Cal Poly should provide housing on campus for as much of this existing shortage as possible and for all additional undergraduate students. This principle includes provision of appropriate housing types, support services and amenities to enhance the residential environment as a place for learning." **Rationale:** This is Task Force recommendation # 1, page 6-13 of the staff report. It acknowledges the EXISTING, large backlog of housing shortage on campus which has resulted from not building housing for many years, as welt as projected future shortages.

Suggested text changes are not included. The Plan section Residential Communities, beginning at page 124, states that with the addition of 3,000 beds during the plan period approximately one-third of the undergraduate student population can be housed on-campus. Planned faculty and staff accommodations would further mitigate the housing impact of enrollment expansion. Appropriate locations for university related residential development, and funding to produce such housing, are restraining factors on the total amount of housing that can be provided.

Page 47. Last paragraph continuing on Page 49

"Policy Constraints"; [This is under the "Existing Conditions", section of the Master Plan and it describes the four impacts of new campus development on neighborhoods. It also contains the only discussion of "Neighborhood Disputes" and neighborhood agreements in the Master Plan.]

Action: add a final sentence so that the paragraph now reads, "This category includes areas where campus or California State University policy differs from city and county regulations and practices, neighborhood disputes, and issues of concern to students, staff and faculty. Dealing with these issues on the sports complex and parking structure has resulted in agreements between Cal Poly and adjacent neighborhoods to mitigate impacts. <u>"To eliminate ongoing conflicts between the University and established residential neighborhoods, the University shall be proactive in <u>enforcing its agreements, rather than reactive and complaint</u> <u>driven."</u></u>

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ATTACHMENT 2 FG. IC

Rationale: This is a Task Force recommendation for proactively eliminating ongoing conflicts between Cal Poly and neighborhoods.

The suggested text is not included in this paragraph, now located at the bottom of page 57. Cal Poly staff respond that the Master Plan / EIR process itself is proactive in anticipation of change and inclusion of appropriate mitigation. In particular, Chapter 7, Implementation, is seen as continuing community dialog into the future in a proactive fashion.

Background:

Both the Sports Complex and the Performing Arts Center parking structure mentioned above are defined in the Master Plan as "Facilities Ancillary Activities". The Task Force also addressed this type of campus facility:

"It should be recognized that large, new developments on campus which are dependent on both the student population AND a large commercial draw from non-student populations, may have significantly larger impacts on residential neighborhoods than those developments which depend upon the student population alone. Developments with a commercial component may also require proportionately larger efforts and costs to eliminate negative impacts on established residential neighborhoods." Task Force recommendation #7, page 6-12 of the staff report.

Page 49. "Light and Glare"

Action: Change sentence to read, "This issue was important with the sports complex and parking structure, but <u>these impacts will be</u> mitigated by appropriate design".

Rationale: This is the one sentence in the Master Plan which proactively addresses light and glare impacts generated by campus development. This more clearly incorporates Task Force guiding Principle #2.

The suggested text is not included in this paragraph, now located at the top of page 59. Cal Poly staff indicates that the Draft EIR evaluates light and glare impacts and mitigation on pages 294 and 295. Inclusion of the proposed text is appropriate in light of the EIR evaluation and reducing the need to refer to that document, and for clarity in the plan text.

Page 49. 'Traffic"

More detailed mitigations are on pages 140 -164 in 'The Circulation Chapter", 'the Alternative Transportation Chapter', and 'The Parking Chapter". The city staff report also contains many comments on traffic impacts.

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ATTACHMENT 2 RG. 1

Page 49. "Noise"

Action: Delete existing sentence and replace with the following: "This issue was important with the sports complex, but these impacts will be mitigated by appropriate design."

Rationale: The first sentence makes this consistent with the "Light and Glare section above. It also incorporates the guiding principle of the Task Force, that new development on campus shall be designed to eliminate impacts on established neighborhoods.

The suggested changes have not been made to this paragraph, now located on page 59. Cal Poly staff indicates that the Draft EIR evaluates noise impacts and mitigation on pages 288 through 292.

Page 48, Constraints Summary Map.

Comment noted. Response not required.

Action: This map should be expanded to show the Goldtree site in the Cheda Ranch to the North. The Goldtree site is shown on page vi as an "area suitable for ancillary activities and facilities" and described on Page 180 as having 35 acres with potential for development of "ancillary activities and facilities".

There should also be a "red arrow" signifying a "potential neighborhood conflict" placed on the east side of Grand Avenue at Stack Street in the Monterey Heights Neighborhood. This area is also identified on **Page 179-80** as "one potential site for ancillary facilities".

The Constraints Summary map remains unchanged, but should be amended to include designation of the Goldtree site. The Goldtree area does appear on other maps, for example the Land Use map on page vi. The Goldtree site and related constraints are discussed in the text at pages 59-60, and 195-197. Chapter 7, Implementation, includes a proposed "Goldtree Area Service Provisions" study. Regarding the potential neighborhood conflict designation for Slack Street, east of Grand, Cal Poly staff comments that the map shows general areas of conflict rather than specific blocks or streets.

Page 49. "Development of New Areas"

Action: Add the following sentences to the end of the paragraph: <u>The</u> <u>university should develop or maintain adequate natural or physical</u> <u>buffers between established residential neighborhoods and existing</u> and future developments on the campus to avoid negative Impacts. <u>Because these are adjacent to existing residential neighborhoods, the</u> <u>uses will be compatible and new development will be designed to</u> 58-9

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ATTACHMENT 2 RG. V.

eliminate impacts on the neighborhoods. Rationale: This is a recommendation of the Task Force to eliminate potential conflicts with neighborhoods. Page 6-12, #8 of the Staff Report.

Cal Poly staff notes that, with the exception of an expanded visitor's center at the northeast corner of the Grand/Slack Street intersection, page 194, and an informal recreation field at the northwest corner of the same intersection, page140-142, no new development is proposed adjacent to residential neighborhoods.

Page 50. "Satellite Development"

Discussion: The Goldtree site in the Cheda Ranch near Stenner Creek Road and Hwy. I is identified on the map on page vi as one of two areas "suitable for ancillary activities and facilities". Is this the site being discussed?

Yes. See discussion at pages 59-60, and 193-197.

Page 54. "Issues"

Discussion: This is great and is incorporated into the "compatibility" principles on Page 55

Comment noted; response not required.

Page 120. "Environmental Consequences" bottom box.

Action: Change this to read: "These two sites are adjacent to single family neighborhoods. The northeast corner of Slack and Grand is currently undeveloped and is bisected by a vegetated drainage. Development will be carefully designed to eliminate visual, noise, traffic, and light Impacts and to protect both natural features and the integrity of the nearby neighborhood. [It should be identified on the Constraints Summary on Page 48 as having visual, noise, traffic, and light impacts]. The parcel to the west of Santa Rosa is currently undeveloped. This intersection of Scenic Hwy. I and Highland Drive is a gateway entrance to both Cal Po/y and the City of San Luis Obispo. The City's Scenic Highway section of it's circulation element shows the adjoining highway section as having high value arid a panoramic view of the Morros, with the City in the foreground. It is adjacent to, and higher than a neighborhood of single story, single family homes to the west. Development will be carefully' designed to preserve the panoramic view of the Morros from the intersect/on of Highway I and Highland Drive and to eliminate visual, noise. and light impacts on the adjacent single story, single family neighborhood.



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principle. Comment noted; response not required. Page 130. "Environmental Consequences" first box Action: Add last sentence: The 1997 "Sound study for the Cal Poly Sports Complex" was also done. This facility shall be designed to eliminate noise, light, and visual impacts on and off campus. Rationale: Internally consistent and it incorporates the guiding principle of the Task Force. Specified text now at page 143. Suggested additional text has not been included. Additional wording which addresses this comment has been added at pages 143-145, and in the Draft EIR at pages 288-292. Cal Poly staff notes the need to cite the Jones and Stokes 1997 sound study more explicitly. Page 130. "Environmental Consequences" second box Action: Add a second section," The 1997 "Sound study for the Cal Poly Sports Complex" was also done. This facility shall be designed to eliminate noise, light, and visual impacts on and off campus. Rationale: Internally more consistent and incorporates the Task Force guiding principle. Now located on page 144, the text of the referenced "environmental consequences" box has been changed, but does not include the suggested additional language because impactss cannot be "eliminated", but instead must be mitigated to an insignificant level . See response to preceding comment. Page 131. "Environmental Consequences" second box Action: Add sentence, "This facility will be designed to eliminate these impacts". Rationale: This is the Task Force guiding principle. 1B-26

The suggested text is not included. The area near the Grand/Slack Street intersection is being proposed for 136 beds of upper division or married student housing. See pages 130 and 132. Pages 134-136 discuss the staff/faculty housing proposed for two sites west of Highway 1, north of Highland. Housing is evaluated at several points in the Draft EIR.

Page 129. First paragraph, last sentence.

Discussion: This is very good. It parallels the Task Force guiding

Letter 3

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ATTACHMENT

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ATTACHMENT 2 RG. 12

Suggested additional language has not been included. The text of the referenced "environmental consequences" box, now located on page 145, has been changed to state that anticipated lighting and noise effects can be mitigated to a less than significant level. See discussion on pages 143-145, and 288-292.

Page 168. "Environmental Consequences" second to last bullet, Action: Add, *"<u>but will be designed to eliminate these impacts"</u>. Rationale: This is the Task Force guiding principle.*

Suggested additional language has not been included. The "environmental consequences" box on page 184 notes that light and glare impacts from new parking structures are considered significant, but mitigable. Lighting impacts are discussed in the Draft EIR at pages 293-297.

Page 178. "Ancillary Activities and Facilities" Discussion: This type of development has tremendous impacts on neighborhoods.

Comment noted. Response not required.

Page 179. "Issues"

Action: Add a new, last bullet item: <u>"New developments on campus</u> which are dependent on both the student population AND a large commercial draw from non-student populations, may have significantly larger impacts on residential neighborhoods than those developments which depend upon the student population alone. Developments with a commercial component may also require proportionately larger efforts and costs to eliminate negative impacts on established residential neighborhoods."

Rationale: This states Cal Polly's commitment to mitigate the impacts of this type of development on established residential neighborhoods. This is a Task Force recommendation. Page 6-I 2, #7 of the Staff Report.

Suggested language not included. Cal Poly staff notes that the Master Plan does not propose ancillary facilities with a commercial component. The Plan text should be amended to clarify what is intended as a "commercial component", as well as the nature of the anticipated uses.

Page 180. "Environmental Consequences" top box.

Action: Add: <u>The environmental consequences of ancillary facility</u> uses can be much greater than residential use impacts. The <u>environmental consequences of all ancillary facility</u> uses adjacent to the existing residential neighborhood will be explored. These include traffic, noise, light, and visual impacts.

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ATTACHMENT 2 K. I

Suggested language not included. The text included in the "environmental consequences" box, now on page 195, has been greatly expanded, indicating that anticipated impacts will be less than significant.

Page 180. "Environmental Consequences" bottom box.

Action: change the second last sentence to read, <u>"Some of the area</u> is visible from Highway 1 and the neighborhoods and the city's open space on Bishop's Peak. The environmental consequences of all ancillary facility uses in this remote site will be explored. These include traffic, noise light visual and growth inducing impacts.

Suggested language not included. The text included in the "environmental consequences" box, now on pages 196–197, has been extensively modified and expanded, indicating in general that anticipated impacts could be mitigated to an insignificant level. Additional environmental analysis is recommended in several subject areas as part of future environmental review of specific projects.

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ATTACHMENT 3 FG. 1

California Polytechnic State University San Luis Obispo, CA 93407 Office of the Provost and Vice President for Academic Affairs (805) 756-2186 • Fax (805) 756-5292

November 14, 2000

Dear Cal Poly Campus and San Luis Obispo Community:

Some of you have asked why you do not see all of your earlier comments on the Preliminary Draft Master Plan reflected directly in the Cal Poly Master Plan and Draft Environmental Impact Report published in October. We hope you do not feel that your ideas have gone unheard or unread. We have reviewed and discussed all the comments we received and incorporated them throughout the document. Indeed, you will see major changes in the October release of the Master Plan as a result of comments and suggestions on the Preliminary Draft.

As you know, Cal Poly has been developing the campus Master Plan through a process involving extensive participation by the campus and community. In spring 1999 we received over 500 principles recommended by task force members. During fall 1999 and winter 2000 the Master Plan team met with campus and community groups to discuss preliminary plan concepts. In spring 2000 we received many pages of comments from about 50 individuals and organizations. These included the following campus and community organizations and agencies: Cal Poly Academic Senate, Associated Students, Inc., Landscape Advisory Committee, Biological Sciences Department, College of Agriculture Land Use Committee, City of San Luis Obispo, County of San Luis Obispo, San Luis Obispo Council of Governments, the local Air Pollution Control District, local chapter of the Sierra Club, and Residents for Quality Neighborhoods. We also received extensive input in the form of student projects from four classes in the College of Architecture and Environmental Design and the College of Engineering.

In such an interactive process, many groups' and individuals' ideas have contributed to, and been incorporated in, the Master Plan. Sometimes this work appears explicitly in the document, but, more commonly, the text in the Plan represents a synthesis of ideas drawn from many sources. For example, the Cal Poly Academic Senate, Deans' Enrollment Planning Advisory Committee, and others expressed concern about operating budget support for the University, so we incorporated the intent (although not the literal language) of these groups' statements in the Guiding Framework and Implementation chapters.

This collaborative process contrasts with the formal response to comments that will occur with the Draft and Final Environmental Impact Report. At that point in the process, as required by law, Cal Poly will respond point-by-point to each comment received.

We did not feel that it was necessary to provide responses in this form during the development of the Master Plan. Instead, we developed a matrix in spring 2000 that showed how the Master

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The California State University -Baberineld - Channel Islands - Chaco - Duringuer Hills - Freina - Fallertain - Haward - Humbolde - Long Beach - Luc Angeles - Maroame Acade Municeur Bay - Northridge - Pomuna - Sactamerto - San Bernardino - San Hego - San Franciscu - San Jose - San Luc Obispo - San Maecos - Sunoma - Stanilaus

ATTACHMENT 3 PG.

Plan principles incorporated the 500-plus recommendations from the campus and community task forces. In the attached matrix, we have prepared a similar analysis showing where and how the Master Plan and Draft EIR integrated the comments received on the Preliminary Draft. This matrix shows that the Master Plan fully addressed many of the comments received and partially addressed others. In about half a dozen cases, the Master Plan team considered, but was not able to accommodate, a concern raised by a member of the campus or community – usually because the request asked for consideration of an idea that is not consistent with the Cal Poly academic mission and its responsibility as a member of the California State University system. Finally, a number of comments suggested additional detail and refinement that can be accommodated more appropriately in the follow-up studies and guidelines that will be developed to implement the Master Plan. It is important to keep the Master Plan itself at the level of principle and policy for review by the CSU Board of Trustees.

We thank you again for taking the time to contribute to the Cal Poly Master Plan, and welcome your additional comments and suggestions.

Sincerely,

Ludi C. Daldon

Linda C. Dalton, Ph.D., AICP Vice Provost for Institutional Planning

Robert E. Kitamura, AIA Director of Facilities Planning

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CAL POLY Long-Range Enrollment Plan and Master Plan Update	ATTACHMENT 3 P
Substantial Issues Raised by Comments on May 2000 Preliminary Draft of the M	aster Plan
·	Responsibility for Action
	Executive Direction
Academic Quality and Character Implications of enrollment growth in general Distribution of enrollment growth by discipline (DEPAC findings)	
Natural Environment Principle regarding environmental responsibility and environmental education	Executive Direction
Full inventory of environmental resources Brizzolara Creek enhancement area as Outdoor Teaching and Learning lab	
Design Refinements, esp. in Campus Instructional Core Building locations, pedestrian routes, access, safety, etc.	MP Team Analysis
	MP Team Analysis
Residential Communities Impact of proposed student housing (including parking and circulation) on Brizzolara C	леек, 1973
Recreation, Athletics and Physical Education Potential Mustang Stadium relocation (and reuse of existing stadium site)	Executive Direction
	MP Team Analysis
Circulation Foothill, RR track and California intersections and circulation South Perimeter closure and circulation Clarification of bicycle routes, storage, etc.	
Alternative Transportation and Parking More development of trip reduction policies and programs (without specifying operati Commitment to transit subsidy	Executive Directio onal measures)
Ancillary Activities and Facilities Goldtree area proposals	Executive Direction
Implementation Phasing and Staging Concerns about capital and operating budgets, disruption, and follow through	Executive Direction MP Team Analys
Follow-up Processes and procedures for land management	MP Team Analys
Note: This table focuses on major policy issues and does not include a longer list of items addressed as refinements to the plan and/or as environmental mitigation measures	that can be
	LCD, 1B-9 ¢ommen
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ATTACHMENT 3 FG. L. Dallon 11/14/00 MPComments11.xls DRAFT < ۲ ۵. < < < ۲ < ۲ < ŝ < < -Guiding Framework intended to be general: see later chapters for detail. The development of the campus Master Plan and Implementation represents a proactive process by Cal Poly Particularly with respect to alternative transportation, the Mester Plan considers both policies and incentives to change behavior Comments CAL POLY Summary of Comments Received on May 2000 Preliminary Draft Master Plan, and Response in October 2000 Mester Plan and DEIR 5-9; 15; 16-19; a and Ch. 7 E-7 P x-xi; 204-15 1-2, 11, 32-38 Page In Plan/DEIR (Oct. 2000) Ch. 1. 2, 3 15, Ch. 7 4, 79 4,79 4, 79 ₽ ß 185 ۱ 4 Diagrammatic illustration changed in response to multiple auggestions See aspirations and principles associated with Cal Poly mission. See Introduction, Guiding Framework, and Long-Range Enrollment chapters Academic quafty addressed in principles and academic plans for enrollment growth Additional principle identities environmental responsibility associated with Cal Poly mission Additionat principle identifies environmental responsibility associated with Cat Poly mission Additional principle Identifies environmental responsibility associated with Cal Poly mission Modifications to Master Plan (October 2000) See principles and implementation sections See acknowledgements See DEIR Page in Prelim Plan 1 (May 2000) xi, 1071 14, 55 12-15 47-48 4 5 4 62 -4 Recommendation for proactive, rather than reactive response by Cal Poly to neighborhood concerns. Cover letter for staff seport and residents' letters concern about commitment to implementation Comment on Preliminary Draft (May 2000) Several suggestions for changes to principles. Need to credit other sources, e.g. LA GIS Lab Illustration should be reviewed and modified Concern that plan depends on changes in student bchavior Set high goals for Plan implementation Encourage *sustainable campus* More detail regarding principles CSU and community contexts Academic quality converts Concern with sustainability Add summary of impacts 25-May 10-May 14.Apr 5-Jun 6-Jun 12-Jun 12-Aug 10-Apr un(-; 12-Jun 5-Jun un(~6 Date Cal Poly -CLA, English Cal Poly -Academic Senate Cal Poly -CAED, LAC Cat Poly -CAED, LA Cal Poly -CAED, LA neighbors City of San Luis Obispo ASI President SLOCOG neighbor various Cal Poly -President emeritus Affilistion Code: A = Addressed P = Parliaity addressed Monday club notes Aborne, Sam Marx, Steven Senate resolutions Herron, Dan Surliff, Dale Sutlith, Date Suttiff, Dale Comment from City Council Dollar, Don General Kennedy, Robert E. NON NON 2 **6**1 DRAFT ---er d ŝ ន ű --Chap-ter Ś اً گُ 1B-32 . .

ATTACHMENT 3 PG L. Dalton 11/14/00 MPComments11.xls DRAFT ٩ ۰ æ o < < o ۰. Sode Code < < o ٥. No chango - Campus responsibility governed by CEOA and CSU Master Phan mitigates impacts, reduces housing shortage, addresses neighborhood issues, but cannot promise to "eliminate" impacts Chapter 3 explains the demand and campus responsibility for educating additional students Academic program mix (polytechnic emphasis) is central to Cal Poly mission. Principles recommended by 1999 task forces available on wobsite No change to principles, due to detail in later chapters Comments CAL POLY Summary of Comments Received on May 2000 Prelitinary Draft Master Plan, and Response in October 2000 Master Plan and DEIR 24-28; 29-31 24, 29-31 1-2, 11, 32-35 13; 32-38 11; 15; 330-31 Plan/DEIR (Oct. 2000) сг.3 16-19 2 ₽ 13 See revised enrollment tables and discussion of use of enrollment scenarios See errolment scenarios for options that do not require increases in physical capacity, also, see revised enrollment tables. DEH addresses resource and service capacity. Modifications to Mester Plan (October 2000) Academic quality addressed in principles and academic plans for enrollment growth Budget issues addressed in principles and implementation chapter See physical plan elements and DEIR See responses to RON concerns. See responses to RCM concerns Page In Prelim Plan (May 2000) 13 and elsewhero 13 and elsewhere v, 26-29 13, 192 16-19 26-29 23, 27 2 ņ Ŷ ŭ ₽ Suggestions to study degree tength; consider different calendars, etc.; clarity enrollment data Suggestion for stronger wording on alternative transportation, expand self-mitigation to services and resources Concerned with enrollment increase, academic quality Too generic in approach to issues: Include all recommended principles in an appendix. Comment on Preliminary Draft (May 2000) Operating budget and growth concerns; resolution calls for making enrollment growth contingent on receiving budget commitments Concerned there is no willingness to identify *impact zones* or establish Co-Lead Agency Not convinced that Cal Poly needs to grow. Wording request to clarity responsibility for mitgation "on and off campus." RON issues, Mustang Stadium, Goldtree Ctanily enrollment numbers; ctanity how scenarios used Suggestions to reconsider programmatic emphasis RQN issues <u>first</u> 6/6 and 4/21 14-Apr 12-Jun 12-Jun 9-Jun 13-Jun 12-Jun 9~Jun որ 21-Apr 5-101 n,d. Date A LOUGH - fundament SLO County Supervisor City staff Herron, Dan SLOCOG Cal Poly -CLA, Psych St.O County Supervisor SLO County neighbor neighbors Cal Poly -Academic Senate neighbor City staff City staff Affiliation stafi A = Addressed P = Partially addressed SLO Slaff Report; Sanville,Terry; Collins, Curlis Bryce Stern, Chuck Haff, Russell Pinard, Peg Comment from Senate resolutions SLO Staff Report Sanville, Terry Bianchi. Shirley fingle, ğ e DRAFT ~ ~ 6) ÷ e b 2 ~ Code: ~ ~ CN ~ 2 1B-33 5

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L. Dalton 11/14/00 ۵. • -< ۵. ۲ < < < ۵. 80 ٥. ۵. < Master Plan proposes no new development adjacent to residential neighborhoods except for Visitor Center near Slack Streel. Constraints and Opportunities analysis presents issues at general level. Appendix B to Chher areas will be mapped more fully during DEIR Master Plan implementation Commont recognized; map shows general areas of conflict rather than specific blocks or Existing Conditions chapter provides general ovorview. Density, massing and dosign details will be worked out with the City. Chapter 4 represents a surrwary. See later elements and DEIR for more detail. Student housing projects are planned to be completed whead of enrollment growth. and Use element intended as overMew. Comments CAL POLY Summary of Commonis Received on May 2000 Preliminary Orah Master Plan, and Rasponse in October 2000 Master Plan and DEIR 6015 13; 288-292; 293-97 59; 193-97 13, 30, 124 Page in Plan/DEIR (Oct. 2000) 293-97 140-42 ę, **09-6**5 83 69 69 8 8 DEIR contains more detailed inventory of plant communities in areas proposed for new development See commitment to mitigation in principles and provisions for mitigation in DEIR Existing Conditions chapter provides general overview, additional details on plan components in Ch. 5, See also discussion of environmental setting in Ch. 6, DELR Informal recreation on west side of Slack street adds to green space adjacent to residential Modifications to Master Plan (October 2000) 800 beds to be built by 2002 reduce housing shortage and Master Plan student housing program accommodates all new undergraduates See additional details on plan components in Ch. 5 and DEIR. Covered in Natural Environment principles. Additional wording added. Additional wording added. See revised wording. veighborhoods See DEIR Page In Prelim Plan (May 2000) 48-50, 180 48-50 35, 49 53 65 99 **6** 2 46-50 **4**9 **8** 46 83 Development on west side of campus can impact use of Famin Open Space on Bishop's Best, should reality makes & light as impacts to Bishop's Fack area, support Neighborhood Task Force recommendations Mapping of polential neighborhood conflict with Monterey Heights, east of Grand Ave. "Cal Poly should provide housing on campus for as much of th(e) existing shortage as possible. More detail regarding existing conditions, esp. constraints and opportunities analysis Comment on Preliminary Draft (May 2000) Concern about ecological integrity and continuity of wildlife habitals and contidors Concerns about Goldtree area; anciflary activities in general Concerns about butter lor neighborhood. Cancern with scale of housing (or other development) west of Highway 1 More detailed mapping and inventory Concerns about light and glare; noise Suggested addition of Public Utilities Commission Suggested additions to traffic issues More detail in Land Use element 21-Apr 12-Jun 7-Jun 5-5 12-Jun 5-Jun 5.Jun 5-Jun e-Jun UR7-9 5-Jun Date Cal Poly -CAED, LAC Sierra Club neighbors neighbors City staff neighbors neighbors City staff City staff neighbors neighbors Affiliation Frankel, Ruggles, Saunders, Segal Sullifl, Dale Comment from SLO Staff Report SLO Staff Sanville, Terry Collins, Tarren LU Genera Generat Report N N N NON NON ß ВÖ å DRAFT ÷ З Ÿ 뿓 4 4 4 -+ Chap-4 5 4 1B-34 .

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Comment from Affiliation Date (comment from Affiliation Date (comment from Date (comment from <thdate (comment from <thdate (comment from</thdate </thdate 	Coantents		The 'P' will be addressed in master plan implementation.	-					To be developed as part of Master Ptan implementation		Additional detail to be developed as part of Master Plan Englementation	
Comment from Affiliation Date (comment from Affiliation Date (comment from Date (comment from <thdate (comment from <thdate (comment from</thdate </thdate 	Page In Plan/DEIR (Oct. 2000)	76; 219		81; 97	81; 97	B1; 97	81; 97	230-33	85; 94-99	86-90, 94-96 and mufiple exhibits	66	
Comment from Affiliation Date (comment from Affiliation Date (comment from Date (comment from <thdate (comment from <thdate (comment from</thdate </thdate 	Modifications to Master Plan (October 2000)	dditional wording added. See also, DEM.	See Natural Environment and Outdoor Teaching and Learning elements	Aevised plan establishos Brizzolara Creek enhancement area; moves student housing	Revised plan establishes Brizzolara Creck enharcoment area; moves student housing. See DEIR, too.	Revised plan establishes Brizzolara Creok enhancement area; moves student houshog	Revised plan estabilishes Brizzolara Creek enhancement area; moves student housing	See DEIR	Additional reference to BMPs in Outdoor Teaching and Learning element	Maps altered: descriptions in Outdoor Teaching and Learning element modified.		
Commant from Affiliation Date (commant attribution) Date (commant attribution) Date (comparised) Date (comparised) <thdate (comparised) <thdate (comparised)</thdate </thdate 	Page In Prelim Plan (May 2000)					71, 116	71, 116	11	æ	75-80; 83-85	69	•
Commant from Affiliation Date (commant attribution) Date (commant attribution) Date (comparised) Date (comparised) <thdate (comparised) <thdate (comparised)</thdate </thdate 	Comment on Preliminary Draft (May 2000)	Espand discussion of Momos as setting for SLO and campus	Bia steward of open tands - concerned about *P*, allow public access on Cal Ply lands; clean up Architectural Village.	Oppose housing near Brizzolara Creek	Biological rasources of Brizzolara Creek	Housing in floodplain (H-3 and H-4) is mistake. Need to apply Nat. Erv. Principles.	Corridor protection for Poly Canyon and Brizzolara Creek; restora Feedmili area	Concern with watershed protection	Suggested expansion of BMPs	Show Pavilion on all maps, feedlot to be encorporated in BCEC; horseshoeing taclity not mentioned; identify yanus of how Pavilion will replace access provided try Buil Tast; need map with propress adjointanted archdor, concern regardingr eve housing proximity to EIS with fence students out of grazing fields; dom fights on hivestock; show Farm Operations as moving to Future Corporation Yards	Expand examples of how outdoor teaching and learning activities are integrated into campus	
Comment Artiliatio from Artiliatio from Inside Secondary Donary Donary Artiliatio Segal Inside Secondary Donary Do	Date	12-Jun	5-Jun	1-Jun	12-Jun	un(~¿		1	ի։			
Comment from Unglise, Segal Senossan Benossan Renor, Steven Marx, Steven Marx, Steven Marx, Steven Renor Staff Renor Staff Renor Scothy, Ken	Affiliation	neighbors	neighbor	Sierra Club	Cal Poly - CSM, Bio Sci	Cat Poly - CLA, English	Cal Poly - CAED, LAC	City staff	City staff	Cal Poy - CAGR LUC	Cal Poly - CAED, LAC	
	Comment from	Frankel, Frankel, Ruggies, Saunders, å Segal	Doltar, Don	Collins. Tarren	al Serit	Marx, Steven	Sutiff, Date	SLO Staff Report	SLO Staff Report	Scotto, Ken	OTL Sutifit, Data	

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	Comments	The Master Plan designates general areas for	development rather upan stres for specific programs.					0. 4.1.0 moseine etiitlas shinw poleitilal (of	greater building heights and gain of open space	Details of landscape guidelinos and deaign or Bradiey Park eroa as part of implementation	Initii and renovation are covered in the Master Plan, but not shown in detail in the maps	Design of northeast area, including replacement of Bidg. 8 is part of implementation, with	Involvement of users Details at program fevel not shown in Master	Plan				
	Plan/DEIR (Oct. 2000)	1		<u>8</u>	115-16; 263-66	104-114	106-7; 113-14		110-11	115, 120-23	xiii, 120	E1-211 '401	- +:-		104-8, 191-92		126	
	Madifications to Master Plan (October 2000)			Wording modilied	See discussion of areas within campus instructional core; and DEIR in particular.	See changes and additions to Campus Instructional Core element	Library expansion and redesign intended as part of northwest area								See activities in campus centers and residential centers	Changes made in Preliminary draft	Wording added	
	Page in Preilm Plan (May 2000)	 		18	16	2	94-95; 101-2		88	xi, 107f	106	os: 99.100			11	 	113	
Summary of Continents Received On May 2000 Frequencies	Comment on Preliminary Draft (May 2000) P		Sites for specific academic programs, disciplines or colleges	Encouragement of visual diversity as well as	Interest in possible historic buildings	Activities and design considerations in	UL/Centernial Greon area Current Ibrary space is inadequale; do not de- centraitse library schvitles; need support of inaditional pint resources; Ibrurent in single	more energy at resource the	Concern about heights in center of campus	Retain Bracley Park-SW quadrant: assess staging of landscape improvements: supports inversion nond Polx Critics solutions.	Are we upgrading Graphic communication	Dustany interness i Creatern about layout of new building for	Bioresource and Ag. Engineering.	Child Development program would like to bé In Plan with tab. offices & pre-school lab	Suggestions for services on campus to reduce	Wording and factual changes on licusing	section Note importance of student competition with non-	student incuseriorus
Sumn	Date			21-Apr	10-Mav		13-Jun		10-May	12-Jun	а-Мау		26-May	uŋ?-6	20-Jun	_		
	Affiliation			City staff		Cal Poly -	ASI Cat Poly -		various	Cal Poly - CAED, LAC	Cal Poly-	CLA, GRC	CAGH, BRAE	Cat Poly		-	SA, Housing	
	Comment		General	Sanwke.	erry Ionday club	-+-	Plan Davis, Hiram		Monday club notes	Sulliff, Dale	Levenson,		Soloman, Ken	Trvon. Betta		Allan,	Preston SLO Staff	Report
	Chap- ter	-+	CC CC	S		8	9 6 0 9		8	8	1		8	8				Ê

ATTACHMENT 3 PG. 4 L. Datton 11/14/00 MPComments11.xts DAAFT م 80 < ٩ ۲ -< Q o ۵. < Master Plan calls for housing approximately one third of undergraduate students on campus. Market studies have shown that students should be interested in apartment-style housing. Provision of faculty and staff housing follows a principle of the master plan to address community impacts. As stated in the preliminary draft of the Mestor Plan, Cel Poly is limited by CSU policy. Need to cite Jones and Stokes 1997 sound stuck more explicitly Asster Plan language change not seen as Comments acessary. CAL POLY Summary of Comments Received on May 2000 Pretiminary Drath Master Plan, and Response in October 2000 Master Plan and DEIR 143-45; 288-92 81; 97; 128-32 Page in Plan/DEIR (Oct. 2000) 130, 132 130; 132 134-36 126-34 132-34 5 136 128 Sea additional wording: and DEIR discussion of noise issues and mitigation See discussion of faculty and staff housing; and DEIR See discussion of taculty and staff housing; and DEIA Master Phan changes Include nearrangement of student residentiat communities, particularly to allow for Britzolara Creek Enhencement Project. See DEIR, too. 2000 See modified proposal for H-6 residential area, separated from Sleck Street, and DEIR Revised Master Plan creates a full residential community in this area Modifications to Master Plan (October 2 4240 Page in Prelim Plan (May 2000) 71 116 118-19 33 훯 ŝ 121 12 8 115 ŝ housing units H: 3 Å H 4 major disturbance to riparian contridor, so eliminate; build H 5, H 6 & H 7 first; build using uest Stack and Grand to norm side of drainage; perhaps use H 3 Å H 9 for student housing; hold H 1 and H 2 in abeyater and avoid if possible (could be a grassland miligation site) Concern about noise related to sports facilities Concern about housing in southwest corner of campus Concern about student residences near Grand and Stack Question about the fixelihood that students will want to live on campus Concern about residences west of Highway 1 Comment on Preliminary Draft (May 2000) Add even more housing-50% of students Suggested wording change aculty/staff housing sites ratemity locations 10-May 12-Jun 12-Jun 12-Jun 12-Ju 5-Jun nn - S 9-Jun S-Jun 21-Apr Code: A = Addressed P = Partiaty addressed I - T.n.h.a.Adressend duind implementation Date Cal Poly -CSM, Bio Sci neighbors neighbors neighbors City staff neighbors neighbor various neightor City staff Affiliation Frankel, Ruggles, Saunders, & Segal Frankel, Ruggles, Saunders, Å Segal Collins, Curtis RON; Simon, Richard Monday club Biological Sciences Department Comment SLO Staff Report Dollar, Don Ē Sarwille, Teny nolos RON DRAFT REC RES RES Bes ЯËС RES RES Chepŝ RES SES S 1B-37

ATTACHMENT 3 FG. (L. Dalton 11/14/00 MPComments11.xls ORAFT -_ ۲ -----۲ < Code ~ < ~ ۰. < Cetails will be develop during implementation -particularly design of parking structure and new student housing The Land Use element provides an overview, jeading to detail in the subsequent elements. 143-45; 288-92 Need to cite Jones and Stokes 1997 sound Alternative Transportation programs are designed to reduce traffic circulation and Suggestions to be considered during implementation Details to be developed as part of Implementation Details to be developed as part of implementation Details to be developed as part of mplementation Comments Included in plan components parking requirements CAL POLY Summary of Comments Received on May 2000 Preliminary Draft Master Plan, and Response in Octuber 2000 Master Plan and DEIR 155-68: 176-158; 178; 182- ¹ 83 |1 155-56; 162 Page In Plan/DEIR (Oct. 2000) 165-67 162-65 165-67 165-67 143-44; 290 154 155 145 5 Some adjustments made in revised Master Plan Some adjustments made in revised Mester Plan See edditional wording; and DEIR discussion of noise issues and mitigation Modifications to Master Pian (October 2000) See Circulation, Parking and Allemative Transportation elements Changes made in Preliminary draft See provision for trails Wording modified See DEIR 7 2750 141, 162 Page in Prelim Plan (May 2000) 148-50 52 152 140-41 140-41 151 ₽ 130-31 130-31 139 ន 140 Bicycles - neod (o have adequate Chass II around Highland and Pedimeler, and route jetring the roads west of business building & a route like Via Carta but wider. Request tor policy about commuting and parking Bicycle circulation needs further development Comment on Preliminary Draft (May 2000) Concern about noise related to sports facilities Concern about possible relocation of Mustang Stadium Alternative traffic calming; question about iteasibility and usefulness of grade-separated pedestrian crossings Circulation and parking impacts in Alta Vista area Colifornia-Foothill land use and traffic issues Clarification of bike connections and routes Corrections on circulation and afternative transportation sections. Encouragement of use of recycled water Allow public access on Cal Poly land Accommodate electric bicycles 5/4 and 6/12 5-Jun 20-Jun 10-May 9-Jun 21-Apr 6-Jun 0-?nu 6-Jun 12-Jun un 29 3-Apr 5-Jun Code: A = Addressed P = Partially addressed Date Cal Poly -CSM, Math SLO APCD City staff City staff Cal Poly -AFD, Univ. Police City staff City staff neighbor various neighbors neighbor City staff neighbors Affiliation Lajoie, Barry Goldenberg, Stuart Collins, Curlis Monday club Ruggles, Saunders, & Comment Irom Dollar, Don SI.O Staff Report SLO Staff Report SLO Staff Report SLO Staff Report Sanville, Terry Pautson Jacquie notes Frankel. Segal NÖN ç DRAFT υ ပ o υ ç 띭 PB o ter be ç B ЯË ပ 1B-38

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Comments	Defails to be developed as part of Implementation	Details to be developed as part of Implementation	Details to be developed as part of Implementation		Access wit be provided as part of implementation plan for doardy S. Perimeter and N. Perimeter to through traffic as well as other circulation changes	Access wit be provided as part of implementation plan for closing S. Perimater to through traffic	Access with he provided as part of implementation plan for closing S. Perimeter and N. Porimeter to through traffic as well as other circulation changes			Detailed dirkulation plans to be part of master plan implementation
Page in Ptan/DEIR (Oct. 2000)	165-67	165-67	165-67	168, 174	117-18, 174	118, 174	117-18, 174	161; 166	161; 166	94: 174
Modifications to Master Plan (October 2000)	Some adjustments made in revised Master Plan	Some adjustments made in revised Master Ptan	Some adjustments made in revised Master Plan	Wording added				Circulation to residential complexes north of Brizzolara Creek realigned.	Circulation to residential complexes north of Brizzolara Creek realigned.	Circulation to extended campus added to plan components
Page in Prelim Ptan (May 2000)	152	152	152	144	157	105, 157	144, 157	146, 151	146. 151	146; 157; 167
Comment on Freilminary Draft (May 2000)	Allow bicycles on inner Perimeter and Doxter (anywhere state vehicles are allowed)	Supports bike paths and vehicle reduction	Bicycle issues - task force initiated	Service access should include buses, shuttles, etc.	Ensure service foults are clearly marked for energency use (concerned about making them look too pedestrian); access to example is inadequale for emetagery vehicles: need adequate access for delivery vehicles;	Cencern ol impacts from Perimeter being pedestrian only	Service access on cariplus	Residence halls are too close to EHS production unit: roadway too close	Serious concern about roads accessing residential sites H-1 & H-2 going by EHS	Head transportation plan for farm toads outside of core; show blend of neadsfraiks in traffic plan; consider additional bridge over Britztolara for parking structure; Via Carta circulation structure, Via Carta circulation
Dete	9-May	17-May	20-Jun	3-Apr	22-May	12-May			31-Mey	6-Jun
Affiliation	Cal Poty - CAED, ARCE student	Cal Poly - CAGR, Crop Sci	Cal Poly - AFD, Univ. Police	Cal Poly - AFD, UNN. Poice	Cal Poly - AFD, Risk Mg1	Cal Poly - CLA, Music	Cal Poly - AFD, Univ. Police	Cal Poly -	Cal Poly- CAGR, EHS	Cal Poly - CAGR LUC
Comment from	Ketty-Sneed, C	Steirmaus, Scott	Aeitts, Tony	Paulsen, Jacquie	Risser, Joe	Rinzler, Paul	Paulisen, Jacquié	Walter. Vicinia	Hannings, Dave	Scotto, Ken
Chap- ter	<u>××</u> 0	00	0	0	<u></u> о	0	U	0	o	U

ATTACHMENT 3 PG. 12 L. Dalton 11/14/00 MPComments 11.xls < _ a. < < ~ _ ۰ ۵. 30 _ -< Further operational changes to be part of Master Plan implementation More parking analysis will be developed as part of Master Plan implementation General services will be incorporated in larger structures, so they do not show independently Addhional planning for "livinglearning" needs will occur as residential communities are designed. Additional detail will be developed as part of Masler Plan implementation Master Pian uses past data; agreement that campus and city should coordinate tuture studies Plan did not add the requested data directly. Commitment expressed in Master Plan Comments on maps. CAL POLY Summary of Comments Received on May 2000 Preliminary Draft Master Plan, and Response in October 2000 Master Plan and DEIR 104-15; 127; 187-92 178-80: 185-86 178-80; 285 184; 293-97 xiii, 192 Page In Plan/DEIR (Oct. 2000) 280-87 185-86 185-86 186 180 179 See Alternative Transportation element as well as DEIR Modifications to Master Plan (October 2000) Physical plan elements provide more detail Some services shown on revised likustrative See additional wording: and DEIR Changes made in Preliminary draft See DEIR diagram. 143, 159, 162 Page in Prelim Pian (May 2000) 162, 170 153, 161 5 7 2 120 E **168** 168 162 2 Sevent suggested wording changes and corrections to text; eliminate thressarion designs that rely on U. Police for management during events; separate operational plan for elementive transportation; Support for this reduction, including student housing on compus; concern with financial support for public transit idenship by Cal Poly students Concern about support services for residential communities Clarity parking strategy, kooking for operational details of alternative transportation; supports itrestmen and geographic controls. Parking analysis and student driving behavior Comment on Preliminary Draft (May 2000) Comment on different methods for determing model split Concern about light from proposed parking Concern about air quality around parking Parking restrictions encouraged Parking ratios and restrictions Suggestions for trip reduction. Sites for support services structures structures 14-Apr 30-Aug 20-Jun 21-Apr 6-Jun nnC-0 20-Jun 14-Apr e-hin 6-Jun 5-Apr Code: A = Addressed P = Truba addressed P = Truba addressed Date ASI President SLO APCD City staff City stalf City staff neighbors SLOCOG SLO APCD Cal Poly -AFD, Univ. Police City staff SLOCOG City staff Affiliation Abome, Sam and General Lajoie, Barry Lajoie, Barry Негтоп, Dan Herron, Dan Comment from SLO Staff Report SLO Staff Report SLO Staff Report Campbell, Cindy SLO Staff Report Sanville, Terry BON ន SS ¥ ¥ ¥ ¥ £ DRAFT ¥ ¥ d is ¥ ¥ ¥. 1**B-40** .

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CAL POLY Summary of Comments Received on May 2000 Preliminary Draft Master Plan, and Response in October 2000 Master Plan and DEIR

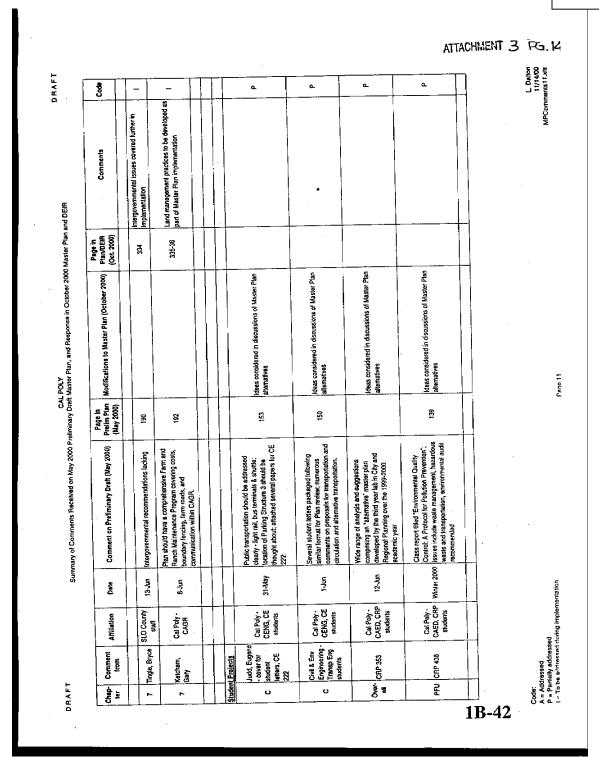
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Comments		Additional services will be considered as part of Master Plan implementation			The Master Plan does not propose ancillary activies with a commercial component							Implementation and phasing should add consideration of change processes	Commitment made as part of master plan process	Details to be developed as part of Implementation	
Plan/DEIR (Oct. 2000)		xiii, 187-92	xiii, 194-95	195-97	193-97	193-97	193-97	183-87	193-97	333	15; 330-31	329-36	334	334-36	
Modifications to Masier Plan (October 2000)		Diagrammatic illustration shows expanded child care center.	Visitor Center shown in more detail in Master Plan meps and text	See additional wording and DEIR, Appendix C.		See additional details on ptan components in Ch. 6 and DEtR.	See additional details on plan components in Ch. 5 and DEIR.	See additional details about plan components in Ch. 5 and DEIR	See additional details about plan components in Ch. 5 and DEIR	See additional wording	See clarification in Guiding Framework, as well as Ch. 7				
Prelim Plan (Mey 2000)		173	180	71, 11 6	6/1	48-50, 180	180	180	180	189	184	ŭ	6	161	
Comment on Preliminary Oraft (May 2000)		Concern about child care needs of present and future faculty	Need more specific proposal for Visitor Information Center at Stack and Grand	Goldtree - deep valley solis, foraging habilat - She needs careful evaluation	Concern about potentiat development with commercial component	Concoms about Goldtree area; ancillary activities in general	Concerns about Goldtree area; west side of campus	Goldtree concerns	Goldtree concerns	Concern about both negative and positive impect of Gai Poly	Phasing, budget issues	Concerned with function management of construction and change, insure up-front funding; develop a Management of Change Process.	Desire tor Cal Poly to fotow through on commitment to early involvement of neighbors	Call for broad and frequent communication and consultation	
Date		7-Aug	5-May	12-Åin	5-Jun	aul2	12-Jun	12-Jun	to-May		10-May	Р.	12-Jun	25-May	
Affiliation		Cal Poly - Endîsh	Cal Poly - AFD	Cal Poly - CSM, Bio Sci	neighbora	neighbors	neighbors	6LO County Supervisor		City Council member	various	Cal Poly - CLA, Psych	neighbors	Cal Poly - CAED, LA	
Comment from		Schwartz, Debora	Slover, Vickie	Biological Sciences Department; Ashley, Phi	RON	RON	Frankel, Auggles, Saunders, & Segal	Bianchi, Shirlev	Monday chub notes	Schwartz, Ken	Monday chub notes	Slem, Chuck	Frankel, Ruggles, Saunders, & Segal	Suttiff, Date	Code: A = Addressed
a P	T	s	ANC	ANC	ANC	ANC	ANC	ANC	- NC	~	-	~	~	-	Code: A = Add

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ATTACHMENT 4 PG 15

December 6, 2000

Warren Baker, President California Polytechnic State University San Luis Obispo, CA 93407

Dear Dr. Baker:

The City of San Luis Obispo is greatly appreciates the opportunity to again review the evolving Cal Poly Master Plan, now including the Draft Environmental Impact report. The extensive and inclusive process of community involvement during preparation and refinement of the plan is evident, and we have been most impressed with your use of public meetings, the Internet and even CD's.

As you recall, the City provided comments on the earlier draft of the plan, and we are gratified to see that, with few exceptions, those comments have been incorporated into the current Master Plan draft through changes to the plan itself, analysis in the Draft EIR, or by designation for analysis as part of future implementation studies. Our comments on the current draft are included as an attachment to this letter.

While the University is cognizant of the concerns of its neighbors, and is actively pursuing solutions to the issues presented, the comments provided by one of our citizen groups, the Residents for Quality Neighborhoods (RQN), were not incorporated to the same extent as those of the City. We recognize that this may, in part, be due to the inability of the University to guarantee the desired outcomes. However, the plan and the EIR deal with many of the issues raised by RQN, and inclusion of the requested language (or a reasonable modification) appears worthy of additional consideration. In some cases we even offer specific recommendations.

Notwithstanding the extensive analysis given to housing, traffic and parking, environmental protection, and other significant issues, our strongest recommendation continues to be for realistic and sincere implementation, once the plan is adopted. The closing section of the plan, Communication and Consultation, holds great promise that an active partnership of the University, the City, and its residents will continue unabated toward that end.

We look forward to working with you to the conclusion of the planning process, and the ultimate realization of its goals.

Sincerely,

Allen K. Settle Mayor

Attachment: City comments on Master Plan draft and EIR

1B-43

Letter 3 Mr. John Mandeville City of San Luis Obispo December 5, 2000

[Note: The letter from the City contained several lists of points. For reference purposes, we have coded the first set as General, 1 through 12; the second set as Previous, 1 through 11; and then added the remaining comments.]

3-1 General 1. A. Commenter suggests reducing the size of ancillary activity area at Grand and Slack.

Response Exhibit I on page vi shows more limited area and adds a buffer at Slack and Grand.

3-2 General 1. B. Commenter suggests recognizing potential neighborhood conflicts at Grand and Slack.

<u>Response</u> A double arrow has been moved on Exhibit 4.10 to the east of Grand Avenue to indicate potential neighborhood conflicts.

3-3 General 2. Commenter suggests designating the hill above residence halls to Natural Environment.

Response This area is currently used for grazing, which explains the Outdoor Teaching and Learning designation. This is consistent with other designations throughout the Cal Poly campus.

3-4 General 3. Commenter suggests retaining Outdoor Teaching and Learning lands in open, undeveloped use.

Response See text addition page 98-99, clarifying future status of Outdoor Teaching and Learning lands. A fundamental concept to understand with regard to the lands of Cal Poly is that it is not appropriate to think of them as "open space." Such a designation may work in a municipality, but university property cannot be viewed this way. The lands of Cal Poly must support its academic mission. They must possess academic "assets" or, in the most severe situation, they may be viewed as "surplus." Much of Cal Poly's 6,000 acres in San Luis Obispo County is in an open and natural state, and will remain this way. It remains thus because it offers grazing for campus livestock, or biological study areas, or watershed management projects or any number of other academic activities. Understanding and appreciating this concept will assist the City with its goal of preserving a natural green belt around its borders.

3-5 General 4. The commenter suggests protecting Stenner as well as Brizzolara creek.

Response The following text has been added at page 103: "Guiding Principles and Goals for the Cal Poly Creek Management and Enhancement Plan" are located in Appendix F. The principles and goals will apply to all creeks on Cal Poly lands, including Stenner Creek. In addition, Cal Poly has partnered with the Land Conservancy of San Luis Obispo County. The Land Conservancy has undertaken several projects on Stenner Creek to reduce erosion and improve fisheries habitat, especially for the endangered steelhead. This enhancement work will continue with other reaches of the creek.

3-6 General 5. Concern about conflict/competition between on and off campus retail.

Response The vision of the Master Plan calls for a primary campus activity center near the University Union that is focused on students. The range of retail businesses and other activities would remain specialized and not constitute a full urban commercial center – and thus not compete directly with San Luis Obispo's downtown. Cal Poly understands that there is a delicate balance in determining how much of what services will be sufficient to support the campus community and manage commuting. Effective alternative transportation will allow students, faculty, and staff – as well as members of the broader community – to take advantage of the range of services and facilities both on and off campus without adding to traffic congestion. The Cal Poly Foundation is presently the exclusive provider of certain services – e.g., food service, vending machines and bookstore. Other services compete for campus outlets – e.g., travel service, ATMs. As planning for an increased range and volume of services occurs, the campus will need to determine which it should offer directly and which might be provided through franchise or "privatization."

3-7 General 6. The commenter suggests affirming student-housing impacts as major community concern.

Response Text has been added under the new heading "Background and Issues" on page 129 to clarify the existing shortage and address the major impact which student housing could have on the community. In addition, the following has been added in a section entitled, Commitment to Student Housing on Campus: "The Master Plan takes the local housing situation into account and proposes measures that will help alleviate a portion of it. The Guiding Framework of the Master Plan calls for adding student housing to accommodate all new enrollment growth. The campus will be breaking ground in Spring 2001 to build apartment-style housing for 800 students. This facility is scheduled to be ready for occupancy in Fall 2002. The next phase calls for housing from 1150 to 1300 additional students by 2004 or 2005. In sum, Cal Poly expects to add 1950 to 2100 student beds in the next five years, but only about 1250 additional students during that same time period. Over the next two decades Cal Poly will increase the proportion of students who live on campus from about 17 percent today to over 30 percent in the future" (p. 136).

"Further, Cal Poly will monitor the local market closely, and, if continuing students are not able to find suitable housing, the campus will develop a strategy to house a larger proportion of the University's students in the future. Strategies may involve working with off-campus partners to identify suitable housing locations and provide financing. Cal Poly and Cuesta College are also exploring ways to cooperate in assuring appropriate housing for their students. Finally, Cal Poly will participate with non-profit organizations in seeking broader solutions to community housing needs" (p. 136).

3-8 General 7. The commenter suggests making every effort to develop on-campus housing.

Response The Plan is exhaustive in its attempts to house all new enrollment on campus, as well as provide off-campus housing for faculty and staff. Fraternities and sororities cannot be provided for on campus because state law and California State University policy prohibits the funding of group housing with exclusive membership.

3-9 General 8. The commenter suggests citing Jones and Stokes sound study.

<u>Response</u> The DEIR and the Master Plan have been amended to cite and incorporate the Jones and Stokes sound study completed for the Sports Complex.

3-10 General 9. The commenter suggests citing the Heery Sports Facilities Master Plan.

Response The Heery Sports Facilities Master Plan has been cited in the Master Plan and DEIR. Note that the Heery plan was developed by a consulting team to suggest the approach to all campus athletic facilities. The plan is not "adopted," it is only advisory. The Master Plan team used the Heery plan as background information, incorporating some of its suggestions, but not all. For example, the football stadium design in the Heery Plan will not be followed.

3-11 General 10. Document parking space reduction.

<u>Response</u> The following table has been used for estimating where savings would occur in parking demand. The Master Plan policy is to reduce parking demand by 2,000 spaces.

Approach	Savings	Relative Cost	Safety Valve*
Freshmen restrictions	1,000~1,50 0	L	some no.
Geographic controls	500	L	appeal
Car/vanpools	300	М	
Lottery	As	L	appeal
	determined		
Parking Fees	minor	L	appeal
On-campus transit	moderate	Н	
City transit	minor	Н	
Bike/ped enhancmt	moderate	Н	
Area mgt	minor	L	
Fac/Staff incentives	minor	Μ	
Entertainment	moderate	Н	
Enrollment scenarios	moderate	Μ	

ESTIMATED PARKING DEMAND REDUCTIONS

Note: alternative transportation savings will be lower for Cal Poly because many of these programs are in existence and functioning well.

*Absolute controls will require provisions (safety valve) for hardships.

The University, as stated policy in the Master Plan, will reduce demand by 2,000 spaces. This reduction can be achieved through a number of measures. Over time, the feasibility and success of various measures will vary. For this reason, it is impractical to commit, at a Master Plan level, to absolutes. For example, an important idea is having an on campus and near campus shuttle. But this needs to be subjected to feasibility studies and trial programs, which the University will do.

To meet the parking reduction proposal of 2,000 spaces, Cal Poly intends to institute as a first, and most effective measure, that freshmen be required to live on campus and that they not be allowed to maintain cars on campus (with exceptions made for hardship and job-related

requirements). We believe that the inelasticity of demand Cal Poly will prevent this policy from having a detrimental effect on the dormitory market. This restriction exists at other universities, including UC Santa Cruz.¹

It is estimated that there will be about 4,000 new undergraduate students each Fall (about 3,000 freshmen) at Cal Poly under the full growth anticipated with the Master Plan. Currently, we house approximately $80\% \sim 90\%$ of our freshmen on campus, and the campus provides 1,530 parking spaces for residents (R1 & R2). At present ratios, approximately 1,800 spaces would be needed under the Master Plan for freshmen. Allowing for some hardship requirements for freshmen, it is anticipated that approximately 1,500 or more spaces could be reduced with this policy alone.

This policy will do more than just reduce cars on campus. It will change the culture of the campus, infusing a higher regard for the environment and a reduced reliance on the automobile. As students advance through the University, they will do so with the ability to use alternative modes of transportation.

3-12 General 11. The commenter suggests clarifying future uses in Goldtree area; concern with compatibility with off-campus resources.

Response At Goldtree an applied research park would be developed in partnership with the local community. Thus, local businesses would have an opportunity to be considered as vendors and service providers as well as occupants of the applied research park. The facility has been sited in a location that has relatively low-value grazing land, low visibility from Highway 1, is adjacent to the City's wastewater treatment plant, and near the California Men's Colony. Additional environmental work will be undertaken when a project for the site has been developed.

3-13 General 12. The commenter suggests including the plan amendment process with provision for community notification, involvement and consultation.

<u>Response</u> A section on plan monitoring, review and revision has been added to Chapter 7.

The Land Use and Project Review Procedures to be established to implement the Master Plan will include the following considerations.

- Establishment of a project development team that represents all affected University interests;
- Identification of responsibility for liaison with elected officials and local and regional agencies, as appropriate to the nature of the project;
- Identification of the appropriate neighborhood areas that may be affected by the project so that meetings may be held early in project planning and design regarding ways to relieve possible impacts.
- **3-14** Previous 1. The commenter suggests a bolder commitment to alternative transportation.

Response Text on page 188 (Principles, subheading Support) has been amended from "Cal Poly should continue to work with city and regional agencies to make alternative transportation increasingly convenient, including scheduling, access and quality of service" to say the

¹ http://www2.ucsc.edu/taps/students.html#fresh

following: "Cal Poly will continue to provide financial support for public transportation. Further, the campus should explore how the University can balance the allocation of resources toward trip reduction programs rather than toward the cost of providing more parking on campus."

Cal Poly currently has the most successful alternative transportation program of any organization in the county.

3-15 Previous 2. The commenter suggests following City policies and standards for off-campus housing.

Response See text in Environmental Consequences discussion. Cal Poly reviewed City and County policies for the development of the Master Plan. To the extent that doing so does not interfere with the academic mission of the school, Cal Poly will strive to meet the spirit of the policies developed by its neighboring jurisdictions. The environmental review of the off-campus housing will include a discussion of consistency with City policies.

3-16 Previous 3. The commenter suggests seeking CSU policy change to allow fraternity housing on campus.

Response CSU policy does not permit campuses to provide housing for organizations with selective membership. Cal Poly will monitor this policy for any system-wide changes.

3-17 Previous 4. The commenter suggests citing and confirming the use of Jones and Stokes noise study.

Response The DEIR and the Master Plan have been amended to cite the Jones and Stokes sound study done for the Sports Complex. The study has been incorporated into the analysis of the FEIR at Chapter 6, Noise.

3-18 Previous 5. The commenter suggests making a commitment to unified analysis and planning with City.

Response As part of the Communication and Consultation section of Chapter 7, the Master Plan includes provision for consultation with elected officials and local and regional agencies.

3-19 Previous 6. The commenter suggests giving high priority to parking studies and mitigation.

<u>Response</u> Comment noted. The Master Plan specifies this plan as part of its implementation studies.

3-20 Previous 7. The commenter suggests clarifying language in EIR regarding light and glare.

Response Language regarding light and glare and the mitigation of impacts has been added to pertinent sections of the EIR.

3-21 Previous 8. A. The commenter suggests amending constraints summary to include Goldtree area.

Response Further discussion and a map has been added to the constraints summary to show the Goldtree area (pp. 64-65).

3-22 Previous 8. B. The commenter suggests amending constraints summary to include potential neighborhood conflicts near Slack and Grant.

Response A double arrow has been relocated on Exhibit 4.10east of Grand Avenue to indicate the potential for neighborhood conflicts. It was the original intention of the constraints analysis to include this area, but the exhibit is not at a scale to identify this level of detail.

3-23 Previous 9. The commenter suggests including RQN language regarding environmental consequences on nearby residential neighborhoods.

Response Text on page 15 has been amended (Question 3, f, third bullet) from "Planning future campus facilities so as to mitigate environmental impacts as part of project design" to "Planning future campus facilities and support services so as to minimize and mitigate environmental impacts on *and off campus* to the *full extent feasible* as part of project design."

3-24 Previous 10. The commenter suggests clarifying "commercial component" in campus core and Goldtree area.

Response The range of retail businesses and other activities in the campus core would remain specialized and not constitute a full urban commercial center. At Goldtree an applied research park would be developed in partnership with the local community. Thus, local businesses would have an opportunity to be considered as vendors and service providers as well as occupants of the applied research park.

3-25 Previous 11. The commenter suggests providing for additional environmental review for future projects.

Response Chapter 7 describes how future projects will be reviewed within the context of the program EIR for the Master Plan.

Following adoption of the Master Plan, Cal Poly will engage in a series of implementation studies (specified in Chapter 7). As projects are planned and built, they will be reviewed and monitored for compliance with the environmental analysis as well as with meeting plan expectations to reinforce the academic quality of the University. Many projects will require additional environmental review in the form of Negative Declarations or focused EIRs. The Campus Planning Committee will review the Master Plan annually so as to determine whether conditions have changed sufficiently to warrant a major update.

3-26 The commenter requests recognition of neighborhood impact at Grand Ave. and Slack Street.

Response A double arrow has been relocated on Exhibit 4.10 east of Grand Avenue to indicate the potential for neighborhood conflicts.

3-27 The commenter suggests designating hill above residence halls to Natural Environment.

<u>Response</u> This area is currently used for grazing, which explains the Outdoor Teaching and Learning designation.

3-28 The commenter suggests clarifying Visitor Center site and conference facility expectations at Grand and Slack.

Response Map change shows more limited area and adds a buffer; see also text changes on p. 206. A visitor center would provide a facility to welcome guests to the campus. It could include a station where visitors could obtain parking permits, campus maps, and directions to their destinations. The visitor center could serve as the starting point for campus tours conducted by Poly Reps. It could also include a small exhibit covering Cal Poly's history and accomplishments.

No detailed program has been suggested for a conference center, yet the idea has been studied several times and continues to arise. Presently, Cal Poly's Conference Services use regular campus facilities during times that they are not scheduled for instruction, and house attendees in some of the residence halls during the summer. The Master Plan calls for an expansion of alumni services near the present Alumni House, which may include small conference or retreat facilities. In addition, the area near Grand Avenue and Slack Street has been suggested for potential conference facilities. Cal Poly will continue to use its residence halls during the off-season to support conferences.

3-29 The commenter suggests adding specific language to retain environmentally sensitive areas in open, undeveloped use.

Response Text has been added on page 82, under "Stewardship" as follows: "The principle of stewardship includes permanent protection of environmentally sensitive areas as open, undeveloped lands. As noted by the commenter, the University's approach to land use differs from that of the City and the County. There is no "Open Space" designation. With the update of the Master Plan, Cal Poly has designated all of its lands to a particular use. The areas designated Outdoor Teaching and Learning are, for most of the acreage involved, agricultural, and most of that is grazing. Some of the agricultural land may see improvements in the future that include accessory farm structures or teaching quarters. Specific "Ancillary" activity areas have been designated on the land use map (Exhibit i).

It is important to understand the fundamental premises in land use designations for Cal Poly, and how these differ from other jurisdictions. No development that is inconsistent with the land use designations will be allowed without a Master Plan amendment granted by the CSU Board of Trustees. Such changes would require CEQA compliance and public comment. Also, it is important to understand that all the land of the University must, in some sense, forward the academic mission of Cal Poly. Approaching areas of campus as "open spac

question with CSU as to whether the land is necessary and should be surplused. That would be counter productive to any City strategy of protecting open space in its green belt.

3-30 The commenter suggests giving equivalent attention to Stenner Creek.

Response The following text has been added on page 103: "Guiding Principles and Goals for the Cal Ply Creek Management and Enhancement Plan" are located in Appendix F. The principles and goals will apply to all creeks on Cal Poly lands, including Stenner Creek. In addition, Cal Poly has partnered with the Land Conservancy of San Luis Obispo County. The Land Conservancy has undertaken several projects on Stenner Creek to reduce erosion and improve fisheries habitat, especially for the endangered steelhead. This enhancement work will continue with other reaches of the creek."

3-31 The commenter notes trade-offs between providing commercial services for students, faculty and staff on and off campus.

Response The range of retail businesses and other activities would remain specialized and not constitute a full urban commercial center – and thus not compete directly with San Luis Obispo's downtown.

3-32 The commenter suggests expanding commitment to student housing, timing and financial feasibility.

Response Additional sections have been added to the Residential Communities element to address these issues; please refer to pages 129 to 136.

3-33 The commenter suggests clarifying references to Heery Sports Facilities Master Plan, especially with respect to possible relocation of Mustang Stadium.

Response The Heery Sports Facilities Master Plan has been cited in the Master Plan and DEIR. Note that the Heery plan was developed by a consulting team to suggest the approach to all campus athletic facilities. The plan is not "adopted," it is only advisory. The Master Plan team used the Heery plan as background information, incorporating some of its suggestions, but not all. Refer to the marginal note added on page 145 for clarification.

3-34 The commenter suggests clarifying the status of Mustang Stadium, including potential for remodeling rather than relocation.

Response Refer to page 146, text (formerly on p. 138) referring to Mustang Stadium has been deleted. Note that the Master Plan does not propose relocating Mustang Stadium. It does suggest that if it needs to be moved, the preferred location would be as suggested in the Heery plan, on the lower fields of the Sports Complex. Mustang Stadium can be remodeled, which was also suggested in the Heery plan. Nevertheless, any relocation of Mustang Stadium will require careful design in order to minimize impacts to adjacent neighborhoods, especially with regard to lighting and noise, as well as additional environmental review. See p. 151 for discussion of renovation of Mustang Stadium as the preferred option.

3-35 The commenter suggests adding "controls to inhibit at-grade pedestrian crossing" along railroad right of way.

Response The map (Exhibit 5.13) has been amended to show this change.

3-36 The commenter notes correction for "Americans with Disabilities Act".

Response This text correction has been made in the Circulation Element, page 174.

3-37 The commenter suggests siting a pedestrian path along Brizzolara Creek outside riparian corridor; minimize creek crossings.

Response Text on page 174, second to last bullet, has been changed from "Develop a new pedestrian path along Brizzolara Creek from the California/Highland intersection to the new

residential housing village at the Poly Canyon entrance. The path should be sensitively sited to support restoration of this natural creek corridor" to read "Develop a new pedestrian path along Brizzolara Creek from the California/Highland intersection to the new residential housing community at the Poly Canyon entrance. The path should be sensitively sited to support restoration of this natural creek corridor. This path will be designed as part of the Brizzolara Creek Enhancement Project to ensure that it is located outside the riparian corridor. Creek crossings will be consolidated and minimized."

3-38 Commenter offers supports for electric or low-emissions vehicles for shuttle service.

<u>Response</u> The following bullet has been added to page 177: "Use state-of-the-art technologies to add to the convenience and efficiency of transit use."

3-39 Commenter notes roadway section does not show pedestrian crossings.

Response Text on page 179 has been corrected.

3-40 The commenter suggests confirming feasibility of reduction in parking demand.

Response Please see **Response** 3-11, above.

3-41 Commenter raises concern that development of ancillary activities in the Goldtree area may create community conflicts and compete with off-campus activities and generate impacts.

Response At Goldtree an applied research park would be developed in partnership with the local community. Thus, local businesses would have an opportunity to be considered as vendors and service providers as well as occupants of the applied research park. Ancillary activities would not create significant peak traffic demand. They would also be contained within facilities so concerns about aesthetics, light and glare would need to be addressed during site and building design and development.

3-42 The commenter suggests the need to strengthen discussion of process, particularly for plan amendment.

Response A section on plan monitoring, review and revision has been added to Chapter 7.

3-43 The commenter suggests reviewing the list of implementation guidelines, standards, and studies for completeness.

<u>Response</u> Chapter 7 has been revised to include a more comprehensive list of implementation studies.

3-44 Comment incorporates letter dated December 3, 2000 from Bishop's Peak neighborhood residents to SLO City Council.

Response See December 8, 2000 correspondence from Bishop's Peak neighborhood residents (Letter 52).

3-45 Comment incorporates letter from RQN dated December 4, 2000 to SLO City Council.

Response See RQN correspondence from December 4 and June 6, 2000 (Letter 58).

3-46 Comment incorporates e-mail message from Richard Kranzdorf dated 12/5/00 to SLO City Council.

Response See Kranzdorf correspondence of December 5, 2000 (Letter 23).

3-47 Comment incorporates testimony and correspondence from Naoma Wright to SLO City Council, 12/5/00 and 12/600 -- request for Cal Poly and Cuesta to provide more student housing.

Response See additional sections added to Residential Communities element (p. 136).

			Letter 4
		MEETING AGENDA / DATE <u>12-5-00</u> ITEM #	
		COUNCIL MEMORANDUM	
	Decembe	er 5, 2000	
	To:	Mayor Settle and City Council	
	Via:	John Dunn, City Administrative Officer Ken Hampian, Assistant City Administrative Officer	
	From:	John E. Moss, Utilities Director An Discourse of the Unit TEAM. Discourse of Unit Director of the Unit Constant of	· · · · · · · · · · · · · · · · · · ·
	Subject:		
	At the r Poly Ma	equest of Council member Mulholland I have provided an additional review of the Cal aster Plan and DEIR relative to their discussion of Utilities impacts, particularly water.	
	have so shows th supply, combine mitigati	ster Plan and DEIR identifies that Cal Poly at full implementation of the Master Plan will me class II, significant but mitigable, impacts. Table 6.23 on page 302 of the DEIR hat at buildout, Cal Poly will have a deficit of 165 acre feet per year of available water based on their safe annual yield from Whale rock of 1,384 acre feet per year, and a ed domestic and agricultural demand of 1,549 acre feet per year at buildout. The ions proposed for this deficit are to implement a water conservation program, develop a is contingency plan, and to investigate the availability of additional supplies over the next s.	
	Sugges	ted DEIR Comments:	
DEC 0 5 2000	TY COUNCIL	It does appear that at least some information is lacking from Table 6.23 on page 302 of the DEIR and should be addressed in the FEIR. In the discussion of the Physical Plan Elements on page 147 and 148 of the Master Plan and DEIR, the discussion of the available water resources for the University includes two deep-water agricultural wells north of Brizzolara Creek which supply an additional 450 acre feet per year for agricultural irrigation. The supply of water available from these two wells and any corresponding demand being satisfied by these two wells should be included in table 6.23 for clarity. Once properly included, there may or may not be the identified deficit in available yield. In Table 6.1 summary of Impacts and Mitigation Measures, on Page 213, the DEIR identifies that "The University should develop a program designed to reduce overall water consumption on campus." It has been the experience of the City and other agencies in California, that domestic water consumption may be reduced by as much as 10 to 14% through the installation of water-saving fixtures alone. The University should consider as a policy statement in the Master Plan that the University will develop and implement a water demand management program which at a minimum, will retrofit the existing campus with water-saving fixtures and ensure that all new development includes the installation of water-saving fixtures only.	-2

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Council Memorandum Cal Poly Master Plan and DEIR Page 2 of 2

3. The City is pleased to see that the University is proposing to prepare a drought contingency plan as a proposed mitigation. The University should be aware that water shortage contingency planning is one of the required best management practices (BMP'S) for all signatories to the California Urban Water Conservation Council's (CUWCC) MOA, and while the University may not be a member of the CUWCC, the City appreciates the University's consideration of developing a drought contingency plan and recommends that the University consider adoption of all BMP's identified by the CUWCC. The City is signatory to the CUWCC MOA and does comply with the BMP's. The City would appreciate the University's consideration of adoption of the BMP's in this Master Plan, regardless of required mitigation.

As a matter of information for the Council, Pg. 300 of the DEIR under Water, identifies that the City and University are currently working on a project to recycle water for irrigation of the sports complex. In previous comments on the draft Master Plan, the City Utilities Department had requested that the University include reference to the possible cooperation between the City and Cal Poly for the use of reclaimed water on Campus, and in particular for use on the sports complex. Council recently approved design of the Phase 1 water reuse system, which does not include extension of a line to Cal Poly. However, reclaimed water service to Cal Poly is identified as an alternative future project and staff feels it is appropriate for this citing in the DEIR to remain.

If you have any questions regarding this memorandum please feel free to contact me at 781-7205.

c: John Mandeville

Letter 4 Mr. John Moss City of San Luis Obispo December 5, 2000

4-1 Regarding a lack of sufficient water supplies for the Master Plan, the commenter notes the University should incorporate agricultural irrigation wells as part of the supply.

<u>Response</u> Comment noted. The actual yield of agricultural wells is uncertain; the University has five wells, two of which draw from shallow, creek-fed water tables. The other three are located on Chorro Ranch and their capacity is also unknown. The text has been changed to reflect the uncertainty of agricultural well supplies. The University continues to have a long-term potential for deficiency.

4-2 Consider a policy to implement a water demand management program that, at a minimum, will retrofit existing fixtures.

Response Comment noted. The mitigation includes incorporation of water-saving fixtures into all new development, retrofit of older facilities over time, and modification of landscaping irrigation requirements. This effort is part of the Master Plan implementation program set forth in Chapter 7.

4-3 Consider adopting the California Urban Water Conservation Council's best management practices as part of the University's drought contingency plan.

Response Comment noted. The University is currently working with the Regional Water Quality Control Board to develop its comprehensive Water Quality Management Plan in order to adopt BMP's as standard practice.



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FACILITIES PLANNING

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955 Morro Street • San Luis Obispo, CA 93401

Date: December 12, 2000

Robert E. Kitamura, AIA Director of Facilities Planning California Polytechnic State University San Luis Obispo Facilities Planning Department San Luis Obispo, California 93407

SUBJECT: COMMENTS RE: CAL POLY MASTER PLAN & DRAFT ENVIRONMENTAL IMPACT REPORT

Dear Mr. Kitamura;

Thank you for the opportunity to review and comment on the Cal Poly Master Plan and commensurate draft Environmental Impact Report. While the drafts of these documents have been circulating since late October, we unfortunately did not receive a copy of the technical appendices regarding the traffic analysis until the week of December 4, 2000. Hence, we have expedited this comment letter regarding the circulation element of your plan and the associated technical analysis of the DEIR.

Cal Poly Master Plan Draft EIR

Traffic Operations - Intersections, pages 269-278

Our concern regarding this section of the DEIR is that the forecast and analysis for the intersection of Foothill Blvd./California Avenue is not indicative of existing or future conditions. In exploring this issue we discovered that the existing traffic volumes collected by the DEIR consultant for the segment of Foothill west of California appears to be substantially in error with previous studies on this segment. Table 1 below compares the historic volume counts recorded along this segment to those used in the DEIR.

Table 1 – Volume Comparison Foothill w/o Califor
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Үеаг	1985	1989	04/1991	1996	08/02/2000	DEIR 2000	5-1
Volume	18050	23469	16660	22300 ^a	14,604 ^b	7500	

a) Taken from the Cal Poly Sports Complex EIR

b) Denotes a summertime count taken when Cal Poly is not in full session

As you can see, the ADT recorded by the consultant for use in the DEIR is substantially below any count previously recorded including a year 2000 summertime count taken when Cal Poly was not in full session.

The City of San Luis Obispo is committed to include the disabled in all of its services, programs and activiti Telecommunications Device for the Deaf (805) 781-7410.



5-1

5-2

5-3

It is difficult to determine if this error has led to a mis-forecast of the intersection analysis because volume count and survey sheets *are not* included in the technical appendices of the DEIR. In addition, the traffic consultant has appeared to analyze this intersection as if it is "actuated & coordinated" within the City's traffic signal system. Foothill/California *is not* currently contained within the signal system and should be analyzed as an "actuated" signal only. It is unknown what affect this distinction will have on the DEIR analysis. Tim Bochum has discussed these issues with ATE (your traffic consultant) and they are aware of these issues.

Recommendation: The traffic consultant should verify these errors and modify the DEIR accordingly. City staff believes, that the reassignment/redistribution of up to 5,000 vehicles a day to the California and Foothill corridors *will* have a significant operational impact upon the intersection that is not currently identified in the DEIR.

Trip Reduction Assumptions and Alternative Transportation, pages 269-278

(See additional comments below under Master Plan section)

In general, the City concurs with Cal Poly's approach to utilizing alternative transportation, TDM and other incentives to reduce vehicular trips and parking requirements for the expansion components of the campus. The DEIR consultant has been very generous in reducing the net increase in vehicle trips assigned to the expansion plans.

However, there *are no assurances* in the Master Plan that the assumed modal splits will absolutely occur. Therefore, making a conclusion that the impacts are "less than significant" based solely on these assumptions does not appear to be adequate. It should be incumbent on Cal Poly to quantify (which has only partially been done in the DEIR) what the modal split objectives are and establish a mitigation monitoring program to ensure that these goals are reached. The DEIR falls short in this regard but does make the following statement, "Any reduction in financial incentives for the student and staff use of bus service will have a negative effect on the use of transit."

Recommendation: The Master Plan (or DEIR) should quantify necessary modal split objectives (or general trip reduction amounts) and put forth a mitigation monitoring program to ensure that the trip reduction assumptions made in the DEIR become reality. The City believes that without this level of specificity, a finding of Class III impact regarding this component of the circulation element is not a valid finding.

SLO Transit Impacts

The DEIR and Master Plan state that "...Cal Poly will work with SLO Transit (City operated local bus service) and CCAT to develop the transit plan for the campus." The report seems to assume that either or both transit systems have unlimited ability to expand service to carry all new on-campus students and staff. However, Cal Poly is not located within the City boundary and therefore no additional City transit funding will ensue from population increases for student housing within Cal Poly. Thus, the assumptions are basically flawed.

The level of transit analysis in the DEIR is not sufficient to determine if the SLO Transit local service

5-3

5-1

can *absorb* the additional transit trips that will be generated by the proposed expansion plans of Cal Poly. What we do know is that SLO Transit is currently running tandem bus service along our highly populated student routes and sometimes must leave riders at the curb because standing room only capacity is exceeded on the buses (see attached). Additional ridership implied in the DEIR will have significant impacts that will necessitate leaving more riders at the curb if current service levels are in effect. It is incumbent upon the DEIR to investigate this issue and make recommendations regarding the service requirements that will be necessary to meet the objectives (see trip reduction comments above) of the Master Plan.

Recommendation: 1) Include a mitigation measure: Cal Poly will establish a Short Range and Long Range Transit Plan with the goals, programs, policies and objectives that will ensure meeting the modal split objectives outlined in the DEIR and Master Plan. 2) Establish a mitigation monitoring program to measure results and effectiveness of the Master Plan transportation programs and implement needed additional measures as necessary.

General Comments

The DEIR should be clear that capital improvements projects such as the California Street extension, and Parking Garage II, which are contained in this *program* level EIR, will need to conduct *project* level environmental review to avoid impacts not included in this document.

Cal Poly Master Plan Comments

Chapter 5 - Physical Plan Elements

Page 162, California Boulevard, Foothill Boulevard and Campus Way

The consultant will need to amend this section accordingly based upon the comments and issues identified in the DEIR. The current wording found in this section is not reflective of the DEIR.

Page 176-179, Alternative Transportation Element

The City concurs with Cal Poly's approach to utilizing alternative transportation as a means to accommodate part of the future growth of the campus. However, there *are no assurances* in the Master Plan that the assumed modal splits will occur.

The Master Plan (or DEIR) should quantify the necessary modal split objectives, or if flexibility is wanted: general trip reduction amounts, and a commensurate monitoring program to ensure that the trip reduction assumptions made in the Master Plan will become reality. The Master Plan unfortunately does not *commit* the University to this philosophy; it merely identifies alternative transportation as a possible component of the future campus system.

Finally, there appears to be some discrepancy between the traffic study, DEIR and the Master Plan on the level of participation necessary to achieve the trip reduction assumptions. The traffic study clearly identifies mandatory parking pass restrictions and well as other TDM percentages that are not carried

5-10

over to the DEIR or Master Plan. It is important to be consistent between these documents so that assumptions are clearly visible and the Master Plan reflects the true transportation picture for the growth of the campus.

We suggest the following additions to this element of the Plan:

- Pursuant to the comments mentioned regarding the DEIR, Cal Poly should establish clear modal split objects and an annual monitoring program to gauge success or failure with Master Plan objectives. The City's General Plan currently does this and if Cal Poly would duplicate the effort, that effort would make our two documents complimentary on this very important transportation issue.
- 2) The Master Plan should recommend that Cal Poly work with the City, the County and SLOCOG to develop a Short Range and Long Range Transit Plan for the University.
- 3) It should be made clear on page 179, that there are *potentially severe Environmental Consequences* of the Master Plan if the trip reduction assumptions contained in the DEIR and traffic study are not achieved after implementation of elements of the Master Plan. This statement is not only fair to the casual reader of this document it is accurate as well. Cal Poly has done an excellent job of mitigating the increased on-campus student population from a transportation perspective. However this excellent work is based upon a "house of cards" of assumptions unless they become reality. Solid and strong mitigation measures and monitoring program is the necessary glue to make that house of cards solidly built and successful.

We thank you for the opportunity to review and comment on these important documents for our community and the University. If you would like to discuss these issues further, or have any additional questions, please contact Timothy Scott Bochum, Deputy Director of Public Works, or myself at (805) 781-7203.

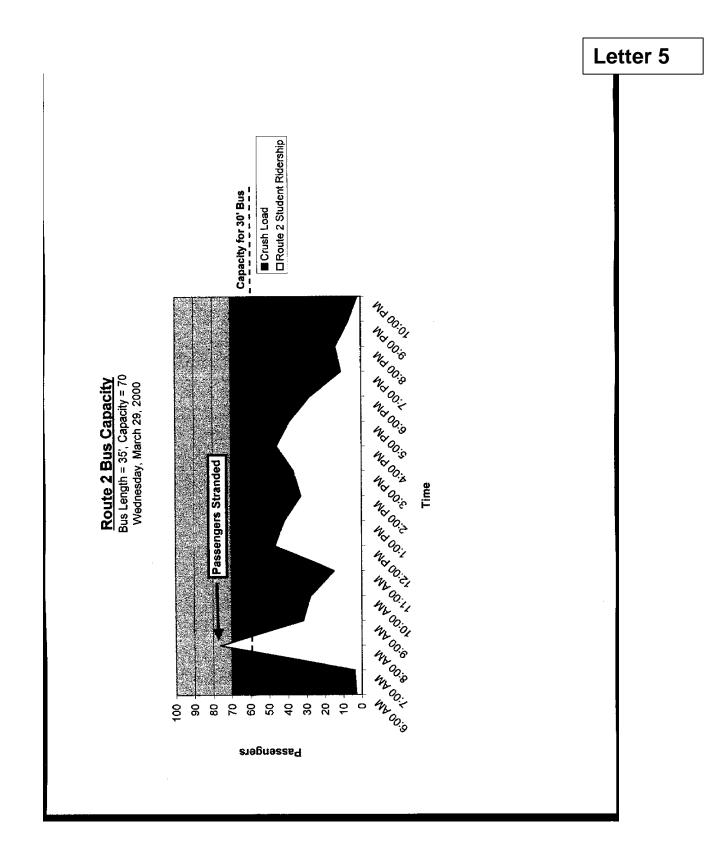
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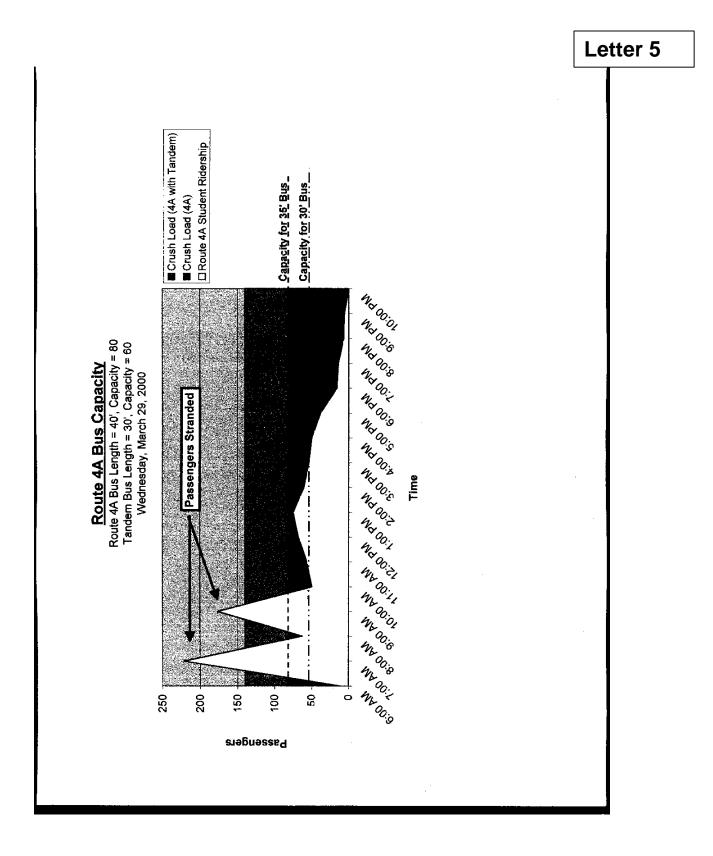
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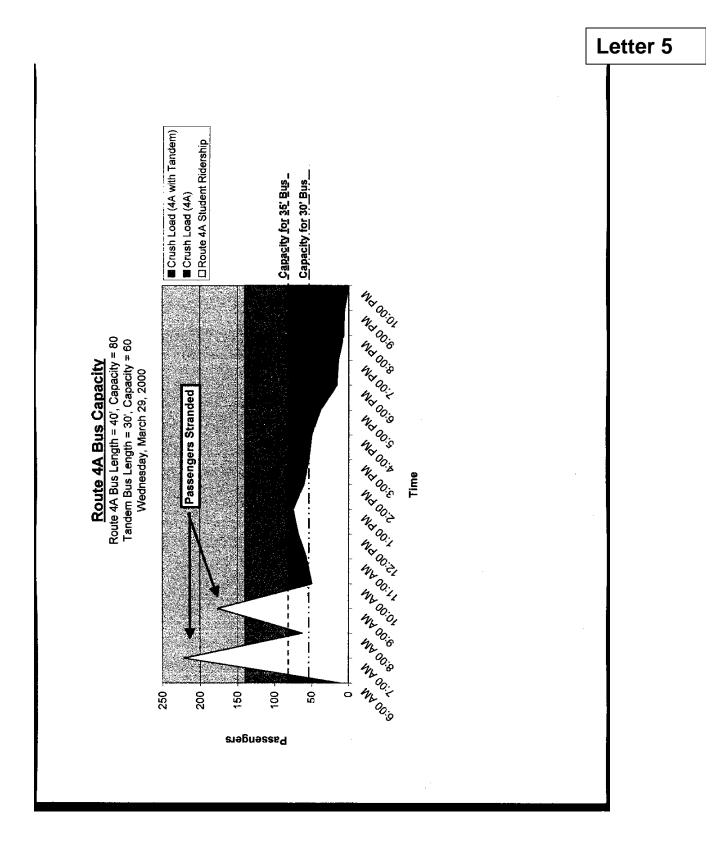
Michael McCluskey Director of Public Works

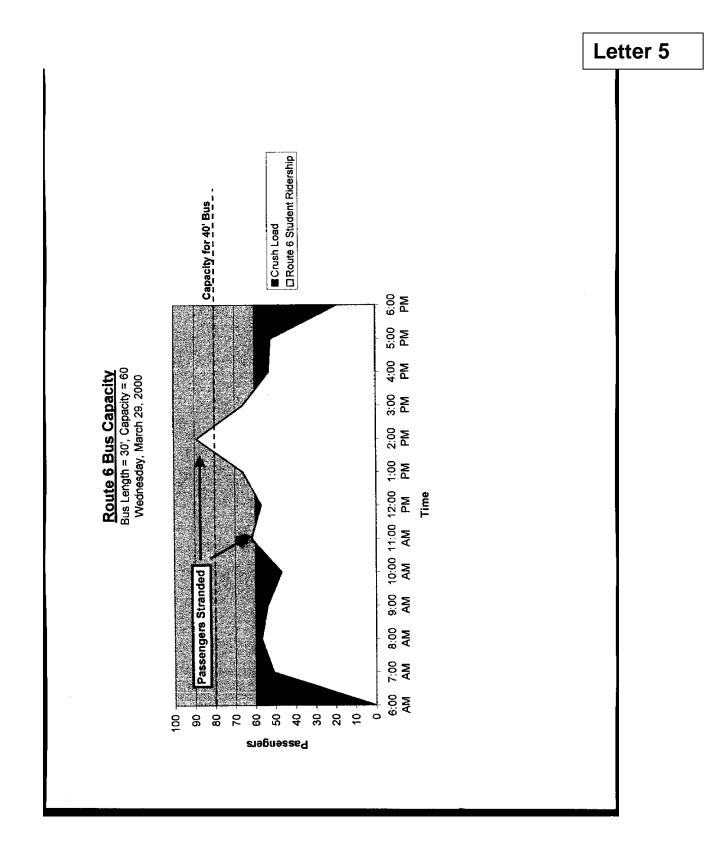
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Cc: City Council John Dunn Ken Hampian Timothy Scott Bochum John Mandeville Chris Clark, CMCA









Letter 5 Mr. Michael McCloskey City of San Luis Obispo, Public Works December 12, 2000

5-1 Commenter suggests that traffic volumes reported for the Foothill Boulevard/California Avenue segments of the circulation system appear to be in error. This could substantially change the impact analysis for the intersection at Foothill and California.

Response The traffic volumes (ADT) were reported in error. These figures have been corrected in the text of the Final EIR. However, the intersection volumes were taken separately from the roadway ADT count and are correct. The level of service (LOS) for the Foothill/California intersection was calculated assuming actuated signal control (rather than actuated-coordinated as reported in the study). The resulting LOS are shown below in Table A. **Table A**

Scenario	A.M. Peak Hour	P.M. Peak Hour
Existing	12.2 Sec / LOS B	21.7 sec / LOS C
Baseline	13.8 Sec / LOS B	25.5 Sec / LOS C
Baseline + Project	14.3 Sec / LOS B	30.4 Sec / LOS C
Cumulative	16.3 Sec / LOS B	36.1 Sec / LOS D
Cumulative + Project	16.8 Sec / LOS B	42.7 Sec / LOS D

Foothill/California Levels of Service

5-2 Commenter suggests an inadequacy in the environmental analysis of the impacts to circulation because the plan does not mandate trip reductions through alternative transportation and other means. The plan should quantify necessary modal split objectives.

Response The plan *does* mandate trip reductions. The fundamental trip reduction mechanism is housing all new enrollment on campus. This would be the functional equivalent of the City adding a new residence for every new job created within San Luis Obispo. Furthermore, the campus will institute a policy of restricting freshmen from having automobiles on campus. The Master Plan states as policy that the demand for 2,000 parking spaces will be eliminated. The following table has been used for estimating where savings would occur in parking demand.

Estimated Parking Demand Reductions

Approach	Savings	Relative Cost	Safety Valve*		
Freshmen	1,000~1,50	L	some no.		
restrictions	0				
Geographic controls	500	L	appeal		
Car/vanpools	300	Μ			
Lottery	As	L	appeal		
	determined				
Parking Fees	minor	L	appeal		
On-campus transit	moderate	Н			
City transit	minor	Н			

Approach	Savings	Relative Cost	Safety Valve*
Bike/ped enhancmt	moderate	Н	
Area mgt	minor	L	
Fac/Staff incentives	minor	Μ	
Entertainment	moderate	Н	
Enrollment scenarios	moderate	Μ	

Note: alternative transportation savings will be lower for Cal Poly because many of these programs are in existence and functioning well.

*Absolute controls will require provisions (safety valve) for hardships.

The University, as stated policy in the Master Plan, would reduce demand by 2,000 spaces. This reduction can be achieved through a number of measures. Over time, the feasibility and success of various measures will vary. For this reason, it is impractical to commit, at a Master Plan level, to absolutes. For example, an important idea is having an on campus and near campus shuttle. But this needs to be subjected to feasibility studies and trial programs, which the University will do.

To meet the parking reduction proposal of 2,000 spaces, Cal Poly intends to institute as a first, and most effective measure, that freshmen be required to live on campus and that they not be allowed to maintain cars on campus (with exceptions made for hardship and job-related requirements). We believe that the inelasticity of demand Cal Poly will prevent this policy from having a detrimental effect on the dormitory market. This restriction exists at other universities, including UC Santa Cruz.²

It is estimated that there will be about 4,000 new undergraduate students each Fall (about 3,000 freshmen) at Cal Poly under the full growth anticipated with the Master Plan. Currently, we house approximately $80\% \sim 90\%$ of our freshmen on campus, and the campus provides 1,530 parking spaces for residents (R1 & R2). At present ratios, approximately 1,800 spaces would be needed under the Master Plan for freshmen. Allowing for some hardship requirements for freshmen, it is anticipated that approximately 1,500 or more spaces could be reduced with this policy alone.

This policy will do more than just reduce cars on campus. It will change the culture of the campus, infusing a higher regard for the environment and a reduced reliance on the automobile. As students advance through the University, they will do so with the ability to use alternative modes of transportation.

5-3 Commenter suggests transit impacts are not adequately quantified in the DEIR. The capacity of the transit system to absorb the necessary increase in ridership has not been established. Further suggests that mitigation and monitoring be added to reinforce transit objectives.

Response The enrollment increases will take place over the next twenty years. During this time, Cal Poly will work with the transit providers to enable the increase in capacity necessitated by this and other growth. The City will also increase, both in residences and jobs (especially the latter) and will also require additional transportation alternatives. Cal Poly will work with the

² http://www2.ucsc.edu/taps/students.html#fresh

City to monitor the use of transit services. In addition, Cal Poly will begin a feasibility study, as part of the implementation of the Master Plan, for a near campus shuttle system, which could reduce the impacts on the local transit providers.

5-4 Commenter suggests that the DEIR be clarified regarding the need for project level environmental review for capital projects such as California Boulevard extension and Parking Structure II.

<u>Response</u> Comment noted. Individual projects will be subjected to additional environmental review. Chapter 7 describes how future projects will be reviewed within the context of the program EIR for the Master Plan.

The Land Use and Project Review Procedures to be established to implement the Master Plan will include the following considerations.

- Establishment of a project development team that represents all affected University interests;
- Identification of responsibility for liaison with elected officials and local and regional agencies, as appropriate to the nature of the project;
- Identification of the appropriate neighborhood areas that may be affected by the project so that meetings may be held early in project planning and design regarding ways to relieve possible impacts.

5-5 Commenter notes that page 162 of the plan (new page 171) will require modification consistent with comment number 5-1.

Response The text has been modified.

5-6 Commenter offers concern that the modal split objectives have no assurance that they will be achieved. He further suggests that further mitigation (see 5-9 below) and monitoring be instituted.

Response The Master Plan proposes housing all new enrollment on campus. All of these on-campus residents will use a mode of transportation that is an alternative to vehicular use, namely, walking. In addition, freshmen will be restricted from using automobiles.

5-7 Commenter notes discrepancies between DEIR, plan, and traffic study as to required level of participation necessary to achieve trip reduction assumptions.

Response The Master Plan has been clarified to identify how trip reduction would be achieved, providing a commitment to funding the bus subsidy at least at current amounts (see p. 189).

5-8 Commenter suggests adding clear modal split objectives and an annual monitoring program.

<u>Response</u> Please see <u>Response</u> 5-2, above.

5-9 Commenter suggests Cal Poly work with the City, County, and SLOCOG to develop a Short Range and Long Range Transit Plan for the University.

<u>Response</u> Text which read "City Transit Improvements - Continue to work with transit providers to improve local transit to campus to meet future needs" has been changed to read "Integrated Transit Plan – Work with SLOCOG, City and County to develop both short and long term transit plans" (p. 189).

5-10 Commenter suggests the "potentially severe environmental consequences" will result if the trip reduction assumptions in the plan are not achieved.

Response Many commenters, including the City of San Luis Obispo, Caltrans, SLOCOG, and others have stated strong concerns with Cal Poly's alternative transportation approach in the Master Plan. Michael McCloskey, Director of Public Works for the City of San Luis Obispo, observes that Cal Poly's vehicle trip reduction program is "based upon a 'house of cards' of assumptions" which will collapse unless recommended mitigation measures are made reality. This description is apt.

The Cal Poly Master Plan was initiated in part by the California State University's proclamation that it would endeavor to educate the growing ranks of students referred to as Tidal Wave II, the children of the baby boom. Cal Poly would take its reasonable share of those students. At the outset of the Master Plan process President Baker declared, as a matter of policy, that all new enrollment would be housed on campus. The University would not exacerbate an extremely tight housing market in the community by asking it to accept and find homes for an additional 3,000 students.

This on-campus housing requirement presented the Master Plan team with its greatest challenge. Although Cal Poly maintains 6,000 acres of campus in San Luis Obispo County, only a small portion of that fit the profile of appropriate housing sites. A student residence must be built at the intersection of low environmental/educational sensitivity, and proximity to the instructional core of campus. And more than just being within walking distance to classes, it needed to configure a community that would foster academics and citizenship.

An important component of the proposed student housing is the fact that under present conditions six of ten freshmen and eight of ten upper class students will want to bring cars to campus. In order to meet the anticipated demand, Cal Poly would need to develop approximately two additional parking structures beyond the two currently proposed. Realizing that having five parking structures on campus was difficult to accept, the Master Plan team sought alternatives.

The result was a three-pronged strategy to manage this demand:

- Policy-driven reduction of parking spaces. A reduction in the projected number of parking spaces that would be required under the Master Plan if the campus were to continue to provide parking in accordance with current ratios.
- Improved transit and other alternative transportation approaches. These are listed below.
- Moderation of impacts to neighborhoods. Any reduction in parking availability will immediately increase the pressure on local neighborhoods for parking. The city and university have previously cooperated on residential parking restrictions. As mitigation for the reduction, this program will be reviewed and expanded.

The University, as stated policy in the Master Plan, would reduce demand by 2,000 spaces. This reduction would be achieved through a number of measures. Over time, the feasibility and success of various measures will vary. For this reason, it is impractical to commit, at a Master Plan level, to absolutes. For example, an important idea is having an on campus and near campus shuttle. But this needs to be subjected to feasibility studies and trial programs, which the University will do.

To meet the parking reduction proposal of 2,000 spaces, Cal Poly intends to institute as a first, and most effective measure, that freshmen be required to live on campus and that they not be allowed to maintain cars on campus (with exceptions made for hardship and job-related requirements). We believe that the inelasticity of demand Cal Poly will prevent this policy from having a detrimental effect on the dormitory market. This restriction exists at other universities, including UC Santa Cruz.³

It is estimated that there will be about 4,000 new undergraduate students each Fall (about 3,000 freshmen) at Cal Poly under the full growth anticipated with the Master Plan. Currently, we house approximately $80\% \sim 90\%$ of our freshmen on campus, and the campus provides 1,530 parking spaces for residents (R1 & R2). At present ratios, approximately 1,800 spaces would be needed under the Master Plan for freshmen. Allowing for some hardship requirements for freshmen, it is anticipated that approximately 1,500 or more spaces could be reduced with this policy alone.

This policy will do more than just reduce cars on campus. It will change the culture of the campus, infusing a higher regard for the environment and a reduced reliance on the automobile. As students advance through the University, they will do so with the ability to use alternative modes of transportation.

Additional measures to further reduce demand will be instituted. The following table presents a list of actions the university will explore and implement if feasible. Note that some of these measures will be more successful than others. For example, restricting students who live close to campus from getting parking permits will be difficult to enforce, but other campuses have found workable ways to do so. For example, UC Santa Barbara issues no campus parking permits to students living within two miles of campus. In addition, Cal Poly already has one of the most successful alternative transportation programs in the region. This means that the return on additional investment in some of these programs will be *relatively* marginal.

•	Freshmen restrictions	•	Bike/pedestrian enhancement
•	Geographic controls	•	Continued bus subsidy
•	Car/vanpools	٠	Faculty/Staff incentives
•	Parking Fees	٠	Entertainment/services on campus
•	On-campus shuttle	٠	Enrollment scenarios
•	City transit improvements	٠	Remote parking

PROPOSALS FOR MANAGING PARKING AND VEHICLE TRIPS ON CAMPUS

Many comments on the Master Plan have raised concerns about the continuation of the fully subsidized bus passes for Cal Poly students and employees. The current bus subsidy is an element of a negotiated arrangement between Cal Poly and the City of San Luis Obispo. The

³ http://www2.ucsc.edu/taps/students.html#fresh

current agreement is for four years and ends on June 30, 2001. The negotiations are complex and are influenced by ever increasing costs. In addition, Cal Poly's current funding (through parking fines) has been and continues to be relatively stable, meaning it has not been increasing commensurate with increased transit costs. Because the subsidy is the result of two party negotiations, it is not possible for the University to predict that it will always be able to reach an agreement with the city. Nevertheless, Cal Poly is committed to maintaining the funding for the bus at least at the currently designated level, and is exploring funding sources, such as an increase in parking fees, to fully cover the subsidy.

To conclude this discussion, it is important to review the pieces of the puzzle. In lieu of building two additional structures of steel and concrete, Cal Poly has chosen to erect a "house of cards" dependent on an interlocking set of incentives and policies. The "house of cards" for alternative transportation and parking demand management will be held together by the following important elements.

Cal Poly will:

- house all new enrollment on campus, eliminating the majority of new vehicle trips that would otherwise occur with off campus residences. Cal Poly is also undertaking faculty and student housing projects that will further reduce demand;
- institute restrictions on freshmen parking;
- maintain, at least at current levels, the bus subsidy;
- study the feasibility, and if appropriate, institute a campus shuttle system;
- study the feasibility, and if appropriate, institute geographic restrictions on parking permits;
- *not* build the two structures that otherwise would have been required to meet parking demand;
- work with the City to manage any resulting impacts to neighborhoods; and
- continue its aggressive and successful alternative transportation program.

Without this structure, the campus will not function in accord with the Master Plan. Air quality and transportation impacts will be significant. Community concerns will be heightened and the quality of the university experience will be diminished.

12/27/00 WED 11:50 FAX 805 756 7566

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December 7, 2000

Robert E. Kitamura Director of Facilities Planning California Polytechnic State University San Luis Obispo San Luis Obispo, CA 93407

SUBJECT: Cal Poly Master Plan & Draft EIR.

Dear Mr. Kitamura,

Thank you for providing the District with the opportunity to review and provide comments on the Cal Poly Master Plan and Draft EIR. We previously commented on the Preliminary Draft Cal Poly Master Plan (enclosed for your convenience) in a letter to Deby Anderson of Cal Poly dated June 20, 2000, that is incorporated here by reference. Since we have previously reviewed the Draft Master Plan, most of our comments in this letter will focus on the Draft EIR.

Master Plan

General Comments

To reiterate the sentiments expressed in our June 20, 2000 letter, the proposed Cal Poly Master Plan presents a variety of policies and guiding principles that will aid the growth of the campus in ways that will reduce air quality impacts associated with additional student enrollment. The document appears well-written and well thought out, and incorporates essentially all of the land use and circulation policies contained in the District's Clean Air Plan. Our congratulations to the many individuals and groups responsible for its development.

Specific Comments

 (Circulation Principles, Public Transportation, page 158) District staff concurs with the statement that "additional public transportation could greatly reduce the need to increase the University parking supply to accommodate enrollment growth." We further praise the commitment to fully integrate public transit routes and stops into the campus circulation system. Student patronage of the public transit system has been very impressive, due largely to University support of a free student bus pass program. Future on-campus enhancements and increased integration of the public transit system in conjunction with continued financial support of the free student bus pass program will greatly reduce parking demand and air quality impacts.

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Cal Poly Master Plan & Draft EIR Dccember 7, 2000 Page 2

Draft Environmental Impact Report

Specific Comments

- 2. (Table 6.1, Summary of Impacts and Mitigation Measures, page 209; and Mitigating Measures page 287) The DEIR concludes that "[o]perational air quality impacts from traffic are mitigated by policies contained in the Master Plan (Class III)." While we agree that portions of the Master Plan will reduce traffic related air quality impacts, we disagree with the conclusion that the impacts are fully mitigated to Class III less than significant levels that require "[n]o additional mitigation." Traffic related air quality impacts at build-out (2020) are estimated in Appendix E using the California Air Resources Board land use model URBEMIS7G (see Table 6.20). The results of this analysis indicate that motor vehicle related air quality impacts will greatly exceed the District's upper Tier Π significance thresholds; enough to be considered Class I. As stated in our June 20, 2000 letter, past subsidized student access to public transportation is one of the most important contributing factors to Cal Poly's impressive student average vehicle ridership rate. Ongoing funding for this program has historically been uncertain; thus, it cannot be assumed that the program will continue unless a permanent funding solution is identified. Continued, long term financial support for this program is essential to minimizing the air quality impacts associated with the future growth of the university. We therefore request that the DEIR strike the conclusion that the project's air quality impacts are Class III and insert as mitigation of traffic related impacts the requirement to continue financial support of the free student bus pass program.
- 3. (Table 6.1, Summary of Impacts and Mitigation Measures, page 209) Mitigation is suggested for stationary sources which are expected to result in Class II impacts. Suggested mitigation includes shade tree planting and orientation of buildings to take advantage of natural lighting and heating/cooling. However, the potential addition of boilers to the heating plant (3 existing boilers) on page 147 of the Master Plan do not appear to be considered in the discussion of "stationary sources." Permits will need to be obtained from the District prior to the installation of any new boilers or stationary power generation equipment. Questions regarding new equipment permits or modification of existing permits should be directed to Gary Willey of the District's Engineering Division at (805) 781-5912.
- 4. (Operational Impacts, Table 6.20, page 284-285) Table 6.20 separately compares vehicle and stationary operational impacts to the District's thresholds of significance. In fact, the sum of vehicle and stationary emissions should be compared to the District's thresholds to assess the project's level of significance. In this case, total operational NOx emissions are estimated at about 80 lb/day, approximately 55 lb/day above the District's upper Tier II significance threshold.

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Cal Poly Master Plan & Draft EIR. December 7, 2000 Page 3

- 5. (Mitigating Measures, Operational Emissions, Traffic, page 287) While District staff recognize the beneficial nature of a number of policies and goals contained in the Master Plan, air quality impacts at build-out are projected to significantly exceed the District's Tier II significance threshold. As stated in Comment 2 above, continued support for free student access to the public transportation system (SLO Transit and CCAT) is an extremely effective and tested means of reducing student transportation related air quality impacts. We therefore request that student bus pass subsidies be included as mitigation under the "Traffic" heading.
- 6. (Mitigating Measures, Parking Structures, page 287) District staff concur that proposed parking structures should be "designed with multiple exits in order to reduce the time required to vacate the cars after large events" to reduce the potential to create CO hotspots. We further recommend review and evaluation of the results of the CO monitoring program currently underway to evaluate the newly constructed Grand Ave. parking structure prior to the design and construction of any new parking structures on campus. Significant attention will need to be afforded the concept of parking structure design and siting if the monitoring data indicate exceedences of state or federal air quality standards.
- 7. (Construction Impacts, Air Quality, Toxic Substances, page 305) As stated in the DEIR, asbestos containing materials (ACM) may be present within existing structures that could be disturbed during demolition and renovation activities. This project is subject to the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (NESHAP), which includes but is not limited to: 1) notification requirements to the District, 2) asbestos survey conducted by a Certified Asbestos Inspector, and, 3) applicable removal and disposal requirements of identified ACM. Please contact Tim Fuhs of the APCD Enforcement Division at 781-5912 for further information regarding asbestos and lead abatement issues.
- 8. (Construction Impacts, Mitigating Measures, Equipment Emission Control, page 310) The first paragraph on page 308 indicates the likelihood that equipment emissions (primarily diesel powered) will likely exceed the District's construction phase significance thresholds at the H1, H2, Goldtree site, the off campus housing site, and the Grand and Slack housing sites. There exists; therefore, strong justification for implementing significant mitigation measures aimed at reducing public exposure to diesel exhaust. The fine particulate fraction of diesel exhaust has been listed by the State of California as a toxic air contaminant (TAC), recognizing both chronic and carcinogenic health risks. We therefore recommend that the list of mitigation measures presented on page 310 be revised as follows:

- The project owner shall require that all fossil fueled equipment shall be properly maintained and tuned according to manufacturers specifications.

- The project owner shall require that all off-road and portable diesel powered equipment,

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Cal Poly Master Plan & Draft EIR December 7, 2000 Page 4

including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, shall be fueled exclusively with CARB certified diesel fuel.

- During construction activities at each of the locations identified above where equipment emissions are projected to exceed the District's thresholds, the project owner shall install catalytic soot filters on the two pieces of equipment (per site) projected to generate the greatest emissions. Where the catalytic soot filters are determined to be unsuitable, the owner shall install and use an oxidation catalyst. Suitability is to be determined by an independent California Licensed Mechanical Engineer who will submit for District approval, a Suitability Report identifying and explaining the particular constraints to using the preferred catalytic soot filter.

9. (Construction Impacts, Mitigating Measures, page 310 and Appendix E, Mitigation Monitoring Program, page E-6) A list of dust control measures are presented. Item "O" states "[it] shall be the University's sole discretion as to what constitutes a nuisance." Prohibitions against the generation of nuisance, and the definition of nuisance, are presented in Section 41700 of the California Health and Safety Code (H&SC) and District Rule 402: Nuisance. Enforcement of nuisance from emission of air pollutants falls under the authority of the District. Please remove Item "O".

Thank you for the opportunity to provide input on this project. Please feel free to contact me at 781-5912 with any questions or comments.

Sincerely,

Barry Lajoie

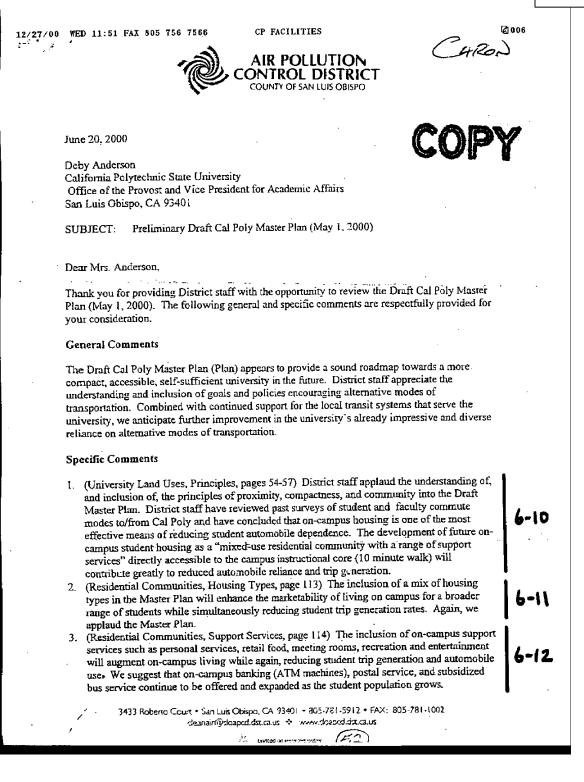
Air Quality Specialist

cc: Gary Willey, SLOAPCD (permit issues) Tim Fuhs, SLOAPCD (Asbestos/lead issues)

Enclosure: June 20, 2000 letter to Deby Anderson of Cal Poly.

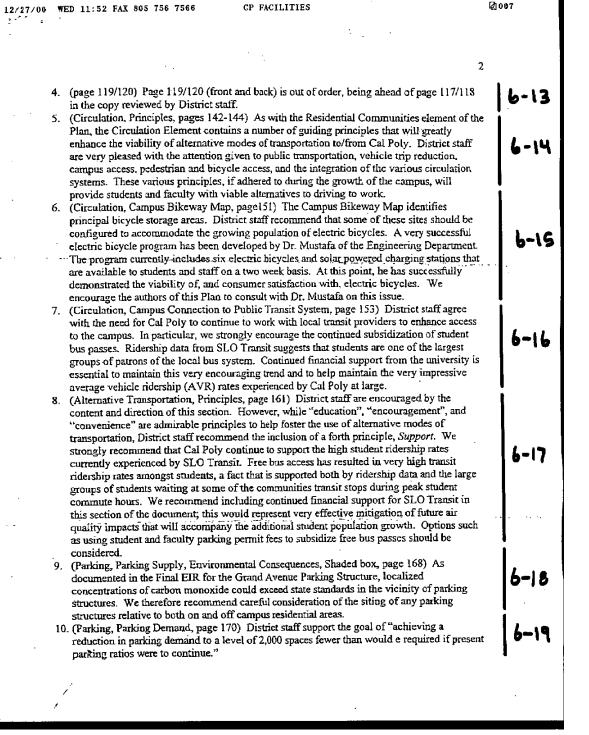
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. · 3 Please feel free to contact me at (805) 781-5912 with any questions or comments. Sincerely, Ban Barry Lajole BPL/bpl H:\OIS\PLAMRESPONSE\2246-1.bl.doc ------------ ----e and a summer of a ------يحتريصنا لحسنته بحليها لتربا ك ___` - ____

Letter 6 Mr. Barry Lajoie Air Pollution Control District December 5, 2000

- **6-1** The commenter concurs with the air quality benefits of integrating transit with the future development of the Cal Poly campus.
- **Response** No additional response is necessary.
- **6-2** The commenter expresses the desire to make mitigation of traffic impacts contingent on public transit subsidy.

Response Many comments on the Master Plan have raised concerns about the continuation of the fully subsidized bus passes for Cal Poly students and employees. The current bus subsidy is an element of a negotiated arrangement between Cal Poly and the City of San Luis Obispo. The current agreement is for four years and ends on June 30, 2001. The negotiations are complex and are influenced by ever increasing costs. In addition, Cal Poly's current funding (through parking fines) has been and continues to be relatively stable, meaning it has not been increasing commensurate with increased transit costs. Because the subsidy is the result of two party negotiations, it is not possible for the University to predict that it will always be able to reach an agreement with the city. Nevertheless, Cal Poly is committed to maintaining the funding for the bus at least at the currently designated level, and is exploring funding sources, such as an increase in parking fees, to fully cover the subsidy.

6-3 The comment questions the conclusion that emissions associated with operational motor vehicles will be less than significant when compared with the Air Pollution Control District's thresholds for significance and the need to make mitigation of traffic impacts contingent on public transit subsidy.

Response Table 6.20 provides a summary of estimated unmitigated emissions associated with buildout of the university in accordance with the various uses and transportation strategies included in the Master Plan. The emissions were calculated based on the net traffic generation associated with the campus as described in Appendix C of the Draft EIR (*Parking and Traffic Study*, Associated Transportation Engineers, 2000) and assumes incorporation and implementation of transportation control measures and other aspects of the Master Plan that reduce overall trip generation. When compared with the District's thresholds, the resulting unmitigated emissions exceed the Tier 2 threshold for Nox by about 55 pounds per day but are less than the Tier 3 threshold of 25 tons per year. According to the District's CEQA Guidelines, when a project is expected to exceed the Tier 2 threshold, an EIR should be prepared and all feasible "standard" and "discretionary" mitigation measures should be implemented. The commenter refers to ongoing funding for subsidized student access to public transit as a feasible mitigation whose implementation is uncertain under the present wording of the Master Plan.

6-4 The comment refers to the District permit requirements for boilers that can be a source of stationary emissions.

<u>Response</u> This comment is noted and the permitting requirements will be forwarded to the Director of Facilities Planning.

6-5 The comment notes that the correct characterization of emissions associated with the project should combine stationary and mobile source estimates.

Response The resulting total is about 55 lbs/day above the District's Tier 2 threshold, as described in response No. 6-2, above.

6-6 Commenter notes need to make mitigation of traffic impacts contingent on public transit subsidy.

Response Many comments on the Master Plan have raised concerns about the continuation of the fully subsidized bus passes for Cal Poly students and employees. The current bus subsidy is an element of a negotiated arrangement between Cal Poly and the City of San Luis Obispo. The current agreement is for four years and ends on June 30, 2001. The negotiations are complex and are influenced by ever increasing costs. In addition, Cal Poly's current funding (through parking fines) has been and continues to be relatively stable, meaning it has not been increasing commensurate with increased transit costs. Because the subsidy is the result of two party negotiations, it is not possible for the University to predict that it will always be able to reach an agreement with the city. Nevertheless, Cal Poly is committed to maintaining the funding for the bus at least at the currently designated level, and is exploring funding sources, such as an increase in parking fees, to fully cover the subsidy.

6-6 The comment recommends incorporating the information gained from currently ongoing carbon monoxide monitoring of the recently-completed parking structure to help shape the design of future structures in a manner that minimizes CO exposure.

Response This comment is noted and will be forwarded to the Director of Facilities Planning. The monitoring of the parking structure has been going on since October 2000. To date, the highest level of CO has been less than 3 parts per million, considerably below the state and federal thresholds. This monitoring will continue until September 2001. The only significant concern with the new parking structure has been the exit time, sometimes exceeding thirty minutes. This is because, pursuant to an agreement with the Alta Vista Neighborhood Association, there is only one regularly operated exit. The new structures will be designed, to the extent feasible, with multiple exits.

6-8 The comment notes that the project will be subject to the requirements contained in the National Emissions Standard for Hazardous Air Pollutants with regard to asbestos abatement and removal.

Response This comment is noted and will be forwarded to the Director of Facilities Planning. The University has undergone extensive asbestos removal in building renovation and demolition. The University will comply with asbestos and related regulations.

6-9 The comment recommends additional mitigation measures to address diesel emissions associated with construction activities at off-campus housing sites.

Response The following items have been added to the list of Equipment Emissions Control in the EIR at page 326:

The project shall require that all fossil-fueled equipment shall be properly maintained and tuned according to manufacturers specifications.

The project proponent shall require that all off-road and portable diesel-powered equipment including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, shall be fueled exclusively with CARB certified diesel fuel.

During construction activities at each of the locations identified above where equipment emissions are projected to exceed the District's thresholds, the project proponent shall install catalytic soot filters on the two pieces of equipment (per site) projected to generate the greatest emissions. Where the catalytic soot filters are determined to be unsuitable, the project proponent shall install and use an oxidation catalyst. Suitability is to be determined by an independent California Licensed Mechanical Engineer who will submit for District approval, a Suitability Report identifying and explaining the particular constraints to using the preferred catalytic soot filter.

6-10 The comment refers to the regulation of, and definition of, a "nuisance" provided in the Health and Safety Code that will determine the University's exercise of discretion with regard to the abatement of nuisances associated with construction-related dust. The comment states that the abatement of a nuisance associated with air pollutants (such as dust) falls under the discretion of the Air Pollution Control District.

Response This comment is noted and will be forwarded to the Director of Facilities Planning.

6-11 The comment provides support for Land Use principles.

<u>Response</u> No response required.

6-12 The comment provides support for mix of housing types.

Response No response required.

6-13 The comment provides support for expanding services for students living on campus.

Response No response required.

6-14 The comment notes pages are out of sequence in review copy.

Response Noted - October 10 and January 23 plan pagination is sequential.

6-15 The comment provides support for Circulation principles.

Response No response required.

6-16 The comment suggests the University consider electric bicycle use and storage.

Response Ed Johnson, Facilities Planning, has received a grant to test the feasibility of using electric bicycles on campus. The first bike arrived on campus at the end of last year.

6-17 The comment provides strong support for coordination with local transit providers and continued bus subsidy.

<u>Response</u> No response required. See <u>**Response**</u> 6-2, above.

6-18 The comment suggests adding Support as a principle for alternative transportation.

<u>Response</u> Text on page 189 has been added to read that "Cal Poly *is committed to maintaining the funding for the bus at least at the currently designated level.*"

6-19 The comment notes concern with air quality associated with parking structures.

<u>Response</u> Please refer to comment 6-6 above. The new structure, even during event conditions, has operated well below state and federal requirements.

6-20 The comment provides support for reduction in parking demand.

<u>Response</u> The following table has been used for estimating where savings would occur in parking demand. The Master Plan policy is to reduce parking demand by 2,000 spaces.

Approach	Savings	Relative Cost	Safety Valve*
Freshmen	1,000~1,50	L	some no.
restrictions	0		
Geographic controls	500	L	appeal
Car/vanpools	300	Μ	
Lottery	As	L	appeal
	determined		
Parking Fees	minor	L	appeal
On-campus transit	moderate	Н	
City transit	minor	Н	
Bike/ped enhancmt	moderate	Н	
Area mgt	minor	L	
Fac/Staff incentives	minor	Μ	
Entertainment	moderate	Н	
Enrollment scenarios	moderate	М	

Estimated Parking Demand Reductions

Note: alternative transportation savings will be lower for Cal Poly because many of these programs are in existence and functioning well.

*Absolute controls will require provisions (safety valve) for hardships.

To meet the parking reduction proposal of 2,000 spaces, Cal Poly intends to institute as a first, and most effective measure, that freshmen be required to live on campus and that they not be allowed to maintain cars on campus (with exceptions made for hardship and job-related requirements). We believe that the inelasticity of demand Cal Poly will prevent this policy from having a detrimental effect on the dormitory market. This restriction exists at other universities, including UC Santa Cruz.⁴

It is estimated that there will be about 4,000 new undergraduate students each Fall (about 3,000 freshmen) at Cal Poly under the full growth anticipated with the Master Plan. Currently, we house approximately $80\% \sim 90\%$ of our freshmen on campus, and the campus provides 1,530 parking spaces for residents (R1 & R2). At present ratios, approximately 1,800 spaces would be needed under the Master Plan for freshmen. Allowing for some hardship requirements for freshmen, it is anticipated that approximately 1,500 or more spaces could be reduced with this policy alone.

This policy will do more than just reduce cars on campus. It will change the culture of the campus, infusing a higher regard for the environment and a reduced reliance on the automobile. As students advance through the University, they will do so with the ability to use alternative modes of transportation.

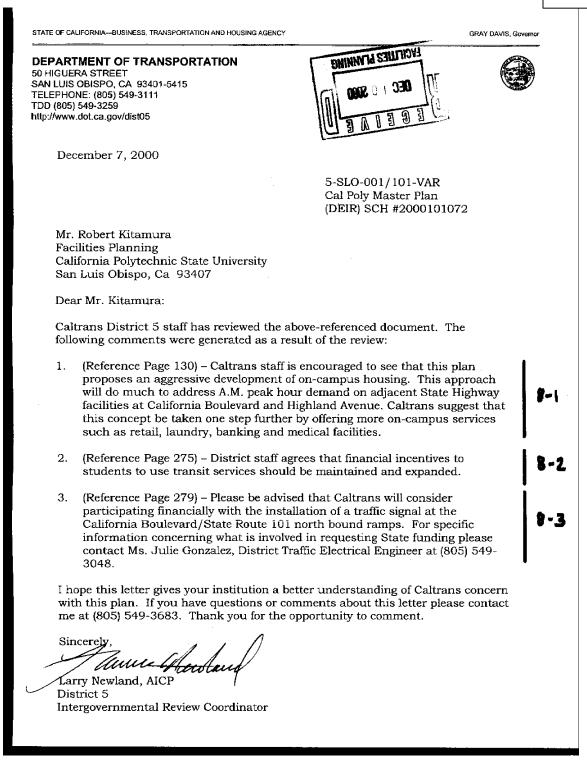
⁴ http://www2.ucsc.edu/taps/students.html#fresh

n H. Hickox retary for ironmental rotection	81 Higuera Street, Suite 200, Sa	//www.swreb.ca.gov/rwqcb3 Governor 1 Luis Obispo, California 93401-5411 47 • FAX (805) 543-0397
November 16, 2	000	
Mr. Robert Kita Director of Faci Cal Poly State L San Luis Obispo	lities Planning Jniversity	FACILITIES
Dear Mr. Kitam	ura:	
COMMENTS REPORT	ON CAL POLY MASTER PL	AN AND DRAFT ENVIRONMENTAL IMPACT
Thank you for Report. We also	the opportunity to review the Ca o appreciate the opportunity to part	al Poly Master Plan and Draft Environmental Impact icipate in developing this plan.
Since the Mast comments at thi		ssues in a very general manner, we have no specific 7-1
dedicated to de	veloping a comprehensive and pra	fanagement Plan. Thank you for the obvious efforts ctical approach to water quality protection. We are in bate we will have comments in the next week or two.
If you have q 542-4647.	uestions, please call <u>Sorrel Mar</u>	ks at (805) 549-3695 or Gerhardt Hubner at (805)
Sincerely, Julie for: Roger W. Brigg Executive Office		
I	m/Staff/Sandra/Ceqa/Cal Poly Master Plar	a comment letter
	California Environi	mental Protection Agency
		cycled Paper

Letter 7 Mr. Roger Briggs Regional Water Quality Control Board December 5, 2000

7-1 No specific comments were received from the Regional Water Quality Control Board.

<u>Response</u> None required.



Letter 8 Mr. Larry Newland Department of Transportation December 7, 2000

8-1 Caltrans commends the development of on-campus housing and encourages more on-campus services to further reduce trips.

Response The Master Plan proposes several activities and services that will be attractive to students and reduce the number of trips to downtown and other locations. These are detailed in the University Union Plan and in the Campus Instructional Core section of chapter 5 of the Master Plan. See pp. 16, 133, 189, and 202.

8-2 Caltrans agrees that financial incentives should be maintained and expanded for transit.

Response Cal Poly recognizes the importance of maintaining the subsidy for free bus ridership with the local transit providers. A healthy ridership on local buses will continue to be an important component in reducing area traffic and air pollution. Cal Poly will continue to provide incentives for transit and other alternative transportation.

An important question is whether Cal Poly will be able to subsidize 100% of the transit use into the foreseeable future. That question depends on a number of factors that cannot be determined at this time. It is important to understand the background of the transit subsidy in order to understand why this is so. Every several years, the transit contract between the University and the City is renegotiated. Factors used to determine costs include the number of students using the system, the overall cost, and projections of use into the future.

See also text additions to p. 188-199.

8-3 Caltrans is considering participating financially in the development of a signal at the California Boulevard/State Route 101 northbound ramps.

Response With the extension of California Boulevard to Highland Avenue, approximately 5,000 additional vehicle trips per day could be redirected onto this roadway. The northbound off ramp at California Boulevard is an attractive alternative to Grand Avenue. Drivers exit onto their own westbound lane of California Boulevard as opposed to the required crossing of Grand Avenue without benefit of traffic controls. A signal at California and Highway 101 should improve traffic conditions at that intersection, especially as traffic increases on that road segment.

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Lu DeCarii - Exe	Arroyo Grande Atacadero Arroyo Grande Atacadero Grover Beach Metropolitan Planning Organization Census Data Affiliate Service Authority for Freeways and Expressways	
Decembe Robert K Director o Cal Poly		
Re: Cal	Poly Master Plan and Environmental Impact Report	
Dear Mr.	Kitamura:	
support f Poly gro housing, plan. Residen We supp the folloo <i>purpose</i> depende strongly reduce f	but for the opportunity to review and comment on the Cal Poly Master Plan. Overall, we the policies and programs in the twenty-year Master Plan and believe it will help Cal win the right direction. We have provided some general comments about on-campus but the majority our comments are focused on the transportation components of the transport of the communities for the proposal to construct new student housing on campus. We strongly support wing language of the plan as it relates to mobility for the new housing units: <i>"The of the Master Plan isto change the culture of the campus in a way that reduces the automobile" (Page 183).</i> In light of the proposed apartment-style living, we support provisions for retail food shopping on-campus, among other amenities, to he need for driving off-campus.	
1. Pag Ster	tion, Alternative Transportation, and Parking e 156: Stenner Creek Entrance - In the Existing Conditions, the campus entrance at aner Creek and Highway 1 is recognized as "very dangerous". Does the Master Plan mmend its closure or other mitigation?	l
2. Pag	e 158: Innovative Transit Financing - We support an integrated Public Transportation em for on and off-campus circulation. We encourage Cal Poly to use innovative noing to preserve the current subsidized public transit program.	2
look	re 158: Vehicle trip reduction - We support the language on vehicle trip reduction. We forward to working with Cal Poly in its effort to develop and fund more specific grams. We recommend a provision to provide preferential parking for carpoolers linked a transferable parking pass for multiple vehicles.	3
4. Pad	e 159: Bicycle access on service roads - Service access roads should be developed to ommodate bicycle access where possible.	ч
fror	ge 163: RR Ped-Bike trail - We support the improved pedestrian connections to and n Cal Poly along California from Foothill to Highland recognized in the Plan. We believe plan should also recognize the segment along California from Foothill to the south	5

		<u>_</u>	
Page 168: Transit Improvements - On-Campus transit facilities should strive for state-of- the-art technologies, including universal transit passes for students (swipe card), real time bus arrival/departure information, and sufficient capacity for peak transit loading. We also recommend all bus stops include shelters, benches and informational signs as documented is the SLOCOG Bus Stop Improvement Plan.	9-	6	
Page 168: Campus Shuttle - The shuttle should serve the parking garages, among other areas, and be funded through dedicated funds such as parking fees.	۹-	ר	
Page 171: California Blvd We strongly support the proposed extension of California Boulevard through to Highland Drive, and support provisions for Class II bikelanes (at a minimum) along this roadway.	۹-	8	
Page 173: Intersection designs - We support the proposal to explore a range of alternative intersection designs (including engineered roundabouts) and suggest similar flexibility for other roadways. For example, reducing the width of automobile travel lanes could be considered to accommodate Class II bicycle lanes as allowed by revised AASHTO standards.	۹-	٩	
Page 178: Financial Feasibility - Cal Poly should be commended for providing an Alternative Transportation section in the Master Plan. We are please to see the Plan recommends a study of expanded incentives for alternative transportation. When will this study begin? Please include SLOCOG is all correspondence related to this project.	۹-	10	
Page 179: Vague Plan Components - Are these plan components part of the plan? While the programs listed are supported by SLOCOG, they are listed here only as "possibilities" and no beneficial impacts can be credited to the Plan unless they are proposed as Programs.	۹-	Ŋ	
Page 179: Parking fees - SLOCOG supports exploring the adjustment of parking fees to assist with alternative transportation. Cal Poly should take a leadership role and seek modifications to CSU policy provide greater flexibility in the use of parking funding.	9-	12	
Page 182: Parking location - We support the general concept of peripheral parking structures to reduce impacts of automobiles on campus linked with bike routes. We strongly support a shuttle service, especially for peripheral parking areas.	۹-	•13	
Page 184 Parking structure locations - SLOCOG will evaluate the proposed parking structure locations during the environmental review of those structures. We support the general policy of locating the garages near main entrances.	۹-	-14	
ase do not hesitate to contact me or Peter Rodgers on my staff at 781-5712 if you should ve any questions or concems			
icerely, 			
	the-art technologies, including universal transit passes for students (swipe card), real time bus arrival/departure information, and sufficient capacity for peak transit loading. We also recommend all bus stops include shelters, benches and informational signs as documented is the SLOCOG Bus Stop Improvement Plan. <i>Page 168: Campus Shuttle</i> - The shuttle should serve the parking garages, among other areas, and be funded through dedicated funds such as parking fees. <i>Page 171: California Blvd</i> We strongly support the proposed extension of California Boulevard through to Highland Drive, and support provisions for Class II bikelanes (at a minimum) along this roadway. <i>Page 173: Intersection designs</i> - We support the proposal to explore a range of alternative intersection designs (including engineered roundabouts) and suggest similar flexibility for other roadways. 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Letter 9 Mr. Ron DeCarli SLOCOG December 7, 2000

9-1 Does the Master Plan recommend closure or other mitigation at Stenner Creek and Highway 1?

Response Cal Poly is currently in discussions with Caltrans to seek improvements along the Highway 1 corridor to improve safety and access to the University's many properties and activities along that route. Ideally, there would be a consolidation of access points along that segment of Highway 1.

9-2 SLOCOG supports innovative transit financing.

Response Cal Poly will continue to look for funding mechanisms such as grants and partnerships, as well as modifications to parking fees, to support student, staff and faculty access to local transit systems. In order to accomplish the parking demand reduction goal of 2,000 spaces, the university must support a robust alternative transportation program. See also page 189.

9-3 SLOCOG supports the Master Plan language on trip reduction and recommends preferential parking for carpooling linked with a transferable pass for multiple vehicles.

<u>Response</u> Cal Poly supports this recommendation. The trip reduction program, its operation and administration, will be part of the more detailed implementation measures developed subsequent to the adoption of the Master Plan. See also page 189.

9-4 Bicycle access should be accommodated on service roads.

Response Services roads on campus will be primarily for pedestrian use. A bicycle access plan is on exhibit 5.14 of the Master Plan that includes most of the major routes to and on campus. Text on page 167 under "Bicycle Friendly" has been amended to include the following sentence: "Where appropriate bicycle routes may follow service access roads."

9-5 SLOCOG supports improved pedestrian connections along California and would like that expanded to include the segment south of Foothill.

Response Cal Poly will work with the City of San Luis Obispo in coordinating pedestrian and bicycle access routes. See text addition, p. 171.

9-6 Transit improvements should strive for state-of-the-art technologies.

Response Cal Poly will seek funding for research and implementation of innovative alternative transportation systems such as those described in the comment. See text additions, pp. 177 and 189.

9-7 Campus shuttle should serve parking garages and be supported by dedicated fees.

<u>Response</u> The campus shuttle would serve nearby residential areas and the parking structures. This program, its operation and administration, will be part of the more detailed

implementation measures developed subsequent to the adoption of the Master Plan. The following paragraph (with amended text in italics) now appears on page 178: "In order to encourage alternative transportation and to provide access to and from nearby student residential complexes, parking lots and outdoor teaching and learning facilities, Cal Poly should undertake a financial feasibility analysis to institute a campus shuttle service *with dedicated funding*. Routes should be designed to serve regular locations on a frequent schedule. In addition, the shuttle service feasibility study should include an analysis of the ability to provide ad hoc access for student field trips and other activities in the Extended Campus away from the instructional core. The shuttle should have regular loading and unloading points *at key buildings, parking lots and structures. Consideration should be given to using electric or similar low-emission vehicles for the shuttle service.*"

9-8 SLOCOG supports extending California through to Highland and including Class II bikelanes.

Response The extension of California Boulevard is the first priority for major circulation improvements at Cal Poly. The current design of the extension has Class II bicycle lanes included.

9-9 SLOCOG supports innovative intersection designs and decreased roadway widths to accommodate bicycles.

Response Intersection design will begin with the development of detailed plans to push Highland Avenue around to connect with Grand Avenue. The intersection at Highland and Via Carta will be challenging. It must accommodate increased automobile traffic with the continuation of the road, and increased pedestrian activity with the construction of student apartments north of Brizzolara Creek. Engineered round-abouts are preferred because they maintain a steady flow of traffic, however, they are inconvenient in proximity to pedestrian crossings (you cannot stop in or near a round about). The following text has been added to the paragraph that discusses Key Intersection Designs: "…Intersection redesign needs to accommodate pedestrians and bicycles as well as motorized vehicles" (p. 183).

9-10 SLOCOG supports expanded incentives for alternative transportation and asks when planning will begin.

Response This program, its operation and administration, will be part of the more detailed implementation measures developed subsequent to the adoption of the Master Plan

9-11 SLOCOG notes that the plan components for alternative transportation are "vague" and should be proposed as "programs."

Response The Master Plan has been revised to clarify its intention of providing alternative transportation incentives and components. It is the intention of the Master Plan that some or all of these proposals be put in place. There are in fact necessitated by the stated policy of reducing parking demand by 2,000 spaces. Without improved alternative transportation, the campus will face severe parking inadequacies in the future. These programs, their operation and administration, will be part of the more detailed implementation measures developed subsequent to the adoption of the Master Plan.

9-12 SLOCOG supports adjusting parking fees.

<u>Response</u> Parking fees for faculty and staff are controlled, in part, by collective bargaining. The campus controls student fees, subject to provisions of California State University fee policies. This program, its operation and administration, will be part of the more detailed implementation measures developed subsequent to the adoption of the Master Plan

9-13 SLOCOG supports peripheral parking structures, better bicycle access, and shuttle service.

<u>Response</u> The parking structure locations were part of the Walker 1988 Parking Master Plan. This plan examined the parking needs of the entire campus and proposed a comprehensive program for improving parking and access for the campus

9-14 SLOCOG generally supports the proposed location of the parking structures and will evaluate them closer during environmental review.

Response Each of the structures will be designed and reviewed in much greater detail during their development phase. Each will have at least a Mitigated Negative Declaration prepared pursuant to CEQA, which will give SLOCOG and others an opportunity to comment further.

Adopted:

ACADEMIC SENATE Of CALIFORNIA POLYTECHNIC STATE UNIVERSITY

San Luis Obispo, CA

AS-___00/ RESOLUTION ON HOUSING AND THE MASTER PLAN

Background: Cal Poly currently has approximately 17,000 students and would be permitted to 1 increase the number of student to 17,900 under the current Master Plan. Cal Poly is in the process 2 3 of revising its Master Plan to allow for an increase of 3,000 students. This would bring enrollment at Cal Poly to nearly 21,000 students when completed. 4 5 Cal Poly is under pressure from both the CSU and the State to increase enrollment to meet the 6 7 needs for Tidal Wave II. However, the enrollment at Cal Poly represents only 5% of the total CSU enrollment. The 3,000 increase in enrollment would represent less than 1% of the total 8 enrollment in the CSU. This increase would hardly solve the CSU enrollment problems 9 associated with Tidal Wave II. 10 11 During the Spring of 2000 the Academic Senate passed the resolution entitled "Resolution on the 12 Growth Component of the Master Plan." The resolution addressed the failure of the CSU to 13 reimburse Cal Poly for increased enrollment at the marginal cost of adding additional students. 14 Adding additional students would mean a further deterioration of the quality of education at Cal 15 16 Poly. The resolution called for the removal of the growth component from the Master Plan. 17 This fall the availability of housing for students was far less than the demand for housing. In an 18 attempt to deal with this shortage of housing, utility rooms in the Cal Poly dorms were converted 19 to living spaces for students. This additional housing was still not nearly enough to meet the 20 demand for housing. There were stories of students bidding against each other for the limited 21 number of housing spaces available in the community. There were further stories of students 22 living on couches. In addition, an unknown number of students chose to leave Cal Poly because 23 they had been unable to find housing. 24 25 Compounding the housing problem, Cuesta College has continued to increase its enrollment. 26 27 Many of these Cuesta students come from outside the area and as a result are competing with our 28 own students for the limited number of available housing spaces. 29 Cal Poly is in the process of building a new dormitory that would house 800 students. 30 Unfortunately, this dormitory might fail to meet the demand resulting from the increase of 900 31 students to the current Master Plan ceiling. Furthermore, this new dormitory would not address 32 33 the current shortage of housing for students nor would it address the continued impact of the 34 rising enrollment of Cuesta College.

35	Further compl	icating the housing issue is the impact of the hiring of new faculty to replace those				
36	faculty members who will be retiring over the next several years. Young faculty moving to the					
37	area will have the dubious distinction of having to pay very high prices for houses. Those who					
38		will find themselves competing in a very limited housing market with students.				
39	The competition for housing will result in extremely high rental costs for our new younger					
40	faculty members.					
41						
42	WHEREAS,	The Academic Senate has passed the "Resolution on the Growth Component of				
43		the Master Plan" which called for the removal of the growth component from the				
44		Master Plan; and				
45						
46	WHEREAS,	The availability of housing in the community is not nearly adequate to meet the				
47		demand for housing for our students; and				
48						
49	WHEREAS,	The extent of this shortage in housing is not known; and				
50						
51	WHEREAS,	The housing shortage is exacerbated by the continued increase in enrollment of				
52		Cuesta College; and				
53						
54	WHEREAS,	Cal Poly will add an additional 900 just to reach the current Master Plan ceiling of				
55		17,900 students; and				
56						
57	WHEREAS,	0				
-58		which would bring enrollment at Cal Poly to 20,900 students; therefore, be it				
59						
60	RESOLVED:	That Cal Poly engage in a thorough analysis of the housing situation in the	1.0-1			
61		community similar to that undertaken by the UC campuses at Santa Cruz and	10-1			
62		Santa Barbara; and be it further	1			
63	55661.005		10-1 10-2 10-3			
64	RESOLVED:	That Cal Poly create a plan to address the housing shortage; and be it further	10-2			
65	DEGOLVED		•			
66	RESULVED:	That the presentation of the revised Master Plan to the CSU Board of Trustees be	10-2			
67 (P		delayed until such time the plan to address the housing shortage is complete; and				
68 60		be it further	•			
69 70	DESOLVED.	The static mercle the sector the COLL Decoder Court of Court Court of the	•			
70 71	RESULVED:	That this resolution be sent to the CSU Board of Trustees, State Senator Jack				
72		O'Connell, and Assemblyman Abel Maldonado; and be it further				
72 73	DECOLVED.	That State Senator Jack O'Connell and Assemblyman Abel Maldonado be invited	10-4			
73 74	RESULVED.	to a meeting of the Academic Senate to address the housing and enrollment issues.				
/4		to a meeting of the Academic Senate to address the housing and enrorment issues.	ļ			
			•			
		Proposed by: Harvey Greenwald				
		Date: November 1, 2000				

Letter 10 Dr. Harvey Greenwald Academic Senate

November 1, 2000

10-1 Dr. Greenwald submitted a "Resolution on Housing and the Master Plan" to the Academic Senate Executive Committee on November 1, 2,000. While this resolution was not forwarded to the full Senate, it raised a number of issues of importance to the Master Plan. The resolution recommends Cal Poly prepare a study on the housing shortage on campus and in the community.

Response A discussion of the Market Analysis prepared prior to the Master Plan has been incorporated into the Residential Communities Element in pages 129-130. The analysis provides information on current deficiencies in the San Luis Obispo housing market, and the feasibility of providing housing on-campus.

10-2 The resolution further suggests that Cal Poly develop a plan to address that housing shortage.

Response The Residential Communities element has been reorganized and now includes a more substantial discussion of existing deficiencies and plans to reduce the impacts of this shortage on students and faculty, as well as the larger community. See pp. 136-137, where the following language has been added.

Cal Poly has sponsored two recent studies of the housing market as it affects students, faculty and staff. In 1998, the Division of Student Affairs retained Gordon Chong and Partners and the Sedway Group to analyze the student housing market and explore the potential for new student housing on campus. The findings from this study contributed to the University's decision to build apartment-style units to house an additional 800 students on campus. The Cal Poly Foundation contracted with Anderson Strickler, LLC, to investigate the need and potential for University-sponsored housing for faculty and staff. Their 2000 Employee Housing Study found that housing cost is a significant factor in faculty recruitment and retention. Their report is guiding the development of faculty and staff housing on two sites west of Highway 1, as identified in the Master Plan.

Cal Poly will review and revise these market studies to inform each phase of Master Plan housing development and enrollment growth. Relevant comparative data includes vacancy rates, rents, land available for housing, financing options, and the nature and importance of amenities. Studies will also address student housing preferences and challenges in locating suitable offcampus housing.

10-3 The proposed resolution calls for Cal Poly to delay submittal of the Master Plan to the Board of Trustees pending completion of the housing plan.

Response Cal Poly will submit the Master Plan to the Board of Trustees for its March 2001 meeting. This date has been in the plan development program for three years. As stated in the plan, increased enrollment will *follow* the development of additional student housing. Thus, the Master Plan enrollment increases will not exacerbate the housing shortage. In addition, an 800 bed residential facility will begin construction this year. Plans for the development of faculty housing are underway.

10-4 Commenter suggests that state legislators as well as Board of Trustees be engaged in helping address housing and enrollment issues.

<u>Response</u> Please refer to the discussion in Chapter 3 reflecting enrollment pressures associated with demand for Cal Poly's programs.

To Whom It May Concern: I would like to make the following Comments regarding the Cal Poly Master Plan: FROM: 5 classes I have taken have Name: JASMINE WATTS rught lab in the ecological Address: 3175 Estelitalt, #A study area where the housing study area where the hausing being proposed. These labs tudied Califernia's natural egetation at he site and nammhope you will take these into consideration nammhope you will take these into consideration is areasincerely. Barriel Liba unreplaceable is dependended on by he whogical Sciences department Damen. SLO, (A 9340) 11-1 B. Lowe Facilities Planning Cal Poly University San Luis Obispo, CA 93407 hanes!

Letter 11 Ms. Jasmine Watts

December, 2000

11-1 Commenter is concerned about effects on biota from the housing near the Ecological Study Area.

Response The housing proposed at H-2 is adjacent to one of the campus' Ecological Study Areas at the mouth of Poly Canyon (see Exhibit 5.9). This facility will be designed to stay southwest of the ecological study area. The area will be enhanced in the future with native grasses and the introduction of Cambria Morning Glory, a plant listed by the California Native Plant Society. The DEIR addressed impacts associated with the housing development.

÷ To Whom It May Concern: I would like to make the following Comments regarding the Cal Poly FROM: A Name: Ali Schlag-eter Address: ZOD N: Santa Rosa Apt Fric San Laws D. 93405 Master Plan: I think that a big project like this should be publicited more Neither I, nor my parents who pay further have heard nothing about this Do you not care what the students think? 12-1 TO: B. Lowe I hope you will take these into consideration Facilities Planning When revising the current draft. Cal Poly University Sincerely, San Luis Obispo, CA 93407 aw Jednageter

Letter 12 Mr. Ali Schlageter

December, 2000

12-1 Commenter suggests the Master Plan was inadequately publicized.

Response Cal Poly's Master Plan team has been preparing the Master Plan for the past three years. Following a series of meetings during the Fall and Winter quarters of the 1998-1999 academic year, over one hundred members of the campus and community participated in task forces during Spring 1999 to develop the guiding principles for the plan. The plan was first presented in draft form to the public in the Spring of 2000. Numerous press releases and public meetings accompanied the release of this early version of the plan. The formal plan and Draft EIR were presented to the community in the Fall of 2000. The March date for the Board of Trustees presentation has been presented to the public for over three years. See discussion of process in Introduction and Task Forces in Chapter 2.

Bonnie Lowe /cpslo,employee1 11/16/2000 13:42 Page 1 MESSAGE Dated: 11/2/2000 at 10:53 Subject: Possibility of moving a College of Agriculture facility ... Contents: 3 Creator: Linda Dalton /cpslo,employee1 Item 1 FROM: Dana L. Azevedo /cpslo,employee1 TO: Bonnie J. Lowe /cpslo,employee1 CC: Rex M. Wolf /cpslo,employee1 Item 2 Bonnie, Here's another note from the student asking about the parking structure. Dana Item 3 MESSAGE Dated: 11/2/2000 at 10:53 Subject: Possibility of moving a College of Agriculture facility ... Contents: 3 Creator: Andre Muhlen /cpslo,student5 Item 3.1 FROM: Andre V. Muhlen /cpslo,student5 TO: Linda C. Dalton /cpslo,employee1 Item 3.2 ARPA MESSAGE HEADER Item 3.3 Hi Linda, You may have read Joe Jen's response to my e-mail about moving the irrigation training facility near Via Carta to another location. Can you clarify the position of the College of Agriculture on this? The Facilities Planning Office has written in the May of 2000 version of the Cal Poly Master Plan that an alternative location for the third parking structure would be on lot H-16 and over part of your facility. Is this an option, and if so, how much trouble would that be for the College? 13-1 I'm writing a project on the location of third parking structure and would appreciate an official reply from the College of Agriculture, so I can include that in the project. Sincerely, Andre von Muhlen >Please talk to vice provost Linda Dalton and BRAE Dept Head Ken Solomon. >As far as I know, that is NOT an option. May be you are looking at an > old version of parking structure plan. Joe Jen --Hi Dr. Joseph, > I'm doing a project on parking at Cal Poly and noticed one of the > options for the third parking structure would be located at the > irrigation learning facility along Via Carta and north of Brizzolara > Creek. I would appreciate if you could tell me what the College of > Agriculture's response is about moving this facility somewhere else, 13-2 and

Bonnie Lowe /cpslo,employeel 11/16/2000 13:42 Page 2 > how much trouble that would be. >

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Bonnie Lowe /cpslo,employee1 11/16/2000 13:43
                                                                                                                         Page 1
MESSAGE
                                                                                         Dated: 11/2/2000 at 10:47
Subject: Possibility of moving a College of Agriculture facility ... Contents: 3
Creator: Linda Dalton /cpslo,employee1
Item 1
FROM: Dana L. Azevedo /cpslo,employee1
TO: Bonnie J. Lowe /cpslo,employee1
CC: Barbara J. Fenske /cpslo,employee1
Joseph J. Jen /cpslo,employee1
Ken Solomon /cpslo,employee1
Rex M. Wolf /cpslo,employee1
Item 2
Bonnie.
Perhaps you could enlighten him. I do believe he's looking at an old
version?
Dana
Item 3
REPLY
                                                                                         Dated: 11/2/2000 at 10:47
Subject: Possibility of moving a College of Agriculture facility ... Contents: 2
Creator: Joseph Jen /cpslo,employee1
Item 3.1
   TO: Andre V. Muhlen /cpslo,student5
CC: Linda C. Dalton /cpslo,employeel
Barbara J. Fenske /cpslo,employeel
          Ken Solomon /cpslo,employeel
Item 3.2
Please talk to vice provost Linda Dalton and BRAE Dept Head Ken Solomon.
As far as I know, that is NOT an option. May be you are looking at an
old version of parking structure plan. Joe Jen
>
          Hi Dr. Joseph,
>
> I'm doing a project on parking at Cal Poly and noticed one of the
> options for the third parking structure would be located at the
> irrigation learning facility along Via Carta and north of Brizzolara
> Creek. I would appreciate if you could tell me what the College of
> Agriculture's response is about moving this facility somewhere else,
and
and > how much trouble that would be.
>
>
          Sincerely,
>
>
         Andre von Muhlen
>
>
5
   PS: My project is for an English 218 class with Professor Mary Forte.
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Letter 13 Mr. Andre von Muhlen

November 2, 2000

13-1 The commenter seeks clarification on the location of Parking Structure III, and whether it would impact the irrigation training facility.

Response An early version of some planning studies showed the structure using part of the land now occupied by the irrigation training facility. Subsequent discussions with the College of Agriculture Land Use Committee informed the Master Plan team that this location would not be appropriate. The proposed location in the Master Plan is on parking lot H-12 at the northwest corner of the intersection of Via Carta and Highland.

Bob Ladd 118 East Morrison Avenue Santa Maria, CA, 93454-6620 805-928-6663

B. Lowe, Facilities Planning Cal Poly University San Luis Obispo, CA 93407

Gentlepersons,

I would like to make the following comments on the Cal Poly Master Plan. After seeing the plan, I feel that it is a fine plan, and could be even better with a few adjustments. I appreciate that the campus core will be relatively vehicle free, and because the nearest available parking space for those with paid parking permits may continue to be as much as a half mile away from their class, students will likely ride either from home or from their vehicle to the bike rack nearest to their class. That is fine, but more needs to be done to accommodate the bicycle traffic that is being encouraged. The bicycle and pedestrian traffic on campus needs to be separated for safety. I would like to have seen more dedicated bike lanes which are completely separate from pedestrian walkways. It is too confusing for bicyclists to determine where they can and cannot ride on campus, and current signage is inadequate. With dedicated bikeways, clear rules can be established regarding safe bike access to the campus core, such as no riding outside the bike lanes. If this is the rule now, notice is not being spread widely enough.

My second comment concerns the proposed residential dormitories on the perimeter of the campus core. The new structures proposed near the mouth of Poly Canyon are too high up on the slope, and would be an eyesore for residents on the slopes of Bishops Peak and Cerro San Luis. Even though it would be more expensive, the parking ought to be beneath them, so the fluids leaking from vehicles will not be washed by rains into Brizziolari Creek. I saw no such remediation in the Master Plan.

I am happy to see that the dormitories are located along what the planners appear to be establishing as the edge of campus. I like the concept of classroom facilities in the core, then dormitories on the perimeter, then open space all the way to Santa Margarita on the other side of the mountains. That is a very good way of assuring that development of campus facilities will not be pushed further into the foothills. I just wish you had pulled that perimeter back from the steep slopes. It shows no example of restraint. I think Cal Poly's earlier stewards were hinting at preservation of some open space on the valley floor when they named Perimeter Drive. The name suggests it is the perimeter of the campus core. Anyway, it is probably not **be** feasible to build any higher up on the slope.

Sincerely,

Bob Ladd

PECEIVED 12/4/00

14-1

14-2

14-3

Page 129

Letter 14 Mr. Bob Ladd

December 4, 2000

14-1 The commenter suggests that more needs to be done to accommodate the bicycle traffic on campus, including greater separation between pedestrians and bicycles for safety.

Response A detailed bicycle planning will be included in the implementation plans.

14-2 The commenter is concerned that the student housing is to be developed too high up the slope of the hills on the eastern edge of the campus instructional core. This could negatively impact the views from residences on the slopes of Bishops Peak and Cerro San Luis.

Response As part of the constraints analysis undertaken at the outset of the Master Plan process, the team identified steep slopes on campus (Exhibit 4.6) that would be inappropriate for development. Further, the team established a limit for construction line on slopes (see text on p. 59). This limit was designed to be consistent with policies in adjoining jurisdictions, the City of San Luis Obispo and the County of San Luis Obispo. Some of the new housing will be visible to established housing across the valley and elsewhere. Because of the distance of these residences from the proposed housing, the impact to visual resources is not significant.

14-3 Parking should be beneath the housing to reduce the possibility of water quality impacts.

Response All campus parking will be designed with drainage facilities that prevent the deterioration of water quality from automobile-related pollutants, whether they are within a structure, or a surface parking lot. A Water Quality Management Plan is under development that will provide best management practices for all development, including parking, on campus. See text addition on p. 195, which indicates that the Plan calls for us to "integrate parking into other structures at ground level or below as feasible."

		Letter 15
Master Plan: Nar	OM: ime: ldress:	
 Why net build up instead of out? By building up the natural resources and open land won't be disturbed. With more trusting concerned more cause. Prohibitive freshman to bring cause isn't freshman to bring cause more is increased. It takes me 2 hrs. by bus to get to Promo Pace Colors. I hope you will take these into consideration When revising the current draft. 	D: B. Lowe Facilities Planning Cal Poly University San Luis Obispo, CA 93407	-1

Letter 15 Anonymous

December, 2000

15-1 Commenter suggests "building up instead of out," thereby preserving natural resources and open land.

Response Several commenters have suggested the University develop housing in a more compact form to save land, especially through the use of taller buildings – "up not out." Housing on campus was designed to meet several parameters. One was to avoid the development of high-rises. Student housing is effective when it provides an atmosphere of community. This requires air and open recreation space, as well as a connection to everyday living patterns. Taller structures create a disconnection between the student and the student community. In addition, taller structures increase the risk of catastrophe from fire or seismic events. Nevertheless, the proposals are compact, at a density equal to or greater than that elsewhere on campus. Furthermore, a constraints analysis undertaken at the outset of the Master Plan process identified areas appropriate for housing development. The housing proposals are consistent with that analysis. See Constraints and Opportunities analysis in Chapter 4.

15-2 Commenter notes that housing will bring more cars. Transit services must be improved if measures like freshmen restrictions are implemented.

Response Comment noted. Cal Poly will continue to provide financial support for public transportation. Further, the campus will explore many ways in which to balance the allocation of resources toward trip reduction programs rather than toward the cost of providing more parking on campus.

Letter 16 2 To Whom It May Concern: I would like to make the following Comments regarding the Cal Poly FROM: Name: Tarianno Helin Master Plan: Address: 250 E Evernmend By SLC, Ca. P. 240. · I will little to get some assurance 6-1 of sustainable practices in planned 12:2 100:200-. For by the placed lighting after in a man part of planned development i be ave diver nee and matter anys to develop For development parking TO: B. Lowe **Facilities Planning** Cal Poly University San Luis Obispo, CA 93407 I hope you will take these into consideration When revising the current draft. Sincerely, Brianna Holan Brianna Holan Earley + Schmatze Rusley Lisdent B. H. R. Club Prosident

Letter 16 Ms. Brianna Holan

December, 2000

16-1 Commenter requests assurances of sustainable practices in planned development.

Response The following has been added to the Master Plan (pp. 162-163):

Site selection, site planning and building design should account for solar exposure, prevailing wind direction, and patterns of light and shade to minimize energy requirements and enhance the quality of outdoor space. Design guidelines and processes for implementing the Master Plan should encourage energy efficient building design and resource conservation. The campus landscape plan should consider the impact of vegetation and water use on the resource efficiency of facilities and the creation of comfortable and functional outdoor space.

Design for renovation of existing buildings and new construction should consider ways to maximize energy efficiency and take advantage of the mild climate in San Luis Obispo. Alternative, renewable energy sources should be used to the greatest extent possible to offset growth in demand. As costs escalate for traditional energy sources, other options to consider include integrated photovoltaic and solar generation for electricity, passive and low energy cooling strategies for buildings (including materials, solar control, natural ventilation, thermal mass), passive solar space and water heating, and effective use of day lighting. New buildings should be well ventilated using natural ventilation, and existing buildings should be retrofitted where feasible to make them usable and livable during the summer without requiring air conditioning.

Consistent with Cal Poly's mission, the campus should explore an integrated approach to sustainable, or "green" design for research, education and operational applications in new and renovated buildings and in the campus landscape treatment. In addition to the energy conservation measures noted above, these efforts should address water conservation and reclamation, re-use of materials and products, and life-cycle costing in general. Several opportunities for resource recovery projects with educational and research potential as well as operational value include water supply and waste treatment for animal facilities, enhancement of Brizzolara Creek and the construction of new student residential communities.

16-2 As to the location and effect on environment from planned development, commenter suggests that there are alternatives, such as underground parking.

Response Several commenters have suggested the University develop housing in a more compact form to save land, especially through the use of taller buildings – "up not out." Housing on campus was designed to meet several parameters. One was to avoid the development of high-rises. Student housing is effective when it provides an atmosphere of community. This requires air and open recreation space, as well as a connection to everyday living patterns. Taller structures create a disconnection from the student to the student community. In addition, taller structures increase the risk of catastrophe from fire or seismic events. Nevertheless, the proposals are compact, at a density equal to or greater than that elsewhere on campus. Furthermore, a constraints analysis undertaken at the outset of the Master Plan process identified areas appropriate for housing development. The housing proposals are consistent with that analysis. See Constraints and Opportunities analysis. Where feasible, the

Master Plan calls for "integration of parking into structures at ground level or below" (page 195).

FACILITIES PL To Whom It May Concern: I would like to make the following Broke Swedon FROM: Sicina Madre 4:2P Name: Himme Avc. Building #113 Catpol Address: Son his Obispoi (A 9.3410 Comments regarding the Cal Poly Master Plan: The deplacement of dorms in the Brizzidani (neck hood plach In the Brizzidan' Check hoad plain is completely Nidietto & [After completelying She Analysis (LA-314) and extensively analyzing this area, we as a class find this placement for in thought: It is as though all consideration of slage, hydrolog, and intersection this placent and low at Those you will take these into consideration the When revising the current draft. Products: it Sincerely. 17-1 TO: B. Lowe **Facilities Planning** Cal Poly University 17-2 Sincerely, Drms there wild also sare off any wild life & clestry their havitet. San Luis Obispo, CA 93407 Sincerely, Broke Saredra f Concerned Cal Rhy Student

Letter 17 Ms. Brooke Saavedra

December, 2000

17-1 Commenter questions wisdom of placing student housing in the Brizzolara Creek floodway.

Response Student housing was proposed near Brizzolara Creek in the Spring 2000 draft of the Master Plan. This housing was relocated to accommodate the Brizzolara Creek Enhancement Project. No housing will be located in the floodway. See Exhibit 5.9. See Constraints and Opportunities analysis in Chapter 4, as well.

17-2 Housing will impact wildlife and habitat.

Response Please refer to Exhibit 5.9. Housing has been located only on previously utilized land (for example the Bull Test area –H-1 and H-2, or the parking lot behind the North Mountain dorms—H-5), with the exception of the small area to the south of Yosemite Hall (H6). The DEIR addresses impacts from the housing proposals.

 \odot To Whom It May Concern: I would like to make the following Comments regarding the Cal Poly Master Plan: FROM Ched Sifford The new diveloped hansing should be built on already existing areas as in by borticulture write So that 18-1 200 N. Santa Rosa # 305C San Luis Obispo, CA 93405 Name: Address: rorriculture unitation that yes don't use much a calpoly land, United tall dormisitives shough it blocks a good view it the prevent building dorms more atten. 18-2 TO: B. Lowe I hope you will take these into consideration Facilities Planning When-revising the current draft. Cal Poly University Since:ely, San Luis Obispo, CA 93407 12×12 EGEIVE D 5 2000 **BEC FACILITIES PLANNING**

Letter 18 Mr. Chad Gifford

December, 2000

18-1 Commenter suggests new housing should be developed on previously developed areas.

<u>Response</u> Please refer to Exhibit 5.9. Housing has been located only on previously utilized land (for example the Bull Test area –H-1 and H-2, or the parking lot behind the North Mountain dorms—H-5), with the exception of the small area to the south of Yosemite Hall (H6). See Constraints and Opportunities analysis in Chapter 4.

18-2 Commenter suggests building taller structures to save land.

Response The proposed housing will range from two to four stories, although the University prefers not exceeding three stories. The reasons for not developing taller structures have to do with safety and community. The taller the structure, the greater the fire and seismic hazards. Furthermore, taller structures are not conducive to creating an atmosphere of community. See Constraints and Opportunities analysis in Chapter 4. Where feasible, parking may be incorporated into structures at or below ground level to allow for more compact development (refer to page 195).

To Whom It May Concern: I would like to make the following FROM: Name: chad Gifford Comments regarding the Cal Poly Master Plan: Address: 200 N. Santa Rosa St. #308C TO: B. Lowe Facilities Planning Cal Poly University San Luis Obispo, CA 93407 I hope you will take these into consideration When revising the current draft. Sincerely, There were some issues at the meeting about students not wanting to live in dorms. For one, it is a long walk from Brizziolari Creek to far sides of the campus. My main is that I don't want to see development in and around poly cargod naless 19-1 they are the alongside Via Carta (near Horticalture Unit) since it's most accessible and already developed. It was said that part of the netlands an Cal Pary land will be altered and used in develop process, I'm neavily against this too. Maybe the challenge is to not accept as many students as status quo. Thank you

Letter 19 Mr. Chad Gifford

December, 2000

19-1 Commenter reiterates previous comments and adds that housing near Brizzolara Creek will be too far from the far side of campus.

Response The so-called "10-minute rule," was used to define the campus instructional core, and guide the placement of housing. The rule intones that a student should be able to traverse campus, from one class to the following, within 10 minutes. The housing at H-1 and H-2 will be the furthest residences from classes in the College of Business, for example, and some students may need to allow more than ten minutes to cover this distance. However, once within the campus core, students should be able to move from class to class within ten minutes.

Comment

Has any effort been node to betser whilise essering dometories Sucha as North number which is only too stories high? 20-1

Letter 20 Anonymous

December, 2000

20-1 Commenter asks if any effort has been made to better utilize existing dormitories, such as North Mountain, which are only two stories.

Response Yes. The redevelopment of North Mountain dormitories is shown on Exhibit 5.9 as proposed housing H-4. See Residential Communities element.

	Letter 2 [°]
Dale Sutliff's comments on the Master Plan and Draft EIR:	
November 18, 2000	
To: Linda Dalton	
By: Dale Sutliff, Prof. Chair, Landscape Advisory Committee	
Comments on Cal Poly Master Plan and Draft EIR	
Comment:	
Broad question: Is there a list compiled (beyond the list at back of document) that identifies all of the additional studies and actions necessary to accomplish and implement the master plan (which are listed throughout the document)?	-1
Comments and suggestions (suggested changes/additions shown in <i>italic</i>):	
 p.14, Guiding Framework. Add two principles to Land use-overall direction: long term sustainability and adaptability of facilities energy efficient planning, design and management 	
p.15, Guiding Framework Q6, j, add at end:sense of place and purpose.	
Change margin comment to include:maintain academic and environmental quality. See that this statement is more clearly incomposited in body of text for 07	

p.65, Physical Plan Elements

more clearly incorporated in body of text for Q7.

Environmental Suitability and Sustainability Add and end of statement: ... become degraded, including the upgrading of both buildings and grounds within the campus instructional core. p.67, Physical Plan Elements

Outdoor Teaching and Learning Add at end: All facilities should be designed and managed to promote an integrated teaching and learning environment where both buildings and spaces are central to the learning experience.

p.79, Physical Plan Elements

Enhancement 21-2 Insert: ... conduct research, and implement actions to incorporate appropriate management and enhancement practices.

p.92, Physical Plan Elements Foresight

Add: Each college and program should identify outdoor teaching and learning needs.

Investment Add: Needed investment in outdoor teaching and learning should be identified by the colleges and programs.

Protection Change heading to: Protection and Management

	hysical Plan Elements /isibility	
	Change statement to read: The centrality of outdoor teaching and learning calls for these lands and facilities to be highly visible, even tangible, part of the main campus image – not just on outlying lands.	
A	ntegration Add at end: Constant contact with outdoor teaching and learning lands and facilities by all campus users should e built in to project and academic planning for the campus.	
(Physical Plan Elements Other Creek Enhancement Activities Question: Why not designate Stenner Creek as an Enhancement Area now, with similar approach as Brizzolara Creek?	
I	Physical Plan Elements Design Village Add: • Future development should adhere to environmental sensitivity principles contained in the campus master slan.	21-2
	Campus Core	
Ċ	Change second bullet statement: Exhibit and demonstration areas	
1	Physical Plan Elements ssues	
	Add to 11 th builet:environment and teaching mission.	
	Add to last bulletInconsistent and confusing building signage and references.	
î (Physical Plan Elements Circulation Add:pedestrian circulation and orientation, whether	
p.115,	Physical Plan Elements	
-	Southwest Area Comment: Need Specific Plan for this area, to include incorporation of other facilities as part of parking structure. The illustrative plan shown in the draft master plan raise many issues.	21-3
	Physical Plan Elements	1
0	North Perimeter Pedestrian Way Comment: N.Perim. Dr. should NOT become a BROAD pedestrian way. Rather, the scale of the street should be reduced from its automobile requirements to a scale to better accommodate pedestrian and bike flow. This will contribute to a "more compact campus core".	21-4
	Change statement to include: The way should form a "spine" connected to a series of pedestrian <i>plazas</i> and paths accessing	
•	Physical Plan Elements Green Space Plan	1
;	Comment: This plan needs further resolution, along with the illustrative plan, to show key nodes and plazas related to the pedestrian/bike system; changes to the southwest area configuration, to associate new services (shopping, food, etc.) with the North Perimeter Pedestrian Precinct, etc.	21-
		•

p.137, Physical Plan Elements 21-6 **Outdoor Fields** The second paragraph is out of date. Conditions no longer exist. p.150, Physical Plan Elements Solid Waste and Recycling – Distribution Comment/add: As part of Cal Poly's mission, the campus should establish a recycling center and laboratory for research and re-use of materials and products, requiring re-utilization, where feasible, in campus projects.

Campus Landscape Plan Add, last paragraph: ...It should also provide guidance and standards that ensure that each project should

contribute to the common vision for campus development and of the campus landscape

p.121, Physical Plan Elements

Letter 21 Mr. Dale Sutliff Chair, Landscape Advisory Committee

November 18, 2000

21-1 Commenter asks if a complete list of implementation actions are included in the plan.

Response The current version of the Master Plan has been modified to include a list of all suggested implementation measures for the Master Plan. See Chapter Seven, Implementation Activities. See Chapter 7, updated.

21-2 Commenter suggests a number of text changes to the Master Plan, specifically on pages 14, 15, 65, 67, 79, 92, 93, 99, 101, 103, 121 and 150 (pages per the October 10, 2000 Plan).

Response Most changes were made consistent with the intent of this suggestion. Text changes can be found on pages 16, 17, 69, 71, 84, 96, 97, 98, 103, 106, 108, 127. The alteration suggested for recycling (draft plan page 150) was not incorporated into the plan at this location. Instead, a new section on Sustainable Campus Planning and Design was added at the end of the Public Facilities and Utilities element. This section includes the following language: "... these efforts should address water conservation and reclamation, re-use of materials and products, and life-cycle costing in general" (pp. 162-163).

21-3 Commenter suggests the need for a more specific plan of the southwest area of campus.

<u>Response</u> Chapter 7 identifies the Southwest Area for one of several implementation studies.

21-4 Commenter suggests North Perimeter should not become a "broad pedestrian way."

Response The text has been changed to reflect this comment; "North Perimeter Drive should become a human-scale pedestrian way ..." (p. 122).

21-5 Commenter suggests that the green space plan needs further refinement, showing key pedestrian nodes and plazas and other features.

<u>Response</u> Chapter 7 identifies pedestrian systems as one of several implementation studies.

21-6 Commenter suggests a number of text changes to the Master Plan, specifically on pages 121, 137, and 150.

Response Environmental quality is addressed in question 2.

21-7 Designate Stenner Creek as an Enhancement Area now.

Response The following has been added to the Master Plan (p. 103): "Guiding Principles and Goals for the Cal Poly Creek Management and Enhancement Plan" are located in Appendix F. The principles and goals will apply to all creeks on Cal Poly lands, including Stenner Creek. In addition, Cal Poly has partnered with the Land Conservancy of San Luis Obispo County. The Land Conservancy has undertaken several projects on Stenner Creek to reduce erosion and

improve fisheries habitat, especially for the endangered steelhead. This enhancement work will continue with other reaches of the creek."

21-8 The discussion in the Recreation, Athletics and Physical Education element entitled "Outdoor Fields" is out of date.

Response With the completion of the Sports Complex, the discussion in the Master Plan has been modified to reflect current conditions (p. 145).

Received via e-mail 12/5/00

Hello Ms. Lowe

•I represent the NRM Department on the CAGRLUC committee. Our NRM Dept, is "very" concerned about the proposed remote parking lot that is proposed in or near the area currently known as the NRM Logging Sports and Tree Farm (along Stenner Creek Road). We use this area to a great extent both for class demonstrations and as a outdoor laboratory site. Building a parking lot in this vicinity would significantly impact our NRM teaching programs. We request that significant discussion with our department must occur to work out a possible solution to what we consider to be a major conflict and impact on our NRM teaching program. •This discussion must be timely as we are constantly investing people, time, and money into our current NRM site off Stenner Creek road. For example, we are presently discussing relocating the Tree Farm to the upper field by Stenner Creek road given the drainage and soil problems we have in the lower field tree farm site we are currently using. We have even considered building a greenhouse in this area. Any decision to relocate the Tree Farm or build a greenhouse in our current site would in turn be affected by a decision to put a remote parking lot in this vicinity. Bottomline, NRM needs a outdoor laboratory site for forestry field labs,, logging sport competitions, field demonstrations (e.g., we regularly use the current site for fire control, forest measurements, silviculture, forest harvesting operations), Enterprise projects, and of course propagation of trees. We need a large enough area to accomodate large equipment such as Fire Engines, dozers, large trucks. *Thank you for you consideration. We look forward to further discussion on this subject. ·Best Regards Doug Piirto

22-1

Letter 22 Dr. Doug Piirto CAGRLUC

December 5, 2000

22-1 Commenter, on behalf of the NRM Department and CAGRLUC, raises concerns about the proposed locations for remote parking. Commenter notes that the proposed lot is on or near the area of their Forestry Demonstration Area and Christmas Tree Farm.

Response The Master Plan Land Use map (Exhibit i) identified two general locations where a remote parking lot could be developed. The locations will be refined as discussed in new text on p. 195: "Planning for development of a remote parking site that would involve moving any Outdoor Teaching and Learning activities, such as the forestry demonstration area or sheep grazing, would follow the principle that a new site for their operations would need to be identified and developed first, so as to minimize disruption." It is important to note that the development of remote parking is a contingency predicated on the inability to reduce parking demand through restrictions described in the Alternative Transportation element of the Master Plan.

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P.1

Letter 23

160 Graves San Luis Obispo, CA 93405

December 4, 2000

California Polytechnic State University, San Luis Obispo c/o Crawford Multari Clark and Mohr 641 Higuera Street, Suite 302 San Luis Obispo, CA 93402 Attention: Nicole Phillips

Faxed to: 541-5512

Re: Cal Poly State University

Dear Ms. Phillips:

I am hereby submitting my comments on the Cal Poly Master Plan & Draft Environmental Impact Report. The comments are in four parts. Part I are general in nature. Part II concentrate on one particular aspect of the Plan, the proposal for a Visitors' Center and other ancillary projects on the west side of Grand Avenue between a line of trees and Slack Street. The third part are comments on other aspects of the Plan. Finally, there is a brief concluding statement.

General Comments

As a long-time faculty member at Cal Poly who is interested in the environmental dimension of projects involving the University, I am pleased to note that far more attention has been paid to environmental issues in the Master Plan than in other recent efforts including the Cal Poly Sports Complex. I applaud those responsible for the shift in emphasis. For instance, efforts to make the campus less auto-centric is to be commended and, to some extent, so are the constraints on additional parking spaces commensurate with planned new student housing.

I am distressed, however, at the time-line for review of the Draft EIR. I understand the desire by this campus to move with all due speed so that the Final EIR can be sent to the Chancellor's office early in 2001. One of the pleasures in serving on the Land Use Task Force in the spring of 1999 was having the time to think about and then discuss proposals regarding land use matters on the campus. At the present critical stage of the process,

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however, those who are interested in our campus and community do not have the same opportunity. This is a major shortcoming.

Comments on the Proposed Ancillary Activities and Facilities Abutting Slack Street East of Grand Avenue

In the interest of openness, I want to first be clear that my house at 160 Graves is only a stone's throw from where the proposed Visitors' Center and possibly other structures would be located according to the Master Plan. As one who may retire from full-time teaching in a year or two and possibly move, my comments are directed towards the future of the neighborhood where I have lived since 1983 rather than simply catering to my own wants.

The neighborhood is amazingly quiet given its proximity to the University and the fact that 50 percent or more of the houses are student rentals. One of the reasons for this happy state of affairs, I submit, is the buffer between the neighborhood and campus residence halls in particular and University structures in general. A second reason, already mentioned, is the mix of occupants in the immediate area.

I wish I had been on campus last spring when, according to the DEIR, the proposal was first made to house a Visitors' Center adjacent to this quiet, residential neighborhood. Alas, I was teaching overseas and was thus not "in the loop" during the formative stages of the proposal. I realize I am submitting my comments at the 11th hour but that is, by itself, insufficient reason to have the proposal go forward if there are serious problems as I believe there are.

When one talks about environmental considerations, you must be concerned both with natural habitat and human habitat. The maps and text of the DEIR designates the area in question as "Suitable for Facilities Expansion." In other words, it is not just a proposed Visitors' Center that is at issue but basically the reconstitution of the entire area. For instance, on page 195 one reads that the relatively small area may also be suitable for "additional conference facilities."

What is particular disappointing is that those who put the DEIR together, I am told, refused to designate the ancillary structures as even leading to the possibility of "Potential Neighborhood Conflicts" (see map on page 58). Given that the map on page 61, for instance, shows the entire area in question as "Suitable for Facilities Expansion," it is hard to know how such a designation could escape being listed as one of Potential Neighborhood Conflict.

In page xi of the Executive Summary it is stated that "the team [working on the DEIR], in most instances, [chose] the environmentally superior approach." I can only conclude that the word "most" was used because this case (and perhaps others) could not be classified as "environmentally superior." The Land Use Task Force, on which, as previously stated, I was a member, had a list of guiding principles. I'll quote six: 23-3

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	Strive for compact development of buildings and sites. New development should be concentrated in the campus core (There may be a difference in classification but I certainly question the proposal under discussion as being within the campus core.); Campus land uses should be located so that adjacent uses are compatible with respect to their activities and environmental innert		
	to their activities and environmental impacts; Campus facilities, land use patterns, support facilities, signage, etc. should be compatible with their surroundings;		
4.	The concerns of neighbors regarding traffic, noise, lighting, viewsheds, etc. need to be considered in conjunction with educational and facility needs of the campus;	23	•3
5.	Effective buffers should be established and maintained between campus lands and activities and natural or build environments of both campus & surrounding community;		
6.	Buffers should be provided to offer protection from dust, pesticide drift, odors, noise, visual, traffic and public safety.		
lig oft	proposed ancillary projects will surely result in the destruction of a buffer between campus and the adjacent community. The cumulative impacts including noise, ting, traffic, aesthetics, and ambiance will change this neighborhood forever. We n hear the phrase "urban sprawl." The proposed activities represent "campus wk."	I -	
app Cei oth que	a will note that I have not uttered a single word about new housing south of Yosemite I. Development between Yosemite and the last line of trees before Slack Street is ropriate and still leaves the campus-neighborhood buffer. Perhaps the Visitors' ter or some other ancillary structure could be placed in that same general location. In r words, I understand the need for such a structure or even ancillary structures. The stion is location, location, location. The DEIR location and the designation adjacent rand Avenue and Slack Street is simply wrong, wrong, wrong.	23-	4
<u>Otl</u>	er Aspects of the Plan	•	
Aga	The same commenting on the future student housing plans (designated as H-2 and H-3 DEIR maps) near the north bank of Brizzolara Creek and the mouth of Poly Canyon. In, as with Slack Street, there is the lack of adequate buffers. Similarly, the quarry h of Poly Canyon Road is an eyesore and an embarrassment. I shudder to think what e monitoring might discover.	23-5	;
In o con	der to lessen the "footprint" for future student housing, the planned parking ponent should be reconsidered. By building multilevel parking structures (either	23-4	

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p.4

below- or above-surface), the land necessary for such structures can be reduced. In short, additional consideration should be given to building up or down, not out, when necessary.

I am also unaware that provisions have been considered as to how students in the planned Brizzolara housing area will be fed. It's true that the new housing structures will consist of apartments with kitchens but I'm dubious how often they will be used. The last thing this campus needs are students driving off-campus for their meals or even driving to oncampus locations. This is an issue that needs to be confronted now, not later.

Concluding Statement

As mentioned at the outset, those steering the three-year Master Plan process are to be commended. Compared to other projects instituted during my almost three decades at Cal Poly, the Master Plan is a giant leap forward.

But as the Plan enters the crucial endgame, much remains to be done. Again, getting the job done quickly should not be the major goal; getting it done right is far more important. I know others have spent many hours in studying the Master Plan DEIR. So have I. We are talking about the next 20 years at least. Important matters have yet to be fully thought out. Having come this far we all need to make the extra effort to intelligently and with environmental-sensitivity deal with the remaining issues. As I wrote earlier, the remaining issues include both natural and human habitat.

Sincerely,

Dr. Richard Kranzdorf

cc: San Luis Obispo Mayor Allen Settle Councilmember John Ewan Councilmember Jan Marx Councilmember Christine Mulholland Councilmember Ken Schwartz Sydney Holcomb, Chairperson, Residents for Quality Neighborhoods 23-7

Letter 23 Dr. Richard Kranzdorf

December 4, 2000

23-1 Commenter lauds efforts to reduce reliance on the automobile.

Response Comment noted for the benefit of the decision makers. No response required.

23-2 Commenter concerned about the short time frame for review of the Master Plan.

Response Cal Poly's Master Plan team has been preparing the Master Plan for the past three years. Following public meetings during the Fall and Winter quarters of the 1998-1999 academic year, over one hundred members of the campus and community participated in task forces during Spring 1999 to develop the guiding principles for the plan. The plan was first presented in draft form to the public in the Spring of 2000. Numerous press releases and public meetings accompanied the release of this early version of the plan. The formal plan and Draft EIR were presented to the community in the Fall of 2000. The March date for the Board of Trustees presentation has been presented to the public for over three years. See discussion of process in Introduction and Task Forces in Chapter 2.

23-3 Commenter is concerned about development proposed at the northeast corner of the intersection of Slack Street and Grand Avenue and that it is not a "Potential Neighborhood

Response The map has been modified to show a more limited area of development, and a buffer has been added. The Constraints Summary (Exhibit 4.10) has been modified to more specifically identify potential neighborhood conflicts on the east side of Grand Avenue. Shifting this arrow in no way implies that the west side of Grand is now in a changed condition relative to neighborhood impacts.

23-4 Commenter notes that he has no objection to development located immediately south of the Yosemite Hall dormitory buildings.

Response This area is still several hundred feet from the residential development and is buffered by vegetation located in a drainage swale.

23-5 Commenter echoes concerns raised by others regarding development near Brizzolara Creek and Poly Canyon.

Response Concerns are noted. The Master Plan team made extensive efforts to relocate the H-1 and H-2 housing units at a suitable distance from the creek corridor that resulted in the creation of the Brizzolara Creek Enhancement Project and the re-adsorption of units initially proposed for location along the creek (namely H-3). The additional beds were the result of partial absorption of the H-4 housing unit which could not be relocated in its entirety elsewhere on campus. The EIR addresses the impacts of the proposed housing project.

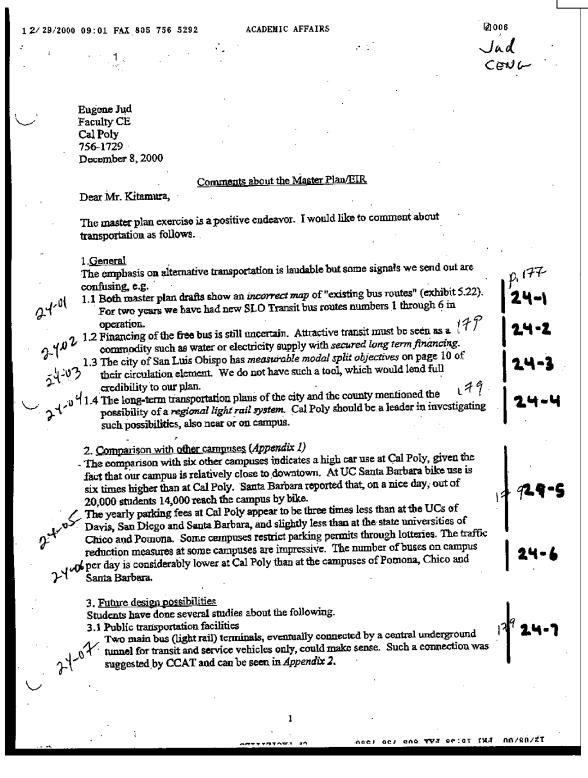
23-6 Commenter suggests additional structured parking to reduce the need for development of more land.

<u>Response</u> See Constraints and Opportunities analysis. Text has been added to the Plan to include parking under structures where feasible (p. 195).

23-7 Commenter raises concerns about students living north of Brizzolara Creek and their need to drive off campus for food.

<u>Response</u> The proposed new residences will be apartment style dwellings. Each will contain a kitchen. The Master Plan proposes additional markets on campus to support student needs. See Support Services element, p. 199, 202-203. Nevertheless, students will need to leave campus for some shopping. These trips are included in the traffic analysis.

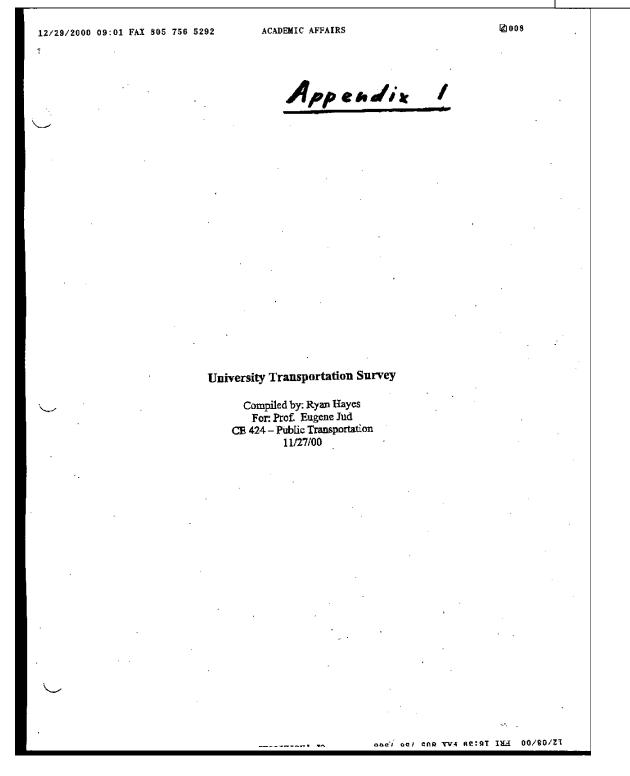
Letter 24



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	3.2 Pedestrians crossing East Perimeter Road	
	Traffic calming appears to be the most appropriate solution. Even a "semi pedestrian	-
1	zone", with cars allowed at low speed, should be possible. Examples with similar //o	5 29-5
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	pedestrian and car volumes as we have on our campus operate successfully in	
•	Chambery, France and Burgdorf, Switzerland and in Australia.	<b>.</b>
	3.3 Parking structure #3	
	Moving this parking structure immediately to the west of the railroad should be	24-9
rt	considered. The walking distances would still be acceptable but there would be	
<b>F</b> 1	considerably fewer disturbances by traffic on the campus.	
	4. Level of service calculations	
	4.1 On campus	1
	The traditional LOS calculations do not make sense in locations with heavy	
•	pedestrian traffic because only delays for car drivers are calculated but not delays for	
10	pedestrians. The quality of the pedestrian experience is not included in these LOS	24-10
· A	calculations. Therefore several towns have made special rules for calculation the	
if.	LOS of pedestrians and the Institute of Transportation Engineers has set up a 100-	
	person committee to issue guidelines and to further better planning for a real	
	pedestrian and bike friendly atmosphere.	•
	4.2 Off campus	1
	When predicting future traffic (cumulative impact) the background traffic growth has	· [
	to be taken into consideration. This is the general traffic growth that would occur	
1	over time even if Cal Poly did not add one more student. It is unclear to us which	
$\bigcirc$	background traffic growth was assumed around Cal Poly, for example on highway	
	one.	
<b>الد</b> ا	Unrealistically low assumptions of traffic growth lead to higher LOS than occur later	
$\gamma$	in reality. We are under the impression that Cal Poly's traffic consultants have	24-11
σ	consistently under estimated the background traffic growth for example in the EIRs	
	for the parking garage and the sports complex.	
	However, if the real LOS are lower than estimated by the consultants we do not unply	
	that mitigation measures should necessarily consist of widening roads and	
	intersections. Mitigation measures could actually mean a better atmosphere for	
	pedestrians and enhancing all modes of alternative transportation.	ł
	Thank you for considering these remarks.	
	Sincerely	
•	5 10	
	Carlow that	
	Eugene Jud, fellow Institute of Transportation Engineers	
		-
	Appendices	
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(Santa Cruz)

## University Transportation Survey Summary

## Report Summary:

This report is the final compilation of information gathered by the fall quarter, 2000 Public Transportation, (CE 424), class taught by Eugene Jud. The surveys include information from a diverse group of seven universities throughout California with populations between roughly 13,000 and 38,000 students, staff and faculty.

The purpose of the study was primarily to show the similarities and differences between these universities. Certainly the success of the other colleges to encourage alternative transportation should be researched further by Cal Poly in order to improve our own campus. Ideas which have been shown to discourage single occupancy vehicles at other campuses should be considered if Cal Poly is serious about becoming a campus friendly to a variety of users.

However, there are also differences between campuses, especially with regard to the topography of the area, which effect the viable transportation options. Whereas Davis and Santa Barbara are in flat areas and are subsequently more bicycle friendly, areas with more hills such as Cal Poly should be content with smaller percentages of bicycle riders. However, this should also encourage Cal Poly to explore better transit options more suited to the area.

Many schools do not have a very defined future vision so the information on this subject is included at the end of the report specific to each school rather than in a comparative format.

Schools Surveyed (Abbreviation in Parenthesis):

<ol> <li>California Polytechnic State University, Pomona</li> <li>California Polytechnic State University, San Luis Obispo</li> </ol>	(Pomona) (SLO)
3. California State University, Chico	(Chico)
4. University of California, Davis	(Davis) (San Diego)
5. University of California, San Diego	(Santa Barhara)

- 6. University of California, Santa Barbara
- University of California, Santa Cruz 7.

1.1 Number of Students & Faculty:	Students	Faculty	Total
Pomona	18,426	2,600	21,026
SLO	16.296	2,700	18,926
Chico	15,400	1,348	16,748
Davis	24,596	11,154	35,750
San Diego	19,918	18,400	38;318
Santa Barbara	20.056	5,300	25,356
Santa Cruz	11,300	2,000	13,300

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	.2 Number of S	tudents Livit	ng on C	ampus		% of Total Students:
-	Pomona			1,400		7.60
+	SLO			2,840		17.43
	Chico			3,625	,	23.54
h	Davis		·····	3,700		15.04
	San Diego	T		5,287		26.54
	Santa Barba			4,180		20.84
	Santa Cruz	<u> </u>		5,000		44.25
$\left  - \right $			·			
	1.3 Campus Loo	ation in Rel	ation to	City:		
				4 miles from down	ntown	
	Pomona		·	Pomona		
	SLO	<del> </del>		I mile from down	town SLO	
	Chico	<u> </u>		Adjacent to down	town Chico	
	Davis			1.8 miles from do	wntown	
	Duvis			Davis		<u>_</u>
	San Diego			14 miles from dov	vntown San	Diego
	Santa Barba	ra		10 miles from dov	vntown San	ta Barbara
	Santa Cruz			3 miles from down	ntown Sant	a Cruz
2. ]	Basic Transport	1		Faculty & Staff	Students	Total
		t of Daily Tr	attic:	Faculty & Statt	Bruccuca	
	Pomona			96.7%	N/A	N/A
		Car	<u> </u>		5.6%	5.1%
		Car/Vanpo		3.3%	0.076 N/A	N/A
	1 1	Bike	<u> </u>	2.0%	N/A	N/A
			1	1 2 12/20	1 47776	
		City Bus				N/A
		Regional I	Bus	1.0%	N/A	N/A N/A
			Bus			N/A N/A
	SLO	Regional I Walk	Bus	1.0% 0.0%	N/A N/A	N/A
	SLO	Regional I Walk Car		1.0% 0.0% 56.0%	N/A N/A 26.4%	N/A 30.4%
	SLO	Regional I Walk Car Car/Vanpo		1.0% 0.0% 56.0% 24.0%	N/A N/A 26.4% 7.4%	N/A 30.4% 9.6%
	SLO	Regional I Walk Car Car/Vanpo Bike		1.0% 0.0% 56.0% 24.0% 4.0%	N/A N/A 26.4% 7.4% 7.5%	N/A 30.4% 9.6% 7.0%
	<u>SLO</u>	Regional I Walk Car Car/Vanpo Bike City Bus		1.0% 0.0% 56.0% 24.0% 4.0% 2.0%	N/A N/A 26.4% 7.4% 7.5% 12.8%	N/A 30.4% 9.6% 7.0% 11.3%
	<u>SLO</u>	Regional I Walk Car Car/Vanpu Bike City Bus Regional		1.0% 0.0% 56.0% 24.0% 4.0% 2.0%	N/A N/A 26.4% 7.4% 7.5% 12.8% 1.0%	N/A 30.4% 9.6% 7.0% 11.3% 1.1%
	SLO	Regional I Walk Car Car/Vanpo Bike City Bus		1.0% 0.0% 56.0% 24.0% 4.0% 2.0%	N/A N/A 26.4% 7.4% 7.5% 12.8%	N/A 30.4% 9.6% 7.0% 11.3%
	SLO	Regional I Walk Car Car/Vanpu Bike City Bus Regional		1.0% 0.0% 56.0% 24.0% 4.0% 2.0%	N/A N/A 26.4% 7.4% 7.5% 12.8% 1.0%	N/A 30.4% 9.6% 7.0% 11.3% 1.1%
	SLO	Regional I Walk Car Car/Vanpu Bike City Bus Regional		1.0% 0.0% 56.0% 24.0% 4.0% 2.0%	N/A N/A 26.4% 7.4% 7.5% 12.8% 1.0%	N/A 30.4% 9.6% 7.0% 11.3% 1.1%
	SLO	Regional I Walk Car Car/Vanpu Bike City Bus Regional		1.0% 0.0% 56.0% 24.0% 4.0% 2.0%	N/A N/A 26.4% 7.4% 7.5% 12.8% 1.0%	N/A 30.4% 9.6% 7.0% 11.3% 1.1%

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	Davis		(7.09)	21.0%	33.8%
		Car	62.0%	21.0%	5.1%
		Car/Vanpool	17.0%	50,0%	39.7%
		Bike	5.0%	15.0%	11.9%
		City Bus		2.0%	1.7%
		Regional Bus	1.0%	10.0%	7.8%
		Walk	3.0%	10.0%	7.078
	San Diego			27/4	(2.04/
		Car	N/A	N/A N/A	63.0%
		Car/Vanpool	N/A		26.0%
· .		Bike	N/A	N/A	2.0%
		City Bus	N/A	N/A	3.0%
		Regional Bus	N/A	N/A	1.0%
		Walk	N/A	N/A	5.0%
	Santa Barba				
		Car	79.9%	23.1%	35.0%
L		Car/Vanpool	9.6%	2.9%	4.3%
		Bike	6.4%	53.3%	43.5%
		City Bus	2.5%	5.1%	4.6%
		Regional Bus	N/A	N/A	N/A
		Walk	0.8%	14.8%	11.9%
	Santa Cruz				<u>.</u>
		No Data Avail Cruz	able for UC Santa		- - -
	ic Transport ructure:	ation	•		
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	Pomona				
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		Garage/Struct	ше 0	0	0
		Total Spaces			8,984
	SLO	1			
		Surface Lot	1,268	3,947	585
		Garage/Struct	······································	800	30
	<u> </u>	Total Spaces		<u> </u>	6,731
	<u> </u>				
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Davis	Garage/Structure Total Spaces			Contraction of the local division of the loc	
Davis	Garage/Structure Total Spaces			Contraction of the local division of the loc	
	Garage/Structure Total Spaces			Contraction of the local division of the loc	
	Total Spaces	60	080		
				1,735	
	No Information for U			1,755	
San Diego	No Information for U			n	
San Diego	1	JC Davis	······		
			6107	5772	
1 1	Surface Lot	5,182	6,107	572 150	
	Garage/Structure	1,553	3,167		
	Total Spaces			16,731	
Santa Barb					
	Surface Lot	1,898		1	
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┞╼┼╴────			·	4,857	
Semta Cray		· · · · · · · · · · · · · · · · · · ·			
Santa Cruz	No Information for	UC Santa Cruz			
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Santa Bar	hara				
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1 2 Number (	f Buses Entering Cam	pus per Day:			
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3.4 Number	of Bike Parking Space	5:			1
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and the second s		2,500			<u> </u>
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	3.2 Number of Pomona SLO Chico Davis Santa Bar Santa Cru 3.3 Number of Pomona SLO Chico Davis Santa Bar Santa Cru 3.3 Number of Pomona SLO Chico Davis San Dieg Santa Bar Santa Cru	Garage/Structure         Total Spaces         Santa Cruz         No Information for         3.2 Number of Bus Routes on Camp         Pomona         SLO         Chico         Davis         Santa Barbara         Santa Cruz         3.3 Number of Buses Entering Cam         Pomona         Santa Cruz         Jana Diego         Santa Barbara         Santa Cruz         Jana Diego         San Diego         Santa Barbara         Santa Barbara         Santa Barbara         Santa Barbara         Santa Cruz         J.4 Number of Bike Parking Space         Pomona         SLO	Surface Lot     1,898       Garage/Structure     0       Total Spaces     0       Santa Cruz     No Information for UC Santa Cruz       3.2 Number of Bus Routes on Campus:       Pomona     10       SLO     6       Chico     12       Davis     14       Santa Barbara     N/A       Santa Cruz     N/A       Santa Barbara     N/A       Santa Cruz     N/A       Santa Barbara     N/A       Santa Cruz     N/A       Santa Barbara     300       Santa Cruz     N/A       Santa Cruz     N/A       Santa Barbara     300       Santa Cruz     N/A       Santa Barbara     300       Santa Cruz     N/A       Santa Cruz     N/A       Santa Cruz     N/A       Subara Cruz	Surface Lot     1,898     2,278       Garage/Structure     0     544       Total Spaces	Surface Lot     1,898     2,278     137       Garage/Structure     0     544     0       Total Spaces     4,857       Santa Cruz     4,857       No Information for UC Santa Cruz

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Davis		N/A		
San Diego		4,332		
Santa Barbara		13,000		
Santa Cruz		N/A		
3.5 Is there a strong	incentive program	n for alternative	transportation	in place?
	s. 500 cars/day a	re allowed to par	k just as close	and
	nctimes ser than faculty/s	aff for	1	F
	pooling.		· ·	
	veral TDM measu	res in operation	(e.g. free bus)	but not as a
	reaching as c.g. S		<u>ر او </u>	[
	s. Faculty, staff a		the city and co	ounty buses
	free.		Т	
	s, city buses are f	ree to all faculty.	staff and stud	ents.
	s. Express shuttle			
	nmuter rail conne			
Santa Barbara:		rking passes sold		
<u>}</u>	2 miles of a	אומתווסי	·····	
┟┈─┼─┼────┼╴╸		days of parking	viven to those	who use
┠━╁╼┽───╄╌		es to get to camp		
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Santa Cruz: Exc	cellent TDM. E. J			- Freedown
4. Cost and Rules for T	ransportation:			
4.1 Charges for stud	lant parking parm	ite.	1	· · ·
TAL CHALGOS LOC SILL	\$ / day	\$ / quarter	\$ / semester	\$/year
Ротода	1.50	36.00	N/A	37 year 144.00
SLO	1.50	35.00	N/A	140.00
Chico			72.00	165.00
Davis	4.00	N/A	210.00	492.00
San Diego	6.00	114.00	N/A	456.00
Santa Barbara	• N/A	110.00	N/A	420.00
Santa Cruz	s i	milar	to	Davis
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ACADEMIC AFFAIRS

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	Is there a lottery for pa	Lottery?	Price difference?		. <u> </u>
	Pomona	No	No		
	SLO	No	No	-	
	Chico	No	No .		
-	Davis	No	No		
┝	San Diego	No	No		
<u>├</u>	Santa Barbara	Yes	No		
	Santa Cruz	Yes	Yes		
4.3	Charges for Bus Pass:	\$/day	S / quarter	S / semester	\$/yea
	Pomona	N/A	N/A	N/A	N/A
<u> </u>	SLO	FREE	· · · · ·		
T	Chico	FREE			
Ţ.		700 710			·
		FREE			N/A
	Davis	\$1.50	\$65.00	\$97.00	
		\$1.50	\$65.00 or students, but no		

6

JJ/80/71

#### Fature Plans:

Pomona: (Goal year is 2007-2008)

<u>*Population*</u>: Several changes to the campus are planned. First, the number of students is expected to rise to 25,500, and the number of faculty and staff to 3,900 for a total expected population of 29,400.

Housing: 700 new on campus housing spaces are planned, as well as 400 new off campus spaces for upper level students.

<u>Parking</u>: The parking additions include 739 new faculty and staff spaces, 2243 new general permit spots, 120 more spaces for visitors, 1000 for residents, and 11 for state vehicles.

SLO: (Goal year is 2020)

<u>Population:</u> The planned number of students is to be 20,900, with the number of faculty and staff rising to 3,200, and the total number on campus 24,100. <u>Housing:</u> Plans call for housing capable of handling a total population of 5,840

students on campus.

<u>Parking</u>: New parking structures on campus will add a total of 1,300 new vehicle parking spaces. Most of these new spots will be for general permits.

**Chico:** The main future plan for CSU Chico is the purchase of more land in order to build more campus parking.

#### Davis: (Goal year is 2005)

<u>Population</u>: The new expected student population is 23,920, with a faculty and staff increasing to 14,045 and a total population count of 37,965.

#### San Diego: (Goal year is 2005-2006)

<u>*Population:*</u> A goal of 25-30% growth has been instituted for the university. The planned increase calls for a student population of 22,507, a faculty and staff count of 18,792, and a total of 41,300.

<u>Howsing</u>: The projected number of students living on campus will increase about 2800 students to accommodate a total of 8,099.

<u>Parking</u>: An increase of parking structure spaces for faculty and general permit to 2100 and 3500, respectively, along with a gain of 90 metered spaces will add 970 total spots.

Santa Barbara: No information for UC Santa Barbara.

Santa Cruz: No information for UC Santa Cruz.

12/29/2000 09:03 FAX 805 756 5292

ACADEMIC AFFAIRS

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Contacts: Pomona: Address of Campus: 3801 West Temple Avc., Pomona, CA 91768 1. Transportation Management of Campus: Title: Director of Parking Services Name: Ray Rizzario Ph. #: (909) 869-2398 e-mail: 2. Long Range Planning: Title: Campus Master Planner Name: Ray Morrison Ph. #: (909) 869-4993 e-mail: 3. Other: Title: Rideshare Coordinator Name: Pillar Arranaga Ph. #: (909) 869-3233 email: SLO: Address of Campus: 1 Grand Ave., San Luis Obispo, CA 93407 1. Transportation Management of Campus: Name: Deby Anderson Title: Facilities Project Information Coordinator Ph. #: (805) 756-6806 e-mail: djanders@calpoly.edu 2. Long Range Planning: Name: Rex Wolf Title: Architect e-mail: rwolf@calpoly.edu Ph, #: (805) 756-2112 Chico: Address of Campus: 400 West First St., Chico, CA 95929 1. Other: Title: Assistant to V.P. for Administration Name: Bill McGinnis e-mail: bmcginnis@csuchico.edu Ph. #: (530) 898-5522 Davis: Address of Campus: 1 Shields Ave., Davis, CA 95616 No Contacts listed. San Diego: Address of Campus: 9500 Gillman Dr., La Jolla, CA 92093 1. Transportation Management of Campus: Title: Name: Parking Services e-mail: parking@ucsd.cdu Ph. #: (858) 534-4223 8 15/08/00 EKT T0:01 EWT 000 100

#### ACADEMIC AFFAIRS

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13/08/00 FRI 16:41 PAX 802 766 7566

2. Long Range Planning: Name: Network Administration Ph. #: (858) 822-1538

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 Name: James Wagner
 Title: Program Mngr., Transportation

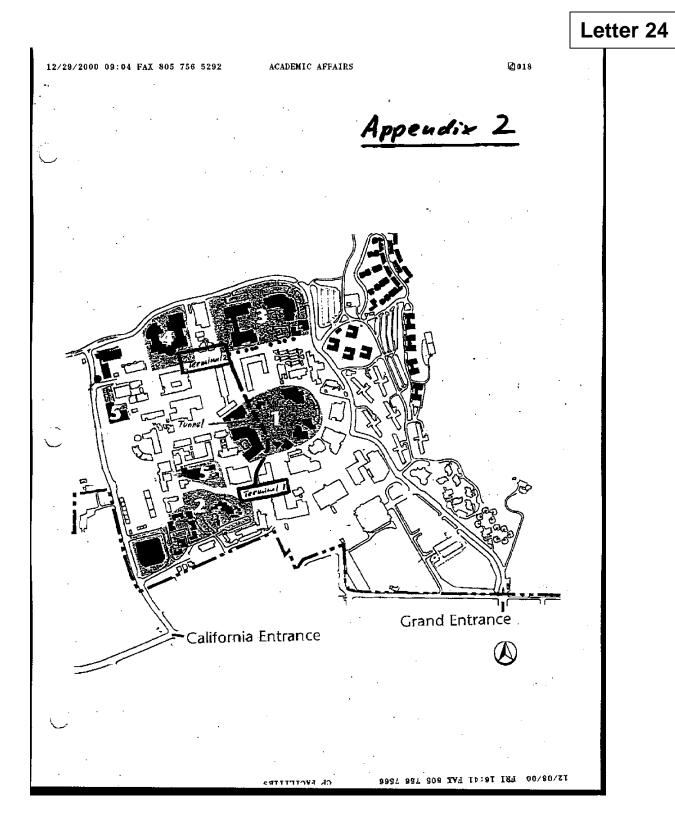
 Alternatives Program

 Ph. #: (805) 893-5475
 e-mail: James.Wagner@park.ucsb.edu

COLLEVATORIA

Santa Cruz: Address of Campus: 1156 High St., Santa Cruz, CA 95064

No Contacts Listed.



Letter 24 Mr. Eugene Jud

#### **December 8, 2000**

**24-1** Commenter notes the need to correct bus routes on Exhibit 5.22

**Response** Exhibit 5.22 has been modified to show the correct bus routes.

**24-2** Commenter notes the need secure funding for local bus service.

**Response** Many comments on the Master Plan have raised concerns about the continuation of the fully subsidized bus passes for Cal Poly students and employees. The current bus subsidy is an element of a negotiated arrangement between Cal Poly and the City of San Luis Obispo. The current agreement is for four years and ends on June 30, 2001. The negotiations are complex and are influenced by ever increasing costs. In addition, Cal Poly's current funding (through parking fines) has been and continues to be relatively stable, meaning it has not been increasing commensurate with increased transit costs. Because the subsidy is the result of two party negotiations, it is not possible for the University to predict that it will always be able to reach an agreement with the city. Nevertheless, Cal Poly is committed to maintaining the funding for the bus at least at the currently designated level, and is exploring funding sources, such as an increase in parking fees, to fully cover the subsidy.

**24-3** Commenter notes the need measurable modal split objectives.

**Response** The following table has been used for estimating where improved alternative transportation and savings in parking demand would occur. The Master Plan policy is to reduce parking demand by 2,000 spaces.

Approach	Savings	Relative Cost	Safety Valve*
Freshmen	1,000~1,50	L	some no.
restrictions	0		
Geographic controls	500	L	appeal
Car/vanpools	300	Μ	
Lottery	As	L	appeal
	determined		
Parking Fees	minor	L	appeal
On-campus transit	moderate	Н	
City transit	minor	Н	
Bike/ped	moderate	Н	
enhancement			
Area mgt	minor	L	
Fac/Staff incentives	minor	Μ	
Entertainment	moderate	Н	
Enrollment scenarios	moderate	Μ	

Estimated Parking Demand Reductions

Note: alternative transportation savings will be lower for Cal Poly because many of these programs are in existence and functioning well.

#### *Absolute controls will require provisions (safety valve) for hardships.

The University, as stated policy in the Master Plan, would reduce demand by 2,000 spaces. This reduction would be achieved through a number of measures. Over time, the feasibility and success of various measures will vary. For this reason, it is impractical to commit, at a Master Plan level, to absolutes. For example, an important idea is having an on campus and near campus shuttle. But this needs to be subjected to feasibility studies and trial programs, which the University will do.

To meet the parking reduction proposal of 2,000 spaces, Cal Poly intends to institute as a first, and most effective measure, that freshmen be required to live on campus and that they not be allowed to maintain cars on campus (with exceptions made for hardship and job-related requirements). We believe that the inelasticity of demand Cal Poly will prevent this policy from having a detrimental effect on the dormitory market. This restriction exists at other universities, including U.C. Santa Cruz.⁵

It is estimated that there will be about 4,000 new undergraduate students each Fall (about 3,000 freshmen) at Cal Poly under the full growth anticipated with the Master Plan. Currently, we house approximately  $80\% \sim 90\%$  of our freshmen on campus, and the campus provides 1,530 parking spaces for residents (R1 & R2). At present ratios, approximately 1,800 spaces would be needed under the Master Plan for freshmen. Allowing for some hardship requirements for freshmen, it is anticipated that approximately 1,500 or more spaces could be reduced with this policy alone.

This policy will do more than just reduce cars on campus. It will change the culture of the campus, infusing a higher regard for the environment and a reduced reliance on the automobile. As students advance through the University, they will do so with the ability to use alternative modes of transportation.

24-4 Commenter suggests the potential for Cal Poly leadership in regional light rail.

**Response** The following text addition has been made on page 189: "Energy Technology Collaborate with SLOCOG and public transportation providers in exploring alternative technologies, including vehicles not dependent on fossil fuels, "real time" arrival/departure information, flexible as well as fixed routing, etc." Refer also to page 177.

24-5 Commenter suggests considering higher parking fees; permit restrictions.

**Response** Comment is noted and appreciated. Parking fees at Cal Poly are much lower than many comparable schools around the state. Cal Poly proposes a robust program of parking demand reduction, including restrictions on freshman parking and geographic controls. Please refer to the alternative transportation section.

**24-6** Commenter suggests increasing public transit access.

**<u>Response</u>** See Alternative Transportation element. Text has been changed to place increased emphasis on public transit.

**24-7** Commenter suggests considering light rail terminals at Cal Poly.

⁵ http://www2.ucsc.edu/taps/students.html#fresh

**Response** Refer to comment 24-4 above.

24-8 Commenter suggests considering traffic calming on east Perimeter.

**<u>Response</u>** See text addition, page 172, which reads "Explore "traffic calming" alternatives to reduce vehicle/pedestrian conflicts." See also, page 168.

**24-9** Commenter suggests moving parking structure #3 west of railroad.

**<u>Response</u>** Moving parking structure three west of the railroad would require the use of prime agricultural farmland, which is contrary to Master Plan policies.

**24-10** Commenter suggests reviewing LOS discussion with respect to pedestrians.

**Response** Comment noted. The pedestrian movements at California Boulevard decrease the efficiency of the roadway. Prior to the development of Parking Structure II, a detailed plan of that segment of the road will be undertaken to improve both automobile and pedestrian flow.

**24-11** Review LOS calculations with respect to increases in background traffic.

**<u>Response</u>** Text has been added to the EIR to clarify background traffic used in the analysis. An error occurred with regard to the Foothill segment near California. This has been corrected.

### Comments on the Calpoly Master Plan and Draft EIR

Submitted by Glen C. Lawson Calpoly Alumni and Local Resident

Submitted on

December 4th 2000.

Glen C. Lawson 2425 Laurel Ave #A Morro Bay, CA 93442 (805) 771-9541 glen.lawson@dot.ca.gov

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Letter 25

The Following comments deal primarily with circulation and parking elements of the Master Plan and the corresponding environmental impacts in the Draft EIR. The focus of the comments regards the Highland Drive corridor, parking on the Northern section of campus and the California Street extension.

The Circulation element of the Master Plan should be based on principals and goals, which the University wishes to accomplish. This version of the Master plan states those principals and goals in an appropriate clear way as seen here. "A fundamental objective of the Circulation element is to redesign campus circulation system to reduce automobile dependence by establishing a pedestrian-oriented campus core and reduce vehicular access to the core. Reducing conflicts between pedestrians, bicyclists and autos by establishing a comprehensive circulation plan is a primary objective of this plan."(CalPoly Master Plan & Draft EIR, October 10, 2000; page 157) and "Primary entrances to the University need to provide direct access to parking lots or structures in order to reduce impacts on the surrounding neighborhoods and minimize vehicle pedestrian conflicts on campus." (CalPoly Master Plan & Draft EIR, October 10, 2000; page 158) Similar Statements can be found throughout the Master Plan and Circulation element. While these goals may have been meet in certain areas of the campus, at the intersection of Via Carta and Highland the circulation element has completely failed to meet these goals. In fact with the increased parking density, new proposed student housing and sport facilities north of Brizzolara creek, vehicle and pedestrian conflicts can only increase at Highland and Via Carta.

#### **The Problem**

The only vehicular access across Brizzolara creek to the planned parking facilities on the north side of campus is by Via Carta. Via Carta is then used for all of the pedestrians that just left their vehicles in the parking lots to cross Brizzolara creek once again in order to access the campus core. Currently the intersection of Highland and Via Carta is directed by Campus safety officers during the peak traffic periods in order to manage the vehicular-pedestrian conflicts. It is currently barely manageable due to the high volumes of traffic and pedestrians. The current sports complex, future student housing and increased parking planned north of Brizzolara creek will only serve to worsen the already increasingly hazardous situation at this intersection.

The real problem is that the proposed parking structure 3 and other proposed developments are planned on the outside of the main access corridor to the campus, in relation to the Campus Core. This situation requires the paths of those entering campus and those trying to reach the campus core to conflict. Campus planning effectively eliminated this problem with the newly constructed parking structure 1 and the proposed parking structure 2 by placing them on the inside of the main access corridor, in relation to the campus core. It is understood that this option was eliminated for parking structure 3 in order to preserve valuable campus core development land, however the circulation requirements necessary to place it outside of the main access corridor have not been addressed by this Master Plan nor by the Draft EIR. Redesign of Via Carta as proposed in the Master Plan (page 172-173) won't reduce the vehicular-pedestrian conflicts.

25-1

The truth of the matter is that the developers of the Master Plan already understand the problem. As stated in the Circulation element: "Traffic congestion and safety issues arise when circulation systems for motorized vehicles, bicycles, and pedestrians cross or overlap. The master Plan should find ways to reduce these conflicts by designing separate routes and managing intersections." (page 159)

If the University truly intends to obtain the goals stated in the Master Plan of reducing vehicular-pedestrian conflicts, the circulation element must be reevaluated in this area of campus and add appropriate measures to meet its goals.

#### **The Solution**

In order to reduce traffic congestion and increase safety at Highland and Via Carta the two main circulation system flows (Vehicular and Pedestrian) should be separated. Pedestrians are always going to use the most direct route, which in this case is Via Carta to access the campus core. Therefore Via Carta should be closed to vehicular traffic and remain as a pedestrian route only. It could still be used for event access during major events at the Sports Complex, but for normal day to day use it should be pedestrian and bicycle use only.

For vehicular access to the parking and other facilities north of Brizzolara creek, a new road should be constructed that is separated from the main flow of pedestrian traffic. For purposes of these comments this new road will be named **Glen View Drive**. In order to separate vehicles and pedestrians this new road should run behind the proposed parking structure 3 where a section of Pinnacles road presently is. This will provide easy access to the parking structure for vehicles, while preventing the necessity of pedestrians leaving the parking structure to cross the vehicular traffic trying to access it. Glen View Drive would also continue on across Via Carta to provide access to the sports complex and the Ag. Pavilion. A grade-separated pedestrian crossing could easily be constructed from the parking structure to the Sport Complex to reduce vehicular-pedestrian conflicts during events.

A new crossing of Brizzolara creek would be necessary for the new road. This crossing could be a few hundred feet east of the old Rodeo Rd crossing and intersect with Highland Drive. While this solution effectively separates motorized vehicles and pedestrian, it presents a challenge to design a functional intersection system on Highland. This solution would create three closely spaced 3-way "T" intersections on Highland. These intersections with Highland are Mount Bishop, the California extension, and the new road across Brizzolara creek. The intersection of Highland with Via Carta would be pedestrians only and would only conflict with cross campus traffic, which is considerably less than those, seeking access to parking from Highland.

To effectively manage traffic through these three closely spaced intersections, they must be designed to work together. The Master Plan proposes that key intersection designs should explore a range of solutions that provide the best response to the need. These

include roundabouts, signalization, stop signs, intersection geometry, lane configuration and other solutions. In addition, it states that they should reduce reliance on University Police staff to monitor and control traffic as a routine daily practice. (CalPoly Master Plan & Draft EIR, October 10, 2000; page 173)

Due to the multiple peak periods around class changes, stop signs at Mount Bishop and at Via Carta have proven ineffective in moving traffic to the parking areas on Highland. Traffic routinely backs all the way up to Santa Rosa Rd. Therefore stop signs are not recommended for these intersections. Traffic lights may be more effective in this situation; however, they may also produce excessive delays at the peak traffic periods. This could continue to require University Police Staff to control traffic during peak times. In addition, Traffic Signals on one of the Gateway entrances to campus will have a negative environmental effect due to visual features of signalization. This is something that the Draft EIR does not address with the Master Plan's recommendations to have possible future signalization on campus. Currently the production of a detailed Highland Corridor Area Plan is in progress to enhance the visual attributes of this corridor. Signalization of these intersections would have a negative effect on these efforts. Also it will have an adverse effect on the "Pedestrian Oriented" feel of the campus that the Master Plan proposes to develop.

Calpoly can use innovative approaches to these intersections that will enhance traffic flow by reducing delay, improve visual characteristics and reduce conflicts. A combination of roundabouts and lane configuration or channelization would best serve these three closely spaced intersections. A three-leg roundabout at the intersection of Mount Bishop would provide a pleasing visual treatment between the border of the Agricultural lands and the campus core. It would also eliminate the long queues that back all the way to Santa Rosa Road during peak periods. Channelization at the intersection of the California extension would provide efficient cross campus traffic flow. Restricting left turns on to Highland from California would resolve the limited sight distance problem produced by the Railroad bridge crossing of Highland. Another 3-leg roundabout at the intersection of the new road accessing the parking and facilities north of Brizzolara creek will effectively move traffic across the creek while minimizing conflicts with pedestrians and bicycles. Cross campus traffic will benefit from the reduced queues and confusion. It will also provide for those seeking to go left from California onto Highland by circling the roundabout and effectively making a u-turn.

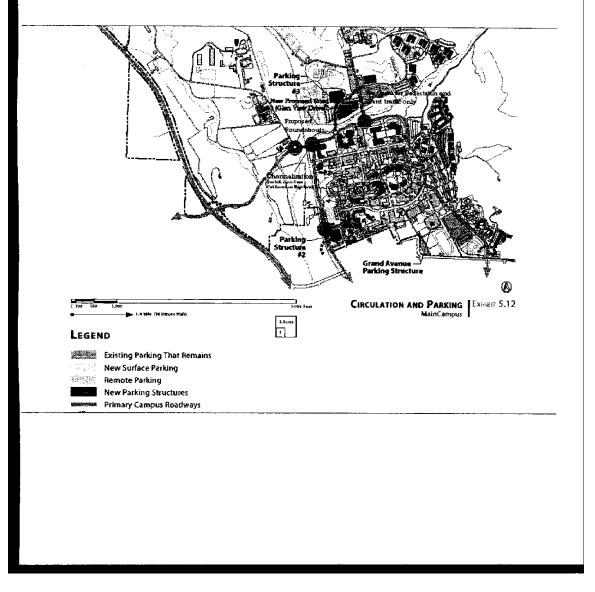
Special attention will be required in the design of these intersections to effectively work together. The new road crossing the creek will be coming down from a grade atop the parking area where it will match with the now existing Pinnacles Road. This will have to be accounted for in the design of the roundabout at the intersection of Highland. The grade of the approach road does not eliminate a roundabout as an intersection design alternative. The Master Plan incorrectly states that due to grades at Via Carta that it is inappropriate for a roundabout. According to the guide book published by the FHWA: "Roundabouts: An Informational Guide" (Publication No. FHWA-RD-00-067) grades on approach roadways greater that -4% may make it more difficult for entering drivers to slow or stop for the approach. (Pg. 167) This is however less of a problem

25-2

25-3

here due to the low speeds of the vehicles approaching the intersection. A roundabout at Via Carta may still be inappropriate, however not for the given reason. Any other intersection type will have the same problem and must be designed to address the situation.

These innovative approaches to traffic management will show all those that visit CalPoly that CalPoly is truly a Learn by Doing educational facility. Please see the attached rough sketch of the ideas proposed above.



#### Letter 25 Mr. Glen Lawson

#### **December 4, 2000**

**25-1** The commenter expresses concern about vehicle-pedestrian conflicts on Via Carta at and north of Highland Drive

**Response** These comments are noted and have been forwarded to Facilities Planning. When Parking Structure III is designed, a detailed study will be undertaken to optimize the circulation in the vicinity of Via Carta, and to reduce conflicts with pedestrians.

**25-2** The commenter proposes an additional road crossing Brizzolara Creek

**<u>Response</u>** A crossing of Brizzolara Creek will be considered during the implementation of the Master Plan. Such a crossing will require permit authority from the California Department of Fish and Game and the U. S. Army Corps of Engineers.

**25-3** The commenter suggests intersection redesign options.

**Response** The DEIR suggested that a roundabout at Via Carta and Highland may not be feasible due to the steep grade on Via Carta. The intersection design will be studied for the most appropriate geometric configuration during implementation of the plan.

```
Bonnie Lowe /cpslo,employee1 12/6/2000 14:15
                                                                                                                                                                                Page 1
                                                                                                                                   Dated: 12/6/2000 at 12:27
MESSAGE
                                                                                                                                                                    Contents: 3
Subject: FW: Principles/james
Creator: Linda Dalton /cpslo,employee1
Item 1
     TO: Bonnie J. Lowe /cpslo,employee1
Item 2
   ----Original Message
From: James R. Vilkitis
Sent: Tuesday, November 21, 2000 9:34 AM
To: Edward F. Johnson; CRI; James R. Vilkitis
Subject: Principles/james
Ed. Here are some principles that should govern any management and/or
enhancement activities. I would prefer that we identify the area as the
stream system rather than riparian system. Stream system is broader and
encompasses the riparian, and some wetland systems. You could use
stream/wetland in stead of stream. That would cover everything. good
 luck. james.
 Major Principles:
                                                                                                                                                                                                    26-1
  For management purposes identify stream segments by associated land uses
 for management purposes identify stream consumption of the segments. Extent
of the stream zones will be delineated by existing/potential vegetation
that is dependent on soil moisture from the steam, i.e. wetlands,
  riparian, etc.
 riparian, etc.
Stream management/enhancement will be a function on maintaining the
integrity of the stream and associated habitats.
Stream management/enhancement will be a function of maintaining the
equilibrium of the streams hydrodynamics.
  Item 3
  Received: from rubens.artisan.calpoly.edu (daemon@rubens.artisan.calpoly.edu
  [129.65.60.41])
                     by davinci.artisan.calpoly.edu (8.8.6 (PHNE_17135)/8.8.6) with ESMTP id
  KAA28105;
  KAA28105;
Tue, 21 Nov 2000 10:34:51 -0800 (PST)
Received: (from daemon@localhost)
by rubens, artisan.calpoly.edu {8.8.6 (PHNE_17135)/8.8.6) id KAA18844;
Tue, 21 Nov 2000 10:34:50 -08000 (PST)
Received: from calpoly.edu (jvilkiti1.cagr.calpoly.edu [129.65.30.50])
by rubens.artisan.calpoly.edu (8.8.6 (PHNE_17135)/8.8.6) with ESMTP id
Van18833.
   KAA18833;
  MALCOSS;
Tue, 21 Nov 2000 10:34:49 -0800 (PST)
Message-ID: <3AlAB20A.A4E85CB5@calpoly.edu>
Date: Tue, 21 Nov 2000 10:34:02 -0700
X-PH: V4.4@rubens.artisan.calpoly.edu
   X-PH: V4.46rubens.artisan.calpiy.edu

From: James Vilkitis <jvilkiti@calpoly.edu

Reply-To: jvilkiti@calpoly.edu

Organization: Cal Poly State University

X-Mailer: Mozilla 4.72 (Macintosh; I; PPC)

X-Accept-Language: en
   X-Accept-Language: en
MIME-Version: 1.0
To: Edward Johnson <ejohnson@calpoly.edu>, CRI@calpoly.edu,
James Vilkitis <jvilkiti@calpoly.edu>
Subject: Principles/james
X-Priority: 1 (Highest)
Content-Type: text/plain; charset=us-ascii; x-mac-type="54455854";
x-mac-creator="4D4F5353"
Content=Type=C=Encoding: 7bit
    Content-Transfer-Encoding: 7bit
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#### Letter 26 Dr. James Vilkitis Natural Resources Management Department

#### **December 6, 2000**

**26-1** Commenter suggests a number of vocabulary modifications to the Master Plan, including identifying "stream" systems, rather than riparian systems.

**Response** The comment is noted and the text has been modified to reflect this suggestion (p. 85).



Aside from reichboring rendents' possible issues w/ Lights ; roise, are There nocturnal animals or birds whose habitats will be distubed by new housing ; other buildings?

#### Letter 27 Anonymous

#### December, 2000

**27-1** Commenter asks if lighting and noise will disturb neighboring residents and nocturnal animals.

**Response** New development, especially located on the edge of the campus instructional core, will have impacts on wildlife and neighboring residences. This issue is discussed in the sections of the Draft EIR on Noise and Aesthetics. Mitigation measures have been recommended to reduce these impacts to a less than significant level. The DEIR addressed these impacts.

To Whom It May Concern: I would like to make the following Comments regarding the Cal Poly Master Plan:

I hope you will take these into consideration When revising the current draft. Sincerely, FROM: Jenny Wong Name: 766 Boysen Ave #16 SUD

TO: B. Lowe Facilities Planning Cal Poly University San Luis Obispo, CA 93407

# Comment

Alternative transportation and less reliance on prismal automobiles are definitely suportant. It is understandable that Policies could be enforced to eliminate these problems, but We a great importance is fer the Master Plan to support these Cha changes by importance such a transition easier. Public Transportation at this time is not enough. There are reasons why people kely in personal transportation. There isn't enough public transportation

#### Letter 28 Ms. Jenny Lang

#### December, 2000

**28-1** Commenter reinforces the need for a strong alternative transportation system on campus and suggests the present system is inadequate.

**Response** These comments are noted and forwarded for the benefit of the decision makers. The Alternative Transportation section of the Master Plan details proposals for improvement of the alternative transportation system. See Alternative Transportation chapter.

MEMORANDUM	

Animal Science Department Cal Poly San Luis Obispo

TO: Linda Dalton Vice Provost for Institutional Planning	DATE: Decemb	er 8, 2000
VIA: Mark Shelton, Associate Dean College of Agriculture		
FROM: Ken Scotto, Chair CAGR Land Use Committee	COPIES:	Jen Lowe Wolf CAGRLUC
SUBJECT: RESPONSE TO MASTER PLAN AND I	ORAFT EIR	
<ul> <li>The CAGR Land Use Committee (CAGRLUC) has site EIR, and offers its responses in the attached table. Some comments and observations are editorial in nature, we (and, perhaps, philosophical) matters. It should be no of CAGRLUC responses (those considered in a form individual committee member responsestime const to reconvene for consideration of the entire response. The CAGRLUC welcomes the opportunity to discuss observations with appropriate members of the Master. The "comments and observations" table presents reas no priority or importance is implied in the order of prespecial mention (and which appear in the chronologi</li> <li>Story Index method of soil classification, especial mention of areas classed a "prime ager Capability Classification method currently us and CAGR here at Cal Poly</li> <li>Goldtree area CAGR and Master Plan Co differ</li> <li>NRM tree farm and logging sports area cur Planarea sited for remote parking</li> </ul>	Some of the CAGF vhile others relate noted that the table all meeting of the of traints did not allow to the Master Pla any of the comme er Plan Committee sponses in chrono esentation. Items cal responses) include pecially as it relate icultural land," diffe sed by Soil Science mmittee definitions	RLUC's to procedural is a compilation committee) and w the CAGRLUC an Committee. ents and logical order, so which deserve dude: s to ers from Land e Department s of this area

# CAGRLUC RESPONSE TO MASTER PLAN AND DRAFT EIR

AGE	COMMENTS/OBSERVATIONS	1
v	Under "Master Plan Summary," last paragraphadd/insert "prime" to second sentence to read	129.
	" protect natural environmental features and prime agricultural lands" EXHIBIT i "AREAS SUITABLE FOR ANCILLARY ACTIVITIES AND FACILITIES" on legend	4
Vi	EXHIBIT I "AREAS SUITABLE FOR ANGILLARY ACTIVITIES AND FACILITIES of regend	
	<ul> <li>have not been proven or field tested</li> <li>This shaded (in pink) area overreaches the traditional CAGR definition of Goldtreeon</li> </ul>	
Ĩ	<ul> <li>This shaded (in pink) area overreaches the traditional CAGR definition of SoluteCor previous maps of this area CAGR defined Goldtree as Fields C62, C63 and C64</li> </ul>	
	EXHIBIT 5.1 (page 70) should also be corrected to reflect CAGR definition of Goldage	127
	"REMOTE PARKING OPTIONS"	
	The parking on Stenner and Mt. Bishop, based on actual site visit, is land capability Class	
	U or prime apricultural land (Brent Hallock)	
	<ul> <li>Designated areas encompass NRM tree farm/lab area, and irrigated pasture ground of</li> </ul>	
	Chada Baash	-
x	An allocation Activities and Eacilities remove reference to "designating a location" to consider	29-
	options in San Luis Creek watershed ranches for "modest-sized applied research park" without	1
	ference to Choda	1
14	Section g (first bullet) – use SLO Creek Watershed Ranches (SLO-CW-Ranches) which is after	24.
	"main campus" but identified on page 43 as separate	-
33	main campus but used intervention by Discipline" first bullet on this page should also state that limits Under "Enrollment Growth by Discipline" first bullet on this page should also state that limits have been set on unique and smaller programs (Soil and Earth Sciences) that severely restrict	29.
	have been set on unique and smaller programs (Solit and Earth Sciences) that severely result	1
	growth On map under San Luis Obispo Creek Watershedremove "includes Extended Campus	1.00
41	<ul> <li>On map under San Luis Obspu Cleek Watering in later parts of document, and they are and Instructional Core," as this is confusing in later parts of document, and they are</li> </ul>	129.
	managed entirely differently. Also defined differently on page 43	!
43	There is no detailed man of the San Luis Obison Creek Watershed Kancnes	129.
45	Circulation and Parking "the Grand Avenue and Highland Drive entrances offer more direct	
40	access" without mention of ancillary parking which contradicts this section	1 2 7
47	Spile	1
	The use of Storie Index is inappropriate; Cal Poly has used Land Capability Classification	
	(LCC) as its tool to identify prime agricultural land, which would be LCC I and II	29-
	<ul> <li>Storie Index is not widely used or accepted since there is not a direct correlation to prime</li> <li>Storie Index is not widely used or accepted since there is not a direct correlation to prime</li> </ul>	
	<ul> <li>Stolle most is not where discound accepted dates and page 53 "Soils Map" Contact lands. CAGRLUC recommends changing this section and page 53 "Soils Map" Contact</li> </ul>	
	CAGRLUC and Brent Hallock for assistance. EXHIBIT 4.4 the intersection of Stenner Creek Rd. and Highway 1 is identified as	1.00
50	"important," yet is not part of circulation on page 46	129.
=		1
51	There are 2 ag wastewater treatment ponds at the dairyseveral other exhibits (EXHIBIT	
	4 10 5 2 5 6 and 5 10) should also be corrected to show 2 ponds	29.
	- Would one characterize langon at BCEC as "WASTE WATER RETENTION POND," or as	]
	"AGRICULTURAL WASTEWATER TREATMENT POND?"	
55	Why is Ruilding 52 "obsolete " when Building 10 from the same era is OK?	129.
57	Agricultural Soils regarding the conversion of prime agricultural land and its impact under	29.
	Loco A remove "generally" in requiring EIR and trustees acquiescence	
58	EXHIBIT 4 10 why are the "Ancillary Research and Parking" areas not covered in constraints	29-
	if Master Plan Committee is considering them at the proposed sites?	
59	Opportunities - Development Suitability	
	Areas of development do not include Cheda Ranch, so how can Ancillary Research Facility	29-
	<ul> <li>be considered?</li> <li>Last word of first paragraph, "properties," by Master Plan definition (page 43) should read</li> </ul>	
	Per pakan	]
60	Goldtree area identified does not have "good vehicular access" according to Master Plan earlier	120-
60	discussion	<b>││ ┷╶┩╵</b>
61	EXHIBIT 4.11 Agricultural Facilities Enhancement is great for Stenner Creek-Mount	
	<ul> <li>EXHIBIT 4: 11 - Agricultural Features Enhancements as "ancillary remote parking" which is not</li> <li>Bishop Road area, but Master Plan also has this as "ancillary remote parking" which is not</li> </ul>	]  47,
		-

63	appropriate usenot consistent throughout the document Introduction first paragraph, the word "ranches" was omitted after watershed on fine 5;	1
00	document not consistent with page 43	29
69	Ancillary Activities and Facilities	i.
	Such activities should not be well-defined or identified on this plan promotes leap frog	-
	development which contradicts Master Plan principles in many ways	29
	Items such as parking or Goldtree have not been agreed upon or discussed in depth	
	It would improve these "wish" items if they were to be located on the San Luis Obispo Creek Wastershed Ranchessince the items are generic, so should the location be broad	
71	EXHIBIT 5.2	i
	Farm Shop should be added to LEGEND in area of "FACILITIES SERVICES, FACILITIES	20
	PLANNING, TRANSPORTATION SERVICES and SUPPORT SHOPS	
	On map at "Future Corporation Yards"	
77 78	Issues – include "encroachment of campus onto prime agricultural land" as a major issue. Third bullet on this page Issue of "degradation of range by grazing practices."	127
78	<ul> <li>Where? Who identified this as an issue?</li> </ul>	1
	<ul> <li>Remove or reword as to "evaluate range practices to improve rangeland health.</li> </ul>	29
80	Plan Components should have Prime Agricultural protection as you do wildlife, plants and	1
	rocks.	29
84	Trails would it be a good idea to add something about placing stiles where trails cross fences	124
	or locked gates?	
85 89	BMP moving away from BMPs towards management measures (per Hallock) First paragraph include "soil and earth sciences" as support operations and research	129
90	EXHIBIT 5.5 add second set of corrals at Escuela Ranch (per Shelton)	120
94	Preservation and Enhancement first bullet: remove the word "should" to "will" to agree with	129
	EQA, page 207.	119
101	Principles to avoid "unnecessary" conversion from agricultural lands is a concept that should	129
400	also be high or even higher on SLO-CW Ranches.	129
122 143	Grading and Drainage should also include "erosion Control." In paragraph include SWPP ATHLETIC FIELD HOUSE	167
140	Referenced/discussed here, but is not designated (labeled) as such on EXHIBIT iii, page	
	xiii; diagram appears next to PS3	29
	Does this mean that ARDFA is displaced/disappears?	I _
153	See comments from page 69	129
153	Gray box of Environmental Consequences-paragraph 2.	1
	Who identified that it is "infeasible" to return to prime agricultural land. This still is prime     agricultural land.	29
	This is not a "no impact." This is a concern that a document like this does not have the	<b> -</b> '
	understanding of prime agricultural land nor sought out the expertise to identify such lands.	t i
154	The "ancillary parking" went to "Remote parking options" to now "new surface parking lots" as if	129
	a done deal. Legend does agree with map.	
155 156	First paragraph does not mention SLO-CW Ranches as part of facility development. Prime agricultural land should be identified as an "Environmental Sensitive Area".	:27
150	Plan Components – paragraph 2 states Gold tree as "potential." According to whom?? Who	124
	"balanced" the principles and what weight was given? This is on the SLO-CW Ranch not in the	24
	"northwest portion of the main campus."	
158	This paragraph is good. It opens discussion without identifying the site. But why are the	24
	ancillary items, such as gold tree on the previous page, not specifically mentioned. Not consistent.	] 41
161	Back to "remote parking." Is this the decided place???	129
194	Principles. Where is the CAGR-LUC input. There are no agricultural specialists identified that	
	had input into this discussion. Plan components do not use Ranches as locations but only "main	1
	campus" and "western ranches." Be consistent and incorporate your own terms from pages 43-	29
	44. Otherwise using "main campus" for Cheda and Escuela Ranches is very misleading.	<u>ا</u> ا
		ŧ.
195	Goldtree is on the SLO-CW Ranch or Cheda Ranch and not the "northwest corner of the main	1
	campus.	29
	Same comments as on page 194 that this is a misleading statement for proximity. Who	1

	<ul> <li>determined the value of this land and stated that this is "not used heavily" by CAGR.</li> <li>The environmental consequences are great in this section and yet in earlier discussion it is considered a "suitable site." Different authors of each section???</li> </ul>	
195	<ul> <li>GOLDTREE SITE</li> <li>Acreage of this site (as per aforementioned CAGR definition of Goldtree) is misstated at 200should be about 51.9 acres</li> <li>Diagram of site should be redrawn to reflect inclusion of Fields C62 (21.7 acres), C63 (8.2 acres), and C64 (22 acres) as per previous (Stechman) maps</li> <li>This area has since been re-fencednow a feed resource for sheep operationresulted from loss of Serrano Ranch grazing to sheep</li> </ul>	29-1
257	More on Goldtree vegetation a mix of weedy and noxious species that are unpalatable to livestock. Who made this determinationfeed resources currently being developed with sheep grazing	29-1
261	<ul> <li>Under "SIGNIFICANCE THRESHOLDS"</li> <li>The Master Plan specifically identifies prime agricultural soils on campus, and states that no further development of such lands will take place." Soil classification method in question.</li> <li>Are proposed "REMOTE PARKING OPTIONS" compatible with this statement/policy?</li> </ul>	29-
262	Under "CUMULATIVE IMPACTS"	29-
325	Interesting that the preparers and persons contacted does not include a single agricultural specialist. Yet much of this document involves technical input on agricultural land uses. How does Master Plan Committee arrive at its conclusions and recommendations concerning agricultural lands and resources without direct input from ag specialist(s).	29-
3	<ul> <li>BOTANICAL SURVEYagain reference to Goldtree acreage</li> <li>Reference to Goldtree as 180 acres</li> <li>AgainCAGR definition of Goldtree would put that site at approximately 50 acres (Fields C62, C63 and C64)</li> </ul>	29-

#### Letter 29 Dr. Ken Scotto

#### **December 8, 2000**

**29-1** Comment requests that "prime" be added to the agricultural land designation.

**Response** The text has been modified to reflect this recommendation (refer to page viii).

**29-2** Commenter raises concerns about the depiction of the Goldtree area.

**Response** The graphic depicting Goldtree has been amended to incorporate suggested changes and refine the location. The location will not impinge upon existing vineyards. Remote parking will not take place on prime agricultural lands nor will it displace current or future NRM facilities.

**29-3** Commenter questions designation of applied research park site.

**Response** Text has been clarified; refer to pages xi, 64, and 206; Nevertheless, the University feels that it is important to continue to identify the Goldtree area of Cheda.ranch as a possible site for an applied research park.

**29-4** Commenter suggests clarifying San Luis Obispo Creek watershed.

**Response** The following text has been added: "...Such designations will be used for all lands on the main campus, *San Luis Obispo Creek Watershed ranches and Chorro Creek Watershed ranches in San Luis Obispo County.*" (page 16).

**29-5** Commenter notes limits on size of smaller, unique programs.

**Response** See text addition under discussion of Critical Mass (p. 37). The following text has been added: "In some instances the campus chooses to limit the size of unique programs despite demand, due to the specialized faculty, facilities and equipment or higher costs associated with such programs."

**29-6** Commenter suggests change in map legend.

**Response** The map on page 43 has been changed accordingly.

**29-7** Commenter criticizes lack of detailed map of SLO Creek watershed ranches.

**Response** Maps of Cheda, Peterson and Serrano ranches have been added on page 45.

**29-8** Commenter expresses concern about an apparent contradiction about access from Grand and Highland in Chapter 4.

**<u>Response</u>** Chapter 4 discusses Existing Conditions only. The commenter's concern is focused on access to future uses, which are addressed later in the Master Plan. For example, see page 195 for a discussion of possible remote parking sites.

**29-9** Commenter questions soil classification and analysis.

**<u>Response</u>** The soil study has been modified to use the Natural Resources Conservation Service soil capability class system, consistent with other jurisdictions.

**29-10** Stenner Creek Road intersection (identified on p. 50) should be discussed on page 46.

**Response** This is discussed later in Circulation element. See page 165.

**29-11** Commenter indicates that maps are missing some reservoirs and lagoons.

**Response** The base map has been changed to include additional reservoirs and lagoons.

**29-12** Commenter has questions about dates and obsolescence for buildings 10 and 52.

**Response** Obsolescence is defined by several criteria, including functionality, not just age.

**29-13** Commenter asks for clarification that an EIR would be required for conversion of prime agricultural lands.

**Response** Text has been clarified, refer to page 59.

**29-14** Commenter asks why areas suggested for ancillary activities aren't covered on the constraints map?

**Response** The base map focuses on the Main Campus. The Constraints analysis has been modified, with the addition of another map and text about Cheda Ranch on page 64.

**29-15** Commenter seeks clarification of reference to San Luis Obispo Creek watershed ranches.

**Response** The text has been clarified accordingly; refer to page 60.

**29-16** Commenter is concerned with the suitability of Goldtree/Cheda Ranch area for development.

**Response** The Constraints analysis now contains a more detailed analysis of Cheda Ranch on page 64.

**29-17** Commenter points out inconsistent designation of development suitability in area near Stenner Creek Road.

**Response** The remote parking sites are not expanded agricultural facilities. These were added after the constraints map was developed. There has been a clarification in the text to reflect this and changes in Exhibit 4.11. Please refer also to the discussion of potential remote parking sites on page 195.

**29-18** Commenter suggests that the word "ranches" should be added to the second sentence at the beginning of the Land Use element.

**<u>Response</u>** This is a general paragraph not requiring the word change proposed.

**29-19** Commenter calls for less specificity in designating ancillary activities.

**<u>Response</u>** The Master Plan team feels that a specific designation should remain, but with text clarification; refer to page 64.

**29-20** Commenter seeks clarification of map legend to include reference to the Farm Shop.

**Response** The legend in Exhibit 5.2 has been changed to add this clarification. Exhibit iii has been modified as well.

**29-21** Commenter is concerned that references to remote parking are not consistent throughout the Master Plan, and that the remote parking designation on the map does not match the legend on Exhibit 5.2.

**<u>Response</u>** The legend in Exhibit 5.2 has been changed to distinguish remote parking options from planned surface lots closer to the campus instructional core.

**29-22** Commenter indicates that SLO Creek Watershed ranches are not included as part of facility development.

**Response** The SLO Creek Watershed ranches and Chorro Creek Watershed ranches are discussed in a separate section on page 77, which has been modified to indicate some potential for development on Cheda Ranch.

**29-23** Commenter suggests identifying prime agricultural land as environmentally sensitive.

**Response** The Master Plan recognizes the environmental value of prime agricultural land in text, but designates it as Outdoor Teaching and Learning on land use maps. The Master Plan now explicitly refers to prime agricultural lands as meriting conservation and protection (see pp. 83 and 96).

**29-24** Commenter questions Goldtree development potential as discussed in the Land Use element.

**Response** The Master Plan includes a general discussion in this section, so the text required only minor modification here. The development potential on Cheda Ranch is discussed in more detail in Chapter 4, Existing Conditions (see p. 64).

**29-25** Commenter prefers the general level of discussion about possible remote parking sites in contrast to the more detailed references to the Goldtree area.

**Response** Comment noted. Discussions of Cheda Ranch in general, the Goldtree area and remote parking options have been expanded in several sections of the Master Plan. See pp. 64, 195 and 206.

**29-26** Commenter suggest adding "encroachment of campus onto prime agricultural land" as a major issue.

**<u>Response</u>** See text addition on page 95 where more appropriate under Issues in Outdoor Teaching and Learning element. The first Issue now reads "pressure to expand instructional core, sports and recreation activities and student housing *into agricultural lands*."

**29-27** Commenter expresses concern about criticism of grazing practices.

**Response** This issue was removed from the list. Grazing management is discussed elsewhere in the Natural Environment and Outdoor Teaching and Learning elements (see pp. 88, 89 and 99.

**29-28** Commenter calls for adding protection for prime agricultural lands in Natural Environment element.

**Response** Protection for class I agricultural lands is now covered more explicitly in Principles in both Natural Environment and Outdoor Teaching and Learning elements. (see revised text on pp. 83 and 96).

**29-29** Commenter suggests adding to trails discussion regarding security.

**Response** The following text has been added: "Trail standards need to be designed to address security as well as environmental issues – for example, stiles can provide access where appropriate over fences or near locked gates." (See p. 88.)

**29-30** Commenter suggests using "management measures" rather than "best management practices".

**Response** The text has been clarified accordingly (see p. 89).

**29-31** Comment asks that the discussion of the Campus Farm reflect research regarding soils and earth sciences.

**Response** References to soils research have been added to the text (see p. 93).

**29-32** Commenter indicates that Exhibit 5.5 should show a second set of corrals at Escuela Ranch.

**Response** Exhibit 5.5 has been changed to show a set of corrals where the Walter's Ranch western boundary intersects the Escuela Ranch.

**29-33** Commenter asks for language change from "should" to "will" to strengthen protection of agricultural lands.

**Response** Text now reads "Prime agricultural soils (class I) *will* be retained in agricultural use" (p. 99).

**29-34** Comment calls for adding principles regarding avoidance of conversion of agricultural lands.

**Response** This concern is addressed elsewhere in the Land Use, Natural Environment and Outdoor Teaching and Learning elements (see pp. 69, 83 and 96).

**29-35** Commenter asks that erosion control be included as part of Landscape Design guidelines.

**Response** This is already addressed as "minimizing erosion" under the Grading and Drainage section (p. 127).

**29-36** Commenter suggests that the illustrative diagram designate the proposed field house with a letter and on legend, and asks if ARDFA will be displaced.

**Response** Exhibit iii has been changed to show the proposed athletic field house at some future date. When that occurs, ARDFA will be displaced and other arrangements will be made for the research activities that currently take place in that facility.

**29-37** Commenter critiques the environmental analysis of the move of the Corporation Yards to Old Poultry Unit area asking for an explanation of why it would not be feasible to return this site to productive agriculture.

**Response** The environmental consequence discussion at page 161 has been rewritten to note that reconversion of this site to agriculture would be impractical, given the capital investment in buildings and site alterations. The notion that there are no impacts to agriculture refers to the additional development not exacerbating the previous conversion of prime soils.

29-38 Exhibit 5.12 generated additional questions regarding "remote parking" options.

**Response** Maps and legends have been made consistent throughout the Master Plan. Additional text on p. 195 explains that "If parking demand should require Cal Poly to consider using any of these locations, additional site analysis will be undertaken to determine the amount of land needed, the most appropriate site or sites, how access will be provided, the effect on circulation, how the parking area(s) would be secured, and how existing uses can be relocated."

**29-39** Commenter reminds us to be consistent in use of terms for Main Campus and ranches as we have defined them in the Existing Conditions chapter (4).

**Response** The text has been clarified in the Ancillary Activities and Facilities element (p. 205) as well as elsewhere in the document.

**29-40** Commenter asks for further clarification of the description of the Goldtree area, particularly in the context of the potential for an applied research park.

**<u>Response</u>** Additional analysis has been added on p. 64 (discussed above), and this is reflected in wording changes in the Ancillary Activities and Facilities element (p. 208).

**29-41** The Master Plan should recognize and discuss sheep operations in the Goldtree area.

**Response** Text has been added on p. 93, as follows: "The sheep unit and sheep operations occupy approximately 144 acres, or about one-third of Cheda Ranch, including some of the area known as Goldtree."

**29-42** Commenter criticized some of the terminology used in the environmental analysis of the Goldtree area.

**<u>Response</u>** The determination was made by V.L. Holland of the Biological Sciences Department who performed site botanical studies. Text has been amended to remove this characterization. (See p. 208).

**29-43** Commenter raises questions regarding soil analysis and significance.

**Response** Remote parking options will not be located in areas currently used for prime agriculture or with prime agricultural soils. Prime agricultural soils were based on criteria used by the Natural Resources Conservation Service and local agencies such as the County of San Luis Obispo.

**29-44** Commenter questions cumulative impact analysis.

**<u>Response</u>** It is the objective of the Master Plan not to further impact prime agricultural soils on campus lands.

**29-45** Commenter critiques lack of involvement of agricultural specialists in analysis.

**Response** Comment noted. Determination of soils was based on accepted criteria of the NRCS. The Master Plan team consulted numerous times with the College of Agriculture Land Use Committee and other representatives of the College of Agriculture throughout the development of the Master Plan.

**29-46** Commenter seeks clarification of description of Goldtree area in appendices to EIR.

**Response** Reference to Goldtree in this context is to the area surveyed by the biologists; refer also to page 64 for clarification.

Bonnie Lowe /cpslo,employee1 11/16/2000 14:08 Page 1 MESSAGE Dated: 11/15/2000 at 13:29 Subject: Fwd: RE: Master Plan Contents: 3 Creator: Ken Solomon /cpslo,employeel Item 1 TO: Bonnie J. Lowe /cpslo,employee1 FROM: Ken Solomon /cpslo,employee1 Item 2 ARPA MESSAGE HEADER Item 3 >Bonnie, >We have reviewed the Master Plan, and wish to alert you to a concern we >have regarding the layout of our new building as it is drawn. We wish to >make sure that our building continues to have proper access required for >our type of program. Specifically, with a highly hands-on intensive design program (which I think Cal Poly wants to retain), we must have laboratories >that are accessible by larger scale transportation. Based on the new >building footprint, we don't believe we will be able to get trucks for >deliveries, equipment, etc. into and out of the new facility as it is >drawn. Right now, most of the deliveries from B&B Steel for the entire >University come into shop 7 and are unloaded/handled by our people!! >Consider the situation at UC Davis, for example. Their approach >(unacceptable in our view) is to have steel deliveries made on the side of >campus away from their Department, which then have to be ferried by pickup 30 -1 >truck to the research laboratory (shop). >It would also be problematic to locate the student laboratories in an >out-lying area that might have large scale transportation. > >Would you please make sure this concern is carried forward to the planning >committee? Thank you. >Kenneth H. Solomon, PE, PhD >Professor & Department Head >BioResource & Agricultural Engineering >Cal Poly, San Luis Obispo, CA 93407 >805-756-2378 phone / 805-756-2626 fax >ksolomon@calpoly.edu **~~~~~** --------Kenneth H. Solomon, PE, PhD Professor & Department Head BioResource & Agricultural Engineering Cal Poly, San Luis Obispo, CA 93407 805-756-2378 phone / 805-756-2626 fax ksolomon@calpoly.edu

#### Letter 30 Dr. Ken Solomon Agriculture Engineering

#### November 15, 2000

**30-1** Commenter expresses concern about the proposed configuration of future BRAE building, and specifically the need to accommodate delivery of large goods.

**Response** Following adoption of the Master Plan, Cal Poly will engage in a series of implementation studies (specified in Chapter 7). As projects are planned and built, they will be reviewed and monitored for compliance with the environmental mitigation requirements as well as with meeting plan expectations to reinforce the academic quality of the University. The Campus Planning Committee will review the Master Plan annually so as to advise the campus whether conditions have changed sufficiently to warrant a major update. New text in the Master Plan recognizes service delivery requirements, as follows: "Site design for new agricultural facilities will accommodate delivery of materials and equipment for student labs, including access by large trucks" (p. 117).

Bonnie Lowe /cpslo,employee1 11/16/2000 13:44 Page 1 12 Dated: 10/26/2000 at 10:13 MESSAGE Contents: 2 Subject: Master Plan Creator: Mark Shelton /cpslo,employeel Item 1 TO: Bonnie J. Lowe /cpslo,employee1 CC: Linda C. Dalton /cpslo,employee1 Joseph J. Jen /cpslo,employee1 Gary B. Ketcham /cpslo,employee1 Kenneth C. Scotto /cpslo,employee1 Ttem 2 Bonnie: I have a few comments for you regarding the Oct. 10 Master Plan and EIR. 1. In 1999, the College built a second dairy lagoon, just east of the existing lagoon. This lagoon does not appear on maps in the master plan on pages 51, 71, and 105, and perhaps elsewhere. 31-1 2. On page 71, Ex. 5.2, the Farm Shop is not listed among the facilities in the Future Corporation Yards area. 3. On page 90, Ex. 5.5, there are a couple of mistakes. Red Rock Pit is indicated (no. 7) at the Chorro Creek Ranch where grazing (no. 5) should be indicated. Also, there is a second corral ("B") on the Escuela Ranch that should be shown just NE of the intersection of the NW boundary of Walters R. and Escuela R. 21-7 4. In the Botanical Survey discussion, the Goldtree Area is described as ca. 180 acres. I know that in all previous discussions between the master plan team and the CAGR Land Use Committee or myself, we have referred to Goldtree as fields C62, C63 and C64, which total about 52 acres. This was the area that the CAGR had in mind to open to non agriculture use. I realize from reading the draft that ca. 60 acres is being considered for use as a research park, etc. This is within the range we have previously discussed; however, 180 acres far exceeds this acreage, so areas much greater than the 50-60 acres should be discussed further with the CAGR, in my opinion. 31-4 Thanks, Mark

MESSAGE Subject: Gol Creator: Ma	ldtree site rk Shelton /cpslo,	employee1	Dated:	11/13/2000 at 13:18 Contents: 2	ut.
Creator: Ma Item 1	ik Sherion (cpsio,	embrokeet			
	e J. Lowe /cpslo,e	mnloveel			
Item 2	nowe topszute				
Bonnie:					
	revious email rega	rding the master	nlan's descrip	tion of the	1
Goldtree si	te as "approx. 180 ite is listed as " rox. 52 acres as I	) acres", please Japprox, 200 acre	note the error s". The actual	on page 195, Goldtree	31-4
Thanks,					•
Mark					

#### Letter 31 Dr. Mark Shelton Assistant Dean, College of Agriculture October 26, 2000

**31-1** Commenter notes the omission of the second Dairy Lagoon.

**Response** Maps have been modified to show lagoon.

**31-2** Commenter notes that the Farm Shop was not listed for the future Corporation Yards.

**Response** Exhibit 5.2 has been modified to list the Farm Shop.

**31-3** Commenter notes errors on Exhibit 5.5 regarding red rock pit and corrals omitted.

**Response** Exhibit 5.5 has been modified accordingly.

**31-4** Commenter notes a concern with the Master Plan's description of the so-called Goldtree Area.

**Response** The northwest corner of Cheda Ranch includes an area known as Goldtree. Traditionally, this area has consisted of three fields (C62, C63, C64), totaling about 52 acres. In conducting feasibility studies for ancillary activities at a satellite location, the Master Plan team examined a slightly larger area (including fields C65 and part of C,61, but excluding C64 as too steep) to determine which land might be more suitable, considering environmental, regulatory, cost and policy constraints. Based on soil type, slope, and current condition, the 60-acre area shown on the detailed map was identified as most suitable for potential development, and became known as the Goldtree project area or site. It is close to the Union Pacific Railroad and has access to water, sewage treatment and electricity. Access could be provided from Highway 1 (perhaps from an improved intersection near the site or at Stenner Creek Road) and/or internally from Mount Bishop Road (pp. 64-65). Reference to Goldtree in the Appendix to the EIR is to the area surveyed by the biologists, not the area proposed for development.

Bonnie Lowe /cpslo,employee1 12/5/2000 13:26 Page 1 Dated: 12/5/2000 at 12:55 MESSAGE Subject: Master Plan concerns Creator: Norman Pillsbury /cpslo,employee1 Contents: 3 Item 1 FROM: Norman H. Pillsbury /cpslo,employeel TO: Bonnie J. Lowe /cpslo,employeel CC: Douglas D. Piirto /cpslo,employeel Mark D. Shelton /cpslo,employeel Item 2 ARPA MESSAGE HEADER Item 3 Bonnie, I've been made aware that the Master Plan calls for a remote bolmie, I ve been made awaie that the high of our parking lot in or in the near vicinity of our Christmas Tree Farm and Logging Sports Complex near Stenner Creek Road. This site is the ONLY site that the NRM Department has for field operations on campus, and as such, the value and integrity of this property is VERY HIGH. 32-1 We would like clarification of the exact location, size, etc. of the remote parking, but if it goes through as I understand it, it would have a significant impact on our field operations. I would urge that the parking lot be moved to another location if I would urge that the parking lot be moved to another location if possible. An alternative would be that our operations be moved to another location, however, the land that would be suitable for growing Christmas trees is already occupied by other progreams and just being "moved" would be quite an undertaking; absolutely not easy. 32-2 Please advise us on the best course of action. Norm Pillsbury

#### Letter 32 Dr. Norman Pillsbury Chair, Natural Resources Management

#### December 5, 2000

**32-1** Commenter raises concern about the location of the remote parking lot relative to the Tree Farm and Logging Sports Complex near Stenner Creek Road. He further requests the exact location of the remote parking be described and moved away from NRM facilities.

**Response** The Master Plan Land Use map (Exhibit i] identified two general locations where a remote parking lot could be developed. The locations will be refined as discussed in new text on p. 195: "Planning for development of a remote parking site that would involve moving any Outdoor Teaching and Learning activities, such as the forestry demonstration area or sheep grazing, would follow the principle that a new site for their operations would need to be identified and developed first, so as to minimize disruption." It is important to note that the development of remote parking is a contingency predicated on the inability to reduce parking demand through restrictions described in the Alternative Transportation element of the Master Plan.

**32-2** Commenter suggests that the NRM Christmas Tree Farm be relocated to better soils.

**Response** NRM, at a meeting on January 3, identified land with the potential for relocating the tree farm. Consideration of remote parking locations will not impede this move.

Subject: FW: campus sustainabi	lity	Page 1 Dated: 12/4/2000 at 8:58 Contents: 3	
Sender: Linda Dalton /cpslo,e	mployeel		
Item 1			
TO: Bonnie J. Lowe /cpslo,em	ployeel		
Item 2			
Bonnie,			
Please include the note to Pau	l Zingg among Master Pl	an comments.	
Linda			
Original Message From: Paul J. Zingg Sent: Monday, November 27, 200 To: Linda C. Dalton Cc: Bob Kitamura Subject: campus sustainability			
Linda Could you take a stab get to it this week because of could provide some input, too.	the San Diego trip. Th	I'm unlikely to nanks. Maybe Kit	
Item 3			
KESSAGE Subject: campus sustainability Freator: csac_cpslo@hotmail.com		Dated: 12/4/2000 at 8:58 Contents: 3	
Item 3.1			
FROM: csac_cpslo@hotmail.com TO: Paul J. Zingg /cpslo,emp	loyeel		
Item 3.2			
Hello, my name is Obadiah Bart engineering student. I am tryin current committee, that would Poly. I have been working with any faculty, adiministrators, environment, energy use, life have been trying to find out w of sustainability at Cal Poly, to try to assist them in this a So far, after speaking with ne- administrators we have account	ng to start up a committ discuss sustainability i h two other students to and students who might k cycle analysis, and plar ho is working on somethi and what could the univ area. arly thirty faculty, stu p with six major differe	ee, or expand a issues relating to Cal interview and email be interested in the ming. Basically, we ing related to the idea versity do as a whole edents, and	33-1
contributators, we have come up	t either have projects g	oing, or that need to	
sustainability at Cal Poly that be addressed. These are: Energy and Resources:	currently in the process	of starting committee	
Sustainability at Cal Poly that De addressed. These are:	s on overall energy use,	water use, wastewater	33-2
pustainability at Cal Poly that be addressed. These are: Energy and Resources: Coack up under Ed Johnson. Focu: creatment, recycling improvement	s on overall energy use, nts, and land assessment alysis for different typ for new contracts, which	water use, wastewater wes of buildings, life	33-2   33-3
sustainability at Cal Poly that be addressed. These are: Energy and Resources: oack up under Ed Johnson. Focu treatment, recycling improvement Buildings: Energy use and cycle analysis before low bid i well, which buildings are not?	s on overall energy use, nts, and land assessment alysis for different typ for new contracts, which of new legislation that ther steps towards sust other C.S.U.'s as well	water use, wastewater  wes of buildings, life houldings are working  has been passed, ainability within	33-2   33-3   53-4

Bonnie Lowe /cpslo,employee1 12/4/2000 9:06

their own department or college. How can we facilitate interdisciplanary senior projects in which an architect, a planner, an engineer and a business student can all interact on a project thus learnig from each other's disciplines and learning how to see a larger picture.

Agriculture: What are we doing at Cal Poly to teach our students about sustainable agriculture and its benefits to our environment? How can we improve as a leader in agriculture, and how can we mesh sustainable agriculture with conventional agriculture so that they are not two completeley separate, or even opposite, concepts?

Transportation: Are the solar bicycles and electric vehicle programs on campus successful? If so, how can we expand them, or improve them? Is it feasible to start a small biodiesel refinery on campus to alleviate some of our diesel costs?

Basically, I was wondering if you might have any input on such a committee, or if you think it might be better to try to expand the scope of another, such as the energy and resources committee. We are hoping that this committee could meet once a month for about two hours to discuss all of these issues between a group of 10 - 12 faculty, administrators and students. I would appreciate any interest or ideas you might have, thank you for your time, Obadiah Bartholomy

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#### Item 3.3

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#### Letter 33 Mr. Obadiah Bartholomy

#### **December 4, 2000**

**33-1** Commenter notes that he is attempting to set up a campus committee on sustainability issues to promote projects dealing with areas such as energy and resource, buildings, political issues, education, agriculture, and transportation.

**Response** See new integrated discussion at end of Land Use and Public Facilities and Utilities elements (pp. 79 and 162-163).

**33-2** Commenter expresses concern with energy and resource use.

**Response** See new integrated discussion at end of Public Facilities and Utilities element (pp. 162-163).

**33-3** Commenter expresses concern with life cycle analysis for buildings.

**Response** See new integrated discussion at end of Land Use and Public Facilities and Utilities elements (pp. 162-163).

**33-4** Commenter expresses interest in political and legislative support for sustainable practices.

**Response** Such support will contribute to Cal Poly's ability to address such issues in implementing the Master Plan as it raises public awareness and may provide resources as well.

**33-5** Commenter expresses interest in interdisciplinary courses and student projects addressing environmental sustainability.

**<u>Response</u>** Introductory chapter enables and supports curricular attention to sustainability.

**33-6** Commenter expresses interest in sustainable agriculture.

**Response** See Outdoor Teaching and Learning element.

**33-7** Commenter suggests expanding bicycle use, including solar and electric energy.

**Response** Bicycle use will be made more convenient under the Master Plan. Cal Poly has already initiated several programs to deal with solar and electric powered vehicles. The first electric bicycles have already arrived on campus for a beta testing program under Ed Johnson of Facilities Planning.

Subj: Part One of My Comments: Master Plan/Draft EIR	
Date: 12/8/00 2:27:51 PM Pacific Standard Time	
From: rkitamur@calpoly.edu Fo: bastinson@rrm-design.com, epjustesen@rrm-design.com, blowe@calpoly.edu, vmontgomery@rrm-design.com	
CC: cwclam@aol.com, ldalton@calpoly.edu, nicole@cmcaplans.com, rwolf@calpoly.edu	
Subject: Part One of My Comments: Master Plan/Draft EIR	
MIME-Version: 1.0 Sender: pashley@calpoly.edu	
FROM: pashley@calpoty.edu	
TO: rkitamur@calpoly.edu CC: biology@polymail.calpoly.edu,	
idaiton@calpoly.edu,	
vholland@calpoly.edu Content-Type: multipart/Mixed; boundary≕'openmail-part-0f926ab6-00000002″	
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openmail-part-0f926ab6-00000002	
Content-Type: text/plain; charset=US-ASCII	
Content-Disposition: inline Content-Transfer-Encoding: 7bit	
To: Mr. Robert Kitamura December 8, 2000	
Director of Facilities Planning	
Cal Poly	
San Luis Obispo CA 93407	
From: Phil Ashley	
Biology Technician Biology Department	
Cal Poly	
San Luis Obispo CA 93407	
Subject: My comments on the Cal Poly Master Plan & Draft Environmental Impact Report (MP/DEIR), October 10, 2000.	
Dear Mr. Kitamura:	
appreciate the opportunity to comment on the Cal Poly Master Plan &	
Draft Environmental Impact Report (MP/DEIR). I also appreciate the Administration officially extending the public comment period on the	
MP/DEIR from the original deadline of Monday, 12/5/00, to the current	
deadline of Friday, 12/8/00.	
received my B.S. from the Cal Poly Biological Sciences Department in	
1968 and my M.S. in Fisheries from Humboldt State University in 1973. I worked for the Calif. Dept. of Fish and Game in 1971 and for the U.S.	
Fish & Wildlife Service from 1973 to 1975. I have been a Biology	
Technician in the Cal Poly Biological Sciences Department for 25 years.	
During my work career at Cal Poly I have taken wildlife biology courses and also commented and testified on behalf of flora and fauna on many	
development projects at Cal Poly, local, State, and national levels. On	
June 12, 2000, I provided written comments on the May 1, 2000, Cal Poly Preiminary Draft Master Plan (PDMP).	
So that my and many others' official written comment letters on the PDMP	
do not get basically eliminated and forgotten during the MP and its EIR	
process I request that you put these official comments in an Appendix to the Final EIR for the MP. This is important especially because, although	
the MP/DEIR have addressed some of our comments on the PDMP, many	
comments that we made on the PDMP have not been addressed or reflected in the current MP/DEIR.	
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Before I begin my specific comments on the MP/DEIR, I would like to urge that the Cal Poly Administration reduce the pace of the MP/EIR process so full deliberations of the MP and its Final EIR can be made at the local level. This important recommendation includes holding a local Campus/local public hearing once the FEIR is finished so the Campus community can easily orally comment on the FEIR before it goes to the Chancelor's Office for final considerations.

This recommendation is important because it is very difficult for the Campus community to attend the Chancellor's hearing on the MP/FEIR in Long Beach. It is logistically too far away for almost all interested people to attend during the busy academic quarter or even to attend during a short quarter break when faculty and staff use that time to prepare for the following quarter and to catch up on domestic things. And students use that same short quarter break to visit hometown family and friends.

So please slow the process enough to hold more local meetings on the MP next year and to hold a Campus/local public hearing on the MP and FEIR. The 20-year Master Plan is just too important a document and process to Cal Poly and the surrounding community for a long time to come not to take this final care with the process before sending it far away to the Chancellor for approval considerations. And please do not rush the process to meet any Cal Poly or CSU centennial celebration deadlines. A careful local Master Plan process for the long future ahead for Cal Poly transcends in importance any celebration deadline no matter how important the celebration.

Also I commend the University for the Master Plan and the process going with it. I think they make you a leader in the areas of university planning and environmental protection. My list of positives about the MP are so long i can not want to cover them all as it would make my comments too long.

But as it collectively covers a lot of my positive thoughts about the MP, I especially like the overall MP Campus Core design. It has a nice balance of open ("green") space quads dispersed throughout the Campus Core for student outdoor study and relaxation between class periods. These Campus Core open space areas for students are very important for a university as Cal Poly. And none of my following strong recommendations against, and alternatives to, the MP proposal of placing student residences in and near the sensitive environs of the Mouth of Poly Canyon on the north side of Brizziolari Creek should be construed as ever eliminating the nice Campus Core open space student quads shown in the MP.

Latso thank the Administration for moving Student Residence Unit H-4 in the PDMP out of the south side Brizziolari Creek flood plain for safety and environmental reasons. Now those 560 student residence beds are shown elsewhere in the current MP. This includes, as recommended in the Biological Sciences Department's comment letter of June 12, 2000, on the May 1, 2000, PDMP, 136 of them now shown in the MP between the existing Yosemite Hall student residences and the eucalytus and olive tree lined intermittent Creek in the vacant grassland field adjacent to Slack Street.

However, in moving H-4 from the south side of Brizziolari Creek, contrary to the Biological Sciences Department's 6/12/00 comments', Student Residence units H-1, H-2, and H-3 not only were not eliminated from the north side of Brizziolari Creek across it from the Campus Core in the sensitive environmental area in and too near the Mouth of Poly

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Canyon, but in the current MP, H-1, H-2, and H-3 combined have been increased from 1464 student beds to 1620 beds. This major environmental concern is addressed below in my comments. (*The Department's 6/12/00 comment letter on page 3 recommended in paragraph "(1)" that H-3 be eliminated from the north side of the Creek and be built elsewhere as described, and in the first paragraph and paragraph "(e)" that H-1 & H-2 sites instead be used for grassland mitigations for unmitigated grassland loss resulting from recent Cal Poly development projects and that H-1 and H-2 "be held in long-term abeyance and....should only be considered for development if there is still on-campus student housing demand after all other student residences in our recommendations have been built.")

Now I will specifically comment on the MP/DEIR where I earnestly hope changes will be made to protect Campus environmental natural resources and the Cal Poly Biological Sciences Department's reliance on them for teaching.

Because of their significant relevance and also to help shorten my new comments on the MP/DEIR, I have included in their entirety as Attachment 1 to my comments here the 6/12/00 comments of the Biological Sciences Department (hereafter referred to as the Department) on the PDMP. I also endorse and incorporate the Department's comments of 6/12/00 into my comments here, except for my clarification in the next paragraph. Because my email account does not have enough space in it to include the Department's 6/12/00 comment letter (Attachment 1) in this email, or the several other attachments referred to in my comments here, I have attached them to hardcopy of my comment letter which I will personally bring over to the Cal Poly Facilities Services Buildling before tomorrow's 5pm MP/DEIR comment deadline.

In the last paragraph of page 3 of the Department's 6/12/00 comments it is stated "Proposed housing sites H-1 and H-2 should only be considered for development if there is still on-campus student housing demand after all other student residences in our recommendations have been built." However, for the many unmitigable, significant, adverse environmental impacts expressed in the Department's comments of 6/12/00 that these student housing units would cause across from the Campus Core on the north side of Brizziolari Creek in and too near the ecologically sensitive mouth of Poly Canyon, I recommend that H-1 and H-2 should be PERMANENTLY eliminated from where the MP proposes them on the north side of the Creek.

The Department recommended various alternative sites for H-1, H-2, and H-3 that would have far less environmental impacts on Campus natural resources and the Department's teaching reliance on those natural resources. And in my comments here, I will provide more alternatives for H-1, H-2, and H-3 that will prevent urban sprawl across the Creek and will be significantly environmentally better than what the MP currently proposes.

Besides H-1 to H-3 destroying deep-soiled valley grasslands critical to the survival of many burrowing prey species and their many predator species, and being too close to the Creek and in and too near the Mouth of Poly Canyon and the Department's Ecology Reserve, these important biological natural resources would be irreversably degraded for wildlife from the 1620 student residents living in them.

Although the Creek area will be planted with native vegetation, it is inaccurate to say the Creek will be restored for wildlife when 1620 students will cross the Creek and riparian zone many times a day to get back and forth to classes. The restored Creek environs will be a

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beautiful place for people and for plant study but it would be so heavily used as a passageway and parkway by over 1600 students that it will be significantly degraded for wildlife over what currently exists there no matter how much more aesthetic it will look after vegetational restoration.

As an example of how important the deep-soiled valley grasslands are to wildlife where especially H-1 and H-2 are proposed by the MP, I with two Cal Poly professors documented many wildlife and wildlife signs on this area in a brief one-hour field trip on Sunday, November 26, 2000, between 10am and 11am. During this short time on a sunny, moderately windy day, and white talking more than we were actually wildlife observing, we saw in, over, and immediately adjacent to the 6 grassland fields (see Attachment 2) of the Bull Unit where H-1 to H-3 are proposed the following: 2 red-tailed hawks, a northern harrier (Calif. Species of Special Concern), an American kestrel, numerous species of small native "songbirds" as goldfinch, Calif. towhee, white-crowned sparrow, mourning dove, black phoebe, scrub jay, mocking bird, etc., numerous ground squirrel and gopher burrows, numerous fox scats as well as coyote and bobcat scat, many deer droppings and tracks, and small animal game trails. Even in an hour, more serious wildlife observing than we three wildlife disturbing walking, talking people did would have likely revealed considerably more wildlife than we observed. Especially since we did not have time to also observe wildlife in the H-3 site.

The primary reason student residences H-1 to H-3, and especially H-1 and H-2, need to be located elsewhere is due to the loss of deep-soiled valley grasslands. Various local scientific and environmental documents (e.g., the SLO County's Dairy Creek [El Chorro] Golf Course Constraints Analysis and Cal Poly's Sports Complex EIR) including the MP DEIR (page 238) have correctly stated that valley grasslands whether comprised of native or introduced grass species are important to many wildlife species, especially when the many species of native and introduced broad leafed forbes that also reside in valley grasslands are considered.

These wildlife species include prey species as ground squirrel, mice, vole, and gopher burrowing rodents, mule deer, jackrabbit, brush rabbit, and the many avian and terrestrial predator species that rely on them for forage, as various hawk and falcon species, white-tailed kite, several owl species, several egret and heron species, several snake species, grey fox, coyote, bobcat, and badger. All of these species except possibly the badger and white-tailed kite would be expected to be found as residents or migrants on the H-1 to H-3 site every year if H1 to H-3 are not built in the valley grasslands where proposed by the MP.

Also several insectivore bat, lizard, frog, and salamander species and numerous insectivorous and herbivorous native bird species are heavily reliant on valley grasslands and many of these species would be found on the H-1 to H-3 site every year.

Building H-1 to H-3 will not only eliminate nearly all of these species from these sites, but when combined with the MP proposed Ancillary Facilities for the Goldtree Ranch site and the new Bull Test Unit at Chorro Ranch these species would be eliminated from about 100 acres of Coastal Valley Grasslands according to the MP/DEIR on page 260. I assum that the MP/DEIR takes into consideration in this 100 acre valley grassland loss figure that the pastures of the new Bull Unit when built will still have good wildlife value, as do the pastures of the existing Bull Unit, even though overgrazing is occuring. If the MP/DEIR has not considered this, then the grassland loss figure would be slightly smaller, but not much since the Ancillary Facilities and H-1 to H-3 sites would comprise the great majority of this 100 acre figure.

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But a 100 acre or nearly a 100 acre loss of valley grassland is a significant environmental impact and not the "less than significant (Class III)" environmental impact indicated in the MP/DEIR (page 260). This is even more apparent when one considers that Cal Poly's two recent EIRs on new student residences for about 800 students and the Sports Complex correctly concluded that the loss of about 12 acres of valley grassland for the former project and the loss of about 40 acres of valley grasslands for the latter project were both SIGNIFICANT impacts.

The MP/DEIR seems to base this conclusion that the previous 2 EIR's conclusions lesser losses of valley grasslands were significant impacts and about 100 acres of loss of valley grassland is not a significant impact with the Master Plan project because there is plenty of similar habitat for wildlife as "resident special-status birds, potentially including loggerhead shrike, golden eagle, and white-tailed kite." (page 258). This statement is specifically addressing the eastern portions of I and H-2, but in reality it should include the entire approximately 100 acres of valley grasslands that the MP/DEIR project would eliminate. And it should also include other Calif. special status valley grassland foraging species as northern harrier, merlin, prairie falcon, ferruginous hawk, sharp-shinned hawk, and Cooper's hawk, as they are losing their valley grassland foraging habitat nearly as fast as or faster than they are losing their mountainous, canyon, woodland, etc. breeding habitat as subsequent comments here help to indicate. Some of these special-status birds I have listed are resident birds and others are winter migrants. In either case their valley grassland foraging habitat is critical to their overall survival.

However, the MP/DEIR assumption is incorrect that there is plenty of valley grassland habitat for these special-status bird species and all wildlife reliant on deep-solled valley grassland. In reference to these special-status species the MP/DEIR states on page 258 "The southern slopes of the Santa Lucia Mountains provide many square miles of higher quality habitat associated with no or lesser intensity grazing." However the DEIR makes no analysis of how much of the southern slopes of the Santa Lucia Mountains are suitable or even available to these special status species and other wildlife species reliant on deep-solled valley grasslands.

Except for a very few grassland habitat areas specifically set aside for multiple use including wildlife use in or near the Campus further north in the Chorro Valley and yet further north along the narrow coastal grassland prairies between the steep slopes of the southern slopes of the Santa Lucia Mountains and the Pacific Ocean (as part of El Chorro County Park and part of the East-West ranch near Cambria just purchased for open space protection), almost all of this valley/prairie land along both sides of Highway 1 is under intense development pressure. It makes no more sense for the MP/DEIR to take the environmentally unacceptable position there is valley grassland habitat elsewhere so Cal Poly's Master Plan development would not create a significant impact to these grasslands and thus does not need mitigation or alternatives considerations, than it would for other developers along the narrow Santa Lucia Mountain valley/prairie grassland corridor to say concerning their potential projects, there's coastal valley grassland elsewhere so our project does not cause a significant valley grassland impact and needs no further CEQA assessment for mitigation or alternatives.

On the east side of Highway 1 where the southern slopes of the Santa Lucia Mountains are, except for typically very narrow stream valley/canyon bottoms (Chorro, Dairy, Pennington, San Luisito, San Bernardo, and a few other creeks along the Chorro Valley stretch, and

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Morro, Toro, Okd, Santa Rita, Cayucos, Villa, Santa Rosa, San Simeon, Pico, Little Pico, and a few other creeks along the narrow coastal prairie stretch), many of which I've hiked or drove up their short stream reache sover the years, this approximately 45 mile strip of mountainous southern slopes is so steep with such shallow soils underlain by bedrock, that it is unsuitable for burrowing prey species as rodents and the predators that feed on them. For more on why these steep slopes are unsuitable for wildlife see my following comments on cumulative impacts on valley grasslands.

The bottom line is that the MP/DEIR should acknowledge as it correctly did in its two herein discussed recent EIR's for lesser losses of valley grasslands, that the loss of about 100 acres of valley grasslands that would result from the MP project is a significant adverse environmental impact and then assess mitigations and alternatives to avoid this significant impact.

Page 260 of the MP/DEIR also wrongly concludes that this is not a cumulatively significant loss of valley grasslands because "the County has witnessed the commitment of an average 200 acres of grazing land per year since 1992, less than 0.03% of the County total." There are several major errors with this MP/DEIR conclusion.

First, there is no standard in CEQA that I am aware of that indicates that the annual development loss, year after year, of 0.03% of the total of a particular type of wildlife habitat in an entire County, is not a cumulatively significant impact. This to the contrary looks like a cumulatively significant loss of habitat. How would people like an EIR to conclude that the annual loss of 0.03% of all human inhabitable land was not a cumulatively significant impact?

Second, this DEIR analysis of the County wide loss of "grazing land" fails to analyse what percentage of County grazing land has grassland soil that is deep enough for ground squirrels, mice, voles, and gophers to safely burrow into for their dens. These 4 groups of rodents make up much, and in many situations most or all, of the prey base for the survival needs of avian and terrestrial predators. Ground squirrels need soil several feet deep for their burrows. And almost all species in the latter 3 categories of rodents need soil at least 1 to 2 feet deep for their burrows. Much of the County's grazing lands are on steep hill and mountainsides with soils only a few inches deep underlain by solid bedrock entirely unusable by rodents! It is very likely that if the DEIR made the needed analysis on this issue, it would conclude that the percentage of County grazing land that can be used by burrowing rodents that is lost to development is much greater than 0.03% of the grazing land suitable for rodent inhabitation.

Third, and most importantly, the figure of an average of 200 acres of grazing land being lost each year in the County to development is grossly inaccurate. This 200 acre figure ignores the fact that in the past few years local newspaper articles have been reporting that conversion of land to Grapescape has been occuring at the rate of about 2000 acres per year with no foreseen future slowdown expected, and nearly all of this conversion has been valley ranchlands (Attachment 3 a, b, and c, 3 newspaper articles). When this approximately 2000 acres per year loss to Grapescape is added to the 200 acre loss figure from other types of County development indicated in the MP/DEIR, the total represents over 100% greater annual loss of grazing grasslands in the County than the MP/DEIR admits too!

And it is generally recognized by most everyone but the Grapescapers that these vast wine vineyard monoculture lands have little wildlife

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value due to (1) nearly complete to complete closed vine canopies preventing hunting by avian predators, (2) barren tilled surface soils instead of the heretofore rodent occupied grasslands, (3) generalty much higher applications of pesticides than on the previous grazing lands, (4) avian nets covering entire wine vineyards preventing bird use, (5) noise cannons scaring away birds, (6) compared to previous dryland grazing vast groudwater use adversely impacting fish and wildlife wetlands, (6) almost complete lack of contour farming with vine rows often going down the slope perpendicular, or nearly so, to slope contours (e.g., Gallo's new vineyards on heretofore Cal Poly's public grazing lands) increasing land erosion (compounded by the common practice of barren surface soil tillage) and wetland sedimentation, (7) in preparation for vineyards deep plowing heretofore rangelands several feet down mincing up rodents in their dens, etc..

And finally almost all of this currently 2000 acres plus per year loss of grazing lands to wine vineyards has been on deep-soiled valley grazing lands occupied by the many species of rodents that form the base of the predator food web. These valley grassland grazing lands converting rapidly to Grapescape are most of the last valley ranchlands so valuable to wildlife that are mildly sloping (defined here as 0 degrees to 30 degrees slope) lying between the flat mostly monoculture farmlands of generally low wildlife value and the steep hill and mountainsides that were too steep for conversion to irrigated row crops (until Grapescape's arrival) and typically too thin-soiled for rodent use and the predators that forage on them.

For all these reasons it is erroneous for the MP/DEIR to conclude the loss of about 100 acres of valley grasslands is a Class III, less than significant impact. Cal Poly MP/DEIR officials testified at San Luis Obispo City's hearing on the MP/DEIR Tuesday night, 12/5/00, that sites such as Student Resident units H-1 and H-2 are "developed" Bull Unit pasture lands. But nearly all valley grasslands remaining were taken over long ago by humans for pasture lands and other livestock grazing lands. But even with overgrazing in many cases, as on the Bull Unit pastures, many prey and predator wildlife species still do very well surviving on such "developed" valley pasture and grazing lands. But they can no longer survive on these valley pasture/grazing lands if they are converted to other types of development as H-1 and H-2.

So I strongly recommend that just as Cal Poly acknowledged for lesser valley grassland losses in the EIR's for the Sports Complex and the soon-to-be-built approximately 800-bed student residences it likewise correctly acknowledge in the MP/DEIR that the loss of about 100 acres of mostly deep-solied valley grasslands that would result from the MP project is both a significant and a cumulatively significant environmental impact. And then use alternatives or mitigations in the MP/EIR to avoid or reduce these imapcts to below significance.

The MP/DEIR also fails to address significant environmental impacts from the proposed MP project that would result from "Disruption of existing wildlife corridors" (page 256, last bullet). The only acknowledgement I found in the MP/DEIR of any type of ecological corridors existing were creek corridors. The MP/DEIR concluded on page 257 that regarding creeks in general Master Plan proposals would enhance creeks, so this is a Class IV beneficial environmental impact. And it concluded on pages 258 and 259 that impacts to Stenner Creek and Brizzolara Creek (='s Brizziolari Creek spelling on the San Luis Obispo Quadrant USGS map) would be insignificant.

It is generally agree on that creeks are wildlife corridors or at least parts of wildlife corridors. But the MP/DEIR conclusion that apparently

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wildlife habitat must be a relatively narrow creek corridor to be a wildlife corridor is unsupportable by wildlife corridor literature. I suggest that the preparers of the MP/DEIR read Conservation Corridors: Countering Habitat Fragmentation (Defenders of Wildlife. 1991. Pp. 81-135 in Landscape Linkages and Biodiversity, Wendy E. Hudson [ed.], Island Press, Wash., D.C.). Many types of wildlife corridors are described in this book including wide corridors that must provide all the survival needs of wildlife species in them. This would include not only wildlife's relatively narrow trails but also their considerabiy more expansive foraging habitat and other survival needs areas.

The MP/DEIR indicates on page 258 under Open Space and Wildlife Corridors that native grasslands border the northeastern edge of where H-1 and H-2 are proposed and that these native grasslands will not be built on. But the MP-DEIR fails to acknowledge that (1) not only do wildlife trails exist where H-1 and H-2 would be built, but (2) also the wildlife valley grassland foraging habitat of many prey and avian and terrestrial predator species exists in the wildlife corridor at the base of the Santa Lucia foothills and will be disrupted and even eliminated where H-1 and H-2 would be built. In fact the valley grassland foraging habitat part of this wildlife corridor at the base of the Santa Lucia foothills is being disrupted and fragmented by many types of development and not just the MP proposed one, so this is also a cumulatively significant impact to this wildlife corridor.

Past Cal Poly construction as the Yosemite, Brick, and North Mountain dorms, O.H. Unit, and Swine Unit, have disrupted this wildlife trail and velley grassland foraging corridor habitat. And approved construction of the new dorms for about 800 students across from the North Mountain Dorms will further disrupt this wildlife corridor. And proposed construction of H-1, H-2, and the Ancillary Facilities far back on the Goldtree Ranch site along the base of the Santa Lucia Mountain foothills will further disrupt this wildlife trail and foraging corridor. Finally much of the Chorro Valley north west of the Main Campus is interspersed with development that has disrupted this wildlife corridor. These Chorro Valley developments disrupting this wildlife corridor include the California Men's Colony. Camp San Luis East, heavily used parts of El Chorro County Park including Dairy Creek Golf Course, County Schools Offices, Camp El Chorro, the gun range, etc..

To demonstrate how wide some corridors need to be for wildlife survival and to prevent habitat fragmentation, I have attached (Attachment 4) the Klamath Corridors Proposal map from the above cited book on wildlife corridors showing that wildlife corridors in some areas need to be many miles wide. I am not suggesting here that the wildlife trail and foraging corridor providing for wildlife's movement and feeding needs at the foothill base of the Santa Lucia Mountains needs to be of such expanse. But it does need to be wide enough to prevent further fragmentation of this wildlife movement/foraging corridor. And that width clearly includes the valley grasslands in the H-1 and H-2 sites.

The MP proposed H-1 and H-2 Student Residence units on the valley grasslands in and too near the mouth of Poly Canyon and MP proposed Ancillary Facilities far back on the valley grasslands in the Goldtree Ranch site (1) would eliminate many acres of the wildlife foraging habitat in this wildlife corridor at the base of the Santa Lucia Mountain foothills, and (2) would disrupt or eliminate some of the wildlife traits in this corridor. This is a significant disruption of this important wildlife corridor.

So it is incorrect for the MP/DEIR to fail to consider, assess, mitigate or provide alternatives for both the significant and cumulatively

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significant environmental impacts that H-1 and H-2, as well as the Ancillary Facilities far back on the Goldtree Ranch site, would have on this important wildlife corridor.

I will conclude my comments on the importance of Cal Poly finding alternative sites for H-1 to H-3 by briefly listing here the alternatives the Department and others have recommended for these sites to avoid building student residences 350 yards back into the environmentally sensitive Mouth of Poly Canyon (see Attachment 5). Most of these alternatives are:

1. Provide parking under the dorms the MP proposes to be build on the Campus Core side of Brizziolari Creek.

Where the MP proposes single level parking lots, provide multilevel parking lots.

3. Where the MP proposes single level parking lots, build dorms over the parking lots

3. Build dorms proposed by the MP on the Campus Core side of Brizziolari Creek slightly higher than proposed. This may marginally block some more hillside views, but that is much more preferable than eliminating important wildlife habitat on the north side of the Creek that also has long term teaching value to the University and citizens of the State.

4. On the north side of Brizziolari Creek along both sides of Via Carta Drive where the MP shows large, single level parking lots, build dorms over some of these. This area across Brizziolari Creek is already greatly disturbed by development from buildings, parking lots, the Sports Complex, and heavy vehicle and foot traffic along Via Carta and Highland Drive and even with more Creek restoration this area is so heavily developed that it will be of high aesthetic and park value, but will remain very low wildlife value.

5. Build at least some upper division student housing in the State/Cal Poly land off Campus along Highway 1 adjacent to Campus where the MP currently proposes only faculty/staff/married student housing. These two areas are at the outer edge of the City and would be little to no disturbance to City neighborhoods and are conveniently situated adjacent to Campus for students reducing City traffic problems.

6. As is now being looked at by Cal Poly and Cuesta College officials, build some student residences on Camp San Luis by replacing old buildings as barracks with student residences, thus not causing the loss of any Chorro Valley wildlife habitat.

7. And the final one I will list here that the City should consider, but apparently has not to date, is to provide at least some new places for student housing in those massive areas it is proposing to annex to the City in the Airport/Margarita-Riviera development areas adjacent to the south end of town. Being good neighbors works both ways and our students should mean far more to the City as Cal Poly prepares to celebrate its centennial than just economic benefit. I make this comment in the most respectful manner to the City and with pride for Cal Poly students, as I was one for 4 years and have directly served many thousands of them as a 25-year Cal Poly employee.

This ends Part One of my comments on the MP/DEIR as I do not have enough space left in my email account to finish my comments in this email. So I will now finish my comments on the MP/DEIR in a second email titled in the email Subject line "Part Two of My Comments: Master Plan/Draft EIR.

Monday, December 11, 2009 America Online: CWOLAM Page: 9

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24-9

Letter	34
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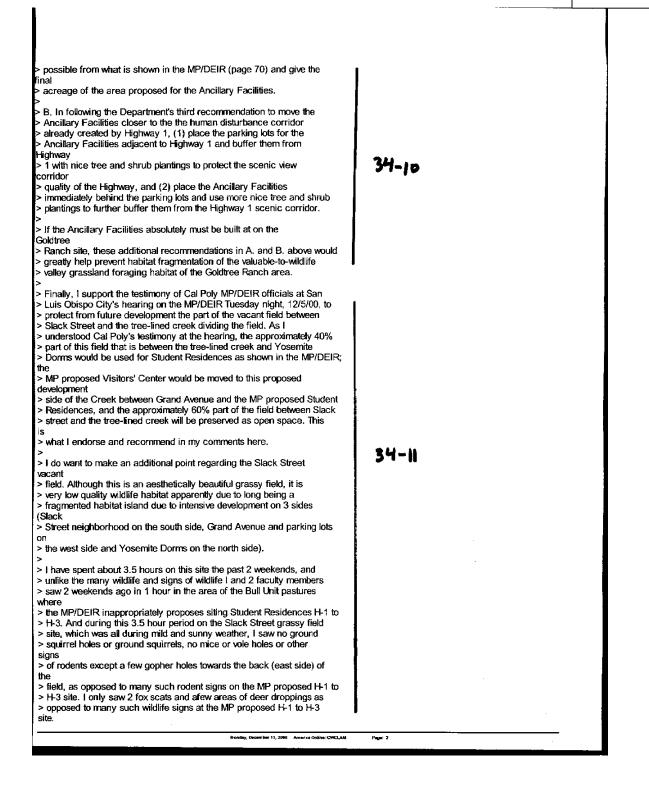
n Part Two I will provide some final comments on (1) preserving the Goldtree Ranch site where Ancillary Facilities are proposed by the MP, (2) preserving most of the vacant field adjacent to Slack Street, and (3) summarizing my overall comments. And I will get both Part One and Part Two electronic emails in to you by deadline today, as well as hard copy of both with the hard copy attachments (Attachments 1 through 5).

Continued on email Part Two, Phil Ashley

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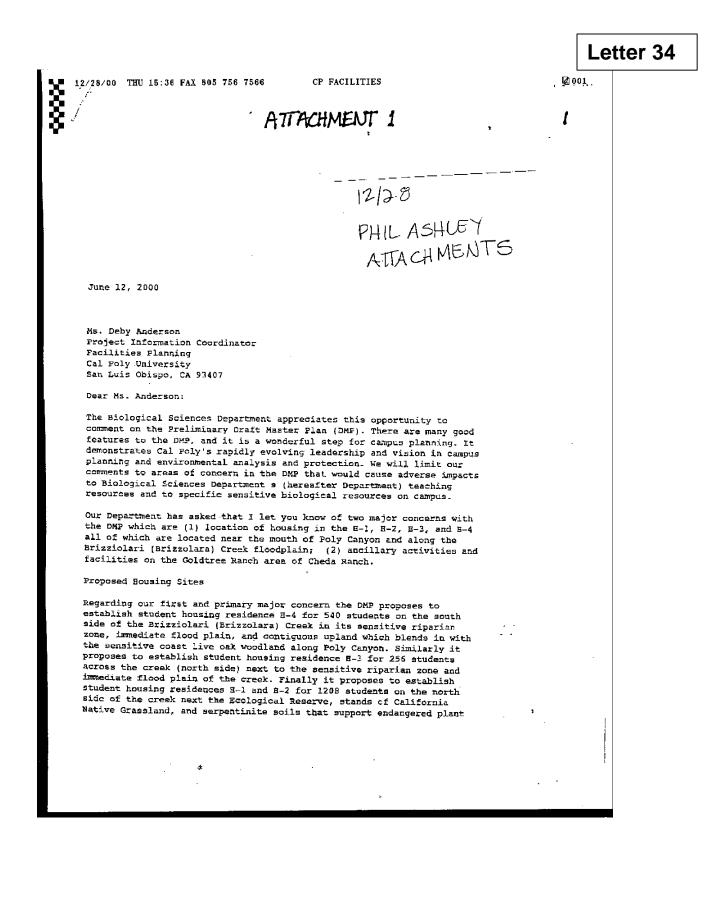
-- Headers -----Received: from rly-xb03.mx.aol.com (rly-xb03.mail.aol.com [172.20.105.104]) by air-xb04.mail.aol.com (v77.14) with ESMTP; Fri, 08 Dec 2000 17:27:51 -0500 Return-Path: <rkitamur@calpoly.edu> Received: from degas.artisan.calpoly.edu (degas.artisan.calpoly.edu [129.65.60.42]) by rly-xb03.mx.aol.com (v77.27) with ESMTP; Fri, 08 Dec 2000 17:27:13 -0500 Received: from localhost (root@localhost) by degas.artisan.calpoly.edu (8.8.6 (PHNE_17135)/8.8.6) with SMTP id OAA08247; Fri, 8 Dec 2000 14:26:34 -0800 (PST) From: rkitamur@calpoly.edu X-OpenMail-Hops: 1 Date: Fri, 8 Dec 2000 14:26:23 -0800 Message-Id: <H00003c605f4a04d@MHS> Subject: Part One of My Comments: Master Plan/Draft EIR MIME-Version: 1.0 TO: bastinson@rrm-design.com, epjustesen@rrm-design.com, blowe@calpoly.edu, vmontgomery@rrm-design.com CC: cwclam@aol.com, ldalton@calpoly.edu, nicole@cmcaplans.com, rwolf@calpoly.edu Content-Type: multipart/mixed; boundary="openmail-part-0f926ab6-00000001" Monday, December 11, 2300 America Online: CWCLAM Page: 10

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Subj: Part Two of My Comments: Master Plan/Draft EIR		
Date: 12/8/00 2:30:54 PM Pacific Standard Time		
From: rkitamur@calpoly.edu		
To: pashley@calpoly.edu		
CC: bastinson@rrm-design.com, biology@polymall.cpunix.calpoly.edu, cwc epjustesen@rrm-design.com, vholland@calpoly.edu, rkitamur@calpoly.edu, b		
epjustesen@rm-design.com, wiolanu@caipoly.edu, rkiamur@caipoly.edu, o vmontgomery@rrm-design.com, rwolf@caipoly.edu	owe@calpoly.edu, nicole@cmcapians.com,	
whoregothery wat the design cont, two ingreationy could		
Phil - Thank you for your comments and I appreciate the time you spent		
on reviewing the plan and EIR Bob		
> To: Mr. Robert Kitamura December 8, 2000		
<ul> <li>Director of Facilities Planning</li> <li>Oct Back</li> </ul>		
<ul> <li>Cal Poly</li> <li>San Luis Obispo CA 93407</li> </ul>		
S San Luis Obispo CA 93407		
From: Phil Ashley		
<ul> <li>Biological Sciences Department</li> </ul>		
> Cal Poly		
> San Luis Obispo CA 93407		
>		
> Subject: Same as for Part One of this email.		
>		
> Dear Mr. Kitamura:		
> The following is a continuation from email Part One of my comments on		
Intertoiloging is a communication from existing and one of my communication the MP/DEIR.		
>		
> In some of my previous comments on the adverse impacts that would		
occur		
> to valley grasslands and reliant wildlife from the MP proposed		
> development of Student Residence H-1 to H-3, 1 also included comments		
on <ul> <li>the same types of adverse impacts that would occur to the valley</li> </ul>		
> grasslands and reliant wildlife from the MP proposed development of		
> Ancillary Facilities far back on the Goldtree Ranch site. I will add a		
> few additional comments here with mitigations and atternatives that I		
> recommend be incorporated in the MP and reflected in the MP/DEIR.		
>		
> There is a large body of literature available on wildlife habitat		
> fragmentation. And nearly the entire book that I cited earlier in		
these		
> comments is just one example of this body of literature. And siting the		
the > MP proposed Appillant Eacilities for back in the middle area of the		
> MP proposed Ancillary Facilities far back in the middle area of the > Goldtree Ranch valley grassland area is a major example of habitat		
> fragmentation.		
>		
> The Department in its 6/12/00 comment letter on the PDMP provided 3		
> recommendations regarding the MP proposed development on the Goldtree		
> Ranch area and I re-emphasize my endorsement of those 3	34-10	
recommendations	1 1 - L 4	
> (Attachment 1, page 5) in my comments here. If the the Department's		
> recommendations "(1)" and "(2)" cannot be complied with (and I hope that		
i they > can be) recording set building the Applitany Excilition in loss from		
> can be) regarding not building the Ancillary Facilities in leap-frog > development fashion far out from the main Campus Core, then I want to		
> add the following mitigations/atternatives to the Department's		
> recommendation "(3)".		
>		
> A. Further reduce the size of the Ancillary Facilities as much as		
Monday, Desember 11 2000 America (niñae: 1700) AM	Rear d	
Monday, December 31, 2000 America Unitiae: CWCLAM	Page: 1	



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adequate tree and shrub plantings to buffer the Highway view corridor, and (3) preserve the Slack Street field as permanent open space as herein described Again, I appreciate the opportunity to comment on the MP/DEIR. And ! will continue to provide consructive input to this very important Aaster Plan process, which the Administration and Campus community can take special pride in leading the way for university long-term development planning balanced with long-term environmental and natural resource protection! Thankyou and Sincerely, Phil Ashley ----- Headers ----Return-Path: <rkitamur@calpoly.edu> Received: from rly-zd03.mx.aol.com (rly-zd03.mail.aol.com [172.31.33.227]) by air-zd03.mail.aol.com (v77.14) with ESMTP: Fri. 08 Dec 2000 17:30:53 -0500 Received: from degas.artisan.calpoly.edu (degas.artisan.calpoly.edu [129.65.60.42]) by rty-zd03.mx.aol.com (v77.27) with ESMTP; Fri, 08 Dec 2000 17:26:30 -0500 Received: from localhost (root@localhost) by degas.artisan.calpoly.edu (8.8.6 (PHNE_17135)/8.8.6) with SMTP id OAA07608; Fri, 8 Dec 2000 14:25:19 -0800 (PST) From: rkitamur@calpoly.edu X-OpenMail-Hops: 1 Date: Fri, 8 Dec 2000 14:25:03 -0800 Message-Id: <H00003c605f4a048@MHS> n-Reply-To: <H00004f305f4a1d7@MHS> Subject: Part Two of My Comments: Master Plan/Draft EIR MIME-Version: 1.0 TO: pashley@calpoly.edu CC: basincy @ccippoy.edu, CC: basinson@rrm-design.com, biology@polymail.cpunix.calpoly.edu, cwclam@aol.com, ldalton@calpoly.edu, epjustesen@rrm-design.com, vholland@calpoly.edu, rkitamur@calpoly.edu, blowe@calpoly.edu, nicole@cmcaplans.com, vmontgomer@crm-design.com, rvolf@calpoly.edu Content-Type: text/plain; charset=US-ASCII Content-Disposition: inline Content-Transfer-Encoding: 7bit Monday, December 11, 2000 America Online: CNECLASE Page: 4



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#### species.

Proposed housing units H-3 and H-4 will cause major disturbance to both sides of the riparian ecosystems which is contrary to the stated goal of the DMP to restore and protect this section of Brizziolari Creek including its woodlands (page 71).

Proposed housing units E-1, E-2, and E-3 would locate 1,464 student residents across the Creek from the existing Campus Instructional Core (Exhibit i, page vi). These residences would extend from the back end of the E16 parking lot eastward to the south-west sloping mouth of Poly Canyon. This is a distance of about 300 yards into the north side of Poly Canyon where the upper Beef Unit and our Department's Ecological Study Area exist. Many of these students would not enter the Campus Core along Via Carta as nearly all the E16 parking lot students do. It is very likely many or most of the DMP proposed additional residents would cross the Creek and its ecosystem in various places upstream to enter and return from the Instructional Core. This will impact the creek and wildlife of these areas.

Our Department has several courses that use these areas extensively in our educational mission such as crnithology, herpetology, icthyology, mammalogy, invertebrate field zoology, wildlife biology, fisheries biology, entomology, general ecology, native plants, plant taxonomy, plant ecology, natural history, and field botany. We also have several field oriented laboratories in courses such as Bio 111, 114, 115, 151, 152, etc. that have a field trip to these areas as part of the courses. Our department uses these areas to teach students about the native flora, plant communities, wildlife habitats, and how to identify the plants and animals that are found here. No other campus offers such as huge diversity of plant and animal species and ecosystems within such a short distance of the campus. This diverse and unique biological resource provides our students the ability to learn about the their environment in a three hour lab as well as with independent studies. Eeavy use of this area by over 2000 student residents will over time result in significant impacts to these areas. In time, we would lose much of the precious biological resources that we depend on in our instructional and research program on campus. The department is currently working on a detailed biological survey of these areas and it should be relatively complete in the next few weeks.

This area of the Erizziolari (Brizzolara) Creek is targeted for restoration and protection in the DMP. Historically the area of the proposed 8-4 and 8-3 housing units has been badly degraded by building and clearing activities on our campus. Riparian woodland and coast live oak woodland have been removed historically to place the existing facilities in this floodplain. In addition, the floodplain was paved over to provide roads and parking areas. This is Cal Poly s opportunity to restore an area that we have badly degraded back into the native riparian woodland and coast live oak woodland that once was here. This restoration effort should also include restoration of habitat for endangered species such as steelhead trout, red-legged frogs, and southwestern pond turtles.

The already approved housing project (B-A) will remove a significant amount of grassland which includes many stands of native grassland and 2 002

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at least one rare plant (Calystégia subaqaulis ssp. episcopalis (Cambria morning-glory) which will be discussed in our biological survey of the site. Cal Poly should provide mitigation for the loss of this habitat and a good place for restoration of these habitats should be the grassland forming the north slope entry to Poly Canyon where residences B-1 and E-2 are proposed by the DMP. This would appear to provide an excellent mitigation and restoration site for approximately 10 acres of native and valley grassland and habitat for the Cambria morning-glory. Many predator and prey species use these grasslands for foraging and housing. The FIR for the current student housing project discussed mitigating the loss of this mixed native and introduced grassland habitat, but no mitigation was provided.

As a result of the uniqueness and sensitivity of habitats where the E-1 to E-4 housing is proposed, we recommend the following changes in the DMP.

(1) Residences B-3 and B-4 being proposed in the creek ecosystem area be eliminated from the DMP. The lost housing units can be accommodated by adding housing units to other proposed housing sites and also a site near the Grand Avenue and Slack Street entrance.

(2) The proposed housing sites located behind the Brick Dorms and their parking lots (B-5), the North Mountain Dorms (B-6), and the housing site near California Blvd. (B-7) should be built first in whatever sequence deemed desirable. After these sites are fully developed, the housing needs on the campus should be re-evaluated to determine what additional housing may be needed.

(c) The open field east of the Grand Avenue entrance to the campus should partially be used for additional future student housing. This area is immediately adjacent to existing housing, and there is a natural drainage divide in this field with tall eucalyptus and dense mature olive trees that form a buffer from the Slack Street neighborhood. Student housing should be planned in the open field between the tree-lined divide and the existing adjacent Yosemite Ball Dorms (B-D, page 117). This would leave as existing open space buffer (about 65% of the field) between the Slack Street neighborhood and the new student housing.

(d) The campus is currently evaluating the need for married student, faculty, and staff housing. The off-Campus housing proposed for the west side of Righway 1 north of Righland Drive (B-8 and B-9, page 117) is designated for this purpose. It might be possible to use one of the sites or part of the sites for additional student housing if needed.

(e) After all of the student housing sites discussed above is built, we believe there is a good chance the student housing demand on campus will be met. The current percentage of students living on Campus is about 19% as indicated. It is very possible many of the upper division students included in the DMP's 3,000 additional beds may not wish to reside on campus. Therefore, we recommend that housing sites S-1 and S-2 across the creek at the entrance to and in Poly Canyon be held in long-term abeyance and be the last built. Proposed housing sites S-1 and H-2 should only be considered for development if there is still on-campus student housing demand after all other student residences in our recommendations have been built. If this site must be used, the site should have a thorough biological analysis and evaluation of

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environmental impacts. Reasonable alternatives may exist at this time as well.

Goldtree Ranch area of Cheda Ranch

The DMP proposes ancillary activities and facilities on the Goldtree Ranch area of the Cheda Ranch (pages vi, 60, and 178-180) have not been clearly defined. Since the DMP gives few examples of these Ancillary Facilities in partnership with non-Cal Poly entities (page 175), we cannot here discuss specifics of potential projects. Ecwever, we recommend a careful survey of the biological resources at this site prior to any final decisions on its land use. This is especially important if a very large construction project is proposed for this fairly pristine valley grassland area of campus.

A significant portion of the grassland areas close to the campus core has been removed for construction of the Sports Complex and next for the approved new housing on the south slope entrance to Poly Canyon. This makes examining remaining grasslands on campus very important prior to development. The Goldtree Ranch area may have been disturbed by past railroad construction, and it may have marginal agriculture soils; however, the site may still offer unique and valuable wildlife habitats and be important in our instructional program on campus. The site may be very valuable for several field oriented courses and for student research. It is easily reached in a 3-hour lab period allowing adequate time for field instruction.

The mostly flat to mildly sloping Goldtree Ranch area has fairly deer valley soils. These deep soils provide critical habitat for burrowing animals such as rodents which are prey species for a host of free roaming predators such as snakes, hawks, falcons, eagles, kites, owls, egrets, herons, shrews, foxes, coyotes, badgers, bobcats, weasels, ringtails, etc. Many of these predators breed, nest and hide in the steep surrounding hills, mountains and canyons, but depend on the grasslands for foraging and prey species. As the food web becomes more and more devoid of prey species, the predators will diminish or disappear. These impacts are not only to the biodiversity of our campus ecosystems but will also impact the value of our campus as an outdoor laboratory.

The Goldtree Ranch area has not been evaluated carefully enough for proper land-use designation in the DMF. Apparently, the maps do not show three campus wetlands: the Nelson and Middlecamp reservoirs and Frog Pond, all of which are near the Goldtree site. These three wetlands are important biological and campus resources especially considering the proximity of the Sports Complex to some other campus wetlands. Some species of winter migratory waterfowl that our Department has documented on Shepard and Drumm Reservoirs may shift to more remote wetlands near the Goldtree site. The DMP also does not show the streams of these reservoirs and ponds or any other drainages in the Goldtree area.

The DMP (page 180) states approximately 35 acres of the Goldtree area are potentially suitable for ancillary development. However the map exhibits on pages vi and 60 show the potential "Areas Suitable for Ancillary Activities and Facilities" to be much larger. Careful Letter 34

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evaluation of the site needs to proceed prior to siting any facilities or determining the size of these facilities.

The DMP recognizes that "some of the area is visible from Highway 1 and so care should be taken in facility siting to minimize impacts to visual resources." This is often the guiding planning principle stated for development proposed for wild and rural areas along fast-traveled roads. Bowever, often the best areas for wildlife habitats are also sanctuaries away from and not visible from the highways.

Based we have the following recommendations and suggestions.

(1) The Goldtree Ranch site should be carefully evaluated not only biologically but also in total prior to any land-use designation. The value of the site to the campus may be greater if it is undeveloped.

(2) Alternate sites that may not be as unique and valuable as the Goldtree Ranch site be explored for Ancillary Activities and Facilities nearer the Campus Core, rather than leapfrogging out 2 miles to a place that has diverse natural resources important to the teaching and research mission of the university.

(3) If the Goldtree Ranch site must be used for Ancillary Activities and Facilities, the campus should consolidate the facilities as much as possible and site them in disturbed sites perhaps closer the disturbance corridor created by Highway 1. This will reduce the habitat fragmentation that would occur on the site.

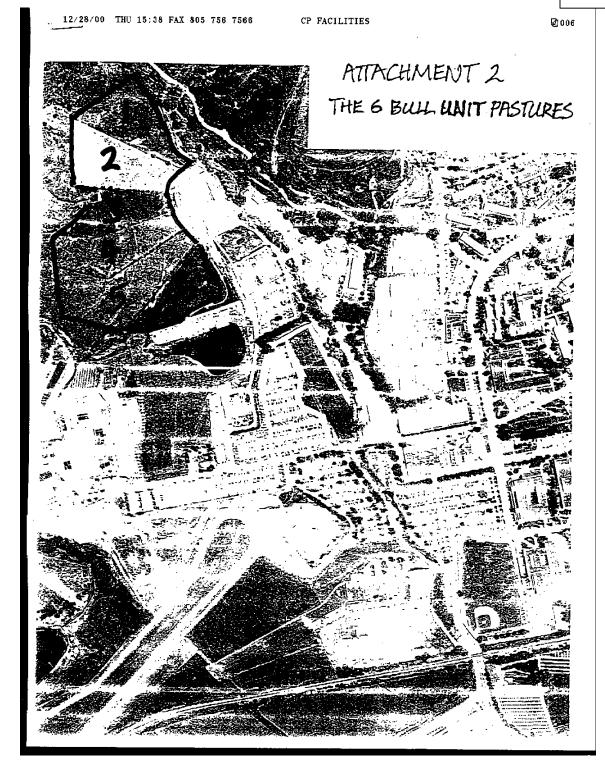
In summary, overall the Draft Master Plan is a huge planning and environmental step toward a vision for the university in which our natural resources are restored and protected for future generations of students as well as the community. We commend you for doing an excellent job but hope you will incorporate our recommendations into the Final Master Plan.

Thank you for the opportunity to comment.

Biological Sciences Department

Copies:

Dr. Linda C. Dalton, Vice Provost Institute. Planning, Cal Poly Mr. Robert E. Ritamura, Director Facilities Planning, Cal Poly



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The report:

#### ATTACHMENT 36. SAN LUIS OBISFO LOUDTY TELEGRAM-TRIBUNE SAT., 2/27/99 PAGE A-10 O Berado 11/5/98 Paso Robles 2,500 oral sex says h Winery Ø Hinkle 10/29/98 Paso Robles 5,472 Winery, tasting room Atascadero ha Ō Roberts 10/26/98 Templeton "I've never 1 acre Wine barrel storage Õ Nadeau 10/20/98 Paso Robles 1.728 fore. I've alway-Winery Ð Edna Valley 9/24/98 Edna Valley cracks. I've ga 14.861 Barrel storage **G** Beckett 9/18/98 Paso Robles 31,900 program, but I Winery Ø Ramage 8/12/98 Paso Robles 9,600 Winery Ġ Speizer 7/14/98 Edna Valley 75,000 Winery, restaurant CHINA fror

#### WINE from Page One

and Growers Association, thinks the export level is closer to 50 percent. Most of the exported grapes go to large wineries in Napa and Sonoma counties.

"Certainly, the fruit is here for more wineries," she said. But the exact numbers of

plants are impossible to come by because farmers are not required to report when they convert their rangeland or dry land crops to wine grapes. The numbers are recorded by the county when the first crop is harvested three or four years after planting. The estimates are strictly pie

in the sky — there's no way of knowing," said Herman Schwartz, owner of Continental Vintners near Paso Robles.

But the number that do exist indicate a booming wine grape in-dustry in the county. A number of

factors are fueling this boom. First, the 1990s can be called. the decade of the grape in San Luis Obispo County and that trend shows no sign of slacking off. The cool nights and warm days along the Central Coast are perfect for growing wine-grapes. "San Luis Obispo has emerged

in the 1990s as one of California's most vibrant and rapidly expanding grape growing and wine producing regions," concluded a re-port commissioned by county winemakers published in August. Second, the premium types

VALLEY from Page One

#### public hospital

The lesson here, she said, "is that the health-care economy is constantly changing and that this is one more indication. Why would you make such a perma-pent decision about closing Gen-eral Hospital in the middle of all this change?"

Supervisor Katcho Achadjian, who holds the swing vote on the

of wine grapes grown in San Luis Obispo County are in the greatest demand. Wine consumption overall has remained flat but consumption of premium wines is on the increase, Ackerman said.

"People are drinking less but better," she said. "That's a sign of the economy, plus the American

utile economy, puts the runerican public in general is developing a little more sophisticated palate." Third, San Luis Obispo County has laid out the welcome mat for the wine industry. Getting approval for a winery takes months rather than years. Paragon proposed its winery in mid-December and expects to take its first grape shipment in August.

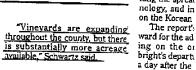
"This county is a dream com-pared to Santa Barbara and Sono-ma counties," Niven said.

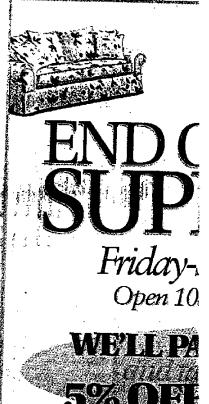
The county's burgeoning grape rowing and wine making trend growing and wine making trend shows little indication of slowing. Richard Greek, county agricul-ture commissioner, said workers in his Paso Roles office report that on the average one person a day comes into the office asking about pesticide permits and other

information about vineyards. Vintuers in the county predict that lower land prices in San Luis Obispo County will continue to fiel vineyard growth. More than 20,000 vineyard acres will be planted in the county by the turn of the century, experts predict

away from inpatient care, she said. Reduced revenue makes it hard to offer the services needed to compete for those patients, she said, noting that Valley hasn't re-ally offered anything that wasn't

auj unite et anyuning inat wasn't available elsewhere. Tenet considered various op-tious before deciding Valley's fate, said Hal Chilton, chief executive officer of Tenet's Central Coast re-





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ATTACHMENT 3c.

NEW TIMES APRIL 1-8, 1999

he industry's environmental

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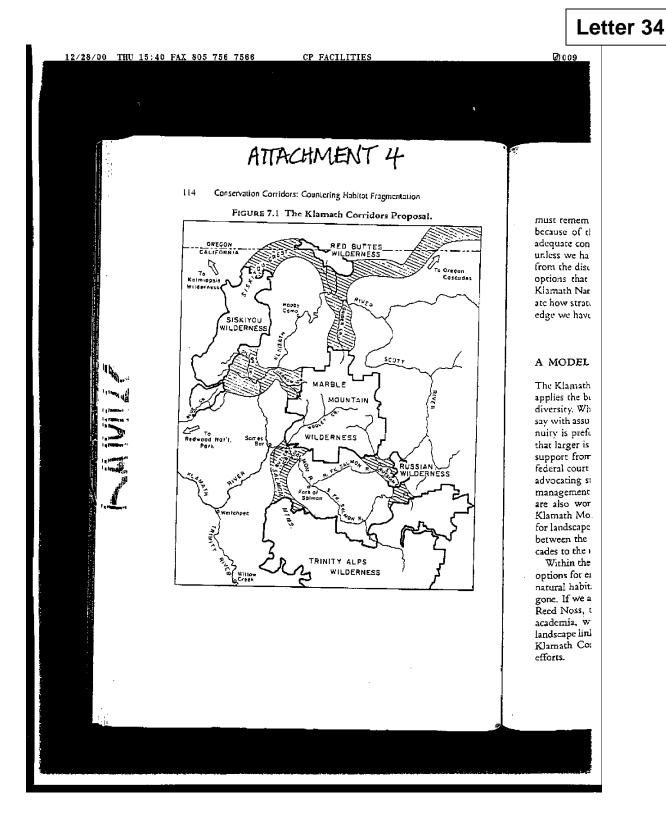
become involved in cases

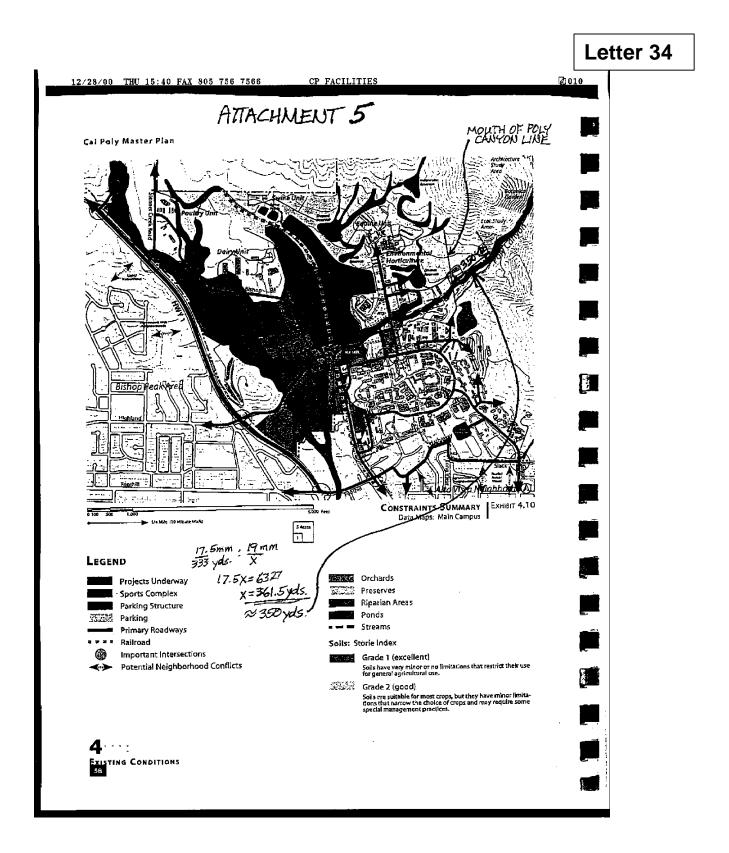
as one example of ways to offset

Suri Luis Obispo County his seen mearly 2000 acres a year, nosily genzing and, converted to vineyards in the last lew years, a tend also acre in hosh Montery and Santa flarbarn councits. Such a conversion on all but the steepest of slopes requires no govern-mental approval or oversight in SLO County, which rates still another issue: other the environmental concerns, this fear that both local and Northern California whereas will cover our countryside with vincyards before we can discuss the wisdom of such a for grazing, and grazing is a compatible use for wildlife," said Pat Vessan, director of the Environmental Center of San Luis Ohispo, "Now we're seeing the wholesale enversion of lands for what was a pas-sive agricultural use to an active one." San Luis Obispo Comuly has seen These are all potential problems created when you convert a passive agricultural practice like ranching into an active agricultural practice like growing wine grapes. "Historically, a lot of land has been used They worry about the loss of wildlife habitst, the increased use of irrigation water, the returned of ask trees and other destrable rasive vegetation, the deep ripping of solit that might cortain historic artifacts, intensided use of pea-licides and fertilizer, and changes to watersheds that could increase crossion and fall creacks with silt. others raised concerns about the "grapescape" trend—or covering the landserape with vineyards—before the cerns before its too late? Grapescape najor environmental change. Environmentalist Sarah Christie and That is the anxiety underlying all unprecedented conversion of grazing lands to vineyards on the Central Coust over the last lew years. That's good news for local wicemakers and agriculturists—and, by extension, the local economy—but a growing churus of environmentalist writes has begun to The answers may be to the workly seemingly unquenchable thirst for California wines, which has caused an his trend. prestion whether there is a bad side to How did the wheenaking industry go from beloved to berated so quickly? When did we decide to starr poking that has always been a sacred cow Supervisors last month as i to polish up its image a bit," said Vecsur, who identified the purchase of oak wowl

pushing the idea of the wine hubusry volutionity charging a 5-cent-per-bottle environmental initigation fere on all Cafformia wines. The more than \$100 million generated by the fere would go to programs that adjest losses of habitat geliding a fee-chiven hineravieracy involved, said Signe Zoller, ite associ-de witemailer au Meridian and current president of Paso Robtes Vinners and Growers Association. "They want to do a columne ite were allowed to pursue the project at all," Christle said. "Wet a visitoer can do all of the above without so match as a negative (environmental impact) decla-region. It is unconscionable. exempts must agricultural work. "If a developer proposed to remove every stired of native vegetation from a 100-acre site, cui down dozena of mattre trees, and move thousands of cubic yards of soil, be would be required to do a full-blowm site plan, with an EIR (environmental impact teport) and extensive mitigation, if he and other environmental impacts, "It is potentially a way for the industry Growers are uniformly apposed to more governmental regulations and believe their environmental impacts are being overstated, even if they acknowlit volumatily fast two years. mechanism is now being officially dis-cussed in Sama Darbara County where vineyard acceage has doubled in the discretionary permit when converting grazing land to vineyands. A similar their industry. edge a need to address concerns about "Growers in general are just leave of To that end, Veesart has started She called for the requirement of a Grapesci

Question Arise About the Impacts of Turning Range Lands Into Vineyards Much of the current controversy began has year after Kendall-Jackson Wirery ripped but hundreds of oak trees from a 1400-are ranch south of Los Alamas, and within sight of U.S. 101, to plant viregards. Environmentalists were ouraged and Environmentalists were ouraged and launched voter initiatives regulating ook remuvel, which were narrowly defeated last year. Also acting was the Santa hariwa: County Planning Department, which ruled Kendalt-Jackson should have goiten a grading permit because of the "significant environmental impacts" of the work. county," Ackermant said, Victanit agrees but says the potential for problems is there, and now is the time to begin a dialogue about those batts, "I'm gliad this discussion is adding place an alcoholic beverage, we are already not happy with the level of raxes we pay" She is even more strongly opposed to suggestions that more mandatory gov-ermient regulations are needed "My guess is that would be met with resistance," said July Ackernan, execu-tive director of the Paso Robles Vinners and Growers Association. The wine industry is already faxed to the gills, As Supervisors last year supported the agri-cularists and opposed the crackdown by its Planning Department, saying it should **Catalyst for Concern** a reason to have these discussions." new, because in San Lais Ohispo County Edual think its a problem yet," Versart said. "But there is cause for concern and "Regulations are created to deal with a problem, and I dent think a problem has been demonstrated, at least in this tive feedback on the idea from the wine industry, yet many growers are cool to the concept. But the South Bathara County Board of ¹ "But the question out there now is: What does that all mean?" said Bill officite, the Santa Barbara County agricultural commissioner. San Luis Obigto County has no regula-tory tdygering mechanism for agricultural gradings that may have unifor impacts to the invitentient. That's a cracon for con-cern, say namy environmendiss, even though SLO County hasn't scen anything life the Kendal-Jackson incident. "The industry in this county has been pretty good about oak trees," Vessat said. Mortetheles, the incident screed as a wake-up call for environmentalists to start examining the impacts of a rapid conversion of grazing land into winvards. <u>D</u> swepi an environmentalist majotity onto the Board of Supervisors, which voted in January to resend dhe prior board's action, allowing the Planning Department to act against growers like Kendall-Jackson. Major Conversion Much of the local concern seems driven by the sleer magnitude of the "It is a coastal phenomenon, with big companies from Napa and Sonoma local conversion to vineyards. Jackson controversy as a turning point. "That was a big lesson for us and we've taken it to heart," Zoller said. "We have to look at the land and can't wis a turning polty on the Central Crass. Everyone had nobling but good feelings about the wine industry until then," about the wine industry until then," vecsar said, before joking. "I should send Kendall-Jackson a thank-you card." just do anything with it anymore. ooking to us because we have cheap That victory for growers was quickly crased when last November's election "It is a coastal Winemakers also describe the Kendali "The Kendull-Jackson oak tree temoval reyards. Ď PAGE 13





#### **December 8, 2000**

**34-1** Commenter suggests putting comments and responses in appendix to Final EIR.

**Response** Comments have been placed in the body of the Final EIR. The Master Plan and FEIR will include all comments on the October 10 publication, plus a matrix showing changes from both the May 1 and October 10 publications.

**34-2** Commenter has suggested reducing the pace of the review of the Master Plan.

**Response** Comment noted. Review periods for the Master Plan and EIR were extended beyond required timeframes to allow for more comment, and the Preliminary draft and its preparation involved the input of the public and many campus advisory groups.

**34-3** Commenter expresses appreciation for components of the Master Plan such as design of the campus core.

**Response** Comments are noted.

**34-4** Commenter expresses appreciation for the moving of the H-4 unit since the Preliminary draft.

**Response** Comments are noted.

34-5 Commenter expresses concerns with current location of H-1, H-2 and H-3 housing units.

**Response** Concerns are noted. The Master Plan team made extensive efforts to relocate the H-1 and H-2 housing units at a suitable distance from the creek corridor that resulted in the creation of the Brizzolara Creek Enhancement Project and the re-adsorption of units initially proposed for location along the creek (namely H-3). The additional beds were the result of partial absorption of the H-4 housing unit that could not be relocated in its entirety elsewhere on campus.

**34-6** Commenter suggests that H-1 and H-2 be permanently eliminated from the Master Plan for several reasons, the first being the loss of deep-soiled valley grasslands, and the second the degradation of the creek corridor due to traffic.

**Response** Grasslands. The grasslands the commenter refers to are currently used for grazing and foraging of animal species. Valley grasslands consisting of species typical of pasture vegetation are not considered a sensitive plant community at the state or federal level, nor are they considered sensitive by CNPS. Therefore, the loss of this vegetative community is not considered a significant impact. In order to consider the loss of foraging habitat a significant impact under CEQA, the consultant would have to find that the proposed development would "have a substantial adverse effect [through habitat modification]" on sensitive species as defined in the EIR. The consultant maintains that there is adequate foraging habitat on surrounding Cal

Poly lands for sensitive bird species, and that development of the site would not result in loss of nesting or other habitat for such species.

*Creek Degradation.* The Master Plan and EIR make a priority of the enhancement of the Brizzolara Creek corridor through the designation of a special project. Mitigation for the H-1 and 3 housing units specifically states (pg. 206) that "Plans for the H-1 and H-2 housing units will include pedestrian systems which are sensitive to the Brizzolara Creek corridor." The commenter is reminded that the design shown in the Plan is conceptual; mitigation in the EIR requires that the creek be protected from pedestrian traffic. Implementation of this mitigation will be part of the long-range implementation of the Master Plan; the project will be further reviewed at such time it is planned to be built.

**34-7** Commenter suggests Draft EIR and Master Plan fail to address the disruption of existing wildlife corridors.

**Response** The consultant believes that the site provides marginal "corridor" values due to existing development on three sides, and maintains that the major wildlife corridor in the area consists mainly of Brizzolara Creek. As mentioned above, the project provides a hard edge to the campus and provides protection for wildlife corridors along the hillsides and through Poly Canyon.

**34-8** Commenter suggests several alternative locations and approaches to the housing development at H-1, H-2, and H-3.

**Response** The commenter is referred to the housing alternatives analysis prepared in the EIR which directs housing siting and design. The goals of the Master Plan are to locate housing within proximity to the campus instructional core and create a community for student living without compromising the function.

**34-9** Commenter suggests Master Plan will result in wildlife habitat fragmentation.

**Response** Comment noted. Development has been concentrated near existing campus development so that fragmentation of wildlife habitat is minimized. The commenter's specific reference to ancillary facilities at Goldtree is noted. These facilities are located where other site constraints (slopes, wetlands) will not be adversely affected. See additional sections added to Residential Communities element.

**34-10** Commenter suggests location of H-1 and H-2 at the Grand Avenue and Slack Street location.

**Response** The University faces significant constraints in this area associated with the surrounding residential neighborhoods (specifically light and noise) that make development of this site with significant housing units difficult. The Environmental Suitability and Sustainability principle in the Land Use element (p. 65) calls for "limiting future development to those areas least affected by regulatory and/or high cost environmental constraints."

#### Cal Poly Master Plan ASI/UU Review and Response December 2000 (Received 12/6/00)

ASI/UU staff and students have reviewed the draft Campus Master Plan (dated October 10, 2000) and offer the following for consideration.

The programs and services provided by the ASI/UU will be impacted by expanded enroilment, an increase in the on campus residential population, and physical changes to the campus environment. Comments and recommendations regarding the Campus Master Plan draft are made with consideration of these issues.

Areas for revision, enhancement and/or inclusion of the ASI/UU can be summarized into four categories:

- 1. University Union Programs & Services
- 2. Clubs & Organizations
- 3. Child Care
- 4. Campus Recreation

#### 1. University Union Programs & Services

t, Minversity	Incorporate elements from the University Union Master Plan, which recognize the student desire to continue growth in specific program areas such as Events, Films, Live Music, Recreation, Meeting Facilities, Informal Gathering Areas, Services, etc.	35-1
•	Provide for physical expansion opportunity both at current location, and at possible satellites near new population centers and residential areas.	35-2
•	Provide consideration of Crandall Gym facility as potential site for Union/Recreation satellite opportunity.	35-3
•	Acknowledge ASI/UU need for facility expansion/development for student entertainment venue.	85-4
2. Clubs & O Consid gather	fer creation of formal and passive locations for student clubs and organizations to	36-5
<ul> <li>Provid partici</li> </ul>	e opportunity for large multi-purpose rooms for increased student club pation.	35-6
	wledge opportunity for ASI childcare services to expand on site, and at alternative ns as faculty/staff/student housing is developed.	35-7
4. Campus R	ecreation	
	for physical expansion opportunity both at current location, and at possible es near new population centers and residential areas.	35-8

.

•	Provide consideration of Crandall Gym facility as potential site for Union/Recreation satellite opportunity.	35-9
•	Provide specific language consistent with Sports Complex Operating Agreement delineating recreational field replacement as Athletic facilities are centralized at Sports Complex.	35-10
•	Identify ASI role in development of new recreational sites to maximize economy of scale, staffing, and program delivery.	35-11
٠	Allow for support facilities in specific proximity to new site development.	35-12

Letter 35 Dr. Rick Johnson Cal Poly ASI/UU

#### **December 6, 2000**

**35-1** Commenter asks that the Master Plan incorporate UU program areas for expansion.

**Response** Text has been added to the Campus Instructional Core element on p. 111: "The UU planning process identified the need for expanded facilities and programs, both in the current location and elsewhere on campus." In addition, the list of area studies in Chapter 7 refers to the "University Union and Student Services Plan."

**35-2** Commenter ask for flexibility for UU expansion at present and possible satellite locations.

**Response** Language added to Campus Instructional Core (above) reflects this request. In addition, Integration and Social Environment principles in this element recognize the need for dispersed activities (refer to p. 109).

**35-3** Commenter asks for consideration of potential reuse of Crandall Gym for Union and/or Recreation activities.

**Response** A plan component has been added to the discussion of the Southwest area of the campus: "Renovation of Crandall Gym for possible additional instructional space and/or recreation and support activities." See p. 122.

**35-4** Commenter seeks acknowledgement of student entertainment facility needs.

**<u>Response</u>** These are addressed in the list of uses for primary campus activity center. (Refer to p. 111.)

**35-5** Commenter reminds us that clubs and organizations need formal and informal space.

**Response** Text regarding this need now reads "space in student residential communities can accommodate *formal and informal functions of* student organizations closer to where students live" (p. 202).

**35-6** Commenter also reminds us that clubs and organizations need multipurpose rooms.

**Response** Text under the principle of Flexibility for Support Activities and Services has been added to read: "This should include multi purpose rooms for student clubs and organizations" (p. 200).

**35-7** Commenter asks that the Master Plan acknowledge the need to expand childcare and provide alternative child care locations.

**Response** Discussion of childcare in the Support Activities and Services element has been modified to read: "The revised diagrammatic illustration shows a site for expanding the Child Care Center *at its present location. ASI may also explore additional child care facilities on* 

campus and/or within or near married student housing and/or faculty and staff housing" (p. 202).

**35-8** Commenter suggests that the Master Plan allow for expansion of recreation at its current location and near new residential areas.

**Response** The Recreation element addresses this need as part of the Proximity principle (p. 147) and in discussions of the potential reuse of Mott Gym (p. 152).

**35-9** Commenter asks for consideration of potential reuse of Crandall Gym for Union and/or Recreation activities. (repeated comment).

**Response** Text has been added on p. 122 as noted above.

**35-10** Commenter reminds us that the Sports Complex Operating Agreement calls for replacement of recreation fields with any consolidation of athletic facilities at the Sports Complex.

**Response** This issue is addressed by the Continuity principle (refer to p. 147).

**35-11** Commenter encourages an explicit ASI role in the development and management of recreation sites to ensure that the planning process addresses operational considerations.

**Response** Text has been added, as follows: "As the organization responsible for managing student recreation programs, ASI should be involved in the design of new outdoor and indoor recreation facilities" (p. 153).

**35-12** Commenter suggests that the Master Plan allow for expansion of recreation at its current location and near new residential areas (repeat comment).

**Response** As noted above, the Recreation element addresses this need as part of the Proximity principle (p. 147).

Letter	36
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TO REY FROM ROB RUTHERFORD

### Cal Poly Master Plan and Draft Environmental Impact Report

### Comments regarding impacts on Cheda Ranch

My review of the plan and DEIR focused primarily on the proposed modifications of the Cheda Ranch, a property that is the sole location of the Cal Poly Sheep Operations and Field Laboratory. Because of the recent reduction in acres available for maintaining the sheep operations from 450 down to 150, and because of increased enrollment in the Animal Science major, any further reductions in available laboratory space will have significant negative impacts on our ability to deliver the education that we promise our students. The two proposed actions that impact this ranch are the development of a research park on the northern side of the ranch, and the development of remote parking on acres adjacent to Stenner Creek Road. I believe that the planners have ignored the guidelines of the campus as well as CEQA when arriving at these proposals. It also becomes apparent that the drafters of this plan based their assumptions on outdated and inaccurate information. For lack of a better approach, I have noted comments regarding statements in the order they appear in the document. In my opinion, there is significant negative impact to both of these actions and mitigation would be more costly than alternative plans. Many of the comments below, drawn from the document, reinforce the mission of the University. I would submit that the actions proposed violate this mission.

Executive Summary - Consider the impacts of a research park and parking lots in light of the following

- Page III Lands provide hands-on opportunities for students.
- Page IV Plan is designed to meet educational needs particularly in science and technical fields.
- Page V Plan is designed to protect natural environment and ag lands that form the character of the campus.
- Pave VI The map on this page indicates the areas suitable for ancillary activities and facilities (not education) this includes a significant portion of the grazing lands of Cheda as well as the vineyard. The "remote parking options" are located on prime ag land. The rest of the ranch designated as "outdoor teaching and learning" includes a large number of acres, which is extremely steep and rocky and is used occasionally to pasture rodeo stock .
- Page VIII Outdoor teaching and learning are central to Cal Poly's mission and must remain integrated.

	Describes "modest-sized" research park. What's modest - in relation to the site it is located?	36-
Introductio	on Consider the impacts of a research park and parking lots	•
Page two -	University recognizes relationship between physical space and student learning/life - spirit of learning.	
Page five -	Prime ag lands were identified so that no development would be proposed.	
<u>Chapter 2</u>		
Pages 11 & 12 -	Continued reference to learn by doing - hands on - importance of undergraduate learning.	
Chapter 3		
Page 35 -	Some facilities will not require expansion with enrollment growth - example - college farm - How was this determination made?	36-
higher fuel	reference made in this or any other chapter about the impact of must prices (which are certainly coming) on numbers of vehicles that need d on campus.	36-
		•
Chapter 4		•
-	Although most of the Cheda Ranch is in the San Luis Creek watershed - the northern side is in the Chorro creek watershed.	   36-
Chapter 4	Although most of the Cheda Ranch is in the San Luis Creek	36-
<u>Chapter 4</u> Page 41 -	Although most of the Cheda Ranch is in the San Luis Creek watershed - the northem side is in the Chorro creek watershed. Cheda ranch is listed at 447.8 acres. Of that, the portion that is fenced for sheep operations is 144. Approximately 20 acres is used by the Smith family for grazing. The majority of the acreage of Cheda is used to house Rodeo stock - it is extremely steep and unproductive. The report seems to suggest that because the sheep are at Cheda - that sheep operations control nearly 450 acres, so	36-
<u>Chapter 4</u> Page 41 - Page 44 -	Although most of the Cheda Ranch is in the San Luis Creek watershed - the northem side is in the Chorro creek watershed. Cheda ranch is listed at 447.8 acres. Of that, the portion that is fenced for sheep operations is 144. Approximately 20 acres is used by the Smith family for grazing. The majority of the acreage of Cheda is used to house Rodeo stock - it is extremely steep and unproductive. The report seems to suggest that because the sheep are at Cheda - that sheep operations control nearly 450 acres, so therefore, to lose 50 or 60 acres would not be significant. Doesn't account for Nelson or Middlecamp reservoirs (or Frog	36-   36-   36-
<u>Chapter 4</u> Page 41 - Page 44 - Page 47 -	Although most of the Cheda Ranch is in the San Luis Creek watershed - the northem side is in the Chorro creek watershed. Cheda ranch is listed at 447.8 acres. Of that, the portion that is fenced for sheep operations is 144. Approximately 20 acres is used by the Smith family for grazing. The majority of the acreage of Cheda is used to house Rodeo stock - it is extremely steep and unproductive. The report seems to suggest that because the sheep are at Cheda - that sheep operations control nearly 450 acres, so therefore, to lose 50 or 60 acres would not be significant. Doesn't account for Nelson or Middlecamp reservoirs (or Frog Pond). Doesn't show second Dairy Lagoon, Lagoon at BCEC,	36-   36-   36-

Page 52 -	Clearly shows Stenner Creek Pastures (site for parking) as <5% slope.	36-9
Page 54 -	All ag field lines are inaccurate - entire ranch has been re-fenced and re-planned since this map was drawn (mid 70's?).	36-10
Page 57 -	Slope > 20% have greatly increased development costs. The area designated on the Goldtree side has slopes in excess of 20%.	, , , , , ,
Page 60 -	Goldtree is suitable for development Access?? Slope?? Ag land?	26-11
Chapter 5		
Page 65 -	Reference to "prime ag soils" and that plan retains all currently available prime ag soils for ag use (parking?).	
Page 65-66	- Reference 10-minute walk to classes/labs - many ag labs - including Cheda currently exceed this.	
Page 71 -	Doesn't show approved access road from Stenner Creek road to the parking lot at Cheda.	36-12
Page 72 -	Future land use at Cheda, Peterson, etc, will continue to be rural, focusing on outdoor teaching and learning.	36-13
Page 89 -	Would suggest that all of Cheda is sheep unit - actually less than 1/2 is used by sheep.	36-14
Page 94 -	Re-emphasis on maintaining ag lands.	00-13
Page 194 -	Suggests competition for land between ancillary and teaching uses.	
	Describes 200 acres as being Goldtree - actual size of Goldtree pastures is <45 acres. Impression is created that the area is not currently being used in the educational program. <u>This grazing area</u> is used as much or more than any grazing area on campus for <u>undergraduate education</u> . Within the last year, ASCI - Range Management - Hallock , FNR (D.Piirto's class), Crop Science (Steinmaus, Patterson, Fountain), and BioSci have all used portions of the indicated Goldtree area to teach various facets of their classes. The site has been used for independent studies for both Senior Project and Masters Thesis. Of course, it is used on a daily basis as part of the resource management associated with sheep classes. <u>Access at Stenner Creek would be highly</u> improbable - both from HWY 1 as well as through the ranch itself.	36-16
	vi .	

			Le
	Access at HWY 1 would require significant modifications to the highway and potential mitigation with the Men's Colony. 50 - 60 acres for research park and parking would reduce the sheep unit size by over 40%. The flock is already below critical mass to meeting teaching/research requirements. Further reductions will	36-1	6
Chapter 6	SIGNIFICANTLY impact education.	l	
Page 206 -	Discusses introducing human impacts into open space - they suggest impacts less than significant. This plan places a research park in a field laboratory used by multiple departments - I consider that significant impact.		
	Cumulative grassland loss is less than significant - I consider the loss of over 1/3 of the grassland at Cheda significant. The increase of students at Cal Poly is insignificant when compared to the population of California - however; it is very significant when compared to the population at Cal Poly.	36-1	1
	Ag Resources section - Prime ag land is referenced once again - with no impact (parking lots?)		
² age 208 -	There is no mention of traffic/circulation impacts at Checa. No mention of impacts of development on Goldtree on wildlife (fox, coyote, deer, hawks, etc. etc.).	36-11	3
Page 221 -	The County Ag and Open Space Element "avoid locating new public facilities outside urban and village reserve lines unless they serve a rural function or there is no feasible alternative" (research park on ag land?).	36-1	٩
age 260 -	States that grassland loss will only be 1.5% of Cal Poly's - but this will be more than 35% of the grassland at Cheda - the only property set up to accommodate and manage sheep. Most of the grassland at Cal Poly is not readily accessible to most of the students for purpose of education.	36-2	0
age 261 -	Existing conditions "none of the projects proposed in the plan will result in development of prime farmland" (parking lots?)		

6-21

ر.

The traffic/parking impacts in this chapter never mention the traffic/parking impacts at Cheda and along Highway 1 in this area

Page 313 - Section 15126(b) of CEQA - Significant irreversible environmental Changes include the conversion of ag land to non-ag land use

It is my opinion that all of the above references point to the fact that the proposed plan would violate CEQA, the University's Mission Statement, and previous agreements between CAGR and the University regarding ag land use. Furthermore, it would serve as a poor example for society, in that it promotes the idea of converting valuable and productive lands into a landscape that produces pollution, excessive runoff, and destroys habitat. No matter how extensive the plan, if it is based on outdated and inaccurate information, such as this plan is it can not be considered a viable document and should be rewritten.

### Letter 36 Dr. Robert Rutherford College of Agriculture, Animal Science

### December, 2000

**36-1** Commenter raises concern about suitability of Cheda Ranch area for ancillary activities and/or remote parking.

**Response** The commenter has raised several concerns regarding the appropriateness of developing ancillary activities in the Cheda Ranch area. As the head of the Sheep Unit, Dr. Rutherford is expressly concerned about the viability of the sheep operations. The Sheep Unit has been impacted by a number of changes on campus. The most significant was the recent moving of the entire unit from the location now occupied by the Sports Complex to the Cheda Ranch buildings, the former location of the Dairy Unit. In addition, sheep grazing pasture area has been reduced by the Sports Complex and expansion of the Horse Unit grazing requirements.

**36-2** Commenter asks what does "modest-sized" research park mean?

**Response** Analysis for the DEIR considered a possible development of about 400,000 square feet of building plus parking. The comparison would be to like facilities developed at universities elsewhere.

**36-3** Commenter asks how was the determination made that campus farm would not require expansion to serve more enrollment?

**Response** The College of Agriculture leadership has indicated that the college has facility capacity.

**36-4** Commenter notes lack of reference to impact of fuel prices on number of automobiles.

**Response** See text addition regarding dependence on fossil fuels as a principle related to Alternative Transportation: "Less reliance on vehicles using internal combustion engines can also contribute to improving air quality and diminishing the use of fossil fuels" (p. 167). A new section on Sustainable Campus Planning and Design also notes "Alternative, renewable energy sources should be used to the greatest extent possible to offset growth in demand" (p. 163).

**36-5** Commenter notes that Cheda Ranch is partially in Chorro Creek watershed.

**<u>Response</u>** See text change, p. 45. The clarification is appreciated.

**36-6** Commenter notes misleading data on use of Cheda Ranch for sheep and rodeo stock.

**Response** The text has been modified to reflect the actual use by the Sheep unit, as follows: "The sheep unit and sheep operations occupy approximately 144 acres, or about one-third of Cheda Ranch, including some of the area known as Goldtree." See text change, p. 93.

**36-7** The commenter notes that reservoirs (Nelson and Middlecamp) are missing from the discussion.

**<u>Response</u>** The text in the Existing Conditions chapter has been made more general, referring to "multiple reservoirs and ponds" (p. 49). Elsewhere, the base map has been changed to add missing reservoirs and ponds.

**36-8** Commenter notes certain reservoirs and ponds missing from map

**Response** The base map for Exhibit 4.5 and others has been modified to show additional water bodies.

**36-9** Commenter notes on slope in areas shown for potential remote parking is less than 5%.

**Response** Comment is noted.

**36-10** Commenter notes that new fencing patterns have rendered Exhibit 4.8 out of date.

**Response** It is recognized that the description of these facilities is in need of updating.

**36-11** Commenter questions suitability of Goldtree area for development.

**Response** Text to clarify the analysis of the Goldtree area has been added to the discussion of constraints and opportunities (pp. 64-65). "The northwest corner of Cheda Ranch includes an area known as Goldtree. Traditionally, this area has consisted of three fields (C62, C63, C64), totaling about 52 acres. In conducting feasibility studies for ancillary activities at a satellite location, the Master Plan team examined a slightly larger area (including fields C65 and part of C61, but excluding C64 as too steep) to determine which land might be more suitable, considering environmental, regulatory, cost and policy constraints. Based on soil type, slope, and current condition, the approximately 60-acre area shown on the detailed map was identified as most suitable for potential development, and became known as the Goldtree project area or site. It is close to the Union Pacific Railroad and has access to water, sewage treatment and electricity. Access could be provided from Highway 1 (perhaps from an improved intersection near the site or at Stenner Creek Road) and/or internally from Mount Bishop Road."

36-12 Commenter suggests showing access from Stenner Creek Road to Cheda Ranch.

**Response** Area is outside the base mapping. Detailed mapping needs to be extended to the rest of the campus area.

36-13 Commenter suggests clarifying future use of Cheda Ranch, in view of Goldtree discussions.

**Response** The following text has been added to the discussion of Ancillary Activities and Facilities (p. 206). "The City and County of San Luis Obispo have supported a research partnership with Cal Poly through the California Central Coast Research Park (C3RP) task force. While a number of sites both on and off campus have been suggested over the years, the Master Plan explores the potential of an applied research park on campus. One possible site is in the Goldtree area. It is important to note that an applied research park on Cal Poly lands would focus on applied research and advanced development activity in support of the University's academic mission, including applied research partnerships, "in

technology, and business development. It is likely to be heavily involved in and dependent on technology – information technology, telecommunications, biotechnology, geographic information systems, visual imaging, etc. An applied research park would provide opportunities

for faculty professional development, internships for students, and employment for partners and spouses of faculty and staff. It could include business services (e.g., photocopying equipment, meeting rooms, and food service). However, it would not include activities often associated with business or industrial parks, such as professional offices or manufacturing (assembly) except as incidental to applied research and development."

**36-14** Commenter requests that the plan clarify use of Cheda Ranch by sheep operations.

**Response** As noted above, additional text has been provided in the Outdoor Teaching and Learning element (p. 93).

**36-15** Commenter notes competition between ancillary activities and teaching.

**Response** Comment noted.

**36-16** Commenter questions the suitability of Goldtree area for development given the extent of its current use.

**Response** As noted above, the text in Chapter 4, under the discussion of Constraints and Opportunities, has been added to analyze development potential at Cheda Ranch including the Goldtree area (p. 64).

**36-17** Commenter questions determination of less than significant impact, regarding human use, loss of grassland, and prime agricultural land.

**Response** Valley grasslands consisting of species typical of pasture vegetation are not considered a sensitive plant community at the state or federal level, nor are they considered a sensitive by CNPS. Therefore, the loss of this vegetative community is not considered a significant impact. This grassland is not supported by prime agricultural soils or other important farmland soils and its loss therefore does not constitute a significant impact under the significance thresholds given. However, the University can make a determination, outside of the realm of CEQA, as to the best use of these lands. Discussions are ongoing with CAGRLUC regarding this area.

**36-18** Commenter requests that the plan add traffic and wildlife analysis for Cheda/Goldtree.

**<u>Response</u>** The eventual type of development at Goldtree and feasible access routes are not yet well understood. This information will be required to determine traffic impacts. Future environmental review and consultation with agencies such as CalTrans will determine impact significance.

Significant impacts to wildlife are limited to sensitive species; the loss of this grassland is not considered to pose a significant threat to the fecundity of sensitive species in the area; similar foraging habitat exists elsewhere on Cal Poly property and in surrounding areas.

**36-19** Commenter questions the research park location, analysis.

**Response** Important in the policy cited is the condition "unless…there is no feasible alternative." Goldtree has been chosen because of the importance of having campus facilities near the core, and the lack of available, unconstrained space, including areas that do not overlie

prime soils. A facility of that type is not essential to the function of the University and is too large to locate on campus.

**36-20** Commenter expresses concern about grassland loss.

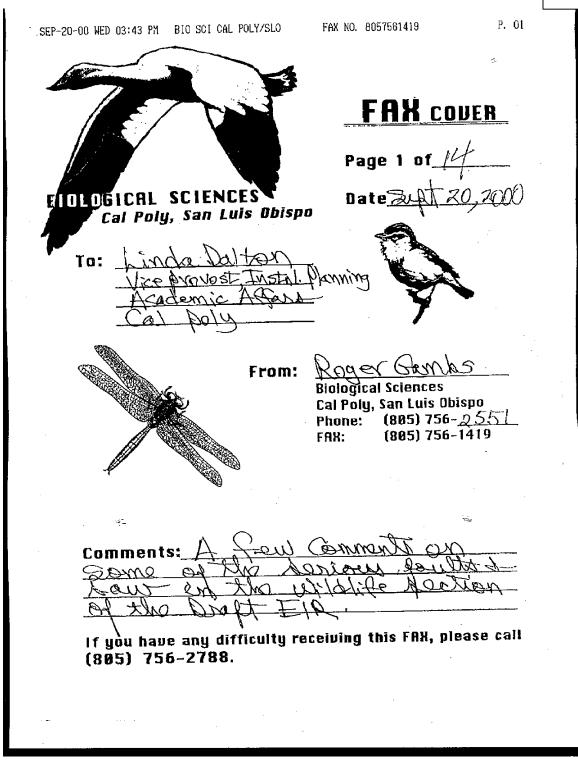
**<u>Response</u>** The College of Agriculture is currently pursuing opportunities to expand grazing in areas off-campus. The Master Plan's commitment is to not develop new facilities without adequately replacing any that may be displaced. See the principle of Continuity in the Outdoor Teaching and Learning element (p. 97).

**36-21** Commenter expresses concern about conversion of agricultural lands

**Response** Parking lots will not be located on prime agricultural land. Further, additional text on p. 195 explains that "If parking demand should require Cal Poly to consider using any of these locations, additional site analysis will be undertaken to determine the amount of land needed, the most appropriate site or sites, how access will be provided, the effect on circulation, how the parking area(s) would be secured, and how existing uses can be relocated."

36-22 Commenter expresses concern about conversion of agricultural lands

**Response** The Master Plan policy is to not convert any Prime agricultural lands. There are some designated fields used by the College of Agriculture, which have been identified for development of housing, parking and other ancillary activities. None of these fields contain prime soils.



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Letter 37 P. 05 FAX NO. 8057561419 SEP-20-00 WED 03:45 PM BIO SCI CAL POLY/SLO for plant. communitie 40 url Cal Poly Master Plan **BIOLOGICAL RESOURCES** The following section outlines the resources present on Cal Poly land holdings and analyzes potential impacts to these resources due to implementation of the Master Plan. , developing en Existing Conditions Cal Poly is surrounded by unique geologic and associated biological resources which enhance not only the setting but educational opportunities for students and researchers as well. Past biological investigations have been limited to classroom fieldwork and site specific studies completed as part of environmental review. The Biological Sciences department at Cal Poly is currently attempting to inventory the biological resources of Cal Poly landa. This effort will identify sensitive plants and animals and provide a larger picture of resources present. Some of this information is already available, and is contained in the following section. Other forthcoming information will be incorporated into future environmental review, where applicable, and will be part of the implementation of specific policies in the Master Plan. Biological resources of Cal Poly were inventoried based on review of past investigations, searches of the California Department of Fish and Game's (CDFG's) Natural Diversity Data Base (NDDB) and the California Native Plane Society's (CNPS's) Inventory of Rate and Endangered Voscular Plants of California (Skinnes and Pavlik, 1994). Vegetation and habitat types were classified using California Vegetation (Holland and Keil, 1995). Sensitive plant are addressed separately in sections following the general vegetarive and nd animal species te eore Vegetation دور aloma Cal Poly is within the outer Central Gozst su et 290 JO) on of the California Floristic Province The vascular plant flora on campus consists of native, naturalized, and planted herbs, grasses, shrubs, and trees. Nonvascular plant flora on campus consists of lichens, bryophytes (mosses and liverworts), and fungi (mushrooms and molds). This subsection provides descriptions of each major vegentive community type present on campus. The common and characteristic plant species are provided for each. Riverine and Open Water. Riverine/open water habitat of the main campus consists primarily of the existing flowing channel of Stenner Creek and Brizolara Creek, and adjacent drainages. Just south of the Chorto Creek Ranch, Chorro Creek provides open water habitat. Stream channels and all associated mituraries, floodplains, drainages and streambanks, are specifically addressed by the CDFG Code Section 1600-1603 (Streambed Alteration Agreement) and are considered Waters of the U.S. Waters of the U.S., including stream channels and werlands, fall under the jurisdiction of the Corps under Section 404 of the Clean Water Act, Valley and Foothill Riparian Communities. The density of vegetation within riparian communities varies from open to nearly closed (Holland, 1986). These habituts are typically located within seasonally flooded and saturated ateas, or areas that are located close to ground water (Sawyer and Keeler-Wolf, 1995). Dominant species within ripatian communities require moist, bare mineral soil for germination and establishment (Holland, 1986). Riparian communities are considered sensitive by CDFO and frequently qualify as werland based on the USFWS werland classification system (Cowardin et al., 1979). In the campus area, dominant trees in riparian areas include sycamore (Plazanus racemasa) and willow (Salis spp.). Seasonal Freshwater Marsh/Seep. Freshwater seep communities are considered sensitive by CDFG, and are classified as palustrine persistent emergent and temporarily to intermittently flooded werland according to USFWS werland classification system (Cowardin et al., 1979). Vegetation and flora of wer meadow/freshwarer seep communities is dominated primacily by a variety of low-growing hydrophytic (water-loving) species including rushes. 6 · · · · RAFT ENVIRONMENTAL IMPACT REPORT NR

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Scopendine outcrops

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Freshwater Marsh. Freshwater marsh communities occur in slow moving, shallow freshwater streams, along the periphery of ponds and lakes, and in isolated areas where the water table is at or near the ground surface (Holland, 1986). In the campus area, these communities occur around the perimeters of the two reservoirs located in the northern portion of campus, and in scattered locations along the flowing channel of Stenner and Brizzolam Creek. Vegetation of these communities consists primarily of bulrush (Scirpur spp.), with some occurrence of cannil (Typha spp.). Freshwater marsh habitats are considered sensitive habitats by CDFG and are classified as wetland according to the USFWS' wetland classification system.

Valley Grassland. The majority of grassland throughout California is dominated by naturalized grasses that were introduced from the Mediterranean region during the Spanish Colonization period. Typical naturalized grass species occurring within Valley Grassland include wild oat (Avena fatua), slender wild oat (Avena barbata), soft chess brome (Bromus hordeaceus), ripgut grass (Bromus diandrus), foxtail batley (Hordeum murinum), and annual ryegrass (Lolium multiflorum). Other dominant species may include red-stern filarce (Erndium cicutarium) and raterail fescue (Vulpia myuros). Native species present in these areas, generally at low density, include Hayfield rarweed (Hemizonia congesta ssp. luzilifelia), blue dicks (Dichelestemma capitatum) and dove weed (Eremocarpus serierus).

California Native Bunch Grassland. Typical dominant bunch grasses in this community are purple needlegrass (Nassella pulchra) and nodding needlegrass (Nassella cernua). Other dominant species may include slender needlegrass (Nassella lepida), large needlegrass (Achnacherum coronatum), melic grass (Melica imperfecta), decegrass (Muhlenbergia rigens) and three-awn (Aristida spp.).

Coastal Scrub. Occurring in more zeric areas, coastal scrub communities occupy sandstone, diatomite and .... Gull serpencine, relatively infertile parent material. The most dominant species in the coastal shrub componently are coyete bush (Baccharis pilularis), lemonade berry (Rhus integrifolia), coffeeberry (Rhamnus californiaca) and poison oak (Tonicodendron diversilobum). Other dominant species include sugar sumac (Rhus ovaca), laurel sumac (Malosma laurina), California sagebrush (Artemuia californica) and brittlebush (Encelia farinors) - farsu os a

Coast Live Oak Woodland. One of the most mesic communities dominated by coast live oak (Querea agrifolia) is the coast live oak woodland community. These areas are dense and are often with mixed evergreen fotesr. Other species found intergraded with coast live oak are California bay hurel (Umbellularia californica), big-leaf maple (Acer macrophyllum) and madrone (Arburus menziesii). The understory of coast live oak woodland communities varies between grassland species and shrubs.

Eucalyptus Woodland. Eucalyptus woodland is typically represented by moderately dense stands of guin trees (Eucalyptus spp.). Plants in this genus, imported primarily from Australia, were originally planted in groves throughout many areas of coastal California as potential sources of lumber, for their use as windbreaks, and for their horticultural novelty. In areas where euralyptus forms dense stands, growth of native plants within their inmediate vicinity is usually completely inhibited.

Pastoral. Pastoral habitats have been disturbed by grazing. Vegetation generally consists of a mix of native and non-native weedy species, similar to those mentioned for grasslands.

Ornamental Landscaping. Parking lots, building areas and other interior portions of campus are vegetated with a mix of native and nonnative plant species, including several species of Eucalyprus, Monterey pine, western sycamore, Japanese maple, warde, Peruvian pepper tree and Brazilian pepper tree.

Ruderal Habitats. Ruderal habitats are those that have been significantly disturbed by construction, roadways or other land-clearing activities. In the campus area, ruderal habitats primarily occur along roadways and older structures. Characteristic plant species of ruderal habitats include milk thistle (Silybum marianum), tree tobacco (Nicotiana glauca), wild mustard (Hinchfeldix incana), sweet leanel (Foeniculum vulgare), and wild radish (Raphanus

poison hemdock? (Conum maculatum)

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BIO SCI CAL POLY/SLO FAX NO. 8057561419 SEP-20-00 WED 03:46 PM Completness, & and E marsh Cal Poly-MasterPlan Wildlife Q Mc Vertebrate fauna consists of mammals, birds, repriles, amphibians, and fish. N merous vertebrare taxa are known to occur or frequent campus lands and adjacent areas on a seasonal basis. Riverine and Open Water. The stream channels of Stenner and Prizzolara Creek are exp important habitat for various pourie and semi-acuatic presses of wildlife due of the presses of and substantial nearshort gover classifing of Withanzing and substantial nearshort gover classifier of with the stream of expected to occur in association with Stennet and Brizzolata Creek include various resident fis Kel. vertition. Specie ide various resident fish species such as three-spine stickleback (Kiasterasteus aculeanus) and prickly sculpin (Conta aspe m, and a variery of amphibians including Pacific chorus frog (Preudacris regilla), western toad (Bufo boreas), and bullfrog (Rana caterbiana). The ØV habitat for the following special-status species: southern steelhead Prove Citche are about section to mamorata pallida), The Call a har and the communities of the communities of the communities with the communitis with the communities with the communities wi Add Ca entre mus within the project area are expected to provide suitable habitat for a diverse assemblage of semi-aquatic and terrestrial wildlife species. A variety of amphibian and reptile species, such as those identified as having potential to occur in association with Stenner Creek, would be expected to frequent riparian habitats such as those found within the project area. Other vertebrate species that would be expected to occur in, or frequent, riparian forest and scrub habitats of the project area include ensatina (Enaatina erdischelizi), gopher snake (Pinophis melanoleudes), common gatter snake (Thannophis sirralis), Virginia opossem (Didelphis virginiana), striped skunk (Mephins mephicis), long-tailed weasel (Mustela frenara), coyare (Canis langas), bobeze (Leer mfes), rescoon (Proon her), beltes congbirder (Carle alegon), Chlifornia quail (Cellipepla californica), black thouse (Leer mfes), rescoon (Proon her), beltes congbirder (Carle alegon), Sociated with riparian habitats of the project area is do expected a provide important nesting, roosting, and foraging habitat for a variety of midatory bird species. Seasonal Freshwater Marsh/Seep. Wildlife-inhabiting wet meadow/freshwater seep habitat is most likely limited to various amphibians such as Pacific chorus frog. Western toad-builfrog, and Catifornia slender salamander. Species of wildlife that would be expected to frequencies frequencies of wildlife that would be expected to frequencies frequencies frequencies frequencies and the state of the m of songbirds, including redwinged blackbird (Agelau's phoeniceus) at Freshwater Marsh. Freshwater marsh habitats provide escape, nesting, and thermal cover for a variety of reconverter Marsn. Treshwater marsh natitals provide escape, nesting, and thermal cover for a variety of mammals, birds, amphibians, and invertebrates (Mayer and Laudenslayer, 1988). In addition, numerous birds and mammals routinely use these habitats for a source of water and food. Birds expected b occur in association with reshwards marsh communities include American coor (Fullowing M), malace (Anna Marshynchos), black-crownerspirate ferm (Mericowa pochorae), great blue hero (Fullowing M) and act (Mericowa pochorae), black-bird paces. In addition, a variety of warm water lish species, amphibians, and reptiles, such as the native suphysisten pood nurtle may occur within these habitars southwestern pond turtle may occur within these habitats. Valley Graffland. Annual grasflands often provide important inditat features for Renges Judy as redeated have (butes providentis), white-tailed kite A Fund compared mailousis), white-tailed kite Baud forule and Aleric 厳ゆ amonly the open grassland areas extensively for foraging purposes, while species such as sugnella neglecta) upo open grasslands for desting. Reputes that commonly breed with W 156 Repuiles the commonly breed within annual Actude Western tener limed Copper focidentalist common garter snake (Inamoons smaw, schake (Crocaled viridit). Muniquals used are expected to occur in or frequent these habition estake (Crocaled viridit). common garter snake (Thamnophis sirtafis). grasslarig and Western range na's pocket sopher Thompays border), A Desichof bas, including townser it ackrabbit (Legus californicits), include black-miled ayer, 1988). In addition pario Avendii) may nocturnary brage (Mayer and Lauders sendii to othin this habin (Plecoths to listed above for Annual Grafshed Native Bunc រភ 6 L IMPACT REPORT lamanc

P. 08 BIO SCI CAL POLY/SLO FAX NO. 8057561419 SEP-20-00 WED 03:47 PM Coastal Scrub. Inland coastal scrub supports a diversity scrub also provides nesting habitat for small birds and roden Coast Live Oak Woodland. Species found in this habitat are similar odland. Eucalyprus woodland may provide suitable mesting sites for various at horney ow! (Bubo virginianus), barn ow! (Tyto alba), and red-railed hawk (Buteo jamaicenuis). ces such as these often provide roosting and hunting perches for a variety of raptors. Portions also be used for roosting, on occasion, by monarch butterfly (Danaus plexippus). habitats provide foraging area similar to that found in grassland areas, above. Ornamental Landscaping. Wildlife present in landscaped areas is limited; rodents and songbirds may use denser areas for foraging. Ruderal Habitats. Ruderal communities typically provide little habitat value for wildlife. However, some reptiles, such as western fence lizard, as well as a variety of songbirds frequent rudged habitant aragine pur Sensitive Species and Habitats Special-status species are plants and animally that are listed a either endangered or threatened under the Federal or California Endangered Species Acts, or rare under the California Native Plant Protection Act. They may also be considered rare (but not formally listed) by resource agencies, professional organizations (e.g., Audubon Society, CNPS, The Wildlife Society), and the 3cientific community. For the purposes of this project, specialstatus species are defined as shown in Table/X. 6-4 The CDFG uses the California Natural Diversity Dambase (NDDB) to document occurrences of special-stratus species. The NDDB also includes information on a number of plant species prepared by the California Native Plant Society (CNPS). To determine which special-status species are likely to occur on campus, CMCA conducted a literature survey and database search of the NDDB. Based on information obtained through the NDDB search and review of existing literature, a preliminary list was compiled of sensitive plant and animal taxa that are known or have potential to occur on campus. The common and scientific names, legal status, and prefetted habitats of all specializatus plane and animal taxa with potential to occur on University held lands are presented below in Table X for special scarus plant species and Table X for special starus wildlife species. The distribution, preferred habitats, and known occurrences of special stary's species that were determined to potentially occur within or frequent the project site, based on the presence of suimble habitat, are discussed in the following sections. 6 6 Table 64. Definitions of Special-Status Species Special Status Plant Species > Planes listed or proposed for listing as threatened or > Animals listed or proposed for listing as threatened endangered under the Federal Endangered Species Act or endangered under the Federal Endangered (SO CFR 17.1Z for listed plants and various notices in Species Act (50 CFR 17.11 for listed animals and the Federal Register for proposed species). various notices in the Federal Register for proposed > Plants that are Category 1 candidates for possible future species). listing as threatened or endangered under the Federal > Animals that are Category 1 candidates for possible Endangered Species Act (55 CFR 6184, February 21, future listing as threatened or endangeted under the 1990). Federal Endangered Species Act (54 CFR 554). > Plants that meet the definitions of rare or endangered > Animals that meet the definitions of rare or species under the CEQA (State CEDA Guidelines, endangered species under the CEQA (State CEQA Section 15380). Guidelines, Section 15380). > Plants considered by the CNPS to be "rate, threatened. > Animals listed or proposed for listi DRAFT ENVIRONMENTAL IM

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	or endangered" in California (List	California Endan	extend and endangered under the face of th			
	Plants listed by CNPS as plants more information and plants o (Lists 3 and 4 in Skinver and Pavl)	Elimited distribution (Renuen, 1978)	of special concern to the CDFG for birds; Williams, 1986 for			
	> Plants listed or proposed for li Cultiformia as threatened or er	sting by the State of > Animal species the adangered under the (California Fish	nat are fully protected in California and Oame Code, Section 3511 ammals], and 5050 (reptiles and			
	California Endangered Species Ac > Planes listed under the Cali Protection Act (California Fish an	fornia Native Plane amphibians]).	about U.S.			
	seq.). > Plants considered sensitive by oth U.S. Forest Service, Bureau of La	nd Management), state	Service lite			
	and local agencies or jurisdictions > Plants considered sensitive or un community or occurring at the lin	nique by the scientific	about LUCIN.			
A West	Table 65. Special Sta	itus Plant Species and Communities with Po Lands	rential to Occur on Cal Poly			
	Common Name	Scientific Name	Legal States			
U SAY	Hoovers bentimass	Agrostis hooveri	-/-/4			
v.yr	Clubit faired Mariposa Uly	Calochorrus clavarus ssp. clavarus	-/-/4			
•	San Luis mariposa fily	Calochornus obispoensis	_/5SC/1B			
	Cambrin Morning Glory	Calystegia subacaulis var. episcopalis	C2/-/18			
	San Luis Obispo sedge	Carex obispoensis	-/SSC/1B			
	Brewers spinetlower	Chorianthe breweri	-/SSC/1B			
	Chorro Creek bog thistle	Cirsium fontinale var. obispoense	E/E/1B			
	San Luis serpentine dudleya	Dudleya abramsii ssp. bettinae	-/SSC/1B			
		Dudleva abramsii spp. murina	-/-/4			
	San Luis dudleya	Dudleya blochmaniae ssp. blochmaniae	-/SSC/18			
	Blochman's dudleya	Frinilaria viridea	-/SSC/1B			
	San Benito fritillary		C1/-/1B			
••* · · •	Consdon's tarplant	Hemizonia partyi ssp. congdonii	-/SSC/1B			
	Jones lavia	Lavia jonesii	-/330/18			
	Small-Leaved Lomatium	Lomatium parvifolium				
	Pringle's Yantpah	Perideridia pringlei	-1-14 - (AU			
	Adobe sanicle	Sanicula maritima	-/SSC/13			
	Cuesta/Pass checkerbloom	Sidalcea hickmanii ssp. anomala	-/SSC/1B			
	Rayless ragwort	Senecio aphanactis	-/-/2			
	Sensitive Habitats/Communities					
	Serpentine Bunchgtass					
	Coastal and Valley Freshwater Mars	h				
	Wet Meadow/ Freshwater Seep					
	Sensitive Habitat/Communities	1 m 1	"Waremaine"			
	6	sh. Freshwarer marsh is discussed above unde	ghen water			
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Cal Poly Master Plan Serpentine Bunchgrass. Areas of serpentine bunchgrass are located east of the main and extended campus. Vegetation is similar to that discussed under "Vegetation" as native bunch grassland. Locally, serpentine soils may also support a range of sensitive plant species including Dulleye spp and San Luis Obispo sedge. Species found on

Sensitive Plant Species

Honvers Bentgrass. Hoovers benigrass is a perennial grass occurring within dry sandy substrates of chaparral, cismontane woodland, and valley foothill grassland (Skinner and Pavlik, 1994). Hoovers bentgrass was not documented by the NDDB 11 occurring on campus.

Wet Meadow/ Freshwater Scep. Wet meadow is discussed above under "Vegetation" as wetland.

such soils are adapted to low nutrient content and high levels of usually harsh parent materials.

Club-Haired Mariposa Kily is a bulb forming kily that produces one or two strap-shaped green leaves in early spring. These begin to wither by the time the plant flowers in May or June. The flowers are cupshaped with three narrow, yellow-green sepals and three obtriangular, yellow pecals marked by jagged, transvene purple-brown bands across the inner face. Each peal bears a rounded, depressed nectary toward the base surrounded by club shaped yellow hairs. The anthers are large and purple. After the flowers wither the ovary develops into a slender, 3-angled capsule with many dark seeds. The plant is generally completely dry by late summer. The dry remains can be identified by the shape of the capsule. Only the bulb and seeds remain alive until the next growing season.

This species is restricted to San Luis Obispo County and Santa Barbara County in the western portion of the Coast Ranges, mostly on soils derived from serpentinite parent material. In San Luis Obispo County, it is knewn from several locations in the Santa Lucia and San Luis Ranges. Four other rare subspecies occur to the north and south of subspecies clavarus. It is known from several sites in the area.

Son Luis Mariposa Lily. San Luis mariposa lily generally occurs within chaparral habitats of San Luis Obispo County, but may also be found in coastal scrub and valley foothill grassland habitats within San Luis Obispo County (Hickman, 1993; Skincer and Pavlik, 1994). Within these habitats, this species primarily occurs in dry, serpentine soils (Hickman, 1993). Sin Luis mariposa lily has been documented north of the Csl Poly campus on hillsides locared adjacent to Brizziolari (creek (NDDB, 1996). Brizzolava

Cambria morning glory is a perennial herb with trailing or sometimes weakly twining stems. It has alternate, broadly mangular leaves that are minutely hairy. The cream-colored, funnel-shaped flowers are produced from April to June. After the flowers wither, the plant develops small, dry capsules with dark seeds. By late summer, the aboveground parts of the plants are completely dry and only seeds and an underground rootstock persist through the dry season. The plant is difficult to identify in the dry season because the dry parts sharter.

Calystegia subacaulis ssp. episcopalis is at present known only from San Luis Obispo and northern Santa Barbara counties. In San Luis Obispo County it ranges from the Hearst Ranch in the northwestern corner of the county south to the vicinity of San Luis Obispo where it usually occurs in grassy sires with clayrich soils often in association with serpenninite parent material.

San Luis Obispo Sedge. San Luis Obispo sedge is a perennial herb that occurs in coastal scrub, valley and foothill grasslands, coastal prairie, chaparral and closed-cone conifer forest communities. San Luis Obispo sedge is threatened by grazing. San Luis Obispo sedge primarily occurs in dry, serpentinite soils (Hickman, 1993).

Brewer's Spineflower. Brewer's spineflower is an annual herb known from twenty occurrences in San Luis This species occurs in coastal scrub, closed-cone conifer forest, chaparral and cismontane woodland communities. Brewer's spineflower primarily occurs in dry, serpentinite soils (Hickman, 1993).

Chorro Creek bog thisde. Chorro Creek bog thisde is a perennial herb located in San Luis Obispo. This species is known in fewer than ten occurrences and primarily in serpentinite soils (Hickman, 1993). Chorro Creek bog 6

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thistle occurs in chaparral and eismontane woodland communities and is threatened by grazing, development and proposed water diversions.

San Luis serpentine dudleya. San Luis serpentine dudleya is a perennial herb located in chaparral, valley and foothill grasslands and coastal scrub communities. This species is known in fewer than ten occurrences and grows primarily in serpentinite soils (Hickman, 1993).

San Luis Obispo D'udleya is a succulent perennial herb with a thick, fleshy taproor. It produces a dense rosette of narrow, fleshy, leaves with a dull, gray-green coloration. In late spring clusters of 5-petaled, cream-colored to dull purplish flowers are produced on stalks arising from the rosette. The ovaries of these flowers mature as clusters of small, dry fruits that split open and release many tiny seeds. These plants are easy to recognize during the dry season.

Dudleya abramuii ssp. munima is endemic to San Luis Obispo County and it is apparently limited to stony serpentinite soils and serpentinite rock outcrops. Its range is limited to the hills bordering the San Luis Valley in the foothills of the Santa Lucia Mountains from Chorro Creek to Corral de Piedra Creek and in the San Luis Range from upper Prefumo Canyon to the Froom Ranch and the hills south of Broad Street.

Blochman's dudleya. Blochman's dudleya is a perennial herb located in Los Angeles, Orange, Ventura, Santa Barbara and San Luis Obispo Counties. This species is known from fewer than twenty occurrences in California and thrives in coastal bluff scrub, valley and foothill grassland and coastal scrub communities with rocky, clay or serpentinite soils (Hickman, 1993).

San Benico fritillary. San Benico fritillary is a perennial herb located in San Luis Obispo. This species lives in chaparral communities and serpentinite soils (Hickman, 1993). Vehicles and expansion of mining threaten the San Beniro fritillary.

Congdon's Zarplant. Congdon's rarplant is an annual herb that occurs primarily in seasonally wet grassland containing alkaline soils (Hickman, 1993). This subspecies is documented by the NDDB as occurring in grassland communities located within the Chorro and Los Osos Valleys, and near Laguna Lake. Due to the absence of suitable habitat, it is unlikely that this species occurs within the project site.

Jones Jayia, Jones layia is an annual here that is found in chaparral and grassland communities. Within these communities, this species occurs primarily on open serpendine or clay slopes (Hickman, 1993). Based on review of the NDDB, the closest documented occurrences of this species to the project site are along the bases of Cerro Romauldo and Bishog's Peak, approximately four and two miles away, respectively (NDDB, 1996).

Small-Cenved Jonatium is a spring-flowering perennial herb with a slender, woody rootstock. Leaves are produced through beginning in March or April and flowering generally begins in April and may-continue into June. The smooth green leaves have expanded, sheathing bases and blades divided into many segments. The small yellow flowers are borne in flavtopped clusters up to 5 inches across. The flattened, dry fruits are often tinged with purple and have membranous wings. The mature fruit clusters shatter during the summer as the leaves wither. By mid-summer the aboveground parts of the plants are completely dry. The old fruiting smlks may persist in identifiable condition during the drought season.

Lamatium parvifolium occurs from Santa Cruz County to Santa Barbara County in the western portion of the Coast Ranges, mostly on soils derived from serpentinite parent material. It is known from several sites in the San Luis Obispo area.

Adobe Yampah is a perennial herb that arises from a deeply buried tuber. In the spring, one or two basal leaves are produced from the tuber. The basal leaves often wither before the flower stalks are produced. Slender, erect flowering stems arise in late spring or early summer. The few leaves become progressively smaller and less divided up the stem. The small white flowers are borne in a flortopped cluster that is elevated above the leaves. After the

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perals have fallen, the ovaries develop into small, Zseeded dry fruits that sharter when the plants dry up in a summer. Old dry fruit clusters may occasionally be recognizable through the dry season.

Perideridia pringlei is known to occur in coastal locations from Monterey to Los Angeles counties and in the interior from Nevada to Kern counties. In San Luis Obispo County it has been documented from a few widely scattered locations--serpentinite soils in the vicinity of San Luis Obispo, from dry hills east of Creston, and the summit of the Caliente Range.

Adobe Societe. Adobe sanicle is a perennial herb that occurs within variety of communities including, chaparral, coastal prairie, wet meadows, and valley foothill grassland. Within these communities, the adobe sanicle occurs primarily on septendine-derived soils or soils with a high clay content (Skinner and Pavlik, 1994). This species is also often found along the margins of salt matches. Within the San Luis Obispo Quadrangle, the adobe sanicle is documented by the NDDB as occurring on slopes associated with Certo Romauido, approximately 4 miles away (NDDB, 1996).

Cuesta Pass checkerbloom, Cuesta Pass checkerbloom is a perennial herb known from only three occurrences on the Cuesta Ridge in Los Padres National Forest. This species lives in closed-cone conifer forest and serpendinite soils (Hickman, 1993).

Rayless ragwort, Senerio aphanactis octurs in vernally moist openings in low elevation coastal scrub on the mainland from Solano County south to northern Baja California, and on Santa Rosa, Santa Cruz, and Santa Catalina Islands. In San Luis Obispo County, it is known from the vicinity of San Luis Obispo where it occurs mostly on serpentinite-derived soils.

Special-Status Wildlife Species

Based on review of NDDB documentation, other pertinent literature, and results of the field surveys, the following specialstanus animals were determined to potentially occupy or frequent the campus and ranches. The species present are listed in Table 66. The habitats and known distributions of the special-status wildlife species identified associations of the special-status wildlife species.

identified as occurring on Cal Poly property are d	ibed below 100 + + + A	the special-status whome species
N TA	J. J. GCC MIN	n a ma pr
T IN TO MIN BOOK Public 6-6. Special Status Wildlife	with Post in the Ablication of	Cal Poly Lands
	- HALLAN M	AMAR
Contrain Name	Scientific Name	Status Q.N
a choos in		Federal/State
NW Monthe Botterfly OCCUMS heve		-/5SC
California Bed Kegged Frog OCCUVISION	Rana aurora drayronii	FT/SSC
The Spurioestern Fond Terrie Occurs hav	Clemmys marmorata pallida	-/SSC
	Oncorhynchus mykiss	FT/SSC-
	Falco columbarius	-/SSC
Ferruginous Mawk 2	Buteo regalis	-/S3C
Cooper's Hawk OCCUSS hase	Accipiter cooperi	-/SSC
Sharpshinned Hawk	Accipiter striatus	-/55C
Northern Harrier	Circus cyaneus	-/SSC
White-tailed Kite	Elanus caeruleus	-/SSC
Golden Hagle TNAAPS 1	Aquila chrysaeros	-/SSC
Willow Flycarcher O Z Z Z W	Himiden Hilli MQDO	Then a show and the
Burrowing Owl ? Charles Un	Athene emidularia	11-/SSC 1/ 01
Loggerhead Shrike Orcurs 900	Lanius lucovicianus	L/SSC
Tricolored Blackbird	Agelaius tricolor	-/SSC
Townsend's Western Bigeared Bar and VallideBar	Antrozous pallidus	-/SSC A
Many MAN Ball	N CITATO	and Think
top 7 - Shan		Max 1
Anster - Splices	A draw of a large of a	- will
	DRAFTEN	ROMENTAL IMPACT REPORT
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	ANONA MA	φ/ <del></del>
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Letter 37

### Cal Poly Master Plan

Monarch Butterfly, Overwintering habitat for the Monarch butterfly (Danaus pletippus) is considered sensitive by the CDFG. Monarch Butterfly typically use dense Eucalyprus stands for this purpose.

California Red Legged Frog. The California red legged frog (Runa aurora draytomii) prefers aquatic habitats with little or no flow, the presence of surface water to at least early June, surface water depths of at least 2.3 feer, and the presence of fairly sturdy underwater supports such as cartails [Federal Register 59(22): 4888]. The largest densities of this subspecies are typically associated with dense stands of overhanging with water and an internited fringe of sturdy emergent vegetation [Federal Register 59(22): 4888]. When the subspecies of the southwestern pond turtle (Clemmys mammata pullida) prefers quier waters of Southwestern Yond Turtle. The southwestern pond turtle (Clemmys mammata pullida) prefers quier waters of

Southwestern Vond Zurtle. The southwestern pond turtle (Clemmy mammate pullida) prefers quier waters of ponds, small lakes, streams, and marshes. It is found to inhabit the largest and deepest pools along streams with large amounts of basking sites, including fallen trees and boulders. Pond turtles also congregate in areas of streams with abundant underwater cover or places of escape beneath the water surface such as undercur banks, tangles of toots, and submerged logs (Hunt, 1994).

Southern Steelhead, Steelhead (Oncorhynchus mykus) are known as the anadromous form of rainbow trout. Steelhead have been documented as occurring in Stenner and Brizziolari Creeks (CDFG, 1973). Optimal habitar for steelhead can be generally characterized by clear, cool water with abundant instream and riparian cover and relatively stable stream flow (Raleigh et al., 1984)

Merlin. The merlin (Falce columbatice) is a winter migrant throughout the western portion of the state in grassland to woodland habituts, but does not breed in California (Audubon Society, 1984). The Merlin may occasionally occur on campus in Annual Grassland and riparian scrub habitats during the winter months.

Ferruginous Hawk. Wintering habitst for the ferruginous hawk (Buzo regalit) is considered sensitive by CDFO. The ferruginous hawk is an uncommon winter resident and migrant along the Coast Ranges and in San Luis Obispo County (Audubon Society, 1984). This species does breed in California. Foraging habitat for the Ferruginous hawk includes open, dry terrain such as grassland and scrub. This hawk may occasionally use Annual Grassland habitats on campus for foraging during the winter months.

Cooper's Mawk. The nesting liferage of the Cooper's hawk (Accipiter cooper) is considered sensitive by CDFG, [/ primarily due to the loss of riparian nesting habitat. Suitable nesting habitat is present along Stenner Creek. This species is an uncommon transient and winter visitor throughout most of San Luis Obispo County. Suitable foraging habitat occurs within Annual Grassland habitat: on campus.

Sharpshinned Mawk. The nesting lifestage of the sharp-shinned hawk (Accipiter striatus) is considered sensitive by CDFG. This species is an uncommon transient and winter visitor within San Luis Obispo County (Audubon Society, 1984). Winter foraging habitat for sharp-shinned hawk may occur within Annual Grassland.

Northern Harrier. The nesting lifestage of the northern harrier (Circus cyanew) is considered sensitive by CDFC. This species is a common transient and winter visitor within much of San Luis Obispo County (Audubon Society, 1984). The northern harrier nears on the ground near freshwater and salt marshes. Open areas, such as grasslands and constal scrub, provide foraging habitat for this species. Potential nesting habitat for the northern harrier occurs adjacent to the two reservoirs and suitable foraging habitat occurs in grassland communities.

White-tailed Kire. The nesting lifestage of the white-tailed kite (Elana caralea) is considered sensitive by CDFG. The White-tailed kire occurs in coastal and valley lowlands, usually associated with agricultural lands and open fields, throughout California. Nests are typically constructed in treetops with dense foliage. This species is considered an uncommon resident of most of San Luis Obispo County. Suitable foraging habitat occurs throughout Annual Grassland, while suitable nesting habitat may occur within cottonwoods and other tail trees.

Golden Eagle. The nesting lifestage and wintering habitat for the golden eagle (Aquila chryscetor) is considered sensitive by CDFG. This species is an uncommon, permanent resident and migrant throughout California and

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### Cal Poly Master Plan

San Luis Obispo County. Habitats include cak woodlands, coastal scrub communities, and open grassland. Nests are tonstructed on cliffs and in large trees in open areas. Suitable foraging habitar for the golden eagle occurs throughout Annual Grassland.

Willow Flycatcher. The nesting lifestage of the willow flycatchet (Empidemax traillii) is considered sensitive by CDFG. Within San Luis Obispo County, this species is documented as a rate but regular spring transient and an uncommon fall migrant (Audubon, 1984). Appropriate habitat for willow flycatcher breeding, in the form of

Alense willow-dominated riparian regetation, but a standard of the standard o resident of the interior valleys and plains of San Luis Obispo County, and an uncommon winter visitor to the coastul regions of the county (Audubon Society, 1984; Morro Group, 1994). This species is primarily associated with extensive grassland habitats and agricultural areas, and is typically dependent on existing burrows of other mammals.

Loggerhead Shrike. The loggerhead shrike (Lanius Indovicianus) occurs in lowlands and foothills throughout most of California. This species is considered a common resident of most of San Luis Obispo County (Audubon) Society, 1984). Preferred habitats for loggerhead shrike include woodland, chaparral, coastal sage scrub and grassland with perches such as fences, posts, and scattered trees. This species has been observed foraging on campus.

Tricolored Blackbird. The tricolored blackbird (Agelaius orcolor) occurs in flocks within grasslands and freshwater marsh habitats containing carrails and culles (Robbins et al., 1983). This species is considered an uncommon resident of San Luis Obispo County (Audubon Society, 1984). Tricolored blackbirds have been observed near Shepard and Smith Reservoirs.

Townsend's Western Bigeared Bat and Fallid Bat. The Townsend's western bigeared bat (Plecous townsendii tounsendii) and pallid bat (Antrozous pallidus) live in a variety of communities throughout California, including coastal conifer and broad-leaved forests, oak and conifer woodlands, and grasslands. Both Townsend's Western of forage in grassland habitats. Suitable big-eared bat and pallid bat typically roost in caves and structuresforaging habitat for these was occurs within grassland habitats.

VMD8

Regulations and agencies governing biological resources in the campus area are described below

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ulatory Secting

Clean Water Act of 1977. Regulatory protection for water resources throughout the United States is under the jurisdiction of the Army Corps of Engineers (ACOE). Section 404 of the Clean Water Act prohibits the discharge of dredged or fill material into waters of the United States without formal consent from the ACOE Delineation of wetlands and other waters of the United States is required to determine acreage affected by dreage ( spoil or fill disposal. Impacts to biological resources are assessed as part of the permit process by the U.S. Fish and Wildlife Service. Policies relating to the loss of wetlands generally stress the need to compensate for wedan acreage losses by creating wetlands from non-wetland habitat on at least an acre-for-acre basis.

Section 7 or Section 10 of the United States Endangered Species Act. The United States Endangered Species Act provides legislation to protect federally listed plant and animal species. Impacts to listed species resulting  $\chi$ from the implementation of a project require that the responsible agency consult the United States Fish and Wildlife Service (USWFS). Formal consultations must take place with the USFWS pursuant to Section 10 of the Endangered Species Act, with the USFWS then making a determination as to the extent of impact to a particular species. If the USFWS determines that impacts to a species would likely occur, alternatives and measures to avoid or reduce impacts must be identified. Section 7 also requires determination of environmental impacts, and thorough biological assessment. Section 7 applies to projects in which a federal agency is involved, either through financial support or project leadership.

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### Letter 37 Dr. Roger Gambs Biology Department

### December, 2000

**37-1** Dr Gambs was requested to comment on the wildlife portion of the administrative draft of the EIR. He identified several important omissions and errors in this early version of the document.

**<u>Response</u>** Corrections were made to the EIR to incorporate many if not all of Dr. Gambs comments. These were included in the public review Draft EIR and therefore need not be elaborated here.

To Whom It May Concern: I would like to make the following Comments regarding the Cal Poly Master Plan:

I hope you will take these into consideration When revising the current draft.

Sincerely,

FROM: Name: Sarah Brown Address: 411 Foothill #5 San Luis D bispo, CA. 93405

TO: B. Lowe Facilities Planning Cal Poly University San Luis Obispo, CA 93407

# Eomment

In dealing w/ ~ Such a confined space to build the new dorms it seems rather silly to build "student opartments," That do not use space efficiently. In an attempt to use as little extra land as possible, it seems more onvironmentally "smart" to create dormsthat pack students in an high rise style of buildings. This same line of thought should be followed by additional buildings on campus ... don't build any more one story buildings. Build up inskad of out!

### Ms. Sarah Brown

### **December 4, 2000**

**38-1** Commenter suggests development on campus should go "up and not out" utilizing taller buildings instead of greater land area.

**<u>Response</u>** The Master Plan has been designed to maintain a compact instructional core to reduce the need to "sprawl" into undeveloped areas of campus, or into Outdoor Teaching and Learning areas. See specific policies and discussion in the Outdoor Teaching and Learning chapter. See Constraints and Opportunities analysis.

39-1

Public Comment on 11/30/00 by:

Scott Cooke, resident and homeowner 3490 Sequoia St SLO, CA 93401

RE: Water Supply

As a 40-year resident of SLO, I have seen an adequate water supply for the City of SLO become so crucial during several drought seasons that consumption had to be controlled by the city. The City Council is currently struggling with how to address the fact that demand will exceed supply again during these unpredictable periods. Currently there is no construction project <u>underway</u> to increase the supply.

Since Cal Poly is under these same constraints, the Environmental Impact Report must, in my personal opinion, carefully address in a detailed, documented manner the adequacy of supplies to cover the student, faculty, staff, and ancillary impacts to our local water supply. This high priority issue for the City of SLO should be re-visited by Cal Poly before approving this Master Plan (Plan). The Plan should document the campus actual steps to addressing a major drought.

The Plan indicates the most recent usage figure of 1,228 AF/Y (1997-1998). With the plan's usage estimate for the Sports Complex at 129 AF/Y, a total of 1,357 AF/Y would have been reached back then which essentially equals the campus allotment of 1,384 AF/Y from Whale Rock Dam. These figures would suggest the limit is already being approached.

I fully support the need for Cal Poly to increase its student enrollment, but I do not have a background in water supply management to allow me to adequately address this topic. I, therefore, ask that you work closely with the City's staff on this specific issue. Also, ensure that the Plan includes a timeline for bringing on board additional water supplies (e.g. wastewater for Sports Complex) before the enrollment increases occur, or Cal Poly will most assuredly suffer an image of not being a good neighbor when water supply problems arise.

Thanks for your interest in the feedback.

Letter 39 Scott Cooke

### November 30, 2000

**39-1** Commenter describes in detail concerns regarding Cal Poly's water supply especially during drought and vis-à-vis the City's water supply.

**Response** Cal Poly derives its water from groundwater sources and through surface water entitlements. For domestic (non-agricultural) use, the University owns entitlement to 33% of the water in Whale Rock Reservoir or approximately 13,707 acre-feet. This amount is not available for continuous consumption because a certain level of water must be maintained in the reservoir to avoid a deficit.

The City of San Luis Obispo, which shares the reservoir with Cal Poly, has developed a computer model that assigns allowable yearly withdrawals based on worst-case weather cycle conditions. The model shows that during the 27-year cycle from 1942-1969, approximately 1,384 acre-feet per year (AF/Y) would have been available to the University, and would have drained Cal Poly's allocation during that 27-year period. This allocation does not account for losses due to sedimentation of the reservoir over time; however, this loss of capacity is relatively minor (estimated 2 AF/Y) and has not been documented. This remains a very conservative lower limit on consumption. The City of San Luis Obispo's water use from Whale Rock regularly exceeds their worst-case allocation.

Water from Whale Rock reservoir is treated at the Stenner Canyon water treatment facility owned and operated by the City of San Luis Obispo. A portion of the entitlement is diverted prior to treatment for use in landscape and turf irrigation. Peak treatment capacity has been recently expanded to 16 million gallons per day (mgd). Since water is conveyed to the University through the City's treatment plant and distribution system, the actual source of drinking water arriving at the campus may be either Whale Rock Reservoir or Salinas Reservoir. No matter the source, Cal Poly's allotment is still based upon its Whale Rock share.

Agricultural operations on campus derive their water from a number of sources, depending on location. Untreated Whale Rock water is supplied to the Sports Complex, and all agricultural operations east of Mount Bishop Road, via the reservoir system on campus. Agricultural operations west of Mount Bishop Road are supplied by groundwater, namely two shallow wells fed by Stenner Creek. Agricultural operations on the Chorro Creek watershed ranches are supplied by three groundwater wells. The University's understanding and documentation of their water supply is limited to their allocation from Whale Rock; none of the groundwater supplies have been documented.

The Sports Complex EIR placed total agricultural allocations at 900 AF/Y because it assumed 449 AF.Y of Whale Rock water was allocated specifically for irrigation and 450 AF/Y was available from other sources. Cal Poly does not currently allocate Whale Rock water in this fashion. Therefore, domestic and agricultural water users compete equally for Whale Rock water. Other sources, as mentioned above, have not been documented, although the well have never run dry or hampered agricultural operations. For the purposes of this EIR, analysis is limited to impacts on the Whale Rock supply, as it is the only known quantity. It is strongly suggested that Cal Poly study their total agricultural water supply prior to expansion or intensification of irrigated agricultural operations.

In recent years, use of Whale Rock water has been split almost equally between agricultural and domestic users. The following table illustrates this division.

Ye	Total	Percentage/AF	Percentage/AF
ar	AF	Domestic	Agricultural
1999-2000	1,130	52%/587	48%/544
1998-1999	918	57%/525	43%/393
1997-1998	824	63%/552	37%/272
Sourc	e: Ed Johnson, Ca	al Poly Facilities Planning	

 Table 24.
 Use of Water From Whale Rock

Current (2000) domestic water use by the University (for non-agricultural purposes) is 587 AF/Y, and agricultural use is currently 544 AF/Y, including the sports complex. The housing project will add 56 AF/Y, for a total of 1,187 AF/Y. Water demand varies considerably; records have shown total consumption as high as 1,130 AF/Y (1999-2000), and as low as 792 AF/Y (1992-1993)6. The year 1999-2000 is considered the worst-case scenario for the purposes of this analysis.

Cal Poly and the City of San Luis Obispo are currently working on a project to recycle wastewater for irrigation of the Sports Complex. The development of this system would reduce demands on the domestic system, which is currently irrigating the Complex at a rate of approximately 73 AF/Y.

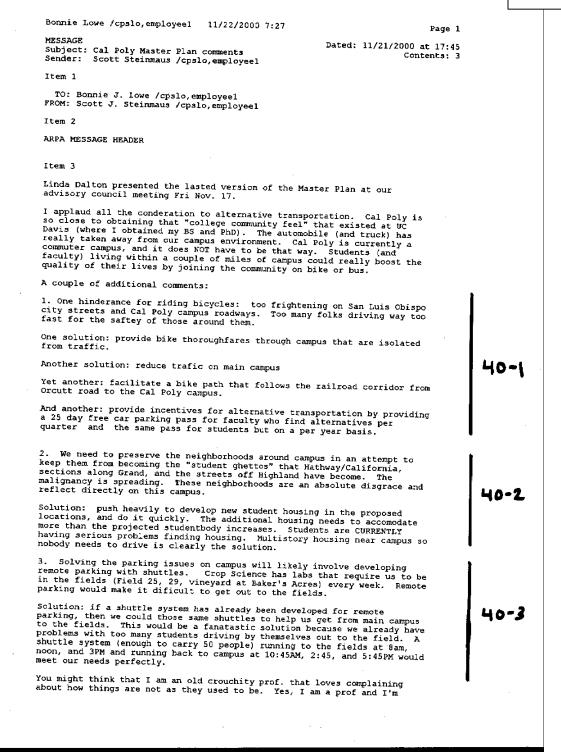
The Master Plan is expected to result in an additional 3,000 student residents and 465 additional faculty and staff. The Plan will also result in approximately eleven acres of additional recreational fields, and approximately nine acres of green space (non-athletic turf). Water demand factors from apartment-style housing facilities at the University of California Santa Barbara campus were used to project water demand in the residence halls. City and County water demand factors were used to calculate staff (office) demand. Water demand for landscape irrigation was based on current per acre usage at the University. Total projected demand, compared with existing use and the University's total domestic Whale Rock water allocation is summarized in Table 6.25 below.

⁶ These last two figures were adjusted to include the anticipated 129 AF/Y from the Sports Complex, which was under construction at the time of this analysis, and the Student Housing Project, which was being permitted.

Use	Number	Water Demand Factor	Total Water Usage (AF/Y)
Current Usage (Agricultural,	1,130		
Domestic, and Sports Complex)			
Student Housing Project	56		
Projected Usage under the Master P	lan		
Future Resident Students	3,000	0.09 AF/Y	263
(Apartments, Landscaping +	persons		
Laundry)	-		
Future Staff/Faculty	465	20 gpd	10.4
	persons		
Future Recreation Fields	11 acres	1.4 AF/yr/acre	15.4
Future Greenspace (Lawns)	9 acres	1.4 AF/yr/acre	12.6
Future Facilities (Off campus –			70
estimate)			
Total Master Plan Demand	1,557		·
Total (Worst-case) Supply	1,384		
Remaining Water Entitlement	(173)		
(Deficit)			
Source: Ed Johnson, Utilities	Coordinator,	Cal Poly, 2000 and C	ity of San Luis Obispo
Water Demand Factors			

 Table 6.25: Master Plan (Current + Future) Estimated Whale Rock Water Demand

City of San Luis water supply models show that during worst-case weather cycle conditions, Cal Poly demand would exceed supply. During normal rain years, it is likely that considerably more water would be available to Cal Poly



Bonnie Lowe /cpslo,employeel 11/22/2000 7:27

Page 2

crouchity but I am in my 30's. I have seen how college campuses have done away with a reliance on the automobile and how they have addressed their housing needs, and Cal Poly is not one of them...BUT IT CAN BE. I simply want to improve the quality of life for everybody on the Cal Poly campus.

Dr. Scott J. Steinmaus Crop Science Department California Polytechnic State University San Luis Obispo, CA 93407 (805)756-5142 office ssteinma@calpoly.edu e-mail Letter 40 Dr. Robert Steinmaus Crop Sciences

### November 21, 2000

**40-1** Commenter raises concerns for the ability to commute via bicycle to campus. He notes specifically that city streets and campus ways are unsafe for bicycles. He suggests bike thoroughfares on campus, reducing traffic on campus, a bike path along the railroad corridor, and alternative transportation incentives.

**Response** Detailed bicycle planning will be included in the implementation programs of the Master Plan.

**40-2** Commenter suggests the need to prevent "student ghettos" near campus and offers that additional housing on campus is the solution.

**Response** Cal Poly is currently developing 800 new beds on campus for current demand. Cal Poly will develop an additional 3,000 beds on campus to house all new enrollment. Cal Poly is in planning for the development of approximately 200-250 faculty and staff housing units to be located on Highway 1 just off campus.

**40-3** Commenter suggests the utility of campus shuttles extending to aid Crop Science students accessing relatively remote labs.

**Response** A shuttle program has been recognized by the College of Agriculture as a positive step towards improving the efficiency and convenience of their course offerings.

MESSAGE			Dated: 11/22/2000 at 11	:31
		Pedestrian Friendly. 5,student2	Contents	
Item 1				
TO: Bonnie J.	. Lowe /cpslo,e	mployeel		
Item 2				
Bonnie,				
This is from a	n e-mail i reci	ieved from Simon Roberts	haw.	
I am incl: best to shut do have to be relo could be quite	ined to argue t own. I realize ocated, and a s nice to	that connects perimeter that the road by campus a e that those temporary p stop sign could be remov d make it pedestrian fri	market would be the arking spots would ed Also, it	41-
	t into a garder	n, or hold a campus farm	er's market there on	
that this road	this road, shou closure would	see a lot of uld it be closed to thru also be consistent with ion of pedestrian friend	what I know of the	
	· ·			
·	· ·			
	· · ·			

### Simon Robertshaw

### November 22, 2000

**41-1** Commenter suggests that Via Carta from Highland to North Perimeter should be closed to all but pedestrians. He further suggests that the area be made into a garden and hold a Farmer's Market. Commenter is intrigued by the notion of "pedestrian friendly."

**Response** The Master Plan (see Campus Pedestrian System in the Circulation section of chapter five) recommends just such a treatment of Via Carta from the Rec Center to Highland Drive. The specifics of the design of this pedestrian promenade will be part of the implementation phase of the Master Plan. See text addition on p. 182.

MESSAGE	Dated: 12/6/2000 at	12.29
Subject: FW: Comments on Master Plan Creator: Linda Dalton /cpslo,employeel	Conten	
Item 1		
TO: Bonnie J. Lowe /cpslo,employee1		
Item 2		
Original Message From: Stephen Kaminaka Sent: Monday, December 04, 2000 1:18 PM To: Linda C. Dalton: rkitamur Subject: Comments on Master Plan		
Bob, Linda:		
These are a couple of thoughts that I had about t		
A. Regarding vehicle access to the Instructional		
(1) vehicle access to the instructional core (esp is frequently needed by outside vendors, employer for setup for special events, conferences, worksh When you have 50 or a hundred employers trying t brochures, etc. at the UU, it's a real zoo. The redesigned to allow easier vehiclular access (in a interior auditorium areas and to avoid conflicts traffic along Inner and Outer Perimeter Road.	s, and campus people ops, career days, etc. o unload booths, UU needs to be and out to the	42-1
(2) specific mention should be made about the new Arch. Engineering, and the College of Engineering labs by large Tractor/Trailer vehicles. These vei more maneuvering room than your usual service and The above comments relate to the following sect: EMERCENCY, AND ADA ACCESS (page 174), and to the su (pages 155-159).	for access to their hicles require much emergency vehicles.	42-2
B. COST ESTIMATES FOR THE MASTER PLAN (1) It seems like Chancellor Reed would like some along with the Master Plan. Some others I have sy think that it would be a good idea. Would some order-of-magnitude type estimates for defined early phases of the Master Plan be a reast as part of the Master Plan? (I don't know what yo worked up in this regard.)	poken to also seem to r some of the better	42-3
Thanks, Steve Kaminaka BioResource & Agricultural Engineering Dept. Cal Poly		
Phone 756-2658		
· · · · · · · · · · · · · · · · · · ·		

#### Letter 42 Dr. Stephen Kaminaka Biological Resources/Agriculture Engineering

#### December, 2000

**42-1** Commenter suggests the need for improved vehicle access to the campus core for the purpose of deliveries and special events, especially at the University Union.

**Response** While the Master Plan proposes the closing of Perimeter to standard automobile traffic, all interior ways will be designed to facilitate delivery and safety vehicles.

**42-2** Commenter notes the need for special access consideration for BRAE, Architecture and Engineering for large vehicle.

**Response** An addition to the text has been made to clarify these access considerations. The design of the access will occur during the implementation phase (p. 117).

**43-3** Commenter suggests the need for cost estimates to be included in the Master Plan for its recommended components.

**<u>Response</u>** Cost estimates are normally developed as part of the campus capital improvement program. This is considered an aspect of Master Plan implementation.

43-3

Responses to Master Plan and Draft EIR November 19 2000-Steven Marx

I believe the Master Plan is an excellent document overall, but I think there is still much in it that needs to be disseminated, discussed and decided upon.

I. Deadline.

A. I believe that December 5 is too tight a deadline for closing off community input on a document that lays out a comprehensive blueprint that's expected to work for 20 years. As the author of the introduction eloquently states, this planning process is the University's own opportunity to learn by doing (p.1). It's too early to close that off.

II. Updating and revising

A. Further along these lines, where is a section outlining how the plan will be updated and revised on a regular basis?

III. The Plan of the Plan

A. I think the document needs modifications to rationalize its structure and make "way-finding" easier.

1. What is the special function of Chapter 2? It appears that material there belongs in chapter 1 or Chapter 5

2. Chapter 5

a) Title—"Physical Plan Elements"—doesn't tell me what this chapter is about, though subtitle does.

(1) "Physical" doesn't include the services and support element

b) Not till I get here do I discover that that the first four chapters of the Master Plan are really a prelude to chapter 5, which is the actual plan presented with its own subdivisions or "elements." Perhaps there should be three sections: Introduction, Plan, EIR c) Use of terms "element" and "plan component" on p. 63 are confusing 43-3 d) "University Land Uses" seems to be a new introduction rather than one of several elements, and it has its own introduction e) "Existing conditions" was title of chapter 4-now it appears as a heading in all the elements f) The heading, "Issues," in all the elements of Chapter 5 seems to signify challenges or problems rather than a pro-con question. g) How do "Principles" here relate to Principles on p. 4? IV. Specifics A. p. 3 Why is the summary called "Executive" Summary? Are non-executives not supposed to read it? B. p. 4 on Principles 1. "The following statements..." What follow are not statements but attributes 43-4 2. I'd like to add a principle: "Build nothing ugly." Thermal tower for instance. Lets act like one of the best colleges in the country . C. p. 4 Wording on principle 5-Substitute "A socially responsible university that meets the needs of the public," for parallelism and distinction from environmentally responsible in principle 6 D. p. 4 principle 6 "... high regard for biodiversity, energy conservation and SUSTAINABLE development" 1. Quote Executive Order of Governor D-16-00 a) Whereas a building's energy water and waste disposal costs are computed over a twenty five year period, or for the life of the building, and far exceed the first cost of design and construction; and



b) Whereas an encoducity state for the first of the	
b) Whereas an opportunity exists for the State of california to foster continued economic growth and provide environmental leadership by incorporating sustainable practises into the state capital outlay and buildingmanagement processes; and	
c) Whereas, sustainable building practises utilize nergy, water and materials efficiently throughout the building life cycle; enhance indoor air quality; improve employee health comfort and prpoductivity; incorporate environmentally preferable products; and thereby substantailly reduce the costs and environmental impacts associated with long-term building operations, without compromising building performance or the needs of future generations; and	
d) Whereas the widespread adoption of sustainable building principles would result in significant long-term benefits to the California environment, including reducitons in smog generation, runoff of water pollutants to surface and groundwater sources, the demand for energy water and sewage treatment services and the fiscal and evironmental impacts resulting from the expansion of thes infrastructures; and	43-4
e) Whereas it is critical that my administration provide leadership to both the private and public sectors in the sustainable building arena	
f) I establish a state sustainable building goal	
g)to site, design, deconstruct, construct, renovate, operate, and maintain state buildings that are models of energy, water and materials efficiency; while providing healthy, productive and comfortable indoor environments	
h) such an approach treats the entire building as one system and recognizes that individual building features, such as lighting, windows, heating and cooling systems, or control systems are not stand-along systems.	
E. p. 12 Correct website address for task force reports on: http://www.facilities.calpoly.edu/Facilities_Planning/FPDB/mp/task_forces.htm	43-5
F. p. 58 Exhibit 4.10—why is Dairy and Poultry unit area left white?	43-6
G. p. 63 Why no mention of Valencia property in Santa Cruz—this is relevant to stewardship as well as a teaching and learning resource.	43-7

1. What are other lands managed by Foundation?	
H. p. 65 Heading "Balance" doesn't elaborate the idea of balance, but states primary use is instructional	43-8
I. p. 86 Outdoor Teaching and Learning	
1. Provide more specification of the teaching and learning and research functions using these facilities—biology classes, NRM classes, ROTC classes, English class—new for 2001—Ecolit: Reading and Writing the Landscape, Art Classes, and interdisciplinary course new for 2002, Cal Poly Land	43-9
J. p.127 Affordable quality of Residential communities	
1. What about cost? Will the rents follow SLO market? Will scholarship programs provide adequate help for low income students? Will rent pricing be high enough to finance subsidies?	42-10
2. Danger of not filling upper division residences. Make beer and wine available for 21 years olds; take on the burden of checking ID and of instituting alcohol abuse and awareness programs on campus—as at Stanford or Cal. You couldn't have a worse alcohol situation than on this "dry" campus	43-10
K. p. 142 Recreation	
1. Heery plan referenced throughout, but not described. Why hide the ball? Heery plan is and is not superseded. Master Plan, Heery plan, Sports complex plan are confused.	43-11
2. Who decides that additional 8000 seat gym is needed in addition to Mott Gym and Rec Center?	
3. Survey students, faculty and community to see how many want a new football stadium and how many want more maintained trails. Do cost and benefit analysis of passive recreation using natural facilities vs. yet more sports palaces.	43-12
L. p. 150 Public Facilities and Utilities	
1. What does this mean? "the campus is diverting UP TO 50% of its waste from the landfill by recycling, except for waste from construction projects. The campus is presently being required to divert 50% of its waste from the landfills."	43-13

alleged toxic waste runoff. Check toxic wastes coming from the dump on north side of Brizzolari creek below bull test area	43
M. p. 154 Thermal Energy Storage Tank should not be hidden as an eyesore bu designed as a landmark Centennial Clock Tower, highlighting the university's commitment to sustainable technology and architectural distinction. Design should be chosen from a competition. Sandra Lakeman, professor of Architecture, expert on towers and mother and collaborator of prize winning tower designer for the university of Utah should be consultant for this project.	^т 43
N. p. 181 Parking	•
1. What does this mean: "While Cal Poly has the most successful program for reducing single occupancy vehicles, there is still a large demand for parking on campus." P. 181	43
O. p. 193 Ancillary activities	
1. Introduction—the whole thing sounds vague and defensive. The second sentence doesn't make sense.	43
2. Good not to site any on Western Ranches	
P. p. 194 "Principles for locating specific ancillary facilities should be the sam as for land use in generalthat is relationship to University's academic mission, environmental suitability, compatibility between adjacent uses"	•
1. Goldtree plan violates principles of Natural Environment element	
a) Stewardship—restore and protect	
b) Understand—inventory and study	43
c) Conservation and Sustainability	
cy conservation and sustainability	
d) Biodiversity	1
d) Biodiversity	

2. This area contains three well developed stockponds and riparian areas and an oak woodland riparian area not shown on the map. It's probably a wildlife corridor between the Morros and Cuesta Ridge. I saw a herd of deer there one day and nine raptors on another.

3. A letter from the Biology Department in June 2000 signed by VL Holland specifies many reasons why not to develop this land for non teaching-learning functions.

4. It's leapfrog development.

Q. p. 195 "Access could be provided from Highway 1 perhaps from an improved intersection near the site or at Stenner Creek Road) and/or internally from Mt. Bishop Road."

1. Very bad to increase traffic internally through agricultural and Stenner creek areas

R. p. 195 "the area is not used heavily by the College of Agriculture"

1. It's been newly fenced by Professor Rutherford as part of his sheep and range managment program which was recently displaced from the site of the sports complex. 43-20

13-19

More responses to Master Plan and Draft EIR November 26 2000-Steven Marx	
This is additional to my comments dated November 19 2000.	
I believe that the Master Plan document and procedures signal great improvements in campus planning. But I'd like to reiterate that the deadline for comment on this Master Plan and EIR is too tight.	
The plan is so comprehensive and raises so many issues that it is not reasonable to experimentation interested members of the community to digest and consider them all within the six-we period allotted, especially since that period is in the middle of the Fall Quarter, the busiest time of the year for faculty. The first public student discussion of the plan takes place on November 28, a week before the deadline, and the plan will be presented to the San Luis City Council on December 4, the announced closing date itself. Such a tight deadline does not confirm the stated principle of welcoming and being responsible to community input.	ek
Ample time was allowed for initial reports from various Task Forces, including the Natural Environment Task Force, which I chaired. The same people who contributed ideas and suggestions in the preliminary stage need more time to study, evaluate and provide alternatives to what the Plan consultants and senior administrators made of thos reports. The Task Force recommendations rejected by the drafters of the Plan should al be listed, and reasons should be provided for those rejections. Also the comments received by the planning committee and responses to them should be included as an appendix to the plan/EIR.	e so
We are told that the Master Plan is a living, changing document whose projections are open to further input and modification. If this is the case, the Plan should include procedures for future revisions that guarantee such flexibility and responsiveness.	
One example of the need for further study is the locations of student residences. As a result of feedback to the planning team's original idea of placing 540 units in the Brizzolara Creek floodplain, this provision was modified to the Creek restoration plan and the relocation of those units elsewhere, a crucial improvement. The present versior of the plan needs further modification to protect the outdoor teaching and learning laboratories and the environmental assets of Brizzolara Creek which are still unnecessarily threatened.	
Units H-2 and H-3 (p. 130) are sited too close to the north bank of the creek and to the mouth of Poly Canyon. Building residences here extends the central campus into what was previously an agricultural and biological study area. Lack of adequate buffers in these locations will adversely affect wildlife using the creek corridor, especially in its future enhanced condition. Major impacts will be produced by from lights, noise and the 900 residents whose primary pedestrian access will be across the creek to the core	. 43

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campus. In addition, the primary drainage of the slopes on the site of these units goes directly into the creek.

I support the alternative of siting the 900 beds of H-2 and H-3 residences in buildings located on the large surface parking lot areas that still remain in the plan, despite its stated principle of eliminating one-level surface parking. Parking garages can be built under the dorms at as many levels as are deemed necessary. These surface parking areas are not labelled in the plan, so I will describe their location on the map on p. xiii.

- 1. South of Drumm reservoir
- 2. East of Via Carta and south of the Ag Pavilion
- 3. West of Via Carta, adjoining sports complex
- 4. West of PS3
- 5. East of Q
- 6. West of K
- 7. Southwest of Grand Ave, across from Yosemite Hall

By sight on the map, the square footage of these surface parking lots exceeds the square footage of the H2 and H-3 residence complexes. It's not good planning to sacrifice environmentally sensitive areas for more parking lots.

Only after all possibilities of new residential development in less sensitive areas of the central campus are exhausted should the H-1 complex be developed. Its capacity could be somewhat enlarged with less impact on the creek. The H-1 area drains less steeply and down toward Drum Reservoir and it is adequately buffered from the creek. Pedestrian access to the central campus from the H-1 area can be directed down toward Via Carta, already heavy with traffic.

These infill modifications are preferable to sprawl into environmentally sensitive areas which are used as teaching and learning facilities. They will render the Master Plan more consistent with its own stated principles.

43-23

Letter 43 Dr. Steven Marx

#### November 19 and November 26, 2000

**43-1** Commenter requests more time for deliberation on the Master Plan.

**Response** Cal Poly's Master Plan team has been preparing the Master Plan for the past three years. After public meetings during the Fall and Winter quarters of the 1998-1999 academic year, over one hundred members of the campus and community participated in task forces during Spring 1999 to develop the guiding principles for the plan. The plan was first presented in draft form to the public in the Spring of 2000. Numerous press releases and public meetings accompanied the release of this early version of the plan. The formal plan and Draft EIR were presented to the community in the Fall of 2000. The March date for the Board of Trustees presentation has been presented to the public for over three years. For further information, please see discussion of process in Introduction and Task Forces in Chapter 2.

**43-2** Commenter suggests need for a section on how plan will be updated.

**Response** A section on plan monitoring, review and revision has been added to Chapter 7 explaining the role of the Campus Planning Committee and California State University system (p. 351).

**43-3** Commenter raises questions and suggestions about organization and chapter titles.

**Response** Organization retained, but text clarified. Key changes include the following: Addition of a section in Chapter 1 explaining the organization of the document; also within each element, the section labeled "Existing Conditions" and Issues has been relabeled as "Background and Issues" to avoid confusion with Chapter 4, Existing Conditions.

**43-4** Commenter suggests editing of principles in the Introduction.

**<u>Response</u>** Text changes - statements now identified as Values to distinguish master plan principles in subsequent chapters.

**43-5** Commenter indicates need to correct website address.

**Response** Text correction has been made (p. 14).

**43-6** Commenter seeks explanation of white space around Dairy and Poultry units on Exhibit 4.10.

**<u>Response</u>** Map has been relabeled as "Selected Constraints Summary." Many white areas are simply not constrained by the environmental features shown on this exhibit.

**43-7** Commenter asks for reference to Valencia Creek property in Santa Cruz County.

**Response** As the Valencia Creek properties are not used for direct support of instruction, they are noted in the footnote at the beginning of the University Land Uses element (p. 67).

**43-8** Commenter requests clarification of use of the term "Balance."

**Response** The text has been clarified as follows: "This principle recognizes that *all uses* of Cal Poly's lands must be balanced in support of the University's academic mission 65).

**43-9** Commenter seeks elaboration on outdoor teaching and learning activities.

**Response** Additional text provides broad language defining outdoor teaching and learning in the introduction to this element: "Specific courses in these and other colleges, including Liberal Arts, are frequently designed to focus on different aspects of campus lands" (p. 90). As the course numbers and titles for specific course applications change over time, a list at that level of detail would not be appropriate in the Master Plan.

**43-10** Commenter expresses concerns about the affordability and marketability of student residences.

**Response** See new discussion of Market Analysis added to Residential Communities element. "Cal Poly will review and revise these market studies to inform each phase of Master Plan housing development and enrollment growth" (p. 136).

**43-11** Commenter asks Cal poly to clarify references to Heery Sports Facilities Master Plan.

**Response** A new note at the beginning of the Recreation element explains: "The Heery Sports Facilities Master Plan was prepared in 1996 as the basis for the development of the Sports Complex north of Brizzolara Creek. The Heery Plan included a range of recommendations. Cal Poly did not adopt the entire plan, but rather used it as the basis for the Sports Complex. The campus Master Plan also referred to the Heery analysis but supercedes the Heery Plan" (p. 145).

**43-12** Commenter questions need for additional sports facilities; calls for more analysis.

**Response** New text has been added explaining that, "As the Master Plan is implemented, the campus, and ASI in particular, will review and refine the kinds of recreational facilities needed to serve students, faculty and staff" (p. 150).

**43-13** Commenter seeks clarification of discussion of recycling

**Response** Confusing language has been deleted (p. 158).

**43-14** Commenter calls for a discussion of environmental condition of quarry area.

**Response** The red rock quarry is not proposed to be modified under the Master Plan. Nevertheless, the campus will continue to work with the Regional Water Quality Control Board on this and other sites on campus.

**43-15** Commenter suggests making TES a landmark.

**<u>Response</u>** Addition to Invisibility principle in Public Facilities and Utilities element allows for "environmental aesthetic that balances beauty and function" (p. 161).

**43-16** Commenter asks for clarification of statement about vehicle trip reduction.

**Response** Cal Poly does have the most successful vehicle reduction program among CSU campuses; however, demand for parking continues. Text has been clarified to this effect (p. 191).

43-17 Commenter finds discussion of Ancillary Activities "vague and defensive."

**<u>Response</u>** The introduction to this element has been simplified. Then, the Plan Components section contains an amplified discussion of likely ancillary facilities (pp. 204-206).

**43-18** Commenter claims that proposed facilities near Goldtree violate environmental suitability location principles.

**Response** The Environmental Suitability and Sustainability principle in the Land Use element (p. 69) calls for "limiting future development to those areas least affected by regulatory and/or high cost environmental constraints." Compared with other areas on the Main Campus and ranches in the San Luis Obispo Creek and Chorro Creek watersheds, the Goldtree area is relatively well-suited as a satellite location. (See the discussion in Chapter 4 regarding Constraints and Opportunities as well.)

**43-19** Commenter expresses concerns about access to Goldtree area.

**Response** At such a time as detailed proposals are developed, site planning and feasibility analysis will provide more detailed evaluation of access options.

**43-20** Commenter indicates use of Goldtree area by sheep operations.

**Response** See text addition in Outdoor Teaching and Learning element (p. 93).

**43-21** Commenter suggests that comments on Preliminary Draft and responses be appended.

**<u>Response</u>** The Master Plan and FEIR will include all comments on the October 10 publication, plus a matrix showing changes from both the May 1 and October 10 publications.

**43-22** Commenter expresses continuing concerns about student housing north of Brizzolara Creek

**Response** The DEIR addresses impacts. Housing units are conceptual, but in general are located 150 feet or more from the channel, a greater distance than existing feedlots. Drainage mitigation is required; pedestrian and light control is required; refer to the text for additional mitigation and analysis.

**43-23** Commenter asks for consideration of more intense student housing, including use of existing parking lots (specific sites listed).

**Response** See responses to Ashley (letter 34). The commenter is referred to the housing alternatives analysis prepared in the EIR that directs housing siting and design. The goals of the Master Plan are to locate housing within proximity to the campus instructional core and create a community for student living without compromising the function.

44-S

Dear Mr. Lowe,

FACILITIES PLANNING My name is Tyson Carroll and currently a student here at Cal Poly in the Landscape Architecture Dept. During the course of the quarter we have had a site analysis class, of which our site was the area located by the reservoir. During this process of analysis we have continued to ask ourselves what is our sitc eventually going to be used as and we keep coming back to dorms or classroom expansion. But when we received a copy of the Cal Poly Master Plan we were shocked to see the dorms being placed right at the mouth of Poly Canyon, when we researched it even further we found that there has not been any environmental impact report to state out the dorms and future parking will have on the creek? Why have they encouraged more parking instead of pushing for more mass transit? Why is it that we are building out instead of up? Instead of increasing enrollment why not limit it encouraging transfers? These are questions and concerns that I have which have not been razed or been even mentioned to the students or the public.

> Sincerely, Tyson Carroll

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NOVEMBER 27, 2000

Monday,

#### **BIO | THE TRIBUNE**

SAN LUIS OBISPO COUNTY, CALIF.

## VIEWPOINT

# Poly's plan for housing

By LINDA C. DALFON Yen If you have not read Cal EPoly's proposed campus Master Plan — in print, on CD or on the Web — I am sure you have at least heard about it. In 'short, it is an ef-fort to present the University's vi-sion for itself during the next 20 years. It addresses a wide variety of issues, not the least of which are en-rollment growth and housing. I mention enrollment growth

Issues, not use task of which accumpliment growth and housing. I mention exrollment growth and housing because these are the two issues that the San Luis Obis-po community is most concerned with — and for good reason. Let's be candid there is a shortage of suitable housing in our communi-ty and it seems to be getting worse. We hear stories about stu-dents engaged in bidding wars for available apartments, students crowtice into aff-campus homes and apartments, and companies looking to San Luis Obispo as a possible location voicing concerns about the lack of affordable housing in our area.

ing in our area. While Cal Poly's student popula While Cal Poly's student popula-tion makes a very real impact on San Luis Obispo County, it is not the only factor in the bousing shortage equation. Cal Poly's en-rollment today is about 900 stu-dents less than in fall 1990, when it reached 17,758 students. Dur-ing the 1990s, Cal Poly deliberate by cut enrollment has been slower than but of the California State University system California State University system Sei our present enrollment cap at of San Luis Obişoc in 1970, the California State University system set our present earoliment cap at 15,000 full-time equivalent stu-dicnts, which translates into a fall student headcount of about 17,900. In the next decade the Cal-ifornia State University system ex-pects enroliments to incorease by 37 percent, and it has asked Cal-Poly to consider an equivalent lev-el of growth. However, the analy-sis at Cal Poly suggests a more modest growth rate in order to sustain academic quality, ensure orderly change, and address im-pacts both on and off campus. Thus, the Master Haa calls for adding an additional 3,000 stu-dents (and about 465 faculty and staff) over the next 20 years. With the enrolment growth we project for the future, Cal Poly will not grow as rapidly as the population ain San Luis Obispo County. "The Master Plan, which is cur-rently under public review and dis-

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cussion, takes the housing situa-tion into account and proposes measures that will help alleviate a portion of it. The Master Phan calls for adding student housing to ac-commodate all new enrollment growth. The campus will be break-ing ground in spring 2001 to build apartments/tyle housing for 800 students. This facility is scheduled to be read/for occupancy in fail 2002. The next phase will house from 1,150 to 1,300 additional stu-dents by 2004 or 2005. In surn, Cal-Poly will add 1,550 to 2,100 stu-dents by 2004 or 2005. In surn, Cal-dent beds in the next five years, but only about 1,250 additional stu-dents beds in the next five years, but only about 1,250 additional stu-dent beds in the next five years, but only about 1,250 additional stu-dent beds in the next five years.

dents during that same time peri-d. Recepting the critical impor-tance of student housing to the university and the community, Cal Poly will make an additional com-mitment in the Master Plan. Look-ing beyond 2005, we will continue to provide student housing, for all new enrollments. This will it-crease the proportion of students who live on campos from about 17 percent today to over 30 percent in the future. Further, we will monitor the lo-cal market closely, and, if continu-ing students are not able to fund suitable housing, we will develop a strategy to house a larger propor-tion of our students in the future. In addition to student housing, it is important to know that the university has conducted several studies regarding faculty and staff

it is important to know that the university has conducted several studies regarding faculty and staff housing and is now moving for-ward with plans to help faculty and staff finance housing and to create new housing. These residences, which will be located on property unreatly waved by Cal Poly on the west side of Highway 1, will be in two complexes consisting of a proximately 250 new units. In short, Cal Poly's Master Plan follows an integrated and collabo-rative approach to academic plan-ning, enrollment growth and phys-ical development that seeks to make sense – for everyone. With its spring 2001 submittal of the Master Plan to the California State University Board of Trustees, Cal Poly will lake the critical next step loward meeting its obligations to both the State of California and our local community, namely, to grow in a measured, responsible way.

Linda C. Dalton, Ph.D., AICP, is vice provost for institutional planning at Cal Poly.

#### Letter 44 Tyson Carroll

#### December, 2000

44-1 Commenter is concerned about placement of housing at the "mouth" of Poly Canyon.

**Response** The housing proposed near Poly Canyon has been situated to avoid the sensitive resources in that area. The Ecological Study Area and Botanical Preserve will be protected. Housing will be designed to encourage students to move towards campus, rather than up the canyon. Numerous measures will be instituted to protect the sensitive resources of the canyon. DEIR addresses impacts

44-2 Commenter states there is no analysis of impacts to the creeks from housing in the EIR.

**<u>Response</u>** The EIR identifies numerous policies, design elements, and mitigation measures – including the University's Water Quality Management Plan – that will reduce impacts to the Brizzolara Creek and other natural resources on campus.

**44-3** Commenter asks why the Master Plan encourages more parking instead of promoting mass transit.

**Response** The Master Plan is promoting many measures to reduce the demand for parking and increase alternative transportation. Specifically, the plan calls for a reduction in demand of 2,000 parking spaces. This is to be achieved through many measures identified in the Alternative Transportation section of the Master Plan. See Alternative Transportation element. and plans for reduction in parking demand.

44-4 Commenter asks why the Master Plan encourages building "out instead of up."

**Response** The Master Plan has been designed to maximize the land use of the campus instructional core, rather than spreading into the Natural Environment or Outdoor Teaching and Learning areas. See Constraints and Opportunities analysis

**44-5** Commenter suggests the Master Plan should encourage transfer students instead of increasing enrollment.

**Response** The reader is referred to Chapter 3 of the Master Plan entitled "Long-Range Enrollment Scenarios" for a detailed explanation of Cal Poly's approach to growth and its response to California's need for higher education. See Chapter 3.

Bonnie Lowe /cpslo,employee1 12/6/2000 14:11 Page 1 Dated: 12/6/2000 at 12:29 MESSAGE Subject: FW: No subject was specified. Creator: Linda Dalton /cpslo,employee1 Contents: 5 Ttem 1 TO: Bonnie J. Lowe /cpslc,employeel Item 2 ----Original Message-----From: V-L Holland Sent: Monday, December 04, 2000 5:33 PM To: V-L Holland; Edward F. Johnson; Dirk R. Walters; David J. Keil; James R. Vilkitis; Roger D. Gambs Cc: Linda C. Dalton; Dale A. Sutliff; Leslie S. Bowker Subject: No subject was specified. Hi all, Attached are the revised documents regarding the Creek Enhancement Plan. 45-1 Please look them over one more time. If you have any final changes let me know so we can forward the final to the Master Plan committee. Thanks. V. L. Holland Professor and Chair Plant and Restoration Ecology Plant and Restoration Ecology Biological Sciences Department California Polytechnic State University San Luis Obispo, CA 93407 [805] 756-2788 office [805] 544-4608 home [805] 756-1419 fax Item 3 Received: from rubens.artisan.calpoly.edu (daemon@rubens.artisan.calpoly.edu [129.65.60.41]) by davinci.artisan.calpoly.edu (8.8.6 (PHNE_17135)/8.8.6) with ESMTP id RAA03215; Mon, 4 Dec 2000 17:10:33 -0800 (PST) Received: (from daemon@localhost) Received: (from understanding).edu (8.8.6 (PHNE_17135)/8.8.6) id RAA11293; by rubens.artisan.calpoly.edu (8.8.6 (PHNE_17135)/8.8.6) id RAA11293; Mon, 4 Dec 2000 17:10:31 -0800 (PST) Received: from calpoly.edu (ckitts.cosam.calpoly.edu [129,65.41.18]) by rubens.artisan.calpoly.edu (8.8.6 (PHNE_17135)/8.8.6) with ESMTP id Distance (PHNE_17135)/8.8.6) with ESMTP id RAA11279; Mon, 4 Dec 2000 17:10:26 -0800 (PST) Message-ID: <3A2C459E.7C6DEE17@calpoly.edu> Message-ID: <3A2C459E.7C6DEE17(calpoly.edu) Date: Mon, 04 Dec 2000 17:33:28 -0800 X-PH: V4.4@rubens.artisan.calpoly.edu From: "V. L. Holland@calpoly.edu Organization: Cal. Poly. State Univ. SLO X-Mailer: Mozilla 4.7 (Macintosh; I: PPC) X-Accept-Language: en.pdf MIME-Version: 1.0 To: Edward Johnson <ejohnson@calpoly.edu>, Dirk Walters </walters Dirk R/cpslo_employeel@davinci.artisan.calpoly.edu>,
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45-

#### (From V.L. Holland, received 12/6/00)

#### GUIDING PRINCIPLES AND GOALS FOR THE CAL POLY CREEK MANAGEMENT AND ENHANCEMENT PLAN

#### INTRODUCTION

There are a number of significant creeks and tributaries that traverse Cal Poly lands and support biologically diverse aquatic and semi-aquatic habitats comprised of communities of hydrophilic trees, shrubs, herbs and the associated diversity of animal life. This report provides some guiding principles and goals that should be implemented in a Creek Management and Enhancement Plan for the Cal Poly campus.

#### **CREEK HABITATS - AN OVERVIEW**

Riparian and creek ecosystems support a diversity of plant and wildlife species. These ecosystems are complex habitats that provide water and moist areas in otherwise arid areas of the campus. The variety of vertical habitats created by the trees, shrubs and herbs provide nesting and foraging sites for a diversity of animal species. These habitats are critical for many wildlife species because they provide a rather permanent source of water and moist microhabitats in otherwise dry environments.

Many riparian and wetland plants and animals are restricted to the creek channel, banks, and/or flood plains of waterways; others integrate with the riparian community from adjacent upland areas. Sometimes the riparian trees are tall and dense forming a forest-like community, and at other times the trees form more open woodland. The lateral extent of the riparian vegetation depends on the size and nature of the creek banks and flood plain of the creek, the amount of water carried by the creek and on the depth and lateral extent of subterranean aquifers. Additionally historical patterns of land use and human impacts often determine the actual extent of the existing riparian and stream corridor, an important consideration on Cal Poly lands. The extent of the riparian and wetland communities vary depending on the interaction of the above factors, as well as others not listed.

There are several creeks and drainages on the Cal Poly campus that support various forms of riparian and wetland vegetation ranging from broad corridors of dense riparian forests to small corridors of mostly aquatic and semi-aquatic shrubs and herbs. Freshwater marsh habitats are found along creeks where permanent, slow moving pools of standing water occur. In these areas, the riparian woodland and freshwater marsh communities overlap and form a mosaic along the creek. Small freshwater marsh areas occur in scattered locations along the creeks on the Cal Poly campus.

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Riparian communities have a significant effect on the environment along creeks or streams. There is seasonal fluctuation in light available to riparian understories because most of the dominant trees are deciduous. When the trees are in their winter-dormant leafless condition, direct sunlight can reach the ground or the river. Some herbaceous species and shrubs actively grow and flower while the trees are leafless. When deciduous trees are in full leaf, the can cast dense shade reducing the light energy that reaches the ground or water and moderates of temperature fluctuation. Daytime temperatures beneath the tree canopy are often several degrees lower than temperatures in full sunlight. The tree cover also decreases wind velocity and relative humidity is increased. The moisture evaporated from the soil and river through evapotranspiration can significantly raise the humidity in a riparian corridor. The evaporation also tends to decrease the temperature. Overall, the environment within a riparian woodland or forest is more mesic than that in adjacent areas. The presence of more mesic conditions along streams permits some plants from adjacent communities to grow as riparian species in areas that are otherwise outside their limits of drought tolerance. For example, Quercus agrifolia (coast live oak) and Umbellularia californica (California bay-laurel), which occur in upland woodlands, are common in many riparian areas on Cal Poly lands.

Unlike the plants of many other communities of California, riparian dominants are summer-active and winter-dormant. Many of the understory plants are similarly summer growing species. The availability of either surface water or shallow subsurface water in a riparian corridor allows the plants to remain metabolically active at times of the year when moisture stress is extreme in adjacent upland areas. Most of the riparian dominants, however, lose their leaves during the winter when active growth is taking place among the members of many lowland communities. Consequently the riparian plants often seem out of phase with the surrounding vegetation.

Riparian areas are very important as wildlife habitats. The multilayered canopy provided by the assorted trees, shrubs and herbs provides a diversity of nesting and feeding sites for birds and mammals. Riparian areas are productive habitats, especially at times when plants of other communities are dormant. The moisture of the stream is an important summer water source in the dry California landscape. The nutrients added to the stream and the alternating shaded and sunny zones of the patchy vegetation are important in stream ecology. The vegetation is an important component of the habitat for fish and other aquatic animals as well as terrestrial species.

Riparian woodland vegetation influences fish habitats by moderating the temperature and providing cover and food. Loss of riparian trees and shrubs and undercut banks can decrease the amount of suitable habit reducing creek productivity and decreasing fish populations. Riparian vegetation is also an important source of fish food and nutrients. Small fish use slower water along margins of larger rivers and depend on terrestrial organisms such as insects that live in the riparian vegetation for food because most aquatic other organisms escape them.

River flow velocity, water depth, and riparian cover are important factors that affect fish populations. In general, vegetation cover slows the water velocity providing resting areas

for fish and increases habitat complexity, which can lead to greater species diversity. Riparian vegetation provides hiding places for both adult fish and fry to escape predation and may also provide increased substrate for fish food and for egg attachment.

Riparian vegetation decreases erosion from stream banks and adjacent uplands, which important in maintaining stream purity and decreased sedimentation. This is very important because streams that are inundated by heavy silt loads become useless as fish and invertebrate habitat.

#### RIPARIAN AND FRESHWATER MARSHES ARE SENSITIVE HABITATS

Over half of the wetland and riparian vegetation in the coterminous 48 States and over 90% of the wetlands in California have been destroyed and few remaining riparian and wetland areas have not been adversely impacted. Because of their location in floodplains, destruction of riparian ecosystems is largely associated with human's activities, especially clearing for agriculture, building structures and paving in flood plains, stream-channel modifications, water impoundments, mining, and urbanization. Even recreational development can destroy natural plant diversity and structure, lead to soil compaction and erosion, and disturb wildlife.

Wise management of remaining riparian ecosystems and restoration of disturbed riparian areas is extremely important because of their high value as fish and wildlife habitat as well as important values to humans and human existence. Riparian ecosystems generally compose a minor proportion of surrounding areas, but typically are more structurally diverse and more productive in plant and animal biomass than adjacent upland areas. Riparian areas supply food, cover, and water (especially important in arid regions) for a large diversity of animals, and serve as migration routes and forest connectors between habitats for a variety of wildlife.

The area occupied by riparian communities in California has decreased over 90 percent in the past 100 years. There has been a similar decrease in area occupied by freshwater marshes. With the loss of these wetland communities has come a comparable decrease in the habitat available for various types of wildlife, particularly resident and migratory birds. Today riparian communities occupy less than one percent of California, but in pre-colonial times these communities occupied considerably larger areas.

Much of the decrease in riparian and freshwater wetlands has been incremental — a little bit here, a little bit there. Individually these changes are minor. Collectively they represent a serious loss of wetland habitats. Freshwater marshes, riparian and other wetland areas are important wildlife habitats. They are particularly important to migratory birds of the Pacific Flyway. The piecemeal draining of marsh areas and removal of riparian woodlands throughout California along with the massive draining of marshlands in some areas of California such as the Central Valley have reduced the overall area covered by marshes by over 90 percent. Still other areas of marshland are threatened by pollution. Loss of these wetlands in California makes the protection and management of those on Cal Poly lands even more significant.

The original riparian forests in California covered several million acres. Today they are measured in thousands and many of the remaining riparian ecosystems have been degraded as a result of human activities. Prior to 1960 few people showed any concern for the demise of California's Riparian Woodlands and very little biological data was collected. Today many scientists and governmental agencies are expressing concern that has led to several symposia and workshops dealing with the ecology and conservation of riparian communities in California. California Department of Fish and the U. S. Fish and Wildlife Service considers Riparian and freshwater marsh communities sensitive. The sensitivity of riparian woodlands and marshlands make it extremely important that Cal Poly take a leadership role in addressing the proper management, enhancement, and protection of these habitats on the Cal Poly lands.

#### CAL POLY STREAMS AND HABITATS

Several of the largest tributaries in the San Luis Obispo Creek and Chorro Creek watersheds traverse significant sections of Cal Poly lands. The survival and sustainability of the diversity of riparian, aquatic, and semi-aquatic biota found along these creeks depend upon Cal Poly's proper management, protection, and enhancement of the stream and streamside habitats. Protection of these sensitive wetland habitats, including the special status species they support, must involve creating and maintaining high quality water in the creeks, sufficient water to support the aquatic and semi-aquatic plant and animal life, and high quality riparian habitats. This will require developing a comprehensive Creek Management and Enhancement Plan based on wise, science-based land and water use decisions by Cal Poly. This plan should develop acceptable management and enhancement goals and guidelines for the creek systems that are found on Cal Poly lands.

As a leading institution of higher education, Cal Poly must be able to acknowledge and address the regional impacts the campus may have on the creek systems that traverse our lands. We must acknowledge and address how activities on our campus effect aquatic habitats downstream in the both the City and the County of San Luis Obispo and in the Morro Bay. The potential impacts to the Morro Bay estuary from Chorro Creek and the marine environment near Avila Beach from San Luis Creek must be evaluated. Thus, the sensitive riparian and aquatic habitats found on Cal Poly lands must be addressed not only as sensitive creek habitats that support rare, threatened, and endangered species but also because they provide a diversity of educational opportunities for our students, staff, faculty, and the community.

#### GOALS AND GUIDELINES FOR THE CAL POLY CREEK MANAGEMENT AND ENHANCEMENT PLAN

The comprehensive Cal Poly Creek Management and Enhancement Plan should include the following management and enhancement goals and guidelines for the creek systems that are found on Cal Poly land. These provide the guiding principles and philosophy for more specific recommendations for the creeks as they might affect all present and future projects undertaken by Cal Poly near the creek ecosystems.

- Identify all structures, concrete, pavement, etc. that affect the stream and riparian ecosystems. Obstacles to proper management and/or enhancement shall be removed from designated creek corridors.
- 2. Protect the streams, stream channels, and adjacent banks, flood plains, and riparian habitats on campus and be consistent with sound, long-term hydrology principles.
- 3. Maintain and/or create stream and riparian corridors that provide adequate buffer zones that protect habitats for the riparian and aquatic plant and animal species.
- 4. Essential habitat features within the stream and riparian ecosystem shall be maintained and/or created including the hydrology, water quality, water flow, water temperature, and complex vertical and horizontal plant cover.
- 5. Reestablish natural flood plain areas for flood control purposes while protecting the Instructional Campus Core.
- 6. Provide habitat for the special status species known to occur or likely to occur in the stream and riparian ecosystem.
- Provide access areas for the public as well as well as designated wildlife areas with limited human access.
- 8. Passive recreation shall be restricted to designated trails.
- Reduce point and nonpoint sources of pollution to ensure that only high quality water enters the stream and riparian ecosystem in accordance with best management practices developed in the Cal Poly Water Quality Management Plan.
- 10. Identify and control stream bank and upland area soil erosion that may contaminate or add sediments to the stream and riparian system.
- 11. Provide student access to and from the housing units on designated paths, which are designed to reduce the impact on the stream and riparian ecosystem.
- 12. Maximize the use of the stream and riparian ecosystem as a living laboratory and educational resource.
- 13. Develop a maintenance program as part of the Cal Poly Creek Enhancement and Management Plan.

14. Control exotic invasive species with stream and riparian ecosystem.

#### SUMMARY

A Cal Poly Creek Enhancement and Management Plan shall be prepared that addresses methods to protect, restore, manage, and enhance the biodiversity and stability to the creek and riparian corridor on the campus. Protection of existing riparian and creek ecosystems from impact by creating adequate riparian and buffer zones should be of utmost importance.

All disturbed sections of the creeks shall be restored and enhanced as directed by the plan. One of the main problems when restoring disturbed creek and riparian ecosystems to their pre-disturbance condition is that the historical conditions of creeks is not well known. Investigations of relatively undisturbed sections of the creek near the restoration and enhancement areas may be useful in gaining some knowledge of predisturbance conditions of the creeks.

The plan shall address methods to restore riparian habitat diversity and stability to the creek corridors an shall provide methods and procedures to manage, restore, and enhance valuable biological habitats that will support a diversity of plant and animal species, including sensitive species. The plan shall also create public trails and lookouts in appropriate but restricted areas that will provide resource-based recreation for the campus residents and visitors to the site, such as bird watching and hiking. The plan, once implemented will be monitored and the area managed to make sure the goals of the plan are achieved. Success of the plan will be evaluated regularly.

Restoration involves returning the ecosystem to as near predisturbance conditions as possible and involves revegetation and removing exotic, invasive vegetation. Enhancement of riparian ecosystems consists of improving existing conditions to increase habitat values. This is usually accomplished by increasing plant or community diversity for plants, wildlife, fish, and other animal life. Managing riparian and creek ecosystems typically involves enhancement techniques as well as proper management and monitoring. However, in some areas creation and restoration projects may involve use of techniques considered more management-oriented (e.g., land shaping and fencing until planted vegetation of the created or restored wetland is established).

### Comments on specific Master Plan pages (from V.L. Holland - Received 12/6/00)

## Page 78 - Principles 15-2 The intro paragraph should state that the principles are action statements and should direct the principles towards the implementation. Page 78 - Stewardship Note the word "restore" has been used. Use more consistent verbiage principles and actions vs. practices. Discuss the impact of Stenner and Brizzolara Creek on SLO Creek and the marine environment. Page 78 - Understanding 45-1 No changes Page 79 - Conservation and Sustainability Change Cal Poly can to Cal Poly will or should Discuss air, water, energy and the impact of these resources on the global environment. Conserving natural resources on campus Mention conservation and/or sustainability Reconsider the wording in general Page 79 - Biodiversity Biodiversity should not be hyphenated ۲۲۰ Change plant to native biotic communities. This feature is recognized and addressed in this document Sensitive habitats need long-term protection. 45-5 Lacking discussion for utilization for educational purposes. Typically these sites are of value or interest because of their educational and research value in resources management ... Page 79 - Viability Definition needs to state that the campus will pursue the viability of the natural environment. Page 79 - Enhancement No changes

Page 80 - Aesthetics

No changes

Page 80 - Access

Page 97 - Brizzolara Creek Enhancement Project

Feedmill is one word.

# 45-7

#### Letter 45 Dr. V. L. Holland Chair, Department of Biology

#### **December 6, 2000**

**45-1** Dr. Holland has prepared a report entitled "Guiding Principles and Goals for the Cal Poly Creek Management and Enhancement Plan."

**Response** The report is part of the implementation of the Brizzolara Enhancement Project, and applies as well to other riparian areas of Cal Poly. It is incorporated into the Master Plan as an implementing report as Appendix F. See text addition.

**45-2** Commenter wants paragraph to state "action" statements.

**Response** See text addition page 82, indicating "Implementation of the Master Plan provides Cal Poly with a unique opportunity to maintain and improve its leadership role as a steward of the land."

**45-3** Commenter suggests more consistent use of verbiage; Change Cal Poly "can" to Cal Poly "will" or "should"; Discuss global air, water and energy impacts.

**Response** Text clarification on p. 83. Global effects of the plan are difficult to quantify and are dependent upon too many factors and variables to be considered in the EIR. CEQA requires analysis of "reasonably foreseeable impacts;" global effects of the plan are not considered to fall under this designation. Regional air and water issues are discussed; energy usage is reduced by policies in the plan, which provide conservation options for buildings.

**45-4** Change plant to native biotic communities; Biodiversity should not be hyphenated.

- **Response** The text has been corrected at page 83.
- **45-5** Commenter suggests expanding Biodiversity discussion.

**Response** See text addition page 83.

**45-6** Commenter suggests rewording the definition of Viability.

**Response** See text addition page 83.

**45-7** Commenter suggests that "Feedmill" is one word.

**Response** Dictionaries differ regarding spelling.

To Whom It May Concern: I would like to make the following Comments regarding the Cal Poly Master Plan:

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I hope you will take these into consideration When revising the current draft. Sincerely,

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FROM: Name: Yagneau Okano Address: 1450 B Suthwood d. Slo CA 93/01 TO: B. Lowe

Facilities Planning Cal Poly University San Luis Obispo, CA 93407

# Comment

I like many strokents, especially on the Calloge of Achitecture & Emiroromental Design, wald like bosce new 46-1 Noving built with Sustainability in Mand. Using The Proggressive Design kenniques (such as passive heating cooling, PV panels) and Ultimative energy sources, would merease interest an living an amps id also promote the onvhormcental concerns of Cal Poly naking the callese a leader for other for follow.

#### Letter 46 Yasman Okano

#### December, 2000

**46-1** Commenter suggests Cal Poly's new housing be built using principles of sustainability.

**Response** The following has been added to the Master Plan (pp. 162-163): Site selection, site planning and building design should account for solar exposure, prevailing wind direction, and patterns of light and shade to minimize energy requirements and enhance the quality of outdoor space. Design guidelines and processes for implementing the Master Plan should encourage energy efficient building design and resource conservation. The campus landscape plan should consider the impact of vegetation and water use on the resource efficiency of facilities and the creation of comfortable and functional outdoor space.

Design for renovation of existing buildings and new construction should consider ways to maximize energy efficiency and take advantage of the mild climate in San Luis Obispo. Alternative, renewable energy sources should be used to the greatest extent possible to offset growth in demand. As costs escalate for traditional energy sources, other options to consider include integrated photovoltaics and solar generation for electricity, passive and low energy cooling strategies for buildings (including materials, solar control, natural ventilation, thermal mass), passive solar space and water heating, and effective use of day lighting. New buildings should be well ventilated using natural ventilation, and existing buildings should be retrofitted where feasible to make them usable and livable during the summer without requiring air conditioning.

Consistent with Cal Poly's mission, the campus should explore an integrated approach to sustainable, or "green" design for research, education and operational applications in new and renovated buildings and in the campus landscape treatment. In addition to the energy conservation measures noted above, these efforts should address water conservation and reclamation, re-use of materials and products, and life cycle costing in general. Several opportunities for resource recovery projects with educational and research potential as well as operational value include water supply and waste treatment for animal facilities, enhancement of Brizzolara Creek and the construction of new student residential communities.

To Whom It May Concern: I would like to make the following Comments regarding the Cal Poly Master Plan:

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Can San Luis Obispo support an increased eritariant and still maintaion its unique aura?

I hope you will take these into consideration When revising the current draft. Sincerely, FROM: Name: Address:

47-1

TO: B. Lowe Facilities Planning Cal Poly University San Luis Obispo, CA 93407

#### Letter 47 Anonymous

#### December, 2000

**47-1** Commenter asks if San Luis Obispo can support increased enrollment and still maintain its unique aura.

**<u>Response</u>** With careful planning, elegant execution, and a sensitive handling of the details of Master Plan implementation, we believe it can. See Chapter 3. DEIR addresses impacts.

# **ACTION for Healthy Communities**

A COMMUNITY COLLABORATION

MEMBERS Adult Services Policy Council

Area Agency on Aging

California Polytechnic State 🛠

Central Coast Health Partners

Children's Services Network

CITY OF SAN LUIS OBISPO Human Relations Commission

Community Health Centers of the Central Coast

COUNTY OF SAN LUIS OBISPO City/County Library Department of Social Services Health Agency Office of Education

Planning Department Probation Department Cuesta College

Economic Opportunity Commission

Economic Vitality Corporation

Environmental Center of San Luis Obispo

Foundation for Community Design

Morro Bay Community Collaborative

Paso Robles Health Collaborative

SLOCO Access San Luis Obispo

Chamber of Commerce San Luis Obispo

Childcare Planning Council San Luis Obispo County Health Commission

San Luis Oblspo County HIV CARE Consortium

San Luis Obispo County Medical Society

San Luis Obispo County YMCA

Taylor Consulting Group

Tenet Health Systems

United Way of San Luis Oblspo County Spcaker: Carlyn Christianson, Community Volunteer ACTION for Healthy Communities, Steering Committee member ACTION Housing Initiative, Chair Contacts: Carlyn Christianson

1159 Vista del Lago San Luis Obispo, CA 93405 541-4419 cchristi@slonet.org

or

ACTION for Healthy Communities C/o SLO County Community Foundation P.O. Box 1580 San Luis Obispo, CA 93406 543-2323

or

ACTION for Healthy Communities Co-Chairs Janna Nichols Director, United Way of SLO County 541-1234

Susan Hughes Director, Tobacco Control County Health Agency 781-5564

X you'll note that Cal Folg is an opicial member of ACTION, but we have not actually had any involvement from it since the Community Survey was completed. This imput is directed to Cal Poly, but other aspects, such as the involvement of Cuesta, well appear on other presentations made to other organizations.

or via ACTION (see pamphlet attached)

#### SUMMARY

ACTION's feedback about the Cal Poly Master Plan's housing element can be summed up in two words: totally inadequate.

Right now, without any increases in students, faculty or staffing at all, Cal Poly's impact on housing in the city and county of San Luis Obispo is a major cause in what ACTION's members consider a health and economic crisis. People are going without food, clothing and shelter in order to pay for housing costs. The homeless shelters' population of women and children has risen dramatically. Cal Poly's higher wages and student's subsidized income allows Cal Poly to displace lower-income workers and special needs populations from the area where they receive services, reducing diversity and impacting employers and transportation. Employers—Cal Poly among them—cite housing as a major weakness in attracting and retaining employees at every income level. The pressure on the City of SLO for housing, as well as increasing pressure for growing room on outlying cities and the county, have grave environmental and economic implications. Preservation of prime agricultural land, and the impacts on air quality as 17,000 people commute into SLO every day--all are threatened by the pressures to solve the housing crisis.

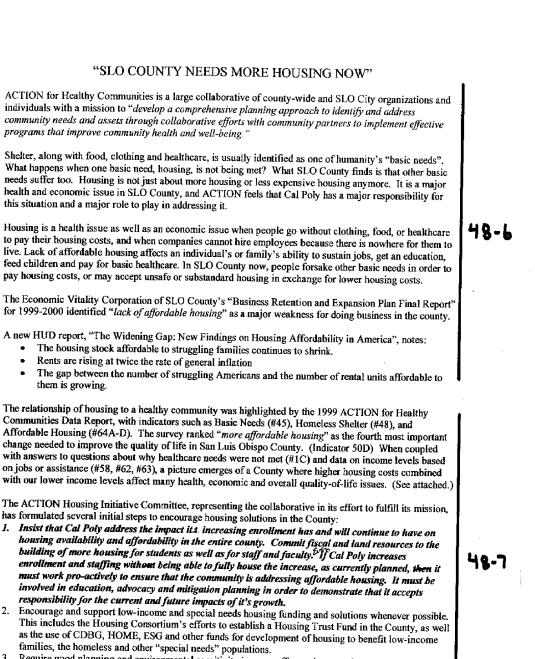
Cal Poly has a major role in contributing to these problems, and ACTION feels it should accept a major role in contributing to the solution. Cal Poly's Master Plan must address the impact its enrollment has and will continue to have on housing availability and affordability in the city and county of San Luis Obispo. It must aggressively commit fiscal and land resources to building much more housing, and much sooner, than stated in the current Plan. If Cal Poly increases student enrollment and staffing witherstoeing able to fully house the increase, then it must also publicly commit to working pro-actively to ensure that the community is addressing affordable housing. It must be involved in education, advocacy and mitigation planning in order to demonstrate that it accepts responsibility for current and future impacts of its growth.

Cal Poly is a vital and essential community member, providing educational, cultural and economic enrichment to the entire county. However, as ACTION surveys the impact's of Cal Poly's growth on our workers, our poor, our families, our environment, our quality of life, we know that the Master Plan can do much better at addressing the housing impacts of the college. ACTION invites and encourages—insists—the school to join the community in addressing this issue now. We ask you to partner with ACTION and many other organizations in contributing to finding solutions to this problem. 48-2

48-1

48-4

48-5



3. Require good planning and environmental sensitivity in every effort to increase the number of housing units. This includes following General Plan and zoning regulations, preserving agricultural land and open space greenbelts, exploring increased density in selected areas in order to reduce sprawl elsewhere, and location of housing near jobs to decrease transportation and air quality problems.

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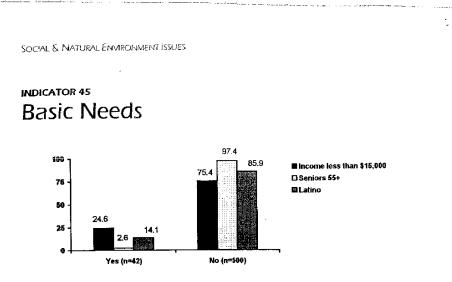


# Action for Healthy Communities

# San Luis Obispo County Data Report

August 1999

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#### Telephone Survey Results

In any given month, do you have to go without basic needs such as food, clothing, childcare, housing or health care?

RESPONSE	NUMBER	PERCENT
Yes	42	7.7
No	500	92.3
Total	542	100.0

Source: 1999 Action for Healthy Communities, Telephone Survey.

#### Responses, by Respondent Type

RESPONDENT	YES	No
Respondents with income less than \$15,000	24.6	75.4
Seniors 55 and older	2.6	97.4
Latino	14.1	85.9

Source: 1999 Action for Healthy Communities, Telephone Survey.

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Social & Natural Environment Issues

## INDICATOR 45 Basic Needs, continued

Telephone Survey Results

If yes, what do you go without? (Top 3 responses)

Response	NUMBER	PERCENT
Health Care (including prescriptions)	20	51.3
Food	14	35.9
Clothing	5	12.8

### The Responses, by Respondent Type

RESPONDENT	Food	HEALTH CARE	CLOTHING
Respondents with income less than \$15,000	18.2	63.6	18.2
Seniors 55 and older (n= 2)	0.0	50.0	50.0
Latino	30.0	60.0	10.0

Source: 1999 Action for Healthy Communities, Telephone Survey.

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Social & Natural Environment Issues

## INDICATOR 48 Homeless Shelter

#### Shelter Occupants, by Background

EOC EMERGENCY SHELTER (SLO)	1998
Domestic Violence	32%
Chronic Substance Abuse	50%
Mentally ill	45%
HIV/ AIDS	4%
Elderly	7%
Total Shelter Occupants	883

Note: Percents do not total, as occupants may fulfill more than one category.

#### Shelter Over capacity

EOC HOMELESS SERVICES	1998	
1 ST Quarter- Jan-March	43	
2 nd Quarter- April-June	351	
3 rd Quarter-July –Sept.	430	
4 th Quarter- Oct-Dec. (partial)	290	
Total Over capacity	1,114	

Note: Over capacity refers to the number of individuals seeking shelter that exceed the number of available beds in the shelter.

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#### **Clients placed in Permanent Housing**

Number of Single Adults	33
Number of Families	54
Number of Parents	73
Number of Children	98
% children	48.0

Number of clients permanently housed 204

Source: Economic Opportunity Commission (EOC) Homeless Shelter, 1999.

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ECONOMIC ISSUES

# Affordable Housing

Fair Market Rents - HUD

RETAVISTICS CONTRACTOR AND AND A CONTRACTOR OF A CONTRACTOR

				98-99
NUMBER OF BEDROOMS	1997	1998	1999	% CHANGE
Studio	\$491	\$498	\$507	1.8
1 -	\$555	\$563	\$573	1.8
2	\$704	\$714	\$727	1.8
3	\$978	\$991	\$1,009	1.8
4	\$1,155	\$1,171	\$1,192	1.8

Source: Department of Housing and Urban Development.

Note: Fair Market Rent standards are issued by the Department of Housing and Urban Development, thus establishing the maximum the Housing Authority can pay for rental units. According to the Housing Authority, actual rents are approximately 7 – 15 percent higher than Fair Market Value. As of April, 1999, the Housing Authority had 1,552 section 8 units in San Luis Obispo County and 169 Public Housing Units in the City of San Luis Obispo. Numbers are run a year behind the local market and are also arbitrarity adjusted to meet federal budget needs.

#### Average Apartment Rents- San Luis Obispo City

NUMBER OF BEDROOMS	UNITS	1998
Studio	269	\$ 520
1 Bedroom, 1 Bath	57	\$ 628
2 Bedroom, 1 Bath	73	\$ 762
2 Bedroom, 2 Bath	149	\$ 794
3 Bedroom, 2 Bath	21	\$ 980
2 Bedroom Townhouse	144	\$ 815

Source: Real Data, in UCSB Economic Forecast Project, 1999.

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#### Economic Issues

# Affordable Housing

#### Percent of Income Spent on Rent

		A	INUAL INCOME		
INCOME SPENT ON RENT	< \$10,000	\$10,000 - \$19,999	\$20,000 - \$34,999	\$35,000 - \$49,999	\$50,000 AND OVER
< 20% of income spent on rent	1.1	4.3	10.0	28.1	61.8
20-24% of income spent on rent	4.0	5.5	12.6	22.9	22.8
25-29% of income spent on rent	6.9	5.1	17.8	22.6	8.2
30-34% of income spent on rent	5.0	9.0	15.7	11.0	5.3
35% and over spent on rent	72.1	72.5	40.6	14.0	0.3
Not computed	10.5	3.6	3.4	1.3	1.7
Total number of renters	5,558	6,638	9,128	5,873	5,482

Source: U.S. Census Bureau, 1990.

Note: 13,380 or 40.9% of total renters spend 35% or more of their income on rent. 16,625 or 50.8% of total renters spend 30% or more of their income on rent.

#### Percent of Income Spent on Home Costs by Owners

INCOME SPENT ON HOME COSTS	< \$10,000	\$10,000 - \$19,999	\$20,000 - \$34,999	\$35,000 - \$49,999	\$50,000 AND OVER
< 20% of income spent on home costs	10.6	47.2	45.6	41.3	45.4
20-24% of income spent on home costs	9.2	10.2	7.2	8.5	16.6
25-29% of income spent on home costs	7.1	4.3	5.7	8.6	13.6
30-34% of income spent on home costs	3.1	4.3	6.8	9.6	10.1
35% and over spent on home costs	57.2	33.3	34.6	31.9	14.1
Not computed	12.9	0.6	0.0	0.0	0.2
Total number of owners	2,084	3,163	9,128	7,357	19,350

Source: U.S. Consus Bureau, 1990.

Note: 9,657 or 23.5% spend 35% or more of their income on home costs and 12,973 or 31.6% spend 30% or more of their income on home costs.

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Economic Issues

# Affordable Housing

Median Sales Price

			97-98
COUNTY	1997	1998	% CHANGE
San Diego	\$184,976	\$207,577	12.2
Orange	\$226,917	\$259,917	14.2
Los Angeles	\$173,515	\$191,144	10.2
Monterey	\$258,202	\$283,066	9.6
Riverside / San Bernadino	\$113,868	\$120,830	6.1
Ventura	\$216,200	\$233,504	8.0
Santa Barbara	\$236,937	\$246,474	4.0
San Luis Obispo	\$177,975	\$181,268	1.9
California	\$184,427	\$201,966	9.5
National	\$120,000	\$129,000	7.5

Source: National Association of Home Builders, 1998.

Economic Issues

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# Affordable Housing

8 Least Affordable Areas in the Nation-1999

Area	Percent of Homes Affordable for Median Income	Median Family Income (1st Qtr1999)	Median Sales Price (1st Qtr1999)	National Rank
San Francisco, CA PMSA	21.3	\$ 72,400	\$ 366,000	181
Santa Cruz-Watsonville, CA	32.0	\$ 61,000	\$ 273,000	180
Eugene-Springfield, OR MSA	37.8	\$ 41,200	\$ 128,000	179
Laredo, TX MSA	40.6	\$ 30,200	\$ 104,000	177
Satinas, CA MSA	41.3	\$ 49,400	\$ 195,000	175
Portland-Vancouver, OR-WA	42.6	\$ 52,400	\$ 158,000	174
San Luis Obispo-Atascadero- Paso Robles, CA. MSA	42.8	\$ 48,000	\$ 180,000	173
San Diego, CA MSA	45.3	\$ 52,500	\$ 196,000	172

Source: National Association of Home Builders, 1999.

Note: The Housing Opportunity Index is based on the median family income, interest rates, and the prize distributions of homes sold for each market in a particular quarker of a year. The prize of homes sold is collected from actual court records by First American Real Estate Solutions, a marketing company. The median family income for each market is calculated by the Department of Housing and Urban Development (HUD).

*Metropolitan Area is one of a large population nucleus, together with adjacent communities that bave a high degree of economic and social integration with that nucleus.. MSAs are relatively free standing and are not closely associated with other metropolitan areas.

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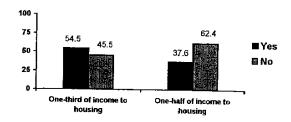
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Economic Issues

# Affordable Housing, continued

Telephone Survey Results



Does <u>one-third</u> or more of your income go to bousing?

	11	999
RESPONSE	NUMBER	PERCENT
Yes	291	54.5
No	243	45.5
Total	534	100,0

Source: 1999 Action for Healthy Communities, Telephone Survey.

Does one-half or more of your income go to housing?

Response		999
	NUMBER	PERCENT
Yes	108	37.6
No	179	62.4
Total	2B7	100.0

Social & Natural Environment Issues

## INDICATOR 50D Quality of Life, continued

### **the** Community Survey Results

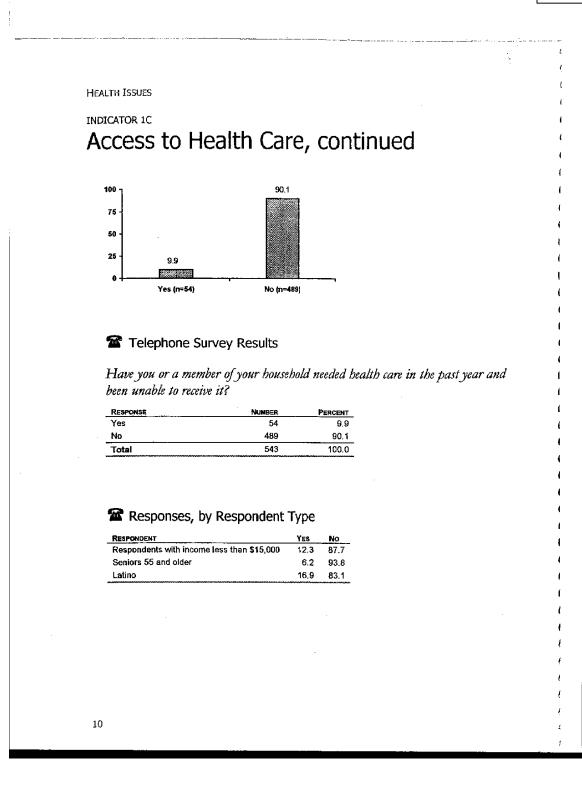
If you could make one major change locally, what would it be?

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SPONSE	NUMBER	PERCEN
Restrict growth/development	348	13,1
More opportunities for youth	257	9.7
Better employment / broader economic base	208	7.8
More affordable housing	190	7.2
Better traffic and roadways management	180	6,8
Affordable / accessible / complete heaithcare	158	6.0
Public transportation	157	5.9
More general social and educational services	124	4.7
More opportunities for family entertainment	111	4.2
More business establishments	109	4.1
Improve local government	107	4.(
Stop crime / gangs	94	3,9
Nothing	91	3.4
Senior services	65	3.2
Full range of services for the homeless	73	2.8
Increase wages	66	2.5
More cultural diversity / racial diversity	63	2.4
Better schools	50	1.9
Lower overall cost of living	47	1.0
Address drug issue	38	1.4
Align friendly industry and jobs	35	1.3
Eliminate chain stores	35	1.3
Create affordable / quality child care	31	1.3
Stronger police force (quantity)	24	0.9
Change law enforcement attitude (quality)	20	0.6
Wheelchair accessibility to ADA guidelines	18	0.7
Ensure stable supply of water	16	0.0
Don't Know	65	2.5
Other	321	12.1

Multiple response question with 2,650 respondents offering 3,121 responses. Source: 1999 Action for Healthy Communities, Community Survey.



Health Issues

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#### INDICATOR 1C

# Access to Health Care, continued

If yes, why couldn't you receive it?

Response	NUMBER	PERCENT
Couldn't afford it	11	21.2
Insurance wouldn't cover it	9	17.3
No insurance	17	32.7
Medi-Cal (problems)	4	7.7
Not available locally	2	3.8
Too expensive / No money	1	1.9
Limitations of insurance	3	5.8
Desired care not available in the area	1	1.9
Other	4	7.7
Total	52	100.0

Source: 1999 Action for Healthy Communities, Telephone Survey.

Economic Issues

## NDICATOR 58 Average Salaries

Annual Average Salary, by Selected industry

	1995	1996	1997	1998	97-98 % Chan <u>ge</u>
NDUSTRY	\$15.833	\$15,406	\$15,847	\$17,560	9.7
Agriculture	\$35,702	\$40,070	\$50,454	\$56,375	10.5
Mining	\$26,345	\$31,234	\$30,444	\$31,206	2.4
Construction	\$25,530	\$29,170	\$30,005	\$31,588	5.1
Manufacturing	\$42,018	\$46,280	\$46,293	\$48,105	3.7
Transportation / Utilities	\$23.396	\$24,356	\$25,405	\$26,703	4.8
Wholesale Trade	\$12,855	\$13,199	\$13,911	\$14,606	4.7
Retail Trade Finance / Insurance / Real Estate	\$23,569	\$26,113	\$26,707	\$29,433	9.2
	\$24,423	\$25,027	\$27,525	\$28,836	4.5
Services Government	\$31,191	\$30,752	\$34,984	\$35,442	1.2
Total	\$23,037	\$24,029	\$25,580	\$26,626	3.9

Source: California Employment Development Department, Labor Market Information Division, 1998.

Economic Issues

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### INDICATOR 62 Household Income

#### Per Capita Personal Income

INCOME	1994	1995	1996	1997	96-97 % Change
San Luis Obispo County	\$19,645	\$20,244	\$21,412	\$22,568	5,4
State	\$23,024	\$23,983	\$25,142	\$26,314	4.7
National	\$22,186	\$23,059	\$24,164	\$25,288	4.7

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, 1999.

Note: Per capits personal income (PCPI) is calculated by dividing the total personal income by the total population for a given county. Population figures used for this calculation are derived from the Census Bureau mid-year estimates.

#### Median Family Income

	FY 1996	FY 1997	FY 1998	97-98 % Change
San Luis Obispo County	\$43,300	\$43,600	\$46,200	5.1
State	\$53,750	\$55,700	\$58,500	4.7
National	\$51,405	\$53,400	\$55,200	3.2

Source: U.S. Department of Housing and Urban Development, 1998.

Note: Median family income estimates are calculated for each metropolitan and non-metropolitan area using the Fair Market Rent (FMR) area definitions applied in the Section 8 Housing Assistance Payment program. The estimates are based on 1990 Census median family income estimates updated to 1998 with a combination of Bureau of Labor Statistics earnings and employment data and Census Divisional P-60 median family income data.

#### Economic Issues

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## NDICATOR 63 Poverty Guidelines

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90 93 Federal Guidelines, 1996-1999

	Annual Income					
FAMILY SIZE	1996	1997	1998	1999	98-99 K CHANGE	
1	\$7,740	\$7,890	\$8,050	\$8,240	23	
2	\$10,360	\$10,610	\$10,850	\$11,060	1.9	
3	\$12,980	\$13,33D	\$13,650	\$13,880	1.6	
4	\$15,600	\$16,050	\$16,450	\$16,700	1.5	
5	\$18,220	\$18,770	\$19,250	\$19,520	1.4	
6	\$20,840	\$21,490	\$22,050	\$22,340	1.3	
7	\$23,460	\$24,210	\$24,850	\$25,160	1.2	
8	\$26,080	\$26,930	\$27,650	\$27,980	1.1	

Source: Department of Health and Human Services, Poverty Guidelines, 1999.

Note: Poverty income guidelines are for all states except Alaska and Hawaii. For 1996 add \$2,600 for each additional member; for 1997 add \$2,720 for each additional member; in 1998 add \$2,800, and in 1999 add \$2,820.

Self-Sufficiency Income Standards – San Luis Obispo County, 1996

	ADULT	ADULT + 2 SCHOOLAGE CHILDREN	Two Adults + 2 SCHOOLAGE CHILDREN
Housing	\$544.00	\$690.00	\$690.00
Child Care	0.00	\$340.00	\$340.00
Food	\$125.00	\$355.90	\$498.00
Transportation	\$114.16	\$117.81	\$231.97
Medical Care	\$77.35	\$157.68	\$206.35
Miscellaneous	\$86.05	\$166.14	\$196.63
Taxes	\$194.81	\$290.85	\$386.92
Earned Income Tax Credit (-)	0.00	(\$89.22)	0.00
Child Care Tax Credit (-)	0.00	(\$78.20)	\$68.00
Monthly Self Sufficiency Wage	\$1,141.37	\$1,950.96	\$2,481.87
Hourly Self Sufficiency Wage	\$6.49	S11.08	\$7.05 per adult

Source: Wider Opportunities For Women, 1996.

Note: The Self-Sufficiency standard is a measure of how much money working adults need to meet their family's basic needs for housing, child cars, food, transport, medical care and taxes, without any public subsidies. Otherwise stated, it is the minimum wage needed to become independent of welfare or other subsidies.



Culding Principles	A long-term approach to planning and ACTION has identified the following program development games in which to establish community goals areas in which to establish community goals Creation of a collaborative planning the ACTION Collaborative (400) freechanism	Commitment to a community-driven Basic Needs/Social Environment. All persons have the basic necessities of life, persons have the basic necessities of life, such as food and shelter, and have the opportunity to be engaged in the onic, personalional, and outural aspects of their plans.	Education: All students enter school roady to learn, and graduate from high school prepared for the workforce or higher education.           Quality of Life Indicators: What is the quality of the in San Luis Obispo county? Do residents feel sate? Are there anough entiployment apportunities?		Action to manual communes use Recent a first published in August 1999, the reconstrict is committed to the recondary data will be the reco	mplied on a semi-annual basis to development being planned and managed the family that the series of the development being planned and managed that the depth both a stat aspects of <b>Public Safety:</b> All persons feet and are safe in their homes, schools and communities
In February 1998 the San Luis Obispo Community Health	Foundation convened a broad collaborative consisting of public and - private organizations to build healthy commutities. The ACTION for Healthy Commutities. Collaborative believes that by sharing resources and working	• •		participation - activity of the calorent - and - to people spintum well-being of its residents	the AOTION A	o Tatx n IV with a second

#### Letter 48 Ms. Carlyn Christianson ACTION for Healthy Communities

#### Not dated

**48-1** Commenter suggests that Cal Poly, especially because of its higher wage earners and subsidized students, is displacing lower wage earners from area housing.

**Response** Cal Poly recognizes these issues and has added text to the Residential Communities element to the following effect (p. 129-130): The San Luis Obispo area has the dubious distinction of being one of the least affordable housing markets in the United States. The 1999 Regional Profile published by the San Luis Obispo Council of Governments showed a median selling price in 1999 of \$184,300 in the county and \$231,500 in the City of San Luis Obispo for single-family homes. The Profile also revealed that 6.5 percent of the housing units in the City of San Luis Obispo are considered over crowded. The 2000 San Luis Obispo County Economic Outlook showed a vacancy rate of only 0.3 percent for rental apartments in the City of San Luis Obispo in September 1999.

Thus, there is a shortage of suitable housing in our community and it seems to be getting worse. Cal Poly faculty and staff hear stories about students engaged in bidding wars for available apartments and students crowded into off-campus homes and apartments. Companies looking to San Luis Obispo as a possible location indicate concerns about the lack of affordable housing in our area. Cal Poly recognizes that housing impacts are a major community concern related to enrollment growth.

While Cal Poly's student population makes a very real impact on San Luis Obispo County, it is not the only factor contributing to the local housing shortage. Cal Poly's enrollment in Fall 2000 is about 900 students below in Fall 1990, when it reached 17,758 students. During the 1990's Cal Poly deliberately cut enrollment when State funding was reduced. Since then enrollment has been slowly building back, but Cal Poly's growth rate has been slower than that of the City of San Luis Obispo. Cuesta College's Student Characteristics and Enrollment Trends report for Fall 2000 shows that the community college's enrollment has increased by about 5 percent annually in recent years. Further, over 40 percent of the new students attending Cuesta's San Luis Obispo campus come from outside the County, and about 45 percent of all students at the San Luis Obispo campus live in the City of San Luis Obispo. Thus, families and households not associated with Cal Poly represent an increasing share of the local housing market.

To exacerbate the housing situation, during the past decade housing supply has not kept pace with demand, particularly for rental housing. The 1999 Regional Profile published by the San Luis Obispo Council of Governments indicates that multi-family units represented only 5 percent of the new housing authorized for construction in 1997 in San Luis Obispo County (as compared with about 20 percent in Monterey County and 40 percent in Santa Barbara County). Some residential complexes formerly rented to students have been converted for other appropriate purposes, such as housing for senior citizens. Further, the City of San Luis Obispo's General Plan does not designate significant amounts of land for multi-family housing; and market studies have shown little near-term development potential in the area close to campus.

**48-2** Commenter suggests that the lack of housing is a major impediment to attracting employees at all income levels.

**Response** Comment is noted. Please see response to 48-1 above.

**48-3** Commenter suggests that increased pressure to solve the housing deficit will have grave consequences to the natural environment and economy.

**Response** This comment is noted. Cal Poly's approach to addressing the housing problem will actually benefit the environment in several ways. Providing additional on-campus and near campus housing will reduce the need for automobile commuting. Further, all on-campus housing will be developed on non-prime soils, protecting agricultural activities on campus.

**48-4** Commenter suggests that Cal Poly must play a major role in resolving the housing issue, including committing fiscal and land resources to building more housing.

**Response** Please see the following new text on p. 136. The Master Plan takes the local housing situation into account and proposes measures that will help alleviate a portion of it. The Guiding Framework of the Master Plan calls for adding student housing to accommodate all new enrollment growth. The campus will be breaking ground in Spring 2001 to build apartment-style housing for 800 students. This facility is scheduled to be ready for occupancy in Fall 2002. The next phase calls for housing from 1150 to 1300 additional students by 2004 or 2005. In sum, Cal Poly expects to add 1950 to 2100 student beds in the next five years, but only about 1250 additional students during that same time period. Over the next two decades Cal Poly will increase the proportion of students who live on campus from about 17 percent today to over 30 percent in the future.

Further, Cal Poly will monitor the local market closely, and, if continuing students are not able to find suitable housing, the campus will develop a strategy to house a larger proportion of the University's students in the future. Strategies may involve working with off-campus partners to identify suitable housing locations and provide financing. Cal Poly and Cuesta College are also exploring ways to cooperate in assuring appropriate housing for their students. Finally, Cal Poly will participate with non-profit organizations in seeking broader solutions to community housing needs.

**48-5** Commenter requests Cal Poly join ACTION in finding solutions to the housing problem.

**Response** Cal Poly has sponsored two recent studies of the housing market as it affects students, faculty and staff. In 1998, the Division of Student Affairs retained Gordon Chong and Partners and the Sedway Group to analyze the student housing market and explore the potential for new student housing on campus. The findings from this study contributed to the University's decision to build apartment-style units to house an additional 800 students on campus. The Cal Poly Foundation contracted with Anderson Strickler, LLC, to investigate the need and potential for University-sponsored housing for faculty and staff. Their 2000 Employee Housing Study found that housing cost is a significant factor in faculty recruitment and retention. Their report is guiding the development of faculty and staff housing on two sites west of Highway 1, as identified in the Master Plan.

Cal Poly will review and revise these market studies to inform each phase of Master Plan housing development and enrollment growth. Relevant comparative data includes vacancy rates, rents, land available for housing, financing options, and the nature and importance of amenities. Studies will also address student housing preferences and challenges in locating suitable offcampus housing. **48-6** Commenter appends several pages addressing housing impacts in our community.

**Response** This information is acknowledged and forwarded to the decision makers for their consideration. See additional sections added to Residential Communities element.

**48-7** Commenter appends data on housing need in SLO area.

**Response** This information is acknowledged and appreciated.

#### Linda C. Dalton



Margot K. McDonald Monday, December 11, 2000 7:58 AM Linda C. Dalton MP comments



I have made a few comments on the Master Plan to add language related to the role buildings can play in energy conservation and production. Gary and Ed may be sending comments on their own. I did not find a place in the Master Plan to insert language on the Design Process which ensures consideration of sustainable design factors. I'm under the gun this morning since I have a take-home exam today for one of my UCSE classes. I will drop off my comments, as well as some additional materials (Bren School, etc.) at your office this morning.

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Margot

Margot McDonald, AIA Associate Professor Architecture Department Cal Poly San Luis Obispo, CA 93407 PH 805.756-1298 FAX 805.756-1500

#### Letter 49 Donna Duerk Dept. of Architecture

#### **December 8, 2000**

**49-1** Commenter suggests a number of changes to the text of the Master Plan to strengthen sustainable building practices, specifically on pages viii, 4, 48, 64, 65, and 91 (pages per the October 10, 2000 Plan).

**Response** These changes have been incorporated into the plan. None of these recommendations raise environmental issues. See text additions on pages viii, 50, 68, 69, and 95 (January 23, 2001 Master Plan).

**49-2** Commenter suggests the need to edit the text to strengthen sustainable building practices in additional locations, specifically on pages 1, 3 and 60 (pages per the October 10, 2000 Plan).

**<u>Response</u>** Wording change is not suitable in this location, but the intent is captured elsewhere in the Master Plan.

**49-3** Commenter suggests the need to edit the text to strengthen sustainable building practices in additional locations, specifically on pages 24 and 28 (pages per the October 10, 2000 Plan).

**Response** It is not appropriate to change wording in this location because the language in this section is from a report of the Deans' Enrollment Planning Advisory Committee.

**49-4** Commenter provides editing suggestions to the Long-Range Enrollment Scenarios chapter to strengthen sustainable building practices.

**Response** Wording change is not suitable in this location. –However, it is addressed in a detailed text addition to the Public Facilities and Utilities element. See pp. 162-163. This section begins with the statement that "Site selection, site planning and building design should account for solar exposure, prevailing wind direction, and patterns of light and shade to minimize energy requirements and enhance the quality of outdoor space." Further, an addition to the University Land Uses element states that "Other plan elements that involve development, such as Outdoor Teaching and Learning, Residential Communities, Parking, and Ancillary Activities and Facilities, do not repeat either these aesthetic or sustainability principles. Nevertheless, it is the intention of the Master Plan that they be applied to all campus development" (p. 79).

**49-5** Commenter suggests that Cal Poly needs to assess sustainability of existing conditions.

**Response** This suggestion is being added to the list of implementation studies (Chapter 7).

**49-6** Commenter suggests adding a discussion of water as a resource for irrigation, etc.

**Response** This is covered on the next page under Agriculture Facilities and Resources (p. 49).

**49-7** Commenter challenges sewer capacity.

**<u>Response</u>** The sewer capacity stated is from discussions with Ed Johnson, Utilities Coordinator for Cal Poly.

**49-8** Commenter has questions about firmness of student housing sites, other land uses.

**<u>Response</u>** Board of Trustees will be approving land use designations and tentative future building sites; nevertheless, each project will require detailed site planning.

**49-9** Commenter suggests the need for a discussion of levels of environmental stewardship in the Natural Environment element.

**Response** This is incorporated in the Natural Environment principles (p. 82).

**49-10** Commenter calls for adding discussion of sustainable planning and building in campus core.

**Response** See new integrated discussion at end of Land Use and Public Facilities and Utilities elements, as noted above (response to comment 49-4).

**49-11** Commenter recommends that the campus consider integration of energy and resource recovery facility with agricultural facilities.

**Response** Again, see new integrated discussion at end of Public Facilities and Utilities element. It concludes: "Several opportunities for resource recovery projects with educational and research potential as well as operational value include water supply and waste treatment for animal facilities, enhancement of Brizzolara Creek and the construction of new student residential communities" (p. 163).

**49-12** Commenter recommends that the campus consider integration of energy and resource recovery facility with student housing in Brizzolara Creek area.

**Response** Again, see new integrated discussion at end of Public Facilities and Utilities element (p. 163).

**49-13** Commenter suggests adding a discussion of sustainable planning and building practices as they apply to development areas in the Campus Instructional Core.

**<u>Response</u>** See new integrated discussion at end of Land Use and Public Facilities and Utilities elements, as noted above (response to comment 49-4).

**49-14** Commenter suggests including section views of site to show topography.

**Response** Implementation studies for the Southwest area will address topography.

**49-15** Commenter asks that the campus apply environmental responsibility principles to student housing development.

**Response** See new integrated discussion at end of Land Use and Public Facilities and Utilities elements, as noted above (response to comment 49-4).

**49-16** Commenter recommends that the campus consider water recovery and recycling as part of Brizzolara Creek enhancement (repeat comment).

**Response** Again, see new integrated discussion at end of Public Facilities and Utilities element (p. 163).

**49-17** Commenter indicates the need to address water quality/run-off from Sports Complex.

**Response** Cal Poly has prepared a Turf Management Plan for the Sports Complex (2000), which addresses water quality impacts from the facility and provides for long-term testing of runoff. Please contact the Cal Poly Landscaping Department or Crawford Multari and Clark Associates for more information.

**49-18** Commenter suggests additions to infrastructure capacity and distribution section.

**Response** Wording changes are not suitable in this location - rather later in Public Facilities and Utilities element. See new integrated discussion on pp. 162-163.

**49-19** Commenter indicates support for principles in Public Facilities and Utilities element; urges implementation.

**<u>Response</u>** No response required.

**49-20** Commenter seeks addition of ADA considerations to pedestrian circulation design and orientation.

**Response** See text addition and clarification to Circulation principles as follows: "At the same time, pedestrian routes must be accessible for people with disabilities of all types and under a range of weather conditions" (p. 168).

**49-21** Commenter appends material on sustainability.

**Response** Acknowledged and appreciated.



California Polytechnic State University Foundation *Administrative Offices* San Luis Obispo, CA 93407

#### MEMORANDUM

To:	Linda Daiton Vice Provost	Date:	December 13, 2000
<b>-</b>	Academic Affairs Frank A. Mumford Hundred Executive Director	File:	
From:	Executive Director	Ref:	· .
Subject:	Campus Master Plan Recommendations	CC:	D. Howard-Greene B. Kitamura D. Duerk-Williamson

At its meeting of December 8, 2000, the Foundation Board of Directors approved recommending certain provisions for inclusion in the University's final Campus Master Plan document.

I am attaching these recommended changes for your consideration.

The Board was appreciative of having the opportunity to comment on this important planning document.

Attachment

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#### FOUNDATION SUGGESTED CHANGES IN WORDING FOR THE MASTER PLAN DOCUMENT

Chapter 2 p.13 Principles

Principles Question 3.f. bullet #3 — add: "campus facilities and support services so as to mitigate"	50-1
Chapter 2 p.14 Question 5.i. — add: "student service programming and support and auxiliary services concurrent with"	50-2
<b>Chapter 2 p.15</b> Question 6.j. — add: "Design and landscape guidelines will supplement the Master Plan to provide detailed guidance regarding such issues as way-finding, architectural vocabulary and open-space systems. <i>Support and auxiliary services will reinforce this image and follow the</i> <i>design guidelines.</i> "	50-1
Chapter 2 p.15 Question 7.m. — add: "public-private partnerships, <i>Foundation support, enterprise partnerships</i> , and 'design-build' project development."	50-4
Chapter 5 p.101 Principles Line 7 — add and delete: "…create a net gain of <del>both</del> instructional <del>space</del> , <i>support</i> , and green space."	50-5
Chapter 5 p.190 Coordination — add: "Support services should be planned with a holistic approach, with collaborative, interactive processes to involve all parties delivering and receiving services. Related services that require face-to-face interactions should be coordinated and consolidated"	50-1
As published by the Foundation Master Plan Task Force 11.22.00	

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#### Letter 50 Frank Mumford, Executive Director Cal Poly Foundation

#### December 13, 2000

**50-1** The Foundation Board of Directors recommended several text amendments to the Master Plan.

**<u>Response</u>** All of the amendments have been incorporated into the plan. None of these recommendations raise environmental issues. See text additions.

50-2 Add "and support and auxiliary services".

**<u>Response</u>** See text additions at page 15 and 16.

50-3 Add acknowledgement of design guidelines by support and auxiliary services.

**Response** See text addition at page 17.

50-4 Add "Foundation support, enterprise partnerships"

**Response** See text addition at page 17.

50-5 Add "support" space

**Response** See text addition at page 106.

**50-6** Add discussion of planning for support services

**Response** See text addition at page 200.



Nov. 30, 2000

Mr. Kitamura Director of Facilities Planning Cal. Poly-San Luis Obispo

Dear Sir,

We are writing about the proposed Cal. Poly Master Plan and draft Environmental Impact Report. After looking through the plan, our basic concern with the potential environmental impacts of putting residences for over 1600 students on the north side of Brizziolori Creek across from the campus core. We do not feel that this is an appropriate placement because of the long term ecological effects this project will have on this sensitive area.

As California tax paying citizens, we have invested in this riparian and grassland habitat which is presently used as a learning resource. We strongly feel that this should not be sacrificed for a development which is more suited for taking place in the campus core area. The mutual creativity of your consultants, and the Cal. Poly professors and students of architecture and urban design could surely be harnessed to create innovative and alternative models which would avoid such an inappropriate placement of this housing, and perhaps be used as a model for other learning communities. As a result, students of biology, natural resources, and agriculture would continue to have this invaluable natural laboratory which is as least as important a part of the university mission as the future housing of students.

Thank you,

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fohn Beccia for Life on Planet Earth PO Box 173 Paso Robles, CA 93447 51-1

#### Letter 51 John Beccia Life on Planet Earth

#### November 30, 2000

**51-1** Commenter's organization is concerned with the placement of housing (1,600 students) on the north side of Brizzolara Creek and the resulting environmental impacts.

**Response** Concerns are noted. The Master Plan team made extensive efforts to relocate the H-1 and H-2 housing units at a suitable distance from the creek corridor that resulted in the creation of the Brizzolara Creek Enhancement Project and the re-adsorption of units initially proposed for location along the creek (namely H-3). The additional beds were the result of partial absorption of the H-4 housing unit that could not be relocated in its entirety elsewhere on campus.

Letter 52

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ACADEMIC AFFAIRS



December 7, 2000

Mr. Robert Kitamura Dr. Linda Dalton Cal Poly San Luis Obispo, Ca 93407

Dear Dr. Dalton and Mr. Kitamura,

The following are our comments. We are submitting these comments to you within the time extension of December 8, 2000 given at the Cal Poly Master Plan Meeting in the Cal Poly Theater (Dalton, Clark). We also noted the clarification in Cal Poly's presentation to the City Council on December 5, 2000 that the Heery sports facilities concept plan referenced in the Master Plan was never adopted.

We appreciate your consideration of our comments:

We are residents of the upper Bishop's Peak neighborhood. We have a direct "line of sight" to the western portion of the Cal Poly Campus which was largely agricultural. Cal Poly is now developing a sports complex there.

Our neighborhood is also directly adjacent to San Luis Obispo City's Ferrini Open Space. The City's natural open space and our neighborhood share the East Slope of Bishop's Peak. This City natural open space area is developed with trails and is very popular. Noise and light from the Sports Complex area which would impact our neighborhood would also impact the City's Ferrini Open Space.

We have the following comments on the Cal Poly Master Plan/DEIR;

1. We strongly support Cal Poly's Adopted Master Plan, Neighborhood Relations Task Force Recommendations. The two guiding principles of the Master Plan Neighborhood Relations Task Force are:

1. "It shall be the guiding principle that negative impacts of new development, and/or redevelopment (on campus) such as; noise, glare, traffic and parking shall not be borne by residents of the established residential neighborhoods of San Luis Obispo."

2. "New development on campus shall be designed to eliminate impacts on established neighborhoods, rather than to create designs that generate ongoing conflicts between the University and residential neighborhoods."

The guiding principles and the other recommendations of the Neighborhood Relations Task Force should be implemented especially as they apply to the Sports Complex area. These are attached for the record.

Cal Poly should state in it's discussion of additions to the sports complex area and its proposed mitigations that, "new developments in the sports complex area shall be designed to eliminate (or avoid) impacts on established neighborhoods and the City's natural open space on Bishop's Peak to the greatest extent possible. "

### RECEIVED

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PROVOST AND VICE PRESIDENT FOR ACADEMIC AFFAIRS ACADEMIC AFFAIRS

Letter 52

3. The master plan, page 334, states that "Cal Poly will meet with neighbors early in the project planning and design about projects that may affect them and have cooperative discussions on ways to relieve possible impacts". We strongly support Cal Poly's commitment to this, especially as it applies to any possible future developments in the sports complex area.

Because the Heery concept plan was done without input from the neighbors and the general public; without sound studies; without an EIR; and it was never adopted, it should not be used as the basis of designing a possible new football stadium.

4. The August, 1997, Jones and Stokes Sound Study for the Cal Poly Sports Complex was done through a joint effort of Cal Poly and the City of San Luis Obispo. It included actual sound studies done on the Cal Poly Campus, which the 1997 Sports Complex EIR did not have. The 1997 Jones and Stokes Sound Study for the Cal Poly Sports Complex should be referenced to help identify, examine, and mitigate possible noise impacts to the greatest extent possible. It is attached for the record.

5. Although it has been stated that the chances of a new mustang stadium being built are remote, Cal Poly is proposing the possibility of a different, larger football stadium. This is a then a proposal for a new project, not merely the "relocation of the old stadium".

6. We do not believe that the mitigations suggested for noise and light are the most effective mitigations possible in eliminating or avoiding light, light trespass and glare impacts to the Bishop's Peak area, and therefore do not follow the Neighborhood Relations Task Force's Guiding Principles, or avoid impacts where it is possible to do so. The most effective mitigations should be used, rather than less effective ones.

8. We offer the following comments;

#### NOISE:

1. There is no proposed findings nor any evidence to support a finding that the environmentally superior alternative of remodeling the present Mustang Stadium is infeasible.

2. It is stated that certain impacts will be mitigated by described measures, however the mitigation measures are not tied to any performance standard, nor any standard of enforceability. The mitigation measures should be tied to performance standards and standards of enforceability. There should be a post construction mitigation monitoring plan for noise or light impacts.

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Letter 52

3. There are additional feasible mitigation measures which should be included. They include, but are not limited to, the following;

A. The Jones and Stokes Sports Complex Sound Study Mitigation Measures are feasible mitigation measures for a football stadium in the sports complex area. A lower sound level limit may be required, as noted.

B. There are other feasible mitigations which have been used in other stadiums and should be considered. These include, but are not limited to, enclosing the football stadium, partially enclosing the football stadium, building a stadium which is significantly below ground level, berming the stadium, orienting the stadium away from the residential neighborhood on Bishop's Peak, and acoustical barriers.

4. We additionally suggest that the following statement be added as a mitigation, "Cal Poly will meet with neighbors early in project planning and design about projects that may affect them and have cooperative discussions on ways to relieve possible impacts" (Page 334, Master Plan)

#### LIGHT, LIGHT TRESPASS, AND GLARE:

1. There are no proposed findings nor any evidence to support a finding that the environmentally superior alternative of remodeling the present Mustang Stadium is infeasible.

2. Page 142 states, "In addition, any additional sports facilities, like any other facility on campus, will be designed so as to mitigate environmental impacts on and off campus". That is a positive statement. However, the proposed mitigation measures for the Parking structures and mustang stadium propose to avoid glare and light trespass "onto adjacent areas and onto public right-of-way areas". The most effective light mitigation measures for the parking structures and mustang stadium should avoid light and glare and light trespass to adjacent areas, the public right of way, AND THE RESIDENTIAL NEIGHBORHOOD AND CITY'S OPEN SPACE ON BISHOP'S PEAK. (These overlook the proposed project)

3. The Master Plan proposes Class II, significant residual impacts for light and glare. We agree with the San Luis Obispo City Council that this is unacceptable. The project and/or mitigations should be reexamined and modified so that the light, light trespass and glare impacts are reduced further. The most effective mitigations should be used, rather than less effective ones.

3.

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ACADEMIC AFFAIRS

## Letter 52

4. Additional feasible mitigation measures which should be considered, include, but are not limited to, enclosing the football stadium, partially enclosing the football stadium, using horizontal arms of lighting which extend over the field of the football stadium and aim light down rather than vertical lights, sinking the football stadium significantly below ground level, planting rows of trees which are tall enough to help screen the sports complex lighting, and using the lighting which most effectively mitigates any light trespass or glare. Attached are professionally suggested, additional feasible mitigation measures for the football stadium and the proposed parking structure closest to the sports complex, Parking structure III (Attachments # 3 and #4 for the record).

5. If the basketball arena is built, similar additional mitigation measures should also be considered where appropriate.

6. Mitigation measures should be tied to performance standards and standards of enforceability. There should be post construction mitigation monitoring plans for noise and light, light trespass and glare.

7. We suggest that the following statement be added as a mitigation, "Cal Poly will meet with neighbors early in project planning and design about projects that may affect them and cooperative discussions on ways to relieve possible impacts". (page 334 Cal Poly Master Plan)

rl and anne B ч, м. <u>р</u>

Sincerely,

# Attachment #1

#### NEIGHBORHOOD RELATIONS TASK FORCE

### RECOMMENDATIONS

In recognition that Cal Poly is an "ongoing" entity in San Luis Obispo: new development, changes, and other activities of the University should address community concerns using the following principles as they relate to Neighborhood Relations.

#### 1.

#### FOR PLANNING NEW DEVELOPMENT ON CAMPUS

#### GUIDING PRINCIPLES:

Because there are established residential neighborhoods in the City of San Luis Obispo, and because new developments on campus may negatively impact these established, residential neighborhoods:

- It shall be a guiding principle that negative impacts of new development, and/or re-development such as: noise, glare, traffic and parking shall not be borne by residents of the established residential neighborhoods of San Luis Obispo.
- New development on campus shall be designed to <u>eliminate</u> impacts on established neighborhoods, rather than to create designs that generate ongoing conflicts between the University and residential neighborhoods.

## SUPPORTING PLANNING AND POLICY PRINCIPLES: *

 There shall be a new, ongoing process by which representatives of residential neighborhoods, neighborhood associations, and the University regularly discuss issues which may impact University/neighborhood relations. Existing University, City and Public Advisory Committees should be continued. (*Rationale: Direct, regular communication between representatives of residential neighborhoods, neighborhood associations, and the University is the basis for positive University/neighborhood relations.]*

- 2. Early in the process of conceptualizing and proposing new development on campus, any possible impacts on the established residential neighborhoods shall be identified through a cooperative effort between the University and those neighborhoods possibly impacted. (*Rationale: Historically, neighborhoods have been key in identifying possible impacts to neighborhoods. The earlier that the neighborhoods are involved in the process the more possibilities there will be for positive, successful solutions.*]
- The University's Environmental Impact Report (EIR) for new developments shall focus on the possible negative impacts on the existing residential neighborhoods.
- 4. The University and the affected neighbors shall work together to reach agreements on specific ways that potential impacts can be avoided. Agreements should list and memorialize specific design aspects, operational conditions, and meaningful enforcement methods.
- 5. Design aspects and agreements with neighborhoods, which are for the purpose of eliminating or mitigating impacts of campus developments, shall be rigorously enforced by the University. To eliminate ongoing conflicts between the University and established residential neighborhoods, the University shall be proactive in enforcing its agreements, rather than reactive and complaint-driven.
- 6. The University should coordinate its neighborhood relations efforts among its various departments so that responsibility for operational issues, agreement enforcement, communications with neighborhoods, and other issues affecting neighborhoods are coordinated.
- 7. It should be recognized that large, new developments on campus which are dependent on both the student population and a large commercial draw from non-student populations, may have significantly larger impacts on residential neighborhoods than those developments which depend upon the student population alone. Developments with a commercial component may also require proportionately larger efforts and costs to eliminate negative impacts on established residential neighborhoods.
- The University should develop or maintain adequate natural or physical buffers between established residential neighborhoods and existing and future developments on the campus to avoid negative impacts.

2.

#### FOR CONSIDERING INCREASED ENROLLMENT

#### GUIDING PRINCIPLES:

Because Cal Poly is a residential campus of more than 6000 acres adjacent to one relatively small city of approximately 45,000 people:

 It shall be a guiding principle that negative impacts resulting from increased enrollment such as: traffic, parking problems, overcrowding, noise, deterioration of residential properties and increased rental housing costs for all, shall not be borne by the residents of the established residential neighborhoods of San Luis Obispo.

#### SUPPORTING PLANNING AND POLICY PRINCIPLES: *

- There is an existing shortage of affordable, desirable housing on the campus. This should be corrected. When the University further increases enrollment, there must be a corresponding increase of affordable, desirable housing on the campus to accommodate that increase. [The university's goal of having only 25% of its students living on campus, as stated in the DEPAC "more" enrollment on campus scenario, is very inadequate].
- The University should provide the location for a Greek Row on campus where Greek activities can take place.
- The University should research the local feasibility of programs which have been successful at other universities, such as; multi-generation housing on campus, on-campus living for first time freshmen, and the development of a transitional living plan.
- The University should strive to develop a social and physical environment on campus that is attractive to students and faculty that promotes on campus living and a sense of community.
- To reduce traffic problems on and near the campus, the University shall continue to contribute to the City's transit services and encourage increased use of these services. Circulation systems on the campus

should be improved with particular focus on alternative forms of transportation, campus transit systems, bicycling and walking.

- New parking on the campus shall not impact established residential neighborhoods.
- The University should work proactively with the City and residential neighborhood associations to review existing "good neighbor" guidelines, develop additional guidelines where necessary, educate students about these guidelines, and enforce and implement these guidelines on an ongoing basis.
- The University should make existing campus educational activities more accessible to the residents of San Luis Obispo.
- The University should provide funding to help the City communicate with landlords and absentee owners regarding property upkeep, tenant relations, and identify and correct violations of overcrowding, noise, and other neighborhood enhancement ordinances.
- The University shall better integrate neighborhood issues throughout the Master Plan and related documents, including the enrollment scenarios.

As this is "the primary conduit for participation" by neighborhoods, and there is no neighborhood representative on the Master Plan Committee [see background materials], we appreciate this opportunity to offer a more complete task force recommendation. We would also appreciate the opportunity for a neighborhood representative from this committee, to attend at least one meeting of the University's Master Plan Committee for the purpose of providing background and answering questions about these recommendations.

Dated: May 24, 1999

*<u>Task Force Charge</u>: "To suggest broad policy or planning principles regarding the assigned topics to help guide the development of the administrative draft of the Master Plan". (Cal Poly Master Plan.)

ATTACHMENT NEIGHBC AGN

### RECEIVED

DEC 08 2000 PROVOST AND VICE PRESIDENT FOR ACADEMIC AFFAIRS

#### Final

#### Sound Study for the Cal Poly Sports Complex

#### Prepared for:

City of San Luis Obispo Parks and Recreation Department 1341 Nipomo Street San Luis Obispo, CA 93401 Contact: Paul LeSage 805/781-7294

Prepared by:

Jones & Stokes Associates, Inc. 2600 V Street, Suite 100 Sacramento, CA 95818-1914 Contact: David Buehler 916/737-3000

August 1997

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#### EXECUTIVE SUMMARY

Jones & Stokes Associates has been retained by the San Luis Obispo Parks and Recreation Department to evaluate the potential increase in sound in city neighborhoods that may occur with operation of the sports complex proposed by California Polytechnic State University. Sound from the crowd, public address announcements, and music has been evaluated using standard acoustic propagation methodologies and a simulation test.

The results of the sound level projection analysis and the simulation test indicate that crowd sound and public address sound at levels anticipated from the stadia will not measurably increase A-weighted background sound levels in the neighborhoods of concern under cool, calm weather conditions with clear skies. They also indicate that sounds from these sources will be barely audible to audible depending on location. In addition, the results of the simulation test indicate that loud music (93-94 decibels A-weighted at 100 feet) can be distinctly audible at locations that have a direct line of sight to the project site and can be barely audible at locations where there is intervening topography or structures. The test results also indicate that public address announcements at a level of \$4 dBA at 100 feet can be audible at locations with a direct line of sight to the project site The predominant winds out of the northeast will tend to reduce sound transmission from the project site to locations to the west (i.e., the neighborhoods of concern). Winds from the east, temperature inversion conditions, or low cloud cover may tend to increase sound transmission from the project site and could result in distinctly audible crowd and public address sound in the neighborhoods of concern. However, these types of conditions are usually unstable, intermittent, and short term in nature. In addition, temperature inversion conditions and the associated low cloud cover that would tend to increase sound transmission typically occur in July, August, and September and would not typically coincide with use of the stadia. Mitigation measures identified at the end of this report will help to reduce sound at the source.

## INTRODUCTION

California Polytechnic State University (Cal Poly) is proposing to construct a multiuse sports complex on campus that would have a baseball stadium, a softball stadium, baseball and softball fields, and soccer fields. The City of San Luis Obispo is considering participating in the funding of the project, which would allow the city parks and recreation department to use the facilities for city sports programs. The California State University, serving as lead agency, prepared an environmental impact report (EIR) as required under the California Environmental Quality Act. The final EIR was certified by the Board of Trustees of the California State University in February 1997. Because of concerns expressed by residents in the Bishop Peak and the Cerro San Luis neighborhoods relating to potential noise effects from the facility, the city retained Jones & Stokes Associates to evaluate the potential noise effects of the project in more detail than was provided in the EIR. The primary noise concerns are related to amplified speech and music from public address systems and crowd noise.

1

Sound Study for the Cal Poly Sports Complex

City of San Luis Obispo Parks and Recreation Departmen.

Recreation Department August 1997 The purpose of this sound study is to evaluate the potential increase in sound above existing background sound levels that could result from evening activity at the baseball and softball stadiums. Mitigation measures to reduce sound from evening stadium activity are also discussed.

## BACKGROUND INFORMATION ON ENVIRONMENTAL ACOUSTICS

Appendix A provides a discussion of terminology and fundamental concepts used in environmental acoustics.

## PROJECT DESCRIPTION AND KEY ASSUMPTIONS

The sports complex would be built on approximately 32 acres and would include:

■ six multiuse athletic fields for soccer, baseball, and softball;

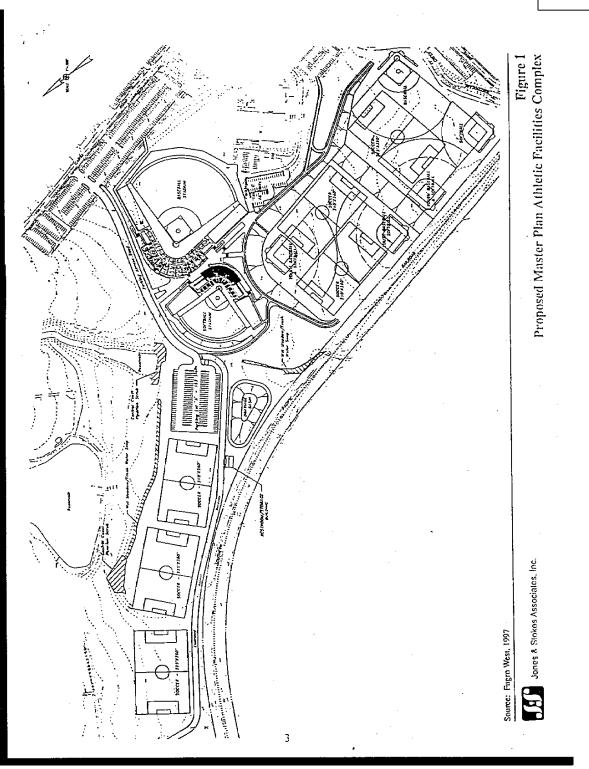
- a baseball stadium with seating for 2,500; and
- a softball stadium with seating for 1,000.

Figure 1 depicts the proposed layout of the facility as described in the final EIR. According to the EIR, the stadiums would be built in two phases. In the first phase, the baseball stadium would be built with approximately 600 bermed box seats, and the softball stadium would be built with approximately 300 bermed box seats. Bleachers would be provided on a temporary basis to bring capacities to 2,500 seats in the baseball stadium and 1,000 seats in the softball stadium. A superstructure for the baseball/softball stadium complex would replace the temporary bleachers and would consist of an additional 1,900 permanent seats for baseball and an additional 700 seats for softball. Permanent public address sound systems would be provided in both stadia. The entire complex would be lighted for nighttime use of the facilities.

The following is additional information about how the stadia would be used and key assumptions used in this analysis:

- Twelve dates are scheduled for women's softball games. Six are day games, and six are night games. Each "game" is a doubleheader. Women's games would rarely go beyond 9 p.m.
- Thirty-four dates are scheduled for men's baseball games. Seventeen are day games, and 17 are night games.
- Men's night games start at 7 p.m. A warmup period starts approximately 1½ hours before the start of the game. Music is typically played during the warmup period.

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- Men's games are typically no more than 3 hours long. During the 1996 season, five of the 57 games played went beyond 3 hours.
- Softball and baseball games would not occur at the same time.
- Public address sound systems would not be used at the multiuse athletic facilities.

# APPROACH AND METHODOLOGY

Jones & Stokes Associates' noise specialist, staff members from the City of San Luis Obispo Parks and Recreation Department, and a group of citizens from nearby neighborhoods met on May 21, 1997, to discuss the project and the citizens' concerns about project-related sound. It was agreed that the primary noise of concern would be activity at the baseball and softball stadia during evening hours and that stadium sound during evening hours (8-11 p.m.) would be the focus of the sound analysis. It was further agreed that a test simulating crowd sound, public address announcement sound, and music would be conducted to provide citizens and decision makers with additional insight into the potential noise impact of the project.

There are several key components to this analysis, and each is discussed below.

## Quantification of Existing Background Conditions .

To evaluate the potential change in sound conditions that would result from activity at the stadia, it is necessary to quantify existing sound conditions at potentially affected areas. These existing data then become the baseline against which predicted and measure stadium sound is evaluated.

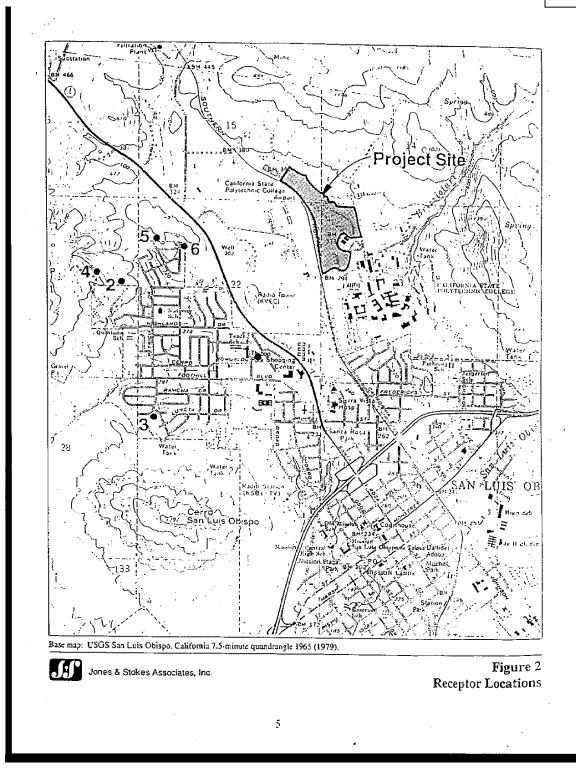
Background sound conditions were evaluated in two ways. First, 24-hour measurements were conducted at six selected neighborhood locations (Figure 2). These data provide information on how sound levels change over time throughout the day and in particular help to identify minimum sound levels that occur during the critical analysis time period of 8-11 p.m. Second, background sound was measured before the simulation test to quantify the actual baseline sound level occurring during the simulation test and to provide octave band background sound level data.

#### Collection of Baseball Game Source Data

To conduct an analytical evaluation of the potential sound increase at residential locations and to obtain a recording of game sounds for the simulation test, sound levels and game sounds were measured and recorded at a baseball game.

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#### Simulation Test

To simulate game sounds, a recorded simulation program was assembled using the baseball source data described above. This program and music and sound effects often used at games were played through a sound system located on the project site. Sound level measurements and subjective evaluations of audible sound were then made by Jones & Stokes Associates' noise specialist at the six residential locations where background measurements were taken previously. These data were then used to quantify the change in sound at the residential locations resulting from the simulation test.

## Analytical Analysis

Using sound level data from the baseball game described above, octave band source levels for crowd and public address announcement sound were developed. Projected sound levels for these sources at each of the six residential locations were estimated based on distance attenuation, molecular absorption, anomalous excess attenuation, and barrier effects. Projected sound levels were then compared to background sound levels.

# EXISTING BACKGROUND SOUND CONDITIONS

## Sound Sources

Numerous sources of sound contribute to the sound environment at the six locations investigated. The primary source of sound is traffic on local roadways. Major roadways in the area include State Route 1 (Santa Rosa Street), Highland Drive, and Foothill Boulevard. Other sources of sound observed include barking dogs, chirping birds, yard maintenance equipment (e.g., mowers, leaf blowers), home maintenance tools (e.g., saws, hammers), public address announcements at the California Men's Colony, emergency vehicle sirens, aircraft overflights, and train passages on the Southern Pacific Railroad track. Residents note that crowd sound and public address announcements from football games at Mustang Stadium are audible on some occasions.

# **Twenty-Four-Hour Measurements**

Twenty-four-hour sound levels at the six selected residential locations were measured using Larson-Davis Model 700 Type 2 sound level meters. Short-term measurements were also selectively taken with a Larson-Davis Model 812 Type 1 sound level meter. These instruments fully comply

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with the American National Standards Institute (ANSI) standard S1.4-1983 for Type 1 and Type 2 instruments. The meters were set to measure A-weighted sound level with a slow meter response. The slow meter response is the appropriate meter setting for measuring nonimpulsive, community noise sound levels. The Model 700 meters were programmed to capture 1-minute  $L_{eq}$  values and 1-hour  $L_{eq}$ ,  $L_{max}$ ,  $L_{min}$ ,  $L_{50}$ , and  $L_{90}$  values measured over 24-hour periods. Instrument calibration was verified before and after each measurement session with a Larson-Davis Model 250 acoustic calibrator. At each 24-hour monitoring position, the meter was held by a tripod that placed the meter approximately 5 feet above the supporting surface. The results of the background 24-hour sound measurements are summarized in Table 1 and Figures B-1 through B-12 in Appendix B and are discussed below.

Position	Address	Start Date	Start Time	L ₉₀ Value Range (dBA)	L _{so} Valu Range (dBA)
#1	242 Ferrini Road	May 22, 1997	3:30 p.m.	35-40	37-43
#2	672 Oakridge Drive	May 22, 1997	3:43 p.m.	43-47	45-51
#3	189 San Jose Court	May 22, 1997	3:20 p.m.	35-36	35-38
#4	Brittany Circle	May 23, 1997	4:46 p.m.	34-36	36-39
#5	320 Twin Ridge Drive	May 23, 1997	5:02 p.m.	39-40	41-43
#6	807 Skyline Road	May 23, 1997	5:14 p.m.	37	38

#### Table 1. Summary of L₃₀ and L₉₀ Sound Levels Measured between 8 p.m. and 12 a.m.

#### Weather Conditions

Weather conditions observed during placement of sound meters at each position are discussed below. Weather data measured at San Luis Obispo Airport were provided by Sharon Grace at television station KSBY and is consistent with observations by Jones & Stokes Associates. These data are summarized in Table 2.

#### Position #1 - 242 Ferrini Road

The sound level meter was placed in the backyard of this residence and began collecting data at 2:30 p.m. on Thursday, May 22, 1997. Fencing and structures block the line of sight to the project site. Skies were clear with a slight breeze. Twenty-four-hour measurement results are depicted in Figures B-1 and B-2, provided in Appendix B. The 1-hour  $L_{90}$  values measured at this location

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Date	Relative Humidity	High Temperature (°F)	Low Temperature (*F)	Wind Speed (mph)	Wind Direction
May 21, 1997	59%	78	57	6	West
May 22, 1997	34%	75	54	23	Northwest
May 23, 1997	57%	75	50	17	Northwest
May 24, 1997	61%	75	54	281	Northwest

### Table 2. Summary of Weather Data for May 21, 22, 23, and 24, 1997

Note: Wind speed/direction and relative humidity were measured at 3 p.m.

* Gusts up to 34 mph.

between 8 p.m. and 12 a.m. varied between 35 decibels A-weighted [dBA] and 40 dBA.  $L_{50}$  values varied between 37 dBA and 42 dBA.

## Position #2 - 672 Oakridge Drive

The sound level meter was placed in the front yard of this residence and began collecting data 2:43 p.m. on Thursday, May 22, 1997. There is a direct line of sight to the project site and Highway 1 from this location. Skies were clear with a slight breeze. Twenty-four-hour measurement results are depicted in Figures B-3 and B-4 provided in Appendix B. The 1-hour  $L_{90}$  values measured at this location between 8 p.m. and 12 a.m. varied between 43 dBA and 47 dBA.  $L_{50}$  values varied between 45 dBA and 51 dBA.

# Position #3 - 189 San Jose Court

The sound level meter was placed in the backyard of this residence and began collecting data at 3:20 p.m. on Thursday, May 22, 1997. Fencing and structures block the line of sight to the project site. Skies were clear with a slight breeze. Twenty-four-hour measurement results are depicted in Figures B-5 and B-6, provided in Appendix B. The 1-hour  $L_{90}$  values measured at this location between 8 p.m. and 12 a.m. varied between 35 dBA and 36 dBA.  $L_{50}$  values varied between 35 dBA and 38 dBA.

## Position #4 - Brittany Circle

The sound level meter was placed in an empty lot in this undeveloped residential subdivision and began collecting data at 4:46 p.m. on Friday, May 22, 1997. There is a direct line of sight to

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the project site, and Highway I from this location. A storm was developing, skies were cloudy, and winds were gusty. The meter was placed near a large tree to visually screen the meter for security reasons and to provide some protection from the weather. Twenty-four-hour measurement results are depicted in Figures B-7 and B-8, provided in Appendix B. The 1-hour  $L_{90}$  values measured at this location between 8 p.m. and 12 a.m. varied between 34 dBA and 36 dBA.  $L_{30}$  values varied between 36 dBA and 39 dBA.

#### Position #5 - 320 Twin Ridge Drive

The sound level meter was placed on an unprotected deck elevated above the backyard of this residence on the upslope behind the residence. The meter began collecting data at 5:02 p.m. on Friday, May 23, 1997. There was no line of sight to the project site as a result of intervening topography and structures. A storm was developing, skies were cloudy, and winds were gusty. Slight sprinkles were noticed. Twenty-four-hour measurement results are depicted in Figures B-9 and B-10, provided in Appendix B. The 1-hour L₅₀ values measured at this location between 8 p.m. and 12 a.m. varied between 39 dBA and 40 dBA. L₅₀ values varied between 41 dBA and 43 dBA.

#### Position #6 - 807 Skyline Road

The sound level meter was placed in the backyard of this residence and began collecting data at 5:14 p.m. on Friday, May 23, 1997. Fencing and topography block the line of sight to the project site. A storm was developing, skies were cloudy, and winds were gusty. Slight sprinkles were noticed. The meter was fairly protected by nearby trees and structures. Twenty-four-hour measurement results are depicted in Figures B-11 and B-12, provided in Appendix B. The 1-hour  $L_{90}$  values measured at this location between 8 p.m. and 12 a.m. were all at 37 dBA.

## SOUND ANTICIPATED FROM THE SPORTS COMPLEX STADIA

#### Crowd Sound, Public Address System, and Music Source Levels

Estimates of sound levels produced by the crowd, public address announcements, and music were made by evaluating sound level data measured by Jones & Stokes Associates, data provided in the Cal Poly Sports Complex EIR, and data from standard references.

Sound levels from the crowd and the public address system were measured by Jones & Stokes Associates at a high school championship game at American River College on Saturday, May 31, 1997. Data were collected using a Larson-Davis 812 sound level meter with output connected to a Sony TCD-D3 digital audio tape recorder. Officials at the event were contacted and

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reported that the size of the crowd was approximately 525. The crowd was evenly distributed in bleachers located along the first and third base lines. A distributed public address system with horn speakers elevated above the bleachers and aimed at the bleachers was employed. Measurements were taken beyond the center field fence at a distance of 370 feet from home plate. This distance is considered to be reasonably representative of the distance to the acoustic center of the crowd.

Maximum sound levels produced by the crowd in response to events such as strikeouts, dropped fly balls, and single base hits were typically in the range of 61-71 dBA. In response to a home run, the maximum sound level produced was 73 dBA. Maximum sound levels produced by the public address system were in the range of 61-65 dBA. Music was briefly played through the system and produced a maximum sound level of 68 dBA.

The Cal Poly Sports Complex EIR reports sound levels measured at the 2,000-seat John Thurman Field in Modesto, California, on July 25, 1996 (Fugro West 1997). A crowd of 663 attended the game.  $L_{max}$  values from general game sound (e.g., yelling, clapping, and organ sound) was measured in the range of 65-70 dBA at 100 feet. Following a home run,  $L_{max}$  values in the range of 74-79 dBA were measured at 100 feet. A distributed sound system with 12 speakers was used at this facility.

The Handbook of Noise Control (Harris 1979) reports the sound level produced by a person yelling with maximum vocal effort is 88 dBA at 1 meter (3.28 feet).

To allow comparison of these measured and reference sound levels, each has been scaled to a reference distance of 100 feet. This is done by using point source attenuation of 6 decibels (dB) per doubling of distance. The maximum crowd sound of 73 dBA at 370 feet measured by Jones & Stokes Associates corresponds to 84.4 dBA at 100 feet. This is calculated by adding 11.4 dB to 73 dBA. The value of 11.3 dB is 20 times the logarithm of the ratio 370/100. This sound level has been scaled up to correspond to the sound produced by 2,500 people by taking 10 times the logarithm of the ratio 2,500/525, which equals 6.8 dB. The reference maximum sound level for 2,500 people at 100 feet is therefore 91.2 dBA (73 + 11.4 + 6.8). Estimated reference sound levels based on the Cal Poly EIR data and the Harris data are summarized in Table 3.

The source level of 91.2 dBA at 100 feet is considered to be a reasonable estimate of the maximum crowd sound level for a crowd of 2,500 people and is conservative relative to data reported in the Cal Poly EIR. The estimate of 92.3 dBA from the Harris data is probably overly conservative because it is based on all 2,500 people yelling in unison with maximum vocal effort.

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Source of Data	Sound Source	Calculated Reference Maximum Sound Level at 100 Feet
Jones & Stokes Associates	2,500-person crowd	91.2 dBA
Jones & Stokes Associates	Public address system	76.4 dBA
Jones & Stokes Associates	Music	79.4 dBA
Cal Poly EIR	2,500-person crowd	84.7 dBA
Harris 1979	2,500-person crowd	92.3 dBA

## Table 3. Estimated Maximum Source Levels

#### Simulation Test

#### Simulation Program and Test Configuration

A test simulating crowd sound, public address announcement sound, and music was conducted to provide citizens and decision makers with additional insight into the potential noise effects of the project. To conduct the test, program material for the simulation was developed. Selected portions of audio recordings from the baseball game at American River College were assembled into a program of 5 minutes and 20 seconds. The program includes announcements over a public address system; crowd responses from relatively minor events, such as strikeouts and dropped fly balls; and crowd response from a home run. Home runs clearly resulted in maximum crowd sound levels. The crowd sound from a single home run was played three times throughout the crowd program. During the first time, the public address announcement of the home run and an airhorn were included with the crowd sound. During the second and third times, the public address announcement and airhorn were edited from the program. The simulation program was assembled using the live digital audio recordings, a computer-based digital audio editor, an Alesis ADAT 8-track digital audio tape recorder, a Mackie 1604 16-channel mixer, and a Teac C-3RX stereo cassette deck.

The simulation test was conducted on the evening of Wednesday, June 18, 1997. A professional sound system was placed at the proposed location of the softball stadium. The sound system consisted of two Peavey SP-5T1 speakers spaced approximately 25 feet apart on stands approximately 5 feet above the ground. Two Peavey SP-5T1 speakers were placed between the SP speakers approximately 3 feet above the ground. The speakers were oriented toward the Bishops Peak area. The speakers were powered by a Peavey CS800 professional stereo power amplifier (600 watts). A Denon DN-610F precision audio component CD/cassette was connected to a Diamond Studio master 12-channel audio mixer, which drove the power amplifier.

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City of San Luis Obispo Parks and Recreation Department August 1997 A reference sound level meter was placed 100 feet in front of the speakers. The sound level produced by the speakers was then adjusted so that the maximum sound level from the "home run" crowd sound (in the range of 91-92 dBA) would correspond with the 91.2 dBA estimate shown in Table 3. A second recording of the crowd program recorded at a level 2 dB lower than the first program follows the first program to simulate a smaller crowd of 1,600 people. Ten times the logarithm of the ratio 2,500/1,600 is 1.9 dB. This program was then followed by 2 minutes of rap music ("It's All Good" by M. C. Hammer) and sound effects, including a fire engine bell, a circular saw, and tubular bells. The rap music was adjusted to play at approximately 79 dBA at 100 feet to correspond to music sound levels measured by Jones & Stokes Associates at American River College. The sound effects were followed by 2 minutes of rock music ("Got to Be Funky" by Stevie Ray Vaughn) played at the maximum level that the sound system could produce without audio distortion. Music would never be played this loud at the stadia. Table 4 summarizes maximum sound levels produced by each element of the 15-minute simulation program as measured at 100 feet.

Program Sound	L _{max} at 100 feet
Crowd	91-93 dBA
Public address	84 dBA
Rap music	78-79 dBA
Fire engine bell	70-71 dBA
Circular saw	72 dBA
Tubular bells	72 dBA
Rock music	93-94 dBA

#### Table 4. Simulation Maximum Sound Levels Measured at 100 Feet

The simulation program was then played six times throughout the evening, between 8 p.m. and midnight, while sound level measurements and observations were made at each of the six residential receptor locations.

#### Weather Conditions

Sharon Grace of television station KSBY was contacted and provided weather data that were measured at San Luis Obispo Airport on the evening of the test. These data are summarized in Table 5.

Skies were clear throughout the evening. When sound level measurements were taken at each position, there was no wind with the exception of a very slight breeze at position #3, San Jose

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Court. These calm, cool, and stable weather conditions were ideal for the simulation test. Winds are predominantly out of the northwest in San Luis Obispo. Winds out of the northwest would tend to

Time	Relative Humidity	Temperature (°F)	Wind Speed (mph)	Wind Direction
9 p.m.	72%	61	6	Northwes
10 p.m.	83%	57	Calm	
11 p.m.	90%	57	Calm	

Table 5. Summary of Weather Conditions on Wednesday, June 23, 1997

reduce sound transmission between the project site and the neighborhoods of concern. Accordingly, the absence of wind provided stable baseline weather conditions for the test.

Ms. Graves also provided information concerning temperature inversion conditions in the San Luis Obispo area. She said that inversion conditions tend to occur in July, August, and September and taper off in October. Sometimes inversion conditions can develop as early as May or June, but this is fairly rare. Low cloud cover conditions in San Luis Obispo tend to coincide with these inversion conditions. Given that the baseball season is from January to May, it appears that inversion conditions that could increase sound propagation would typically not occur during the baseball season.

#### Sound Levels in the Neighborhood

At each position, background sound levels were measured for 1-2 minutes before the simulation program was played. Measurements were then taken for the entire duration of the simulation program. Measurements of background sound levels and sound levels measured during the simulation program are summarized in Table 6. Although sound from the simulation program was audible at some locations, program sound was not clearly measurable above the background sound level at any location. Tonal sound, such as speech and music that is not measurable above the background sound level, can often be audible if the sound level of the tonal sound is within approximately 10 dB of the background sound level. Maximum sound levels reported in Table 6 are not from the program but rather from sources such as car passages, radio transmissions, and aircraft.

The following is a discussion of observations and measurements made by Jones & Stokes Associates. It is important to note that these observations were made by an individual with critical listening skills who was very familiar with the program material. Other individuals unfamiliar with the material may not even notice sound described below as barely audible.

Position #1 - 242 Ferrini Road. Measurements and observations were taken in Throop Park, across the street from this residence because the occupants were not home. Background sound

Sound Study for the Cal Poly Sports Complex. Final City of San Luis Obispo Parks and Recreation Department August 1997 levels included sound from traffic on Highway 1 and Foothill Boulevard and crickets. No part of the simulation program was audible at any time. A train passage resulted in sustained sound levels at approximately 42 dBA for several minutes before the simulation was played.

Position #2 - 672 Oakridge Drive. Background sound levels included sound from traffic on Highway 1 and crickets. The first "home run" crowd sound peak and announcements were barely audible. The second "home run" crowd sound peak was audible, as was the closing announcement statement. The rock music was distinctly audible with intelligible singing. Sound peaks in the range of 43-47 dB were noted during the rock music; however, it was not possible to clearly determine that these peaks were from the music. The rap music and sound effects were inaudible.

	Start Time	Sound	L _{min}	L.90	L _{so}	Leq	L _{max}
242 Ferrini Road⁵	11:40 p.m.	Background	37.8	38.6	39.5	39.5	42.0
		Program	35.7	37.3	39.5	47,4	69.6
672 Oakridge Drive	9:02 p.m.	Background	40.1	41.5	42.4	42.5	44,7
		Program	38.5	40.6	42.9	52.5	71.3
189 San Jose Court	8:38 p.m.	Background	36	35.8	37.4	37.8	43
		Program	34	35	36.8	44.9	68.4
Brittany Circle	8:02 p.m.	Background	37.0	37.5	38.9	41.9	45.3
		Program	36.0	37.8	39.8	52.3	76.1
320 Twin Ridge Drive	9:59 p.m.	Background	34.3	34.9	35.6	37.2	47.3
		Program.	34.9	36.0	42.9	48.1	67.8
807 Skyline Road	. 10:52 p.m.	Background	35.4	36.0	38.6	38.6	43.
		Program	34.8	36.3	37.9	41.7	54.0
	Drive 189 San Jose Court Brittany Circle 320 Twin Ridge Drive 807 Skyline	Drive 189 San Jose Court Brittany Circle 320 Twin Ridge Drive 807 Skyline 10:52 p.m.	672 Oakridge Drive9:02 p.m.BackgroundProgramProgram189 San Jose Court8:38 p.m.Background189 San Jose Court8:38 p.m.BackgroundProgramProgramProgramBrittany Circle9:59 p.m.Background320 Twin Ridge Drive9:59 p.m.BackgroundProgram9:59 p.m.Background807 Skyline Road10:52 p.m.Background	672 Oakridge Drive9:02 p.m.Background40.1DriveProgram38.5189 San Jose Court8:38 p.m.Background36189 San Jose Court8:38 p.m.Background36Program34Program34Brittany Circle8:02 p.m.Background37.0OrreleProgram36.0320 Twin Ridge Drive9:59 p.m.Background34.3Program34.9S07 Skyline Road10:52 p.m.Background35.4	672 Oakridge Drive       9:02 p.m.       Background       40.1       41.5         Program       38.5       40.6         189 San Jose Court       8:38 p.m.       Background       36       35.8         Program       34       35         Brittany Circle       8:02 p.m.       Background       37.0       37.5         Program       36.0       37.8         320 Twin Ridge Drive       9:59 p.m.       Background       34.3       34.9         Program,       34.9       36.0         807 Skyline Road       10:52 p.m.       Background       35.4       36.0	672 Oakridge Drive       9:02 p.m.       Background       40.1       41.5       42.4         Program       38.5       40.6       42.9         189 San Jose Court       8:38 p.m.       Background       36       35.8       37.4         Program       34       35       36.8         Brittany Circle       8:02 p.m.       Background       37.0       37.5       38.9         220 Twin Ridge Drive       9:59 p.m.       Background       34.3       34.9       35.6         807 Skyline Road       10:52 p.m.       Background       35.4       36.0       33.6	672 Oakridge       9:02 p.m.       Background       40.1       41.5       42.4       42.5         Drive       Program       38.5       40.6       42.9       52.5         189 San Jose       8:38 p.m.       Background       36       35.8       37.4       37.8         Court       Program       34       35       36.8       44.9         Brittany       8:02 p.m.       Background       37.0       37.5       38.9       41.9         Brittany       8:02 p.m.       Background       36.0       37.8       39.8       52.3         320 Twin       9:59 p.m.       Background       34.3       34.9       35.6       37.2         Ridge Drive       9:59 p.m.       Background       34.3       34.9       35.6       37.2         Roda       10:52 p.m.       Background       35.4       36.0       33.6       38.6

Table 6. Summary of Sound Levels Measured before and during the Simulation Test

Position #3 - 189 San Jose Court. Background sound levels included sound from traffic on Foothill Boulevard, crickets, and birds. The first "home run" crowd sound peak was audible, and the rock music was just barely audible. None of the simulation program was measurable above the background sound level. The public address announcements, rap music, and sound effects were inaudible.

Position #4 - Brittany Circle. Background sound levels included sound from traffic on Highway 1 and crickets. The "home run" crowd sound peaks and the rock music were barely audible. None of the simulation program was measurable above the background sound level. The public address announcements, rap music, and sound effects were inaudible.

Position #5 - 320 Twin Ridge Drive. Background sound levels included sound from traffic on Highway 1 and crickets. The "home run" crowd sound peaks were just barely audible. The rock music, public address announcements, rap music, and sound effects were not audible. None of the simulation program was measurable above the background sound level.

Position #6 - 807 Skyline Road. Background sound levels included sound from traffic on Highway 1 and crickets. The "home run" crowd sound peaks, part of the announcements, and the rock music was just barely audible. The rap music and sound effects were inaudible. None of the simulation program was measurable above the background sound level.

# **Calculated Sound Level Projections**

Crowd and public address sound has been evaluated using the source levels indicated in Table 4 and an acoustic propagation model. Octave band sound levels for recorded crowd sound, public address announcement sound, and background sound was determined using Spectra Plus Version 4.0, a PC-based spectral analyzer. Tables B-1 through B-6 in Appendix B summarize the sound attenuation calculations for each of the six residential locations. Attenuation calculations were conducted in accordance with procedures recommended in Noise Control for Buildings and Manufacturing Plants (Hoover & Keith 1996). Assumed source levels, distance attenuation, molecular absorption, anomalous excess attenuation, and estimated barriers effects are summarized. A nominal temperature of 50°F and a relative humidity of 90% was assumed in the determination of attenuation from molecular absorption.

The resulting calculated sound levels at each receptor locations can be compared in Tables B-1 through B-6 to  $L_{90}$  dBA background sound levels measured on the night of June 18, 1997. Estimated octave band  $L_{90}$  values are also shown. Calculated sound levels can be compared to background levels measured in May by comparing the results in Tables B-1 through B-6 to  $L_{90}$  dBA values reported in Table 1.

The results of the sound projection calculations are generally consistent with measured results. Projected public address A-weighted sound levels are below background sound levels. In some cases, the 500-Hz octave band public address sound levels approach the background sound

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level for this octave band. This would explain the audibility of public address announcement sound at position #2 on Oakridge Drive. With the exception of position #6 on Skyline Drive, predicted maximum crowd sound levels are below background  $L_{90}$  dBA values. The predicted crowd sound value of approximately 40 dBA at position #6 is approximately 4 dB higher than the background sound level of approximately 36 dBA. However, crowd sound was barely audible and not measurable at this site. This is inconsistent with a 4-dBA increase. Barrier effects and molecular absorption were conservatively estimated in this analysis. The actual barrier effect at position #6 is probably higher than in the prediction.

As discussed in Appendix A, short-term atmospheric effects relating to wind and temperature gradients can cause bending of sound waves and can influence changes in sound levels at large distances (i.e., greater than approximately 1,000 feet). These effects can either increase or decrease sound levels depending on the orientation of the source and receptor and the nature of the wind and temperature gradient. The effects of wind, temperature gradients, and other meteorological effects are very unstable and cannot be predicted with certainty. Accordingly, these atmospheric factors are not included in the basic calculations described above. Studies indicate that wind with speeds up to 10 knots may increase sound levels at downwind locations and decrease sound levels attributed to atmospheric effects as high as 20 dB have been observed at some outdoor venues (Cotton/Beland 1995). It would not be unreasonable to expect that meteorological effects would reduce or eliminate the barrier effects identified in Tables B-1 through B-6.

Winds would need to be blowing from the east to substantially increase sound transmission from the project site to neighborhoods of concerns. Winds are predominantly out of the northwest in San Luis Obispo. Accordingly, winds that would increase sound propagation westerly appear to be unusual. Several residents that were interviewed indicated that on some days, sound from the Mustang Stadium, including public address announcements, are clearly audible. This is likely the result of the large crowd size, loud public address system, and increased sound transmission resulting from wind, temperature inversion conditions, or low cloud cover. These conditions likely would increase the sound transmission from the project site also. However, temperature inversion conditions and the associated low cloud cover that would tend to increase sound transmission typically occur in July, August, and September and would not typically coincide with use of the stadia.

## SURVEY RESULTS

Survey forms were sent to approximately 1,000 residents in the area. Copies of the cover letter and survey form sent to residents or made available at the parks and recreation department are provided in Appendix B. The survey forms were color coded as follows based on the area of the city surveyed:

- green Tassajara, Foothill, and Cal Poly areas;
- pink Bishops Peak area;

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- purple Teach School area; and
- yellow available for pickup at the parks and recreation department.

One hundred and fifty-nine survey forms were returned, and no yellow forms were returned. Forty-six of the forms did not include check marks but rather included written comments, many of which were not related to sound. Tables 7 through 10 summarize the survey results for the 113 forms that were returned with check marks. Tables 7 through 9 summarize responses for each area; Table 10 summarizes responses for all areas. The tables indicate the time period when the simulation test was conducted. They also identify responses of audibility when the simulation was not being played, which indicates that sound from other sources was mistaken for the simulation test.

The simulation test was originally scheduled to be complete by 11:00 p.m. Because of unforeseen delays, an additional test was run at 11:40 p.m. Seven of the survey respondents from the Bishops Peak area indicated that sound (primarily music and speech) from the test was distinctly audible and, in some cases, audible from inside their homes. This increased audibility is attributed to the reduced ambient sound level resulting from reduced street traffic and the reduced atmospheric sound attenuation associated with increased humidity.

## CONCLUSIONS

The results of the sound level projection analysis and the simulation test indicate that crowd sound and public address sound at levels anticipated from the stadia would not measurably increase A-weighted background sound levels in the neighborhoods of concern under cool, calm weather conditions with clear skies. They also indicate that sounds from these sources would be barely audible to audible depending on location. In addition, the results of the simulation test indicate that loud music (93-94 dBA at 100 feet) can be distinctly audible at locations that have a direct line of sight to the project site and can be barely audible at locations where there is intervening topography or structures. The test results also indicate that public address announcements at a level of 84 dBA at 100 feet can be audible at locations with a direct line of sight to the project site. The predominant winds out of the northeast would tend to reduce sound transmission from the project site to locations to the west (i.e., the neighborhoods of concern). Winds from the east, temperature inversion conditions, or low cloud cover may tend to increase sound transmission from the project site and could result in distinctly audible crowd and public address sound in the neighborhoods of concern. However, these types of conditions are usually unstable, intermittent, and short term in nature. In addition, temperature inversion conditions and the associated low cloud cover that would tend to increase sound transmission typically occur in July, August, and September and would not typically coincide with use of the stadia. Mitigation measures discussed below would help to reduce sound at the source.

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# MITIGATION MEASURES

The following are several suggested mitigation measures that would reduce the sound that propagates to the west from the stadia and from the complex in general. Jeff Markowitz, project manager for Cal Poly, was contacted to gain information on the potential design of the stadia and the sound systems for the stadia. He indicated that the project design is schematic only and that there is no detail available on the design of the stadia or the sound systems. The mitigation measures are as follows:

- Employ a distributed sound system at the stadia that minimizes the sound produced by each speaker while providing adequate speech intelligibility. Orient speakers to point away from residences to the west and south. The maximum sound level produced by any individual speaker shall not exceed 65 dBA as measured at 50 feet from the speaker. (This assumes a maximum of 15 speakers in each facility. If more speakers are required, a lower sound level limit may be required.)
- Provide sound monitoring equipment with the public address systems that will allow the system operator to monitor system sound levels so that the sound limits specified above are not exceeded.
- Require that sound systems be operated only by trained technicians.
- Prohibit the use of portable sound systems that increase sound levels in the stadiums.
- Prohibit the use of public address systems on the multiuse fields.
- Prombit music-related events, such as rock concerts, at the sports complex.
- Provide solid barriers (4 pounds per square foot surface area minimum) to block the line of sight between seating areas and residential areas to the west and south.
- Prohibit the use of music and sound effects after 7 p.m.

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## CITATIONS

Conton Beland Associates. 1995. Draft environmental impact report for the Poway Entertainment Center, Pasadena, CA.

Fugro West, 1997, Final environmental impact report for the Cal Poly Sports Complex. San Luis Obispo, CA.

Harris, C. E. 1979. Handbook of noise control. McGraw-Hill Book Company. New York, NY.

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# ATTACHMENT #3

# **Parking Structures**

The ideal parking structure should meet the IESNA minimum illuminance values (not exceed) with excellent uniformity. With the measures listed below, the overall effect should provide a safe non-overlighted environment while minimizing the light trespass potential.

Per recommendations in the IESNA 9th Edition Lighting Handbook, parking structures should meet the following criteria:

	Minimum Horizontal Illuminance	Maximum to Minimum Illuminance Ratio'	Minimum Vertical Illuminance
Parking Structure Interior	1.0 footcandles	10:1	0.5 footcandles
Entrance Areas (Day)	50 footcandles	10:1	25 footcandles
Parking Structure Top Level	0.5 footcandles	15:1	0.25 lootcandles

'The highest horizontal illuminance area, divided by the lowest horizontal illuminance point or area should not be greater than the ratio shown.

Design entries and exits such that higher illuminance levels occur during the day for daylight adaptation. At night, the lighting controls should lower the lighting levels to match the rest of the interior garage.

To minimize light trespass:

- Use fully shield luminaires such that lamp and/or refractor brightness is not seen when viewing parking structure from outside.
- Luminaires should have the option of additional shielding if required.
- All fixtures must be shielded to avoid glare and light spill-over onto adjacent areas and onto public right-of-way areas.
- Landscape lighting should be accomplished with low wattage, low glare luminaires aimed down.
- The use of specular or highly reflective materials on the exterior of all structures shall be minimized.
- Internal light-wells will be provided to maximize the amount of natural light.
- Solid rails shall be included around the perimeter to block light spillage from headlights on cars within the structure and the parking structure lights.\
- All top pole mounted top deck luminaires shall be IESNA full cut-off luminaires.
- All top deck luminaires mounted on poles shall be located on the interior columns to keep light from spilling out on to adjacent areas and include additional shielding to minimize luminaire brightness.
- Any luminaires mounted on the exterior walls shall be IESNA full cut-off luminaires.

Letter 52

# ATTACHMENT #4

# Sports Lighting Criteria

The design for Mustang Stadium shall include measures to reduce light levels, light pollution and glare. This glare is visible to area residents that have a direct view of the stadium and from parks with sensitive habitat.

For aerial sports such as baseball and football, the luminaires need to be located high above the fields (100' or greater) in order to safely light the field with minimal light trespass. With lower the pole heights and the higher the alming angles, there is greater light trespass potential.

Once the aiming and installation has met the criteria, luminaire type, location and aiming shall not be altered during re-design or general maintenance without proper notification of affected property owners.

- Pole heights shall be 100' or greater.
- Preferable lighting equipment would incorporate IESNA full cut off luminaires with no adjustable floodlights.
- If adjustable floodlights are used, every effort shall be made to minimize offensive glare to surrounding neighborhoods.
- Adjustable floodlights must be equipped with both internal and external shielding.
- Aiming angles above 60 degrees from vertical is not allowed.
- Field lighting shall be controlled such that when fields are not in use, the sports lighting equipment is turned off. In no case shall the sports lighting be on after 11PM.
- Lighting levels shall not exceed IESNA recommendations as listed in the 9th Edition Handbook.
- After the first 100 hours of operation, lighting levels shall not exceed IESNA RP-33-99 "Lighting for Exterior Environments" recommendations for minimizing light pollution and light trespass for an environmental zone E1 (intrinsically dark). For environmental Zone E1, the maximum illuminance value given measured anywhere off the property at the eye in a plane perpendicular to the line of sight is 0.1 footcandle.
- Lighting equipment shall have a galvanized or natural aluminum matte finish in order to minimize daytime appearance.

# Letter 52 [neighbors] Bishops Peak Neighborhood Association

# **December 8, 2000**

**52-1** Commenter urges implementation of guiding principles from Neighborhood Relations Task Force.

**Response** The text in the Guiding Framework now reads: "Planning future campus facilities *and support services* so as to *minimize and* mitigate environmental impacts *on and off campus to the full extent feasible* as part of project design" (p. 15).

52-2 Commenter suggests specific language to mitigate impacts in sports complex area.

**Response** While the recently opened Sports Complex is not a component of the Master Plan update, there are numerous principles that apply to any further development of this type. With respect to any future development in the area around the Sports Complex, text has been added as follows: "Particular consideration will be given to minimizing impacts on established neighborhoods and public open space" (p. 150).

52-3 Asks that Heery plan not be used as a basis for any future football stadium location/design

**Response** Although the Heery plan offers guidance the provision of future recreational facilities on campus, it does not necessarily guide design; comment is noted for future reference. The Heery plan will not be used for the stadium design. The location in the Heery Plan for Mustang Stadium is consistent with the Master Plan stadium alternative location, should the stadium move.

**52-4** Commenter requests reference 1997 Jones and Stokes sound study be made in EIR and plan.

**Response** The Jones and Stokes study has been cited in the bibliography. A summary of its findings have been incorporated into the discussion of the Mustang Stadium relocation alternative. The Master Plan text has been modified to include references to the Jones and Stokes sound study as well (see pp. 150 and 152).

**52-5** Commenter suggests the plan consider the possible future football stadium as new project since it is not just a relocation of same size facility.

**Response** Comment noted. If Mustang Stadium were to move, it would require additional environmental analysis. Note that the refurbishment of the current Mustang Stadium has been clarified in the Master Plan as the most appropriate current option (see p. 151).

**52-6** Commenter suggests the need for more effective mitigation for noise.

**Response** The Jones and Stokes study has been cited in the bibliography. A summary of its findings have been incorporated into the discussion of the Mustang Stadium relocation in the EIR.

**52-7** Commenter requests the plan address feasibility of remodeling Mustang stadium (compare noise impacts.)

**Response** The refurbishment of the current Mustang Stadium has been added to the Master Plan as an alternative. The Jones and Stokes study provides the following guidance for expected noise levels at the stadium location:

"The results of the sound level projection analysis and the simulation test indicate that crowd sound and public address sound at levels anticipated from the stadia will not measurably increase A-weighted background sound levels in the neighborhoods of concern under cool, calm, weather conditions with clear skies. They also indicate that sounds from these sources will be barely audible depending on location. In addition, the results of the simulation test indicate that loud music (93-94 dBA and 100 feet) can be distinctly audible at locations that have a direct line of sight to the project site and can be barely audible at locations where there is intervening topography or structures. The test results also indicate that public address announcements at a level of 84 dBA at 100 feet can be audible at locations with a direct line of sight to the project site. The predominant winds out of the northeast will tend to increase sound transmission from the project site and could result in distinctly audible crowd and public address sound in the neighborhoods of concern. However, these types of conditions are usually unstable, intermittent, and short term in nature. In addition, temperature inversion conditions and the associated low cloud cover that would tend to increase sound transmission typically occur in July, August, and September and would not typically coincide with use of the stadia."

**52-8** Commenter suggests that noise and light mitigation must be monitored.

**Response** CEQA requires the development of a mitigation-monitoring plan, a condition of certifying the EIR and its measures. Future environmental work will be more specific to each project and will allow for identification of more concrete applications for mitigation measures.

**52-9** Commenter recommends the Jones and Stokes and other studies for alternative noise mitigation.

**Response** Although the Jones and Stokes study was designed for the Sports Complex, it will be useful for future projects. Specific noise mitigation measures will be developed on a project-by-project basis. The Jones and Stokes study, in conjunction with additional studies, will be used for any modifications to Mustang Stadium, or any similar facility.

**52-10** Commenter suggests adding working with neighbors as a component of noise mitigation.

**Response** See p. 348 where the University includes in its future communication principles that it will consult with neighbors prior to the development of any facility that could have negative impacts in their neighborhood.

**52-11** Commenter suggests plan address feasibility of remodeling Mustang stadium.

**Response** This recommendation has been added to the plan, noting that the refurbishment of the current Mustang Stadium is the most appropriate current option (see p. 151).

52-12 Commenter suggests adding specific language to clarify mitigation of light and glare impacts on residential areas and open space.

**Response** Additional language includes the following: "As noise and light impacts are significant concerns, the campus will conduct further studies, like the Jones and Stokes Sound Study prepared in 1997 by the City and community for the Sports Complex." And, further along in the same paragraph: "Particular consideration will be given to minimizing impacts on established neighborhoods and public open space" (p. 150).

The light mitigation for Mustang Stadium has been modified to read (underlined text is revised):

**Mustang Stadium.** If Mustang Stadium were to be moved, design shall include measures to reduce light and glare visible to area residents. <u>The stadium will be redesigned from</u> that which is shown in the Heery Plan in order to accomplish the following measures:

- <u>All lights must be designed to avoid glare and spillover onto adjacent areas and onto public right of way areas and minimize impacts to adjacent neighborhoods.</u>
- The use of reflective materials will be minimized
- Landscape illumination will be accomplished with low-level, unobtrusive fixtures
- Minimum safe lighting levels will be used in adjacent parking and other facilities.

An analysis of the lighting and glare impacts would be required as part of future environmental review for this project.

**52-13** Commenter calls for more effective mitigation for light and glare - Class II finding not acceptable based on proposed mitigation.

**Response** Additional mitigation has been added to the EIR. The essential change is that the Heery Plan will not necessarily be used for the design of any future facility, and certainly not for the football stadium (which is not proposed for relocation in this Master Plan).

**52-14** Commenter offers suggestions for alternative, more effective mitigation of light and glare.

**Response** Additional mitigation has been added to the EIR. The essential change is that the Heery Plan will not necessarily be used for the design of any future facility, and certainly not for the football stadium (which is not proposed for relocation in this Master Plan).

**52-15** Commenter suggests applying similar mitigation measures for light and glare if basketball arena is built.

**<u>Response</u>** Any sports facility constructed on campus will be subjected to additional environmental scrutiny. The mitigation developed in the Master Plan EIR will be applied to the Field House (basketball arena).

**52-16** Commenter suggests noise and light mitigation must be monitored.

**Response** CEQA requires mitigation to be monitored through the mitigation-monitoring plan, a condition of adopting the EIR and its measures. Future environmental work will be more specific to each project and will allow for identification of more concrete applications for mitigation measures.

**52-17** Commenter suggests adding working with neighbors as a component of light and glare mitigation.

**Response** See p. 348 where the University will consult with neighbors prior to the development of any facility that could have negative impacts in their neighborhood.

# Letter 53







BOARD OF TRUSTEES Geoffrey Land, Chair Jennifer Renzo, Vice-Chair Bob Wolf, Treasurer Leslie Jones, Secretary Don Dollar Bob Lavelle Merle Roders Kimberly Rosa Sandi Sigurdson Arlene Winn Holly Ziegler

December 4, 2000

TO: B. Lowe Facilities Planning Cal Poly University San Luis Obispo, CA 93407

Re: Cal Poly Master Plan

The Environmental Center of San Luis Obispo (ECOSLO) appreciates this opportunity to comment on the Cal Poly Master Plan. The Plan has many good features and attempts to address the potential future impact of housing needs in San Luis Obispo County regarding Cal Poly's projected enrollment. The Environmental Center of San Luis Obispo (ECOSLO) feels that there are some remaining areas of concern in the Plan. The purpose of this letter is to state our concern with the placement of housing, and to bring to your attention certain requirements mandated by the State of California.

Many people have commented on the placement of housing. ECOSLO is concerned with the planned placement of housing in the mouth of Poly Canyon and along the Brizziolari (Brizzolara) Creek flood plain. These areas are sensitive habitats that should not be displaced in the quest for campus housing. A previously made recommendation by the Biology Department offers an alternative to destroying the sensitive areas of Poly Canyon and Brizziolara Creek.

The proposed housing sites located behind the Brick Dorms and their parking lots, the North Mountain Dorms, and the housing site near California Blvd. should be built first in whatever sequence deemed desirable. After these sites are fully developed, the housing needs on the campus should be re-evaluated to determine what additional housing may be needed.

The housing built at these locations should encompass parking beneath the structure in a quantity sufficient to accommodate the number of students housed in the unit. This would allow for a four or five-story building that would require less ground space for its existence thus minimizing the impact on the environment while supplying much needed housing and parking, the idea being to build up rather than out. This idea of in-filling within the campus core could be carried out in many locations on campus and would help eliminate the need to destroy sensitive habitats to house more students, faculty and their attendant requirements.

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Cal Poly Master Plan Comments Page 2

ECOSLO recognizes Cal Poly's "learn by doing" philosophy and enjoys being involved with students and faculty. On August 2, 2000, Governor Gray Davis issued executive Order D-16-00:

"... to site, design, deconstruct, construct, renovate, operate and maintain state buildings that are models of energy, water, and materials efficiency; while providing healthy, productive, and comfortable indoor environments and long term benefits to Californians."

We think that Cal Poly should be designing the most environmentally advanced residence halls in the world. This is an opportunity for Cal Poly to build residence structures that provide a unique living and learning opportunity, emphasizing resource efficiency and renewable energy. The new dorms should be designed with environmental considerations focusing on energy, building materials, sustainable living practices and student involvement in the planning process.

The McLean Environmental Living and Learning Center at Northland College in Wisconsin achieved energy and water efficiency at a rate 50% greater than a typical building designed to code. The systems employed by Northland included high efficiency heating, heat recovery, advanced lighting control, natural daylighting, wind power, photovoltaic panels, and solar water heating. Cal Poly could do the same or better. You have the opportunity in designing the new residence halls and faculty housing to showcase Cal Poly's environmental commitment.

Thank you for your time and consideration in committing to a sustainable future.

Pamela Marshall Heatherington

Pamela Marshall Heatherington Executive Director Environmental Center of San Luis Obispo 864 Osos St., Suite C San Luis Obispo, CA 93401 53-4

Letter 53 Pamela Heatherington EcoSlo

# **December 4, 2000**

**53-1** The commenter suggests that the housing north of Brizzolara Creek should only be built after housing has been constructed at sites H-4, H-5, H-6 and H-7 (see Figure 5-9) and only if a reevaluation suggests the additional housing would be needed. This would protect sensitive habitats.

**Response** Concerns are noted. The Master Plan team made extensive efforts to relocate the H-1 and H-2 housing units at a suitable distance from the creek corridor that resulted in the creation of the Brizzolara Creek Enhancement Project and the re-adsorption of units initially proposed for location along the creek (namely H-3). The additional beds were the result of partial absorption of the H-4 housing unit that could not be relocated in its entirety elsewhere on campus.

**53-2** The commenter suggests that housing provide parking underneath and be built upwards of four and five stories to reduce the need for land.

**Response** Several commenters have suggested the University develop housing in a more compact form to save land, especially through the use of taller buildings – "up not out." Housing on campus was designed to meet several parameters. One was to avoid the development of high-rises. Student housing is effective when it provides an atmosphere of community. This requires air and open recreation space, as well as a connection to everyday living patterns. Taller structures create a disconnection from the student to the student community. In addition, taller structures increase the risk of catastrophe from fire or seismic events. Nevertheless, the proposals are compact, at a density equal to or greater than that elsewhere on campus. Furthermore, a constraints analysis undertaken at the outset of the Master Plan process identified areas appropriate for housing development. The housing proposals are consistent with that analysis. See Constraints and Opportunities analysis. Where feasible, the Master Plan calls for "integration of parking into structures at ground leve 195).

**53-3** The commenter suggests Cal Poly should adhere to principles of building sustainability in all future development, becoming a model for the community. Use infill sites for housing

**Response** Additional text has been added on pp. 162-163, as follows. Site selection, site planning and building design should account for solar exposure, prevailing wind direction, and patterns of light and shade to minimize energy requirements and enhance the quality of outdoor space. Design guidelines and processes for implementing the Master Plan should encourage energy efficient building design and resource conservation. The campus landscape plan should consider the impact of vegetation and water use on the resource efficiency of facilities and the creation of comfortable and functional outdoor space.

Design for renovation of existing buildings and new construction should consider ways to maximize energy efficiency and take advantage of the mild climate in San Luis Obispo. Alternative, renewable energy sources should be used to the greatest extent possible to offset growth in demand. As costs escalate for traditional energy sources, other options to consider include integrated photovoltaics and solar generation for electricity, passive and low energy

cooling strategies for buildings (including materials, solar control, natural ventilation, thermal mass), passive solar space and water heating, and effective use of day lighting. New buildings should be well ventilated using natural ventilation, and existing buildings should be retrofitted where feasible to make them usable and livable during the summer without requiring air conditioning.

Consistent with Cal Poly's mission, the campus should explore an integrated approach to en'' design for research, education and operational applications in new and renovated buildings and in the campus landscape treatment. In addition to the energy conservation measures noted above, these efforts should address water conservation and reclamation, re-use of materials and products, and life-cycle costing in general. Several opportunities for resource recovery projects with educational and research potential as well as operational value include water supply and waste treatment for animal facilities, enhancement of Brizzolara Creek and the construction of new student residential communities.

**53-4** Commenter suggests becoming a model for advanced environmental design.

Response The following text has been added to the University Land Uses element, p. 79. Several of the plan elements contain principles and recommendations to guide future building and landscape design so as to achieve healthy, productive and comfortable indoor and outdoor environments. The Campus Instructional Core element provides the most direction with respect to design principles such as Sense of Place, Compactness, and Visual Continuity. It also includes a section specifying how a green space plan and a landscape plan should be developed as implementation studies. In addition to establishing aesthetic and user-sensitive design, the Master Plan is concerned with energy efficiency and resource conservation. The Public Facilities and Utilities element covers these characteristics of campus development. Other plan elements that involve development, such as Outdoor Teaching and Learning, Residential Communities, Parking, and Ancillary Activities and Facilities, do not repeat either these aesthetic or sustainability principles. Nevertheless, it is the intention of the Master Plan that they be applied to all campus development, including projects undertaken by campus auxiliaries, the Foundation and Associated Students, Inc. As the building and landscape design guidelines are developed, they will take into account the different features of different parts of campus, particularly, the Campus Instructional Core, agricultural facilities in the extended campus, and residential communities.

file:///C|/TEMP/COMMENTS.HTM

#### Dear Ms. Lowe,

After study and discussion in our Issues Committee and in our Legislative/Economic Action Committee, the San Luis Obispo Chamber of Commerce would like to forward the following comments concerning the Revised Cal Poly Master Plan and Draft EIR:

We encourage a comprehensive circulation plan which will promote pedestrian use of the campus, keep parking on the perimeter, ease congestion by a sequencing of links in city roadways as suggested, and provide for an effective and adequate student transit system to include a city/campus shuttle system. We agree with the proposal to discourage Freshman students from bringing cars to campus. We request that you explore the possibility of a city/county/campus joint venture to tap into monies available from transit organizations.

In the area of housing we would like to see the "new urbanism" applied to on campus apartments and to the off campus faculty, staff, and married student housing proposed across Hwy. 1. Innovative design with compact urban form is preferred; this is an opportunity to use creative and perhaps groundbreaking design solutions. We would like Cal Poly to consider the following possibilities with regard to the financing and placement of new housing: 1) forming a non-profit with the Cal Poly foundation to develop housing in other areas of town in addition to those listed in the plan, 2) consider obtaining property on the perimeter of the campus which is now owned by the local school district as a site for development of faculty and staff housing, 3) look into the feasibility of obtaining other properties in close proximity to campus to be used for faculty and staff housing.

We believe that ancilliary and conference facilities would be a plus for the community at large.

We would like to see more services and facilities provided for students on campus; for example, full service food markets. We like the idea of apartment style housing on campus and additional amenities will create a more "resident friendly" culture.

We request that the privitization of housing and of commercial businesses on campus be considered.

We very much appreciate the time, effort, and sensitivity to the community that Dr. Linda Dalton and her team have committed to this process and we look forward to continued updates.

Sincerely, Patricia Wilmore Director of Governmental Affairs San Luis Obispo Chamber of Commerce

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54-3

154-1

# Letter 54 Ms. Patricia Wilmore San Luis Obispo Chamber of Commerce

# **December 7, 2000**

54-1 Commenter offers support for circulation and parking proposals.

**Response** No response required; See Circulation, Alternative Transportation and Parking elements.

54-2 Commenter suggests applying "new urbanism" concepts to housing on campus.

Several of the plan elements contain principles and recommendations to guide Response future building and landscape design so as to achieve healthy, productive and comfortable indoor and outdoor environments. The Campus Instructional Core element provides the most direction with respect to design principles such as Sense of Place, Compactness, and Visual Continuity. It also includes a section specifying how a green space plan and a landscape plan should be developed as implementation studies. In addition to establishing aesthetic and usersensitive design, the Master Plan is concerned with energy efficiency and resource conservation. The Public Facilities and Utilities element covers these characteristics of campus development. Other plan elements that involve development, such as Outdoor Teaching and Learning, Residential Communities, Parking, and Ancillary Activities and Facilities, do not repeat either these aesthetic or sustainability principles. Nevertheless, it is the intention of the Master Plan that they be applied to all campus development, including projects undertaken by campus auxiliaries, the Foundation and Associated Students, Inc. As the building and landscape design guidelines are developed, they will take into account the different features of different parts of campus, particularly, the Campus Instructional Core, agricultural facilities in the extended campus, and residential communities.

54-3 Commenter recommends land and financing options for student, faculty and staff housing.

**<u>Response</u>** See additional language regarding project financing on page 346: "...to the extent possible, the University should explore a range of alternatives, such as public-private partnerships, Foundation support, enterprise partnerships and collaborative 'design-build' project development techniques."

**54-4** Commenter offers support for ancillary and conference facilities.

**Response** No response required; see pp. 205-206.

54-5 Commenter offers support for services and facilities on campus for student residents.

**Response** No response required; See also a new section on Commercial Retail Services (pp. 202-203), cited below in response to comment 54-6.

**54-6** Commenter requests consideration of "privatization" of housing and commercial services on campus.

Response As planning for an increased range and volume of services occurs, the campus will need to determine which it should offer directly and which might be provided through The vision of the Master Plan calls for a primary campus franchise or "privatization." activity center near the University Union that is focused on students. Thus, the range of retail businesses and other activities would remain specialized and not constitute a full urban commercial center. Cal Poly understands that there is a delicate balance in determining how much of what services will be sufficient to support the campus community and manage commuting. Effective alternative transportation will allow students, faculty, and staff – as well as members of the broader community - to take advantage of the range of services and facilities both on and off campus without adding to traffic congestion. The Cal Poly Foundation is presently the exclusive provider of certain services – e.g., food service, vending machines and bookstore. Other services compete for campus outlets -e.g., travel service, ATMs. As planning for an increased range and volume of services occurs, the campus will need to determine which it should offer directly and which might be provided through franchise or "privatization."

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Letter 55

December 3, 2000

Dr. Linda Daiton Vice Provost for Institutional Planning c/o Ms. Bonnie Lau California Polytechnic State University San Luis Obispo, CA 93407

Dear Dr. Daiton:

Thank you for the opportunity to respond to Cal Poly's Master Plan and discussions from your recent community presentations. The most important issue that I have as both a resident of San Luis Obispo and a very close neighbor to the university, is the lack of trust I have in the process Cal Poly has historically taken with development. I do not feel that Cal Poly will protect our neighborhoods' best interests as a good neighbor and truly follow this plan. I am unsure that Cal Poly will not unilaterally add on or "re-develop" projects to their institutional needs that could significantly impact our low density neighborhoods.

I feel it is important that Cal Poly understand and appreciate the dynamic of our two communities' interdependent relationship. In the past, and to a certain extent through this current Master Plan process, Cal Poly has appeared to take a patronizing attitude toward interested community members. This perspective is more than evident by the monologue nature of your presentations and the absence of answers to questions asked. Just writing our questions down in cryptic form on a sheet of butcher paper is not a "public relations savvy" manner to demonstrate an open and interactive dialogue process. Some effort toward answering the questions would have placated most, and at a minimum, it would have demonstrated some genuine interest in the concerns voiced. Additionally, an aggressive mail campaign notifying affected residents, both tenants and owners, of the plan development would have demonstrated an open approach to the process. Be that as it may, the Cal Poly Master Plan directly affects the quality of life of our neighborhoods and since our neighbors are your employees and students, I would think that you would be more than over-cautious in designing projects that will ultimately affect city residents.

To the questions at hand that need significant clarification:

- What guarantee is there that the current open space bordering Slack St. (colored pink on maps indicating Ancillary Facilities) will not be used as building sites in the future?
- How far up the hillside is Cal Poly expecting to develop? (The notorious pink shading-ancillary facilities, differs with almost every map and on some maps the print-cut does not show the entire hillside)
- Why won't Cal Poly commit that land to an open space buffer and/or Ag grazing lands as supported by the December 5, 2000 SLO City Council Agenda Report?
- Will Cal Poly re-designate and add two-way arrows along the Slack St. border east of Grand Ave. indicating neighborhood impact, as supported by the December 5, 2000 SLO City
- Council Agenda Report? How large is the proposed Visitor Center, including parking and ancillary buildings if any?

(*)

# Letter 55

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<ul> <li>What is "or additional conference facilities" (pg. 195 CP Master Plan) in reference to Grand Avenue entrance Visitors' Center? Use? Clientele? Additional building? Capaci</li> <li>Why, all of a sudden, does "conference facilities" appear as just a simple word addit wholly a new and potentially impactful entity? (This is the "trust" issue being tested Cal Poly and the community!)</li> <li>What are the structural/size/EIR differences between a Visitors' Center and conference</li> </ul>	ty/size? ion but between
<ul> <li>facility?</li> <li>What impact to traffic flow, intersection and pedestrian safety, and aesthetics will the Visitors' Center have on the narrow Slack St. roadway and Pacheco Elementary Sch</li> <li>Will it necessitate widening the roadway or installing a traffic light- (against neighbor)</li> </ul>	
wishes?) Couldn't the Visitors' Center be located further up Grand Ave., on campus, in the ar	ea of the SS-7
<ul> <li>proposed 136 bed apartment complex?</li> <li>136 beds versus the 3,000 seems a very small percentage of beds to warrant the disturbance and challenge of infringing on a buffer area. What was the criteria for p 136 bed apartment complex in an existing buffer area?</li> <li>Will the complex remain at 136 beds with a guarantee of no expansion</li> <li>Doesn't this apartment complex set a precedent for possible future development up mountain side and into the buffer area with "add-ons" similar to what is being obser the LOVR/Madonna Home Depot-Costco development-mot trustworthy politics)</li> </ul>	<b>\$\$+8</b>
<ul> <li>Why can't a 136 bed apartment complex be included into the Brizzolaro Creek site s such a small addition rather than a completely new complex?</li> </ul>	since it is <b>\$5-9</b>
<ul> <li>What type of substantial buffer/landscaping will be used to soften the visual and no impact of the apartment complex on the neighboring residential homes?</li> </ul>	ise 55-10
<ul> <li>What (or to whom) is the appeal process for both initial plans (including EIR findings any changes that may supersede the Master Plan?</li> </ul>	), and <b>  55 - i</b> l
<ul> <li>Who makes the final decision on each phase of the plan?</li> <li>How will the bordering neighborhood be notified of final design plans, building sched bracings, etc.?</li> </ul>	
<ul> <li>Can't Cal Poly and the City of SLO develop a Memorandum of Understanding that v both entities to the prescribed/approved Master Plan eliminating the fear of unilaters</li> </ul>	vould bind 55-14
<ul> <li>development?</li> <li>Can the Board of Regents or whatever governing body who will ultimately approve conduct the hearings in San Luis Obispo? (again it would demonstrate good faith in</li> </ul>	Letest ut
<ul> <li>our community needs)</li> <li>How or when will I receive answers to the aforementioned questions?</li> </ul>	155-16

Thank you for listening to my concerns for the place I call "home". And thank you in advance for taking the time to address my questions.

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Sincerely, ٤ qu s.

Terry Elfrink 1983 Sleck St. San Luis Obispo, CA 93405 549-8560 kyken 1@msn.com telfrink@slcusd.org Letter 55 Mr. Terry Elfrink

# **December 8, 2000**

**55-1** Commenter notes his distrust of Cal Poly's planning process.

**Response** Comment noted. See discussion of process in Introduction and Task Forces in Chapter 2.

**55-2** Commenter requests more notice and greater consideration of neighbors by Cal Poly.

**Response** As part of the Communication and Consultation section of Chapter 7, the Master Plan provides for early meetings with neighbors so as to design projects to relieve potential impacts.

**55-3** Commenter seeks greater specificity of development potential at Slack and Grand.

**Response** Exhibit i shows a more limited development area and adds a buffer. The area beyond the ancillary designation will remain "Outdoor Teaching and Learning," consistent with the grazing activities there.

**55-4** Commenter makes request for recognition of potential neighborhood impacts along Slack Street.

**<u>Response</u>** A double arrow has been moved on Exhibit 4.10 to the east of Grand Avenue to indicate potential neighborhood conflicts.

**55-5** Commenter requests that the plan clarify the Visitor Center site and conference facility expectations at Grand and Slack.

**Response** The building outlines are shown on Exhibit 5.7 and on a graphic at page 207. These are only conceptual, as project designs will be developed later. However, they do identify the relative size and scope of a visitor center. Further, new text on page 206 provides the following clarification of expectations:

"The most commonly mentioned ancillary activities include a visitor center, conference center, and applied research park. This section explores the nature of each briefly; however, each would require further detailed analysis at such time as a specific proposal is made.

"A visitor center would provide a facility to welcome guests to the campus. It could include a station where visitors could obtain parking permits, campus maps, and directions to their destinations. The visitor center could serve as the starting point for campus tours conducted by Poly Reps. It could also include a small exhibit covering Cal Poly's history and accomplishments.

"No detailed program has been suggested for a conference center, yet the idea has been studied several times and continues to arise. Presently, Cal Poly's Conference Services use regular campus facilities during times that they are not scheduled for instruction, and house attendees in some of the residence halls during the summer. The Master Plan calls for an expansion of

alumni services near the present Alumni House, which may include small conference or retreat facilities. In addition, the area near Grand Avenue and Slack Street has been suggested for potential conference facilities. Cal Poly will continue to use its residence halls during the off season to support conferences."

**55-6** Commenter seeks clarification on traffic impacts of Visitor Center on Grand Avenue.

**Response** A visitor center would most likely have the effect of reducing the distance existing visitors would have to travel into the campus. Grand Avenue would have only minimal impacts from the proposed project. Access will not be provided off of Slack Street. Future environmental review will also address this topic.

**55-7** Commenter requests the plan consider relocating Visitor Center further onto campus.

**Response** A map change (Exhibit 5.7) shows a different orientation of the Visitor Center and adds a buffer. This is an excellent site for a visitor center, an activity that should have very little effect on the neighborhood.

**55-8** Commenter asks for the basis of locating 136 beds at the northeast corn of Slack Street and Grand Avenue - and is that a maximum number that may be built there? Why not elsewhere?

**Response** The site was selected because it is adjacent to existing student housing, and the tree-lined swale to the south will continue to serve as a buffer. The number of beds represents one estimate of how many units could be built on the site; however, the specific number of students housed will depend on building type and will be determined by more detailed feasibility analysis. Significant changes to this proposal would require a Master Plan amendment from the Board of Trustees. This site was chosen in part to reduce the potential impacts to Brizzolara Creek. Commenter is directed to see Land Use element - Compatibility principle on page 69, proposing buffers between residential neighborhoods and on-campus student residences.

**55-9** Commenter asks why the 136-bed complex cannot be moved to the Brizzolara Creek area.

**Response** The Master Plan team was presented with its greatest challenge when it sought to fulfill the policy of housing all new enrollment on campus. The density assigned to all new housing equals or exceeds that of existing housing on campus. The earlier draft of the plan had considerably more housing near Brizzolara Creek. In order to allow for the enhancement of the creek, the team looked elsewhere to meet the mandate. The area near Slack Street and Grand Avenue is relatively low quality soil, therefore not great for agriculture, is low in biological resources, and has a relatively flat gradient, all of which contribute to it being an excellent site for campus development. However, concern with neighborhood impacts led the team to keep housing to the north of the large swale, behind a natural screen, and to limit the development near Slack Street to non-residential activities. The revised map shows the limits of the area designated for student housing in the Master Plan.

**55-10** Commenter requests information on mitigating visual and noise impacts of new student housing.

**Response** A substantial buffer is currently provided for the complex by the vegetated drainage swale bisecting the site. Additional landscaping to screen light and noise will likely be a part of the project mitigation when proposed.

**55-11** Commenter asks about the review and appeal process for the plan and specific developments.

**Response** The Master Plan will be forwarded to the California State University Board of Trustees for approval and EIR certification at their March 2001 meeting. This will be conducted as a public hearing. Appeal from their decision is to the Superior Court. Subsequent filing to the Board will occur as the development plans are prepared and processed.

**55-12** Commenter asks who makes the final decision on each phase of the plan.

**<u>Response</u>** See response 55-11 above. The Board of Trustees has final decision-making authority over the Master Plan and the individual projects proposed within it.

**55-13** Commenter asks how notification will take place for neighbors regarding any development, EIRs, etc. near Grand Avenue and Slack Street.

**Response** As part of the Communication and Consultation section of Chapter 7, the Master Plan provides for early meetings with neighbors who may be impacted by a campus project. Chapter 7 also addresses future environmental review.

**55-14** Commenter requests the City and Cal Poly enter into a Memorandum of Understanding to avoid concerns of unilateral actions.

**Response** As part of the Communication and Consultation section of Chapter 7, the Master Plan includes provision for consultation with elected officials and local and regional agencies. The University has no provision or current intent to enter into a general Memorandum of Understanding with the City to limit its authority, especially in furtherance of its academic mission.

**55-15** Commenter asks if the CSU governing body can meet in SLO.

**Response** The CSU Board of Trustees will hold their deliberations on the Cal Poly Master Plan as part of a much larger agenda at their March meeting, and, therefore, will not travel to San Luis Obispo for the discussion of the Plan.

**55-16** Commenter asks how will he receive answers to his questions.

**Response** Responses will be included in FEIR as an appendix to Master Plan; individual commenters will receive correspondence noting responses to their concerns.

# Letter 56

 Subj:
 MP comment from Cal Poly Suggestion Form Feedback

 Date:
 12/9/00 8:22:14 AM Pacific Standard Time

 From:
 Idaton@calpoly.edu

 cwclam@aoi.com, rkitamur@calpoly.edu, blowe@calpoly.edu

ia Darlene

_inda

Subject: Cal Poly Suggestion Form Feedback VIIME-Version: 1.0 From: dslack@calpoly.edu FO: ldalton@calpoly.edu TO: ldalton@calpoly.edu Content-Type: multipart/Mixed; boundary="openmail-part-0f953c2a-000000002"

-openmail-part-0f953c2a-00000002 Content-Type: text/plain; charset=US-ASCII Content-Disposition: inline Content-Transfer-Encoding: 7bit

.inda, this came through CP's home page comment section.

-openmail-part-0f953c2a-00000002 Date: Fri, 8 Dec 2000 12:05:51 -0800 Dontent-Type: message/rfc822

Subject: Cal Poly Suggestion Form Feedback vIIME-Version: 1.0 Sender: www@polymail.cpunix.calpoly.edu FROM: www@polymail.cpunix.calpoly.edu TO: dslack@calpoly.edu Content-Type: multipart/Mixed; boundary="openmail-part-0f953c2a-00000003"

-openmail-part-0f953c2a-00000003 Content-Type: text/plain; charset=US-ASCII Content-Disposition: inline Content-Transfer-Encoding: 7bit

Type of comment/complaint: Problem Category: (Other) <Growth>

understand the need of the CSU system to accept more students however, campuses located in ecologiclay sensitive areas i.e. unboilt, Chico, and San Luis Obispo, should really consider the impact on the environment that a larger enrollment has, 1 did ny under graduate work here at poly and am now working on my masters, and the fact of the mater is CAL POLY IS KILLING SAN LUIS OBISPO. Just one example is the new sports complex. I find it hard to believe that nobody thinks that fertiliser is joing to find its way into the creek when the edge of the playing field is only a few feed from the creek. It would be nice to see the students admidted only into spots vacated by graduates, transfers, or drop outs.

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Submitted By: Sen Fine Phone: 805-545-8233 Fax Email: bfine@catpoly.edu Jser Requests Contact Response

Driginating Host: (216.224.130.156)

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londey, Becamber 11, 2000 America Online; CMCLAM

Pager 1

## Letter 56 Ben Fine

### December 8, 2000

**56-1** The commenter notes that Cal Poly is "killing San Luis Obispo." He is concerned about the environmental impacts of increasing enrollment.

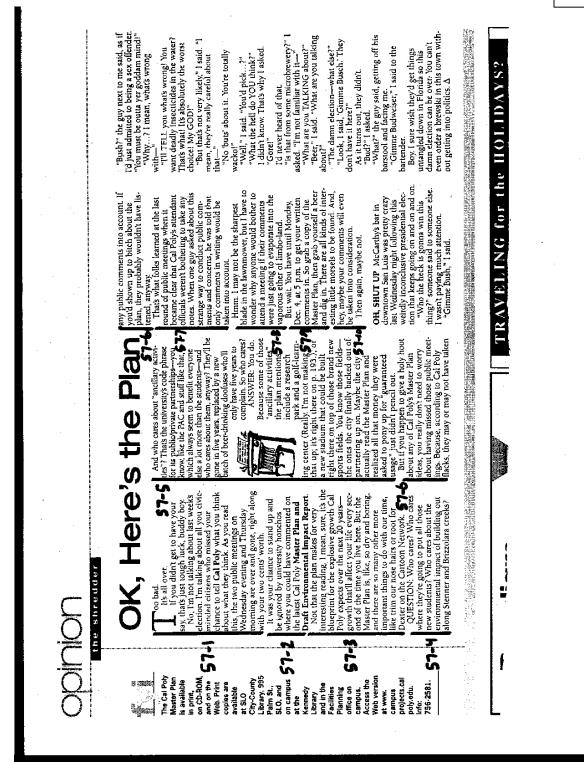
**Response** This statement is too broad to be addressed here. The commenter is referred to the EIR located in chapter 6 of the Master Plan for a discussion of environmental impacts from the master plan. The comment is noted for the consideration of the decision makers. See DEIR discussion of alternatives

56-2 Commenter notes fertilizer is going to enter Brizzolara Creek from the Sports Complex.

**Response** The Sports Complex is not part of the Master Plan update. However, for informational purposes, the Sports Complex has been designed with a number of mitigation measures to reduce the introduction of pesticides and fertilizers into Brizzolara Creek. Furthermore, the creek will be monitored to identify changes in water quality.

56-3 Commenter would prefer new students only be admitted into vacated positions.

**Response** See Chapter 3 for a discussion of different scenarios for meeting enrollment demand.



Letter 57 Shredder New Times

### December, 2000

**57-1** Commenter notes that it was too late to comment on the Master Plan if the public did not attend the two informational meetings held in December.

**Response** Commenter corrects this erroneous statement at Comment 57-9 below.

57-2 Commenter suggests the meetings were an opportunity to "stand up and be ignored."

**Response** The purpose of the meetings was to provide information and respond to questions from the public about the Cal Poly Master Plan.

**57-3** Commenter suggests that the plan is the "blueprint for the explosive growth Cal Poly expects over the next 20 years."

**Response** Cal Poly's enrollment increase of approximately 3,000 students is half what was requested by the CSU Chancellor's office. Environmental constraints and a lack of housing in the community necessitated Cal Poly's reducing that increase. See charts in Chapter 3 comparing proposed growth for Cal Poly with San Luis Obispo area, CSU and State of California.

**57-4** Commenter questions whether anyone would care about where the new students would be housed or the impacts of developing along Brizzolara and Stenner Creeks.

**Response** Numerous comments were received from members of the public who showed concern about housing and impacts to riparian habitats. For the record, development is not proposed along Stenner Creek.

**57-5** Commenter questions whether anyone cares about the development of ancillary activities, such as a research park and a golf-learning center and the relocation of the football stadium.

**Response** Numerous comments were received from members of the public who showed concern about these activities. There comments are addressed above.

**57-6** Commenter suggests that attending the meetings was of no value to the public because the Cal Poly "flacks" probably weren't listening.

**Response** I'm sorry, what did you say?

57-7 Commenter suggests no one was taking notes at the meetings.

**<u>Response</u>** A Cal Poly representative stood at a two foot by three-foot note pad located on an easel in the front of the room and wrote down every comment made by the public.

**57-8** Commenter questioned the value of attending the meeting.

**<u>Response</u>** Attendance at the meeting was an opportunity to hear and be heard, as is the purpose of public meetings.

**57-9** Commenter states that the public had until Monday, December  $4^{th}$  to submit written comments.

**Response** The comment period was extended until Friday, December 8th at 5:00 pm.

**57-10** Commenter suggests that comments made by the public may or may not be taken into consideration.

**Response** Perhaps the preceding 356 pages of comment and response will suffice.

Letter 58 Ø 006 SLO CITY HALL 12/05/00 09:32 2805 781 7109 AGENDA B ITEM # . . . . KQ г Residents for Quality Neighborhoods P.O. Box 12604 - San Luis Obispo, CA 93406 COUNCIL COUNCIL 🖬 🗘 co cua E9  $\Box$ nr: i...( 0.07 **F1**: D UTIL DIA D PERS DIR TRIBUNE December 4, 2000 v J.Hande ville V N. Harlik Re: Comments on the Cal Poly Master Plan and Draft EIR Meeting Date: 12/05/00 Item Number: 1B Honorable Mayor and City Council Members, Once again, we appreciate the opportunity to present to you our written comments on the Cal Poly Master Plan. They are attached and include the following documents: 158-1 1. Response to the City Staff report with suggested actions. [Page 1 - 3] 2. Response to Cal Poly Master Plan Draft EIR with suggested actions. [Page 4 - 6] 58-2 3. RQN's previous Master Plan Comments. (Page 7) As you know RGN has been actively involved with this process from the beginning. After digesting three versions of the plan, we still have very serious concerns regarding the impacts this plan will have on our neighborhoods and community as a whole. We, therefore, ask the council to consider our recommendations and incorporate them into the City's response to the Cal Poly Master Plan. Sincerely yours, comb Man u Cydney Holcomb Chairperson, RGN RECEIVED DEC 0 4 2000 SLO CITY COUNCIL

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SPECIDIES.	TSTOROUANTS NEIST	iBon Holods	12/05/00 story who is 18
	DRAFT ENVIR	I THE CAL POLY MASTER PL AND ONMENTAL IMPACT REPOR October 10, 2000]	
1. <u>RQN</u>	RESPONSE TO : City of	San Luis Obispo - Staff Repor	rt-12/05/00
Pages Repor	<u>1B-1 &amp; 1B-2</u> t in Brief: Concepts 1-10		
1.	We agree.		
2.	We agree.		
З.	We agree.		
4.	We agree.		
5.	We agree.		
Б.	We agree. Add sentenc <u>enrollment</u> :	e: <u>Housing should be provide</u>	d prior to increases in
7.	<u>Heery Sports Facilities N</u> Please refer to our como	<u>Master Plan</u> . We disagree with ments to Page 1B-9.	citing the Heery Plan.
	complex was done in 19 San Luis Obispo, it inclu	<u>ae Study</u> A sound study for 197 through a joint effort of C Juded specific mitigations for r previously asked Cal Poly to us	al Poly and the City of Ioise from the Sports
	recommended mitigatio Action: Change #7 to re recommended mitigatio of a new Mustang Stad	the 1997 Jones & Stokes ns. ad: <u>"Cite the Jones and Stoke</u> ans and show their use in the e di <u>um.</u> Also, list the Jones and nitigations in the EIR for Musta	<i>es Sound Study and its valuation and design</i> Stokes recommended
	. ,		

@ 008

Letter 58

R.O.N 12/04/00

page 2

8. We agree.

9. We agree.

10. Change to read: "Include a definitive process for <u>Plan development</u> and Plan amendment, which assures <u>early</u> community <u>notification</u>, involvement and consultation".

Rationale: This is especially important as Cal Poly is proposing to defer identification of impacts until such time as specific projects are considered for development.

Page 1B-6 Items 1 through 11

We Agree.

Page 18-6 & 18-7 Comments on the October 10, 2000, Master Plan and Draft EIR

Page 71, Campus Development Map [re: Grand/Slack Neighborhood Interface]

Action: We suggest that the removal of pink shading indicating "possibility of future development" apply to any and all other maps on which it may appear throughout the Master Plan.

#### Page 18-9

Page 137, Introduction (re: Heery Sports Facilities Master Plan citation)

Note: The 1995 Heery Sports Facility Master Plan proposes and includes drawings for a new and larger football stadium in the Sports Complex. This stadium would cover four (4) of the brand new multi-use playing fields and proposes large vertical light towers which will face the Bishop's Peak Neighborhood as well as the City's open space area.

This plan was done by Cal Poly without an EIR, without a sound study and without input from neighborhoods and the general public, therefore, because the council and general public have probably never read the Heery Plan it should not be endorsed or used as a basis for future design of the football stadium.

Action: Add the following sentences: [1] <u>The City Council does not endorse the</u> <u>Heery Plan as a basis for future development of a new Mustang Stadium</u>. [2] <u>If</u> Cal Poly should build a new football stadium, it is the expectation of the City

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R.Q.N 12/04/00

page 3

<u>Council that it will be designed to avoid noise and light impacts on established</u> <u>neighborhoods and the City's open space areas to the greatest extent possible.</u> [For example: rather than designing a stadium with vertical light poles facing the Bishop's Peak Neighborhood, Cal Poly should design a stadium which more effectively avoids lighting impacts by utilizing horizontal arms of lights that extend over the field and aim down on the field rather than towards an existing neighborhood.]

Page 138, third paragraph, last sentence (re: Mustang Stadium location clarification)

The Master Plan presumes phasing of Mustang Stadium from its present location to the Sports Complex. The Master Plan does not discuss remodeling of the existing Mustang Stadium, which is probably the environmentally superior alternative.

Action: Remodeling should be discussed as an alternative and be subject to the Environmental Review Process.

#### Page 1B-10

Page 333, Communication and Consultation (re: Community and Neighborhoods)

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See our comments to page 1B-2 concept #10.

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RESIDENTS/FOR OUALTY NEIGHBORHOODS

### 2. RON RESPONSE TO: Cal Poly Master Plan, Draft Environmental Impact Report

Page 210, Cal Poly Master Plan [10/10/00] Noise

Movement of Mustang Stadium

Action: Include the recommended mitigations from the 1997 Jones and Stokes Sound Study as feasible mitigations.

Action: Add the following statement "<u>Cal Poly will meet with neighbors early in</u> project planning and design about projects that may affect them and have cooperative discussions on ways to relieve possible impacts". (Cal Poly Master Plan, Page 334).

Rationale: Cal Poly has stated it will do this, but it does not appear in the mitigation.

Action: Consider other feasible mitigations that have been used for other stadiums, such as: berms, acoustical barriers, enclosing or partially enclosing the stadium and sinking the stadium significantly below ground level.

Page 211 Aesthetics

Third box

**Question:** Cal Poly is proposing Class II (significant) residual impacts. Certainly, Cal Poly is not proposing light impacts so great that they will "interfere with a persons ability to sleep, overwhelm existing views, adversely affect the view shed from the Ferrini natural open space or other public viewing areas. diminish the character of the area from the Ferrini natural open space or other publicly accessible properties or parks, or pose safety hazards which interfere with a persons ability to walk, drive, or from using or enjoying their property? [Class II, Significant Impacts]

Action: City Council should state that these Class II significant residual impacts are not acceptable.

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### Third & Fourth Box

Action: Add the following statement: <u>"Cal Poly will meet with neighbors early in</u> project planning and design about projects that may affect them and have cooperative discussions on ways to relieve possible impacts." [Cal Poly Master Plan, Page 334].

**Rationale:** Cal Poly has stated it will do this but it does not appear in the mitigations.

Action: Add statement. "<u>All light fixtures must be fully shielded, or have internal</u> and external louvers (which ever is most effective) to avoid glare and light spillover onto adjacent, and non-adjacent areas and onto public rights of way. Light trespass shall be avoided to all extent feasible".

**Rationale:** Fully shielded lights or lights with internal and external louvers avoid impacts on established neighborhoods and the City's open space to a greater extent than "hooded lights". City open space and some neighborhoods are not adjacent to Cal Poly.

#### Page 212

Mustang Stadium - second box

Action: Change first sentence to read: "If this project were to occur, final design shall include all feasible mitigation measures possible to avoid light trespass, and light and glare visible to area residents".

Action: Add statement: "<u>All light fixtures must have internal and external louvers</u> or be fully shielded (which ever is most effective) to avoid glare and light spillover onto adjacent, and non-adjacent areas and onto public rights of way. Light trespass shall be avoided to all extent feasible".

**Rationale:** Fully shielded lights or lights with internal and external louvers avoid impacts on established neighborhoods and the City's open space to a greater extent than "shielded lights". City open space and some neighborhoods are not adjacent to Cal Poly.

Action: For new parking structures, new Mustang Stadium, the Slack and Grand area and the Goldtree area, add other feasible lighting mitigations such as: fully shielded lighting, internal and external louvered lighting, landscaping, enclosing or partially enclosing structures, lighting fixtures of non-reflective materials and horizontal lighting arms which are aimed in a downward direction.

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**Rationale:** Cal Poly seems to be offering minimal mitigations rather than more effective ones that would go further to avoid impacts on established neighborhoods.

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#### Page 210 through 212 Noise and Light Impacts

Action: The Council should request that the mitigation measures should be tied to performance standards and standards of enforceability. There should be post construction mitigation monitoring plans for noise and light impacts.

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RESIDENTSFOR GUALITYNEIGHBORHOODS a Sime ang and 12400/00 chemican

#### 3. RON'S PREVIOUS MASTER PLAN COMMENTS

On June 6, 2000, the City Council forwarded RQN's comments on the Master Plan along with their own to Cal Poly. RQN's comments frequently incorporated the adopted Guiding Principles of Cal Poly's own Neighborhood Relations Task Force. They are as follows:

 It shall be a guiding principle that negative impacts of new development, and/or-re-development such as: noise, glare, traffic, and parking shall not be borne by residents of the established residential neighborhoods of San Luis Obispo.

 New development on campus shall be designed to <u>eliminate</u> impacts on established neighborhoods, rather than to create designs that generate ongoing conflicts between the University and residential neighborhoods.

Cal Poly responded positively to the City's comments, but for the most part PIGN's comments were not incorporated into the current document.

Cal Poly staff indicated to the City Staff that they have <u>not</u> adopted many of RQN's previous recommendations [ page 1B-21 through 1B-28 of the City Staff Report [12/05/00] because Cal Poly believes "that the total elimination of impacts on established neighborhoods is not technically possible".

Environmental law supports <u>avoidance</u> of impacts, rather than creating impacts and then attempting to mitigate them. This seems very similar and in the same spirit as "designing new developments on campus to eliminate impacts on established neighborhoods".

Since our original language seems to be controversial, we suggest that Cal Poly re-consider RQN's recommendations, substituting the word "avoid" or "minimize to all extent feasible" in place of the word "eliminate".

Action: City Staff has suggested that Cal Poly re-consider RQN's previous (6/6/00) comments We agree. Council should request that Cal Poly reconsider RQN's previous (6/6/00) recommendations.

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# Letter 58 Residents for Quality Neighborhoods (RQN)

## **December 4, 2000**

**58-1** Commenter notes that comments have been incorporated in City of SLO correspondence.

**Response** Please see responses to letter number three, John Mandeville. Please note that the RQN comments are made a part of letter 58 for the convenience of the reader.

**58-2** Commenter seeks revised wording from 6/6/00 letter urging avoidance or minimization of impacts (rather than elimination of them).

**<u>Response</u>** Cal Poly will seek to minimize impacts to neighborhoods, in lieu of "elimination" of impacts. As noted by the City's comments, project impacts cannot always be eliminated.

**58-3** Commenter requests Master Plan add "on and off campus" to provision for mitigation.

**Response** Chapter 7 of the revised Master Plan identifies a process of interaction with neighbors on campus projects that may have a negative effect in their neighborhood. The text in the Guiding Framework now reads: "Planning future campus facilities *and support services* so as to *minimize and* mitigate environmental impacts *on and off campus to the full extent feasible* as part of project design" (p. 15).

**58-4** Commenter requests the Master Plan recognize and address current student housing shortage.

**Response** See additional sections added to Residential Communities element (p. 136): "The Master Plan takes the local housing situation into account and proposes measures that will help alleviate a portion of it. The Guiding Framework of the Master Plan calls for adding student housing to accommodate all new enrollment growth. The campus will be breaking ground in Spring 2001 to build apartment-style housing for 800 students. This facility is scheduled to be ready for occupancy in Fall 2002. The next phase calls for housing from 1150 to 1300 additional students by 2004 or 2005. In sum, Cal Poly expects to add 1950 to 2100 student beds in the next five years, but only about 1250 additional students during that same time period. Over the next two decades Cal Poly will increase the proportion of students who live on campus from about 17 percent today to over 30 percent in the future.

Further, Cal Poly will monitor the local market closely, and, if continuing students are not able to find suitable housing, the campus will develop a strategy to house a larger proportion of the University's students in the future. Strategies may involve working with off-campus partners to identify suitable housing locations and provide financing. Cal Poly and Cuesta College are also exploring ways to cooperate in assuring appropriate housing for their students. Finally, Cal Poly will participate with non-profit organizations in seeking broader solutions to community housing needs."

**58-5** Commenter requests Cal Poly to be proactive in implementing agreements with neighbors.

**Response** The following has been added to Chapter 7: "The Land Use and Project Review Procedures to be established to implement the Master Plan will include the following considerations.

- Establishment of a project development team that represents all affected University interests;
- Identification of responsibility for liaison with elected officials and local and regional agencies, as appropriate to the nature of the project;
- Identification of the appropriate neighborhood areas that may be affected by the project so that meetings may be held early in project planning and design regarding ways to relieve possible impacts;
- Determination of which implementation guidelines and standards are applicable to the project."

**58-6** Commenter requests adding a commitment to mitigation of light and glare.

**Response** Additional mitigation measures have been added to the EIR to address light and glare. The Master Plan has also been amended at page 150 and 152 to address light and glare. "As noise and light impacts are significant concerns, the campus will conduct further studies, like the Jones and Stokes Sound Study prepared in 1997 by the City and community for the Sports Complex." And, further along in the same paragraph: "Particular consideration will be given to minimizing impacts on established neighborhoods and public open space" (p. 150).

**58-7** Commenter notes traffic impacts and mitigation.

**<u>Response</u>** No response required.

**58-8** Commenter requests adding a commitment to mitigation of noise.

**Response** The Final EIR includes additional mitigation for noise.

**58-9** Commenter suggests adding the Goldtree area to constraints map.

**<u>Response</u>** A map has been added at page 64 depicting and analyzing the proposed ancillary designation in the Goldtree area.

**58-10** Commenter requests recognition of neighborhood impact at Grand Ave. and Slack Street.

**Response** Exhibit 4.10 has been modified to identify this potential area of conflict. A figure on page 207 depicts the proposed development in this area.

**58-11** Commenter requests adding a buffer between campus and residential neighborhoods. They further ask that all impacts to neighborhoods be eliminated.

**Response** Commenter is directed to see Land Use element - Compatibility principle on page 69, proposing buffers between residential neighborhoods and on-campus student residences. It is not possible to eliminate all impacts to neighborhoods from proposed activities on campus, but Cal Poly is committed to minimizing these impacts.

**58-12** Commenter seeks discussion of Goldtree site.

**<u>Response</u>** See constraints discussion on p. 64 and Ancillary Activities and Facilities element, especially pages 206 and 208.

**58-13** Commenter offers support for list of land use issues.

**Response** No response required.

**58-14** Commenter requests adding language to eliminate impacts from light and glare created by proposed development at Slack Street and Grand Avenue

**<u>Response</u>** It is not possible to eliminate all impacts to neighborhoods from proposed activities on campus, but Cal Poly is committed to minimizing these impacts. See Environmental Consequences analysis. Also, revised map on page 204 shows buffer adjacent to neighborhood.

**58-15** Commenter raises concerns about impacts of housing west of Highway 1.

**Response** See text in Environmental Consequences discussion on pages 142-143. It is acknowledged that this site has aesthetic sensitivity with regard to neighboring residences. Development on the site will provide some buffers and consideration of views. However, it is important to note that any development on site H-9 will have some impact on the views of the residences immediately to the west of the site.

**58-16** Commenter offers support for mitigation of impacts of future sports facilities.

**Response** No response required.

**58-17** Commenter requests additional protection in the Master Plan for noise impacts and requests reference to the 1997 Jones and Stokes sound study.

**Response** The Environmental Consequences discussion has been modified to incorporate reference to the Jones and Stokes study (p. 150 and 152). Note also that language has been added about appropriate facility design and minimizing impacts from light and noise. It will not be possible to "eliminate" all impacts as requested by the commenter.

**58-18** Commenter requests additional protection in the Master Plan for noise impacts and requests reference to the 1997 Jones and Stokes sound study.

**Response** The Environmental Consequences discussion has been modified to incorporate reference to the Jones and Stokes study. Note also that language has been added about appropriate facility design and minimizing impacts from light and noise. It will not be possible to "eliminate" all impacts as requested by the commenter.

**58-19** Commenter requests additional protection in the Master Plan for neighborhood impacts.

**Response** The Environmental Consequences discussion has been modified to incorporate reference to the Jones and Stokes study. Note also that language has been added about

appropriate facility design and minimizing impacts from light and noise. It will not be possible to "eliminate" all impacts as requested by the commenter.

**58-20** Commenter suggests need to "eliminate" any light and glare impacts of future parking structures.

**Response** It will not be possible to "eliminate" all impacts as requested by the commenter. However, design of the structures can minimize these impacts. Parking Structure I was designed to minimize impacts of its operations to nearby neighborhoods. Lighting on that facility is muted and has lower impacts than the existing parking on Grand Avenue. Noise is also less that experienced with the surface lots. Air quality impacts from the structure are far below regulatory thresholds.

**58-21** Commenter raises concern about impacts of ancillary activities in general.

**Response** Comment noted. The Master Plan provides protection from neighborhoods in the development of these facilities and the EIR addresses impacts from these facilities.

**58-22** Commenter raises concern about commercial component of ancillary activities that might draw non-student clientele.

**Response** The vision of the Master Plan calls for a primary campus activity center near the University Union that is focused on students. Thus, the range of retail businesses and other activities would remain specialized and not constitute a full urban commercial center. Cal Poly understands that there is a delicate balance in determining how much of what services will be sufficient to support the campus community and manage commuting. Effective alternative transportation will allow students, faculty, and staff – as well as members of the broader community – to take advantage of the range of services and facilities both on and off campus without adding to traffic congestion. The Cal Poly Foundation is presently the exclusive provider of certain services – e.g., food service, vending machines and bookstore. Other services compete for campus outlets – e.g., travel service, ATMs. As planning for an increased range and volume of services occurs, the campus will need to determine which it should offer directly and which might be provided through franchise or "privatization."

58-23 Commenter raises concern about magnitude of impacts of ancillary activities.

**Response** The discussion of environmental consequences for ancillary activities has been expanded on pages 207 and 208.

**58-24** Commenter suggests additional language for environmental consequences of ancillary activities.

**Response** The environmental consequences discussion has been expanded on pages 207 and 208, although not with the same language proposed.

### Letter 59 Margot McDonald

### December, 2000

**59-1** Commenter provided editing suggestions on a number of pages to strengthen consciousness of environmental issues and resource requirements: pp. viii, 2, 4, 100, 101, 102, 123, 153, and 154.

**Response** Changes made on the corresponding new pages to reflect the intent of the suggestion (pp., viii, 2, 4, 106, and 107).

**59-2** Commenter suggested adding additional material to Executive Summary regarding resource requirements.

**Response** See new integrated discussion at end of Land Use and Public Facilities and Utilities elements (pp. 79 and 162-163).

**59-3** Commenter suggested adding to discussion of Electricity capacity and distribution.

**<u>Response</u>** Changes made later in Public Facilities and Utilities element as a plan component (pp. 162-163).

**59-4** Commenter suggested adding to discussion of Natural Gas capacity and distribution.

**<u>Response</u>** Changes made later in Public Facilities and Utilities element as a plan component (pp. 162-163).

**59-5** Commenter suggested clarification to portions of the DEIR: pp. 279 and 331.

**Response** These pages have been modified per the suggestion.

59-6 Commenter attached Humboldt State University Green Building Checklist

**Response** Acknowledged for use in Master Plan implementation

# Letter 60

SUMMARY NOTES UNIVERSITY PLANNING AND BUDGET ADVISORY COMMITTEE Meeting No. 1, 2000-01 Wednesday, October 25, 2000 10:00 A.M. Administration 301

# Members Present: Samuel Aborne, Sema Alptekin, Bob Clover (for Jerry Hanley), Linda Dalton, Bob Detweiler, Myron Hood, Joe Jen, Beth Kaminaka, Steve Kaminaka, Frank Lebens, Bill Pendergast, Rick Ramirez, and Paul Zingg (Chair)

# INTRODUCTION

On behalf of Provost Zingg, Vice Provost Linda Dalton welcomed Committee members to the first meeting of the 2000/01 academic year, and introductions were made.

Provost Zingg noted that UPBAC convenes at least once a quarter. Its principal responsibility is the review of matters pertaining to the budget and planning dimensions of the University. Linda Dalton is spearheading the force behind the University Master Plan effort. Its development has been going on for several years, with the beginning of the strategic planning exercises. Frank Lebens and Rick Ramirez are hear to provide us with information with respect to this year's overall University budget to give you some sense of budget construction elements and some sense as to where we are. In both of these issues, there are many layers of issues that we will be unable to master in one setting. Other meetings that UPBAC has had have focused on education sessions in order to become more familiar and versed on the various responsibilities the Committee has. We are advisory to the President, and a constituency-based body. And one that connects the budget and planning at the University, which is a conscious attempt to underscore the participatory governance commitment of the University and underscore the relationship of budgeting and planning, both short and long-term.

Zingg noted that many of the Committee members will have heard some of the information in other venues of the University due to their involvement in their own respective areas. The value, however, of this group, is this body having the entire University's constituencies represented with all the various views provided.

# 1. Master Plan Update

Linda Dalton provided a status report on the Master Plan process. She indicated that the campus has accomplished a process of developing a Plan that addresses enrollment and academic questions, and facility master plan implications for the facilities and properties as a whole. Building from the campus strategic plans and analyses, task forces were developed, and the first drafts of the Master Plan were developed. There is a Master Plan professional team, the President, and various groups on campus that had stakes in the Plan's development, i.e., the College of Agriculture (agricultural land), ASI, etc.

In May 2000, we distributed the preliminary Plan very widely across the campus and community. This was not to meet a legal requirement, but to get information and responses back from anyone that chose to provide some input. A great deal of input was provided, including the City, County, and other agencies in our vicinity. Over the summer, the team responded to these recommendations, and made a number of changes. Then, the Environmental Impact Report (EIR) was prepared. Now we have the October 2000 Master Plan Report with the EIR. This is a legal step in the process. There are public announcements as part of the Plan, allowing for a specified review timeframe.

The Plan is large, is in CD-ROM format, as well as on the Web. An excerpt from the larger document was distributed to Committee members, and Dalton provided highlights as well as changes from the preliminary draft.

Points highlighted were:

- The executive summary is the same as the preliminary draft, showing colored land use within the campus and close vicinity.
- Changes from preliminary draft: The Plan only refers to Santa Cruz property in the overview portion of the Plan; a later document will be more inclusive of the Swanton Pacific Ranch, but all principals still apply.
- The preliminary draft included four long-range enrollment scenarios that were built from DEPAC recommendations, without building physical capacity. It did not include how some academic disciplines would grow. There is now a new chapter, developed in September, which is included in this new draft.
- Regarding changes that interrelate, i.e., land use reflecting the outdoor lands that relate to instruction, is the Brizzolara Creek enhancement area. The Team looked at the Creek area to provide opportunities for ways to protect the natural environment, but to also create some teaching and learning opportunities (Creek enhancement opportunities). Preliminary plans put student housing in that area, but housing has now been replaced to other areas.
- The instructional core area has been expanded for use and has been modified to add a different structure. One significant piece is the work of the UU planning effort which occurred in Spring 2000 that contributed an ASI perspective as to student services and activities. These are integrated into the document. Diagrams are not intended to be "footprints" but just illustrations as to where a cluster of buildings could occur.
- Regarding circulation and alternative transportation issues, at the Grand Avenue corner, a visitor's center is envisioned to provide a welcoming activity for visitors. At the NW end of campus, i.e., the Gold Tree area, an applied research park area site as been identified.
- Implementation chapter at the end of the Plan focuses on what still needs to be done after it is approved in principal.

Zingg noted that Dalton mentioned and the report makes clear, that this is very much an effort that attempts to achieve a golden mean between bottom up and top down. Top down is the educational mission and the principal context for any planning, policies, and

practices of the institution, which creates a broad umbrella. Several points in the document mention this and the implications of the name of Cal Poly. The bottom up is the fact that this whole effort started with academic strategic planning, the work of the colleges and the UCTE, in looking at their sense of directions and environmental scanning that involved engaging hundreds of on-campus and off-campus folks to provide perspectives to contribute to framing these documents. This is critical to program developing, enrollment implications of program developing, and making critical choices. This is what a master plan is all about, and being able to define and choose the future of the institution and how it defines itself. If a Plan is not in place, someone else will tell us what to do. There will always be some of this, however. But we need to think about what our optimum future is, taking our mission, our membership in the CSU, and the public responsibility roles we play as stewards of our resources (higher education) and an agent for eliciting our constituencies' trust and confidence.

Discussion occurred on the issue of enrollment growth, the lack of adequate State funding allocations (marginal cost differences), and how the Plan addresses this issue. Dalton indicated that the Academic Senate and DEPAC were very concerned about the operational budget issues, and there is mention in the Plan on the need for capital budget resources and operating resources in order to accommodate growth. The Plan addresses the principles, but not the operational issues. Zingg acknowledged that the first step toward this need, and the commitment of the CSU, is the Workforce Initiative. The commitment from the Chancellor's Office is to not only making the \$10M one-time allocation this year a permanent one, but to triple this amount over the next several years. Growth needs to be contingent upon working these issues out. The solutions are not defined in the Plan, but it is not intended to do this. It was also noted that the State Legislature is unsympathetic and feels the CSU should reallocate from within for the workforce issue. The CSU seems to be recognizing this. Once recognizing differential costs, the next issue is whether we can open the door more fully to have a more differential funding formula adopted. This is part of the long-range strategy to make this case and the extent to which the argument has been recognized within the compact permanent allocation. Regarding the method of new funding, the CSU has never gone to a new funding formula since mode and level was abandoned in early 90's. We need to get back to something that gets back to relative cost. Zingg reminded Committee members of the "Future of the University" piece that President Baker had done on our distinction as a polytechnic university, and that this distinction is in jeopardy without the resources to continue this distinction.

The \$1.78M Workforce Initiative allocation will need to be exclusively addressed to the workforce disciplines noted, with apparently very little flexibility. Discussion occurred on the principle of keeping the restricted workforce funds to those disciplines, vs. flexibility in funding with emphasis of the campus' outcomes.

Lebens noted the need to get another State bond issue, since the current capital bond runs out. Detweiler acknowledged that he felt it would be unwise not to consider physical growth in the wake of growth/no growth. The State's economy is good now, so now is the time to seek new funding.

Sam Aborne voiced his disagreement on two of the Master Plan principles: 1) increase in student progress; and 2) unit load. He disagreed with the 15-unit courseload assumption (due to courses becoming 4 units, with full-time status then being at 16 units). He was also concerned about the summer quarter enrollment possibly going to 40% of the AY FTES. He does not believe that our campus could support 40% based on our mission, emphasis on co-ops and internships, etc. Opportunities for co-ops and internships could significantly impact students' abilities to take courses in the summer.

In closing, Zingg acknowledged that the above observations are critical to get on the table and brought to the attention of Dr. Dalton and the Master Plan Team during this review phase.

He proposed that we try at the next session to continue any additional comments and observations with respect to the Master Plan. However, in the meantime, Committee members should not hesitate to express individual observations and concerns to Bonnie Lowe, in Facilities Planning.

Due to the lack of time at today's meeting, most of the next meeting will be spent at looking at the 2000-01 Budget. At that time, the campus may have a better clarification of the \$1.78M Workforce Initiative funding. More information may also be available on one-time funds allocated, i.e., excess Lottery funds designed for faculty development and technology, etc.

Frank Lebens and Rick Ramirez distributed the Sources and Uses budget document, and indicated budget information was also available on the Web, but will be discussed at the next meeting.

60-1

# SUMMARY NOTES UNIVERSITY PLANNING AND BUDGET ADVISORY COMMITTEE MEETING NO. 2, 2000-01 Wednesday, December 06, 2000 8:30 A.M. Administration 409

Present: Preston Allen (for Bob Detweiler), Frank Lebens, Bob Clover (for Jerry Hanley), Joe Jen, Bill Pendergast, Myron Hood, Sema Alptekin, Sam Aborne, Beth Kaminaka, Linda Dalton, Bonnie Long, and Paul Zingg (Chair)

# 1. CONTINUED DISCUSSION OF THE MASTER PLAN

Vice Provost Linda Dalton continued the discussion of the campus draft Master Plan. She indicated that last evening was the last presentation of the Plan at a public setting the San Luis Obispo City Council, and that she would comment on the County and City presentations and the issues that came up during those presentations.

Dalton indicated that the draft plan and EIR have been out since October 10, and that comments are due by December 8. She described the general reactions as being very constructive. Even though there may have been criticisms, they have been constructive suggestions. The Master Plan team's outreach efforts have been appreciated. They would like to see this continued into the implementation phase. Specific areas of criticism from outside have been different than the campus' criticisms. Most of the comments have been related to student housing. The Plan made the commitment to cover housing for new student enrollment, and the Team also agreed to speed up the timeline. Discussions have also started with Cuesta College. People do understand the fiscal obligations we are faced with, however.

Some of the other issues from an off-campus perspective were: concern that we follow through on commitment to alternative transportation, and the lighting adjustments on the sports complex. On campus the largest concern was about the physical development where the student housing sites will be placed (environmental sensitivities). The Team is working with the Landscape Advisory Committee and the Biological Sciences Advisory Committee in this regard, and it feels that the Plan can continue to meet the needs of all. Many comments are continuing to come in, and the Team is making sure that students needs are addressed, i.e., Foundation and food service concerns (an operational issue). When we get to the policy level approval, we will need to review the associated operational issues.

Discussion:

• Sam Aborne noted that it seemed that with the College of Business' quality improvement (recent Orfalea gift), we haven't heard much about growth within the College, i.e., facilities to support that College's growth. Dalton responded that we are not designating disciplinary terms in the Master Plan. We have used vague terms. The Team does have to deal with how much space each particular area needs. Provost Zingg also indicated that the Plan emphasizes the core of the

campus being used for instruction. The possible use of Crandall Gym as a desired space due to its architectural style and being in the historical district of campus has been discussed for some time as a likely prospect for supporting programs that now occur in Buildings 2 and 3. The College's own long-range enrollment calls for it having a 14-15% share of the University's enrollment. Dean Pendergast indicated that he has been thinking about this, because some of the activities that have been involved in the Orfalea gift have included a need for space—part of this are matching funds for endowed faculty chairs. The Dean also noted his interested in programmatic activity for entrepreneurships that have credit bearing activity. There is also some interest in a Technology Management program. There are a number of future interests that will imply a growth for the College.

- Zingg indicated that the physical growth component of the Plan is approximately \$20B over the next 20 years! The Chancellor will need to understand the physical realities of this campus in relation to the amount of agricultural land the campus has. The Chancellor also has as an issue on whether or not new buildings will be used year-round.
- Frank Lebens acknowledged that the Plan has focused on the planning, but we have timing issues as well, since we are already into the implementation phase (student housing and some other instructional facilities plans have already started). Zingg also acknowledged the interest for increased bus service and parking.
- Dean Jen questioned whether the Plan is flexible enough to answer the possible issue of future gifts that may require new buildings. Lebens indicated that we do have the ability to further amend the Master Plan (one major revision a year is allowed). Dalton also pointed out the Plan accounts for enough physical space for the increased enrollment, plus some.
- Sam Aborne also noted that students are interested in how we service the bottom end of campus, and creating environments for students beyond 5:00 pm. The University Union will need to expand beyond where it is now. Aborne indicated that he is also interested in looking at summer enrollment numbers.

Dalton noted that the 15,000 FTE physical capacity will not be met for about 3-4 years, since that number does not include non-traditional instruction, i.e. senior project, off-campus instruction (London Study), student teaching, etc.

# 2. 2000-01 BUDGET—SOURCES AND USES

Provost Zingg began by emphasizing that the 2000/01 FY budget it is based on conservative revenue estimates. That is purposeful and appropriate, and is true with this year's budget.

60-2

60-3

The campus is looking at a shortfall on enrollment of 1.2%. This still exceeds last year's enrollment by approximately 300, but falls short of the mandated target. We are closing this gap based on strong registration figures for Winter Quarter (may be as much as halved). This will affect institutional revenues, of course.

Frank Lebens provided an overview of the sources and uses document, and indicated that there are three major demands on our budget at this time (not unlike other campuses): 1) enrollment growth pressures; 2) technology pressure-need to update technologies in classrooms and administratively; and 3) the issue of new initiatives-facility implications and other operating cost pressures. We have tried to accommodate this in the face of the Capital Campaign. There are college priorities, all of which have operating cost implications. We have tried to address some of these priorities in these budget-planning efforts. We have challenges, and we deal with high levels of uncertainty. We have been given warnings by the Chancellor that the impacted campuses having no leeway on enrollments. Zingg acknowledged that the Chancellor has indicated there is no leeway—currently 4 campuses are on impacted status. Utility cost increases are also making an impact on the budget.

Zingg reminded Committee members of the actions taken by the University in the early 90's to deal with on-going commitments utilizing one-time funding. Over the last three years, the University corrected this problem, which meant we had to tighten our belt to correct the disequilibria (not a deficit but a problem). This is why units and college budgets have not grown even with the press indicating that budgets have grown.

# Enrollment growth funds will be targeted for unanticipated increased revenues

The other big unknown this year is what will happen with the utility costs. The multimedia classrooms on the ITS list are funded by Lottery revenues, and implementation of Student Administrative System investment on Degree Audit will also be funded through the Lottery.

# Letter 60 University Planning And Budget Advisory Committee Paul Zingg, Chair

### October 25 and December 6, 2000

The two UPBAC meetings were an opportunity for Dr. Linda Dalton to present the findings of the Master Plan effort. Several comments were made by various members of the committee.

**60-1** Sam Aborne voiced his disagreement on two of the Master Plan principles: 1) increase in student progress; and 2) unit load. He disagreed with the 15-unit courseload assumption (due to courses becoming 4 units, with full-time status then being at 16 units). He was also concerned about the summer quarter enrollment possibly going to 40% of the AY FTES. He does not believe that our campus could support 40% based on our mission, emphasis on co-ops and internships, etc.

**Response** Comments are acknowledged. Achieving the Master Plan goals of increased student progress and enhancing summer quarter will be significant challenges for the University. These will require increased resources for teaching and administration, and a change in the culture of the campus, which is one of taking the summer off.

**60-2** Dean Jen questioned whether the Plan is flexible enough to answer the possible issue of future gifts that may require new buildings.

**Response** Vice President Lebens indicated that Cal Poly does have the ability to further amend the Master Plan (one major revision a year is allowed). According to Vice Provost Dalton, the Plan accounts for enough physical space for the increased enrollment, plus some.

**60-3** Sam Aborne also noted that students are interested in how we service the bottom end of campus, and creating environments for students beyond 5:00 pm. The University Union will need to expand beyond where it is now.

**Response** The Master Plan proposes a number of new facilities on campus that will enhance the community environment for the soon to be 6,000 plus students living on campus. This includes greatly expanded activities and services in the area of the current UU as well as a distribution of conveniences and services throughout campus. An example can be seen in the newly remodeled campus store on Via Carta. Food service will be added to several locations. El Corral will likely expand services to the western portion of the campus instructional core, reducing the need to "climb the hill" in order to acquire needed supplies, especially for the specialty needs of students in agriculture, architecture and engineering.

# Table 1

This table contains the responses to the October 10, 2000 Master Plan and Draft Environmental Impact Report. It is sorted by the pate references to the responses – last column, "Page in Plan/FERIR (Jan. 2001).

Letter number	Comment #	Name	Comment on Master Plan & DEIR (October 2000)	Plan or DEIR	Page in Plan/DEIR (Oct. 2000)	Modifications to Master Plan	Page in Plan/FEIR (Jan. 2001)
1	01-01	Roberts	No State Agencies submitted comments	E	0	No response required	N/A
2	02-01	Settle	Address issues raised by RQN	Р	0	See Residents for Quality Neighborhoods	N/A
3	03-44	Mandeville	Letter dated December 3, 2000 from Bishop's Peak neighborhood residents to SLO City Council	Р	0	See December 8, 2000 correspondence from Bishop's Peak neighborhood residents	N/A
3	03-45	Mandeville	Letter from RQN dated December 4, 2000 to SLO City Council	Р	0	See RQN correspondence from December 4 and June 6, 2000	N/A
3	03-46	Mandeville	E-mail message from Richard Kransdorf dated 12/5/00 to SLO City Council	Р	0	See Kransdorf correspondence of December 5, 2000	N/A
6	06-13	Lajoie	Pages out of sequence in review copy	Ρ	128	Noted - October 10 plan pagination is sequential	N/A
7	07-01	Briggs	No specific comments at this time	E	0	No response required	N/A
33	33-04	Bartholomy	Interest in political and legislative support for sustainable practices	Ρ	0	Such support will contribute to Cal Poly's ability to address such issues in implementing the Master Plan as it raises public awareness and may provide resources as well	N/A
34	34-01	Ashley	Request attachment of all letters on May 1 Preliminary Draft	E	0	The Master Plan and FEIR will include all comments on the October 10 publication, plus a matrix showing changes from both the May 1 and October 10 publications	N/A
42	42-03	Kaminaka	Suggested that cost estimates for the Master Plan should be included	Р	330	Cost estimates are normally developed as part of the campus capital improvement program. This is considered an aspect of Master Plan implementation	N/A
43	43-14	Marx	Discuss environmental condition of quarry area	Р	150	Refer to response; no text change required	N/A
49	49-21	Duerk	Appends material on sustainability	Р	329	Acknowledged and appreciated	N/A
57	57-08	Shredder	Self-deprecating remark by author	E	0	Noted	N/A
58	58-01	RQN	Comments incorporated in City of SLO correspondence	Ρ	0	See Mandeville	N/A
59	59-06	McDonald	Green Building Checklist from Humboldt State	Р	329	Acknowledged and note for plan implementation	N/A
33	33-05	Bartholomy	Interest in interdisciplinary courses and student projects addressing environmental sustainability	Ρ	1	Introductory chapter enables and supports curricular attention to sustainability	1

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43	43-03	Marx	Questions and suggestions about organization and chapter titles	Ρ	0	Organization retained, but text clarified. Key changes include the following: Addition of a section in Chapter 1 explaining the organization of the document; also within each element, the section labeled "Existing Conditions" and Issues has been relabeled as "Background and Issues" to avoid confusion with Chapter 4, Existing Conditions.	1
49	49-02	Duerk	Editing suggestions to strengthen commitment to sustainability planning and building practices	Р	1	Wording not suitable in this location	1
59	59-01	McDonald	Editing suggestions to strengthen consciousness of environmental issues	Ρ	2	Text addition	2
49	49-02	Duerk	Editing suggestion	Р	3	Wording not suitable in this location	3
43	43-04	Marx	Suggested editing of principles in the Introduction	Ρ	4	Text changes - statements now identified as Values to distinguish master plan principles in subsequent chapters	4
49	49-01	Duerk	Editing suggestions to strengthen commitment to sustainability planning and building practices	Р	4	Text addition	4
59	59-01	McDonald	Editing suggestions to strengthen consciousness of resource requirements	Ρ	4	Text addition	4
10	10-03	Greenwald	Call for Cal Poly to delay submittal of the Master Plan to the Board of Trustees pending completion of the housing plan	Ρ	0	Cal Poly will submit the Master Plan to the Board of Trustees for its March 2001 meeting. This date has been in the plan development program for three years. As stated in the plan, increased enrollment will <i>follow</i> the development of additional student housing. Thus, the Master Plan enrollment increases will not exacerbate the housing shortage. In addition, an 800 bed residential facility will begin construction this year. Plans for the development of faculty housing are underway.	5
23	23-02	Kransdorf	Concern about short review period	Ρ	0	Refer to response; The March Board of Trustees date has been made public for three years	5

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34	34-02	Ashley	Suggest slower pace, including hearing on FEIR	Ρ	0	Refer to response; The March Board of Trustees date has been made public for three years	5
43	43-01	Marx	Request for more time for deliberation	Р	0	Refer to response; The March Board of Trustees date has been made public for three years	5
43	43-21	Marx	Suggests inclusion of comments on Preliminary Draft and responses be appended	E	0	The Master Plan and FEIR will include all comments on the October 10 publication, plus a matrix showing changes from both the May 1 and October 10 publications	5
55	55-11	Elfrink	What is the review and appeal process?	Ρ	334	Chapter 7 discusses communication and consultation, and has been expanded to address plan implementation, monitoring and review	5
55	55-12	Elfrink	What is the decision-making process?	Ρ	334	Chapter 7 discusses communication and consultation, and has been expanded to address plan implementation, monitoring and review	5
55	55-15	Elfrink	Can CSU governing body meet in SLO?	Ρ	334	Cal Poly presents its Master Plan to the CSU Board of Trusteess as one item in an agenda over several days. It is not realistic to ask the Board to conduct its business at each affected campus.	5
55	55-16	Elfrink	How will he receive answers to his questions?	E	0	Responses will be included in FEIR as appendix to Master Plan; individual commenters will receive correspondence noting responses to their concerns	5
57	57-01	Shredder	Claimed too late for comment	E	0	Comment in error	5
57	57-02	Shredder	Claim that meetings ignored input	E	0	Meetings were design to both share information and receive input	5
57	57-06	Shredder	Suggests University representatives not listening	E	0	Cal Poly's representatives were listening at all public meetings	5
57	57-07	Shredder	Claims no one took notes	E	0	Notes were taken on 2 ft by 3 ft notepad on an easel visible to all in attendance	5
57	57-09	Shredder	Statement about comment deadline	E	0	Comment period was extended to December 8	5

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57	57-10	Shredder	Suggests comments may not be considered	E	0	Suggests that commenter note not only the extend of comment on the Master Plan and EIR, but also the responses to all comments and extensive changes to the Master Plan text	5
12	12-01	Schlageter	Wants project more publicly known	Ρ	9	See discussion of process in Introduction and Task Forces in Chapter 2.	9
55	55-01	Elfrink	Distrust of Cal Poly's planning process	Ρ	9	See discussion of process in Introduction and Task Forces in Chapter 2.	9
43	43-05	Marx	Need to correct website address	Р	12	Text correction	14
3	03-23	Mandeville	Previous 9. Include RGN language regarding environmental consequences on nearby residential neighborhoods	Ρ	13	See RQN correspondence from December 4 and June 6, 2000	15
21	21-06	Sutliff	Add environmental quality to Question 7	Р	15	Environmental quality is addressed in questions 3, 4 and 5	15
50	50-01	Mumford	Add "and support services"	Р	13	Text addition	15
50	50-02	Mumford	Add "and support and auxiliary services"	Р	14	Text addition	15
52	52-01	Neighbors	Urge implementation of guiding principles from Neighborhood Relations Task Force	Ρ	13	Text addition based on correspondence from RQN	15
58	58-02	RQN	Revised wording from 6/6/00 letter urging avoidance or minimization of impacts (rather than elimination of them)	Ρ	13	Text addition	15
58	58-03	RQN	Add "on and off campus" to provision for mitigation	Р	13	Text addition	15
8	08-01	Newland	Offer more on-campus services	Р	130	See pp. 16,133,189,202	16
21	21-02	Sutliff	Add two principles to Land Use	Р	14	Text addition	16
29	29-04	Scotto	Clarify San Luis Obispo Creek watershed	Р	14	Text addition	16
21	21-02	Sutliff	Add sense of place and purpose to Question 6	Р	15	Text addition	17
50	50-03	Mumford	Add acknowledgement of design guidelines by support and auxiliary services	Р	15	Text addition	17
50	50-04	Mumford	Add "Foundation support, enterprise partnerships"	Р	15	Text addition	17
57	57-03	Shredder	Suggests plan involves "explosive growth"	Ρ	22	See charts in Chapter 3 comparing proposed growth for Cal Poly with San Luis Obispo area, CSU and State of California	24
49	49-02	Duerk	Editing suggestions to strengthen commitment to sustainability planning and building practices	Ρ	24	Wording not suitable in this location because this section is a committee report	26
49	49-03	Duerk	Editing suggestions to strengthen sustainable building practices	Ρ	28	Wording not suitable in this location because this section is a committee report	30

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10	10-04	Greenwald	Suggestion that state legislators as well as Board of Trustees be engaged in helping address housing and enrollment issues	Ρ	32	Disussion in Chapter 3 reflects enrollment pressures associated with demand for Cal Poly's programs	34
44	44-05	Carroll	Why increase enrollment?	Р	32	See Chapter 3	34
47	47-01	Anonymous	Concerns for increased enrollment and unique environment of SLO	Ρ	32	See Chapter 3	34
56	56-03	Fine	Suggests not increasing enrollment	Р	32	See Chapter 3	34
29	29-05	Scotto	Notes limits on size of smaller, unique programs	Ρ	33	Text addition under discussion of Critical Mass (p. 35)	37
36	36-03	Rutherford	How was determination made that campus farm would not require expansion to serve more enrollment?	Ρ	35	The College of Agriculture leadership have indicated that the college has facility capacity	37
29	29-06	Scotto	Clarify map legend	Р	41	Map change	43
29	29-07	Scotto	Lack of detailed map of SLO Creek watershed ranches	Ρ	43	Map addition	45
36	36-05	Rutherford	Cheda Ranch partially in Chorro Creek watershed	Р	41	See text change, p. 43	45
29	29-08	Scotto	Concern about contradiction about access from Grand and Highland	Ρ	46	Chapter 4 discusses Existing Conditions only	48
29	29-09	Scotto	Questions about soil classification and analysis	Ρ	47	The Master Plan team has redone soils analysis using the NRCS system, replacing the Storie Index. The Master Plan team selected this system to be consistent with the soil classification in use by the County of San Luis Obispo. Exhibit 4.7 and the related text have been changed accordingly.	49
36	36-07	Rutherford	Reservoirs missing from discussion	Р	47	Text clarification	49
49	49-06	Duerk	Add discussion of water as a resource for irrigation, etc.	Ρ	46	Covered on the next page under Agriculture Facilities and Resources	49
49	49-01	Duerk	Editing suggestions to strengthen commitment to sustainability planning and building practices	Ρ	48	Text addition	50
29	29-11	Scotto	Maps missing reservoirs and lagoons	Р	51	Map change	53
31	31-01	Shelton	Second Dairy Lagoon not on maps	Р	51	Map change	53
36	36-08	Rutherford	Reservoirs and ponds missing from map	Р	51	Map change	53
36	36-09	Rutherford	Comment on slope in areas shown for potential remote parking	Ρ	52	Master Plan Team concurs that these sites are generally less than 5 percent slopes	54
36	36-10	Rutherford	Cheda Ranch fencing inaccurate	Р	54	Recognized as in need of updating	56

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29	29-12	Scotto	Question about dates and obsolescence for buildings 10 and 52	Ρ	55	Buildings are from different eras; also, obsolescence defined by several criteria, not just age	57
14	14-02	Ladd	Housing set too far up steep slope	E	258	DEIR addresses impacts	59
29	29-13	Scotto	Clarify requirement of EIR for conversion of prime agricultural lands	Ρ	57	Text clarification	59
49	49-07	Duerk	Challenges sewer capacity	E	57	The sewer capacity stated is from discussions with Ed Johnson, Utilities Coordinator for Cal Poly.	59
58	58-05	RQN	Urge Cal Poly to be proactive in implementing agreements with neighbors	Ρ	57	See Chapter 7	59
3	03-02	Mandeville	General 1. B. Recognize potential neighborhood conflicts at Grand and Slack	Ρ	58	Map change	60
3	03-22	Mandeville	Previous 8. B. Amend constraints summary to include potential neighborhood conflicts near Slack and Grant	Р	58	Map change	60
3	03-26	Mandeville	Request for recognition of neighborhood impact at Grand Ave. and Slack Street	Ρ	58	Map change	60
23	23-03	Kransdorf	Potential neighborhood conflict at Slack and Grand	Ρ	194	Map change shows more limited area; adds buffer	60
29	29-15	Scotto	Clarify San Luis Obispo Creek watershed	Р	59	Text clarification	60
43	43-06	Marx	Explain white space for Dairy and Poulty units	Р	58	Map change	60
55	55-04	Elfrink	Request for recognition of neighborhood impact along Slack Street	Ρ	58	Map change	60
58	58-08	RQN	Add commitment to mitigation of noise	Ρ	59	Text addition	61
15	15-01	Anonymous	Why not build up rather than out?	Р	66	See Constraints and Opportunities analysis	62
38	38-01	Brown	Suggest dorms that stack up rather than out	Р	60	See Constraints and Opportunities analysis	62
44	44-04	Carroll	Why not build up rather than out?	Р	66	See Constraints and Opportunities analysis	62
3	03-17	Mandeville	Previous 4. Cite and confirm use of Jones and Stokes noise study	E	290	The Jones and Stokes study has been cited in the bibliography. A summary of its findings have been incorporated into the discussion of the Mustang Stadium relocation	64
3	03-21	Mandeville	Previous 8. A. Amend constraints summary to include Goldtree area	Ρ	60	Map to be added	64

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29	29-14	Scotto	Why aren't ancillary areas covered on constraints map?	Ρ	58	The base map focuses on the Main Campus; an additional map is being added for Cheda Ranch	64
29	29-16	Scotto	Concern with suitability of Goldtree/Cheda Ranch area for development	Р	60	Text clarification	64
29	29-19	Scotto	Calls for less specificity in designating ancillary activities	Ρ	69	The Master Plan team feels that a specific designation should remain, but with text clarification	64
29	29-24	Scotto	Questions Goldtree development potential	Ρ	74	Text clarification; development potential on Cheda Ranch discussed in more detail in Chapter 4, Existing Conditions	64
29	29-25	Scotto	Inconsistent specificity about Goldtree area	Ρ	75	Text clarification; greater specificity about Goldtree area reflects more detailed analysis of tha area as compared to possible remote parking sites	64
29	29-40	Scotto	Clarifydescription of Goldtree area	Р	195	Text clarification	64
29	29-46	Scotto	Clarify description of Goldtree area	E	326	Appendix to DEIR, p. 3	64
31	31-04	Shelton	Goldtree listed as 200 acres	Р	195	Text clarification	64
36	36-11	Rutherford	Questions suitability of Goldtree area for development	Ρ	60	Text clarification; Map to be added	64
36	36-16	Rutherford	Questions suitability of Goldtree area for development	Ρ	195	Text clarification (see Chapter 4, Constraints and Opportunities)	64
58	58-09	RQN	Add Goldtree area to constraints map	Р	60	Map to be added	64
58	58-12	RQN	Need discussion of Goldtree site	Ρ	195	See Ancillary Activities and Facilities element	64
34	34-10	Ashley	Suggests reconsideration of site for proposed development in Goldtree area	Ρ	195	The Environmental Suitability and Sustainability principle in the Land Use element (p. 65) calls for "limiting future development to those areas least affected by regulatory and/or high cost environmental constraints." Compared with other areas on the Main Campus and ranches in the San Luis Obispo Creek and Chorro Creek watersheds, the Goldtree area is relatively well-suited as a satellite location. (See Chapter 4, Constraints and Opportunities as well.)	65

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43	43-08	Marx	Clarify use of the term "Balance"	Р	65	Text clarification	65
29	29-18	Scotto	Concern about wording	Ρ	63	This is a general paragraph not requiring the word change proposed	67
43	43-07	Marx	Need reference to Valencia Creek property in Santa Cruz County	Ρ	63	Clarification in footnote, as this property is not addressed in the present Master Plan document	67
6	06-10	Lajoie	Support for Land Use principles	Р	65	No response required	68
49	49-01	Duerk	Editing suggestions to strengthen commitment to sustainability planning and building practices	Р	64	Text addition	68
58	58-13	RQN	Support for list of land use issues	Ρ	64	No response required	68
21	21-02	Sutliff	Add two principles to Land Use	Р	65	Text addition	69
21	21-02	Sutliff	Include the upgrading of buildings and grounds	Р	65	Text addition	69
29	29-34	Scotto	Add principles regarding avoidance of conversion of agricultural lands	Ρ	101	This concern addressed elsewhere in Land Use, Natural Environment and Outdoor Teaching and Learning elements (pp. 65, 79, 92)	69
43	43-18	Marx	Claims proposed facilities near Goldtree violate environmental suitability location principles	р	194	The Environmental Suitability and Sustainability principle in the Land Use element (p. 65) calls for "limiting future development to those areas least affected by regulatory and/or high cost environmental constraints." Compared with other areas on the Main Campus and ranches in the San Luis Obispo Creek and Chorro Creek watersheds, the Goldtree area is relatively well-suited as a satellite location. (See Chapter 4, Constraints and Opportunities as well.)	69
49	49-01	Duerk	Editing suggestions to strengthen commitment to sustainability planning and building practices	Ρ	65	Text addition	69
58	58-11	RQN	Add buffer between campus and residential neighborhoods	Ρ	65	See Land Use element - Compatibility principle	69
21	21-02	Sutliff	Edit Outdoor Teaching and Learning statement	Р	67	Text addition	71
3	03-03	Mandeville	General 2. Designate hill above residence halls to Natural Environment	Р	70	This area is currently used for grazing, which explains the Outdoor Teaching and Learning designation	75

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3	03-27	Mandeville	Designate hill above residence halls to Natural Environment	Ρ	70	This area is currently used for grazing, which explains the Outdoor Teaching and Learning designation	75
29	29-21	Scotto	Parking on map does not match legend	Р	71	Map change	76
31	31-01	Shelton	Second Dairy Lagoon not on maps	Р	71	Map change	76
31	31-02	Shelton	Farm shop not listed	Р	71	Map change (legend)	76
36	36-12	Rutherford	Show accress from Stenner Creek Road to Cheda Ranch	Ρ	71	Area is outside the base map	76
49	49-08	Duerk	Question about firmness of student housing sites, other land uses	Ρ	71	Board of Trustees will be approving land use designations and tentative future building sites; nevertheless, each project will require detailed site planning	76
29	29-22	Scotto	First paragraph should mention SLO Creek Watershed ranches	Ρ	72	SLO Creek Watershed ranches discussed in the last paragraph on this page (pp. 72-73)	77
33	33-01	Bartholomy	Proposal for committee on sustainability	Ρ	336	See new integrated discussion at end of Land Use and Public Facilities and Utilities elements	79
49	49-02	Duerk	Editing suggestions to strengthen sustainable building practices	Ρ	60	Wording not suitable in this location	79
49	49-04	Duerk	Editing suggestions to strengthen sustainable building practices	Р	30	Wording not suitable in this location - addressed in Public Facilities and Utiliities element	79
49	49-10	Duerk	Add discussion of sustainable planning and building in campus core	Ρ	85	See new integrated discussion at end of Land Use and Public Facilities and Utilities elements	79
49	49-13	Duerk	Add discussion of sustainable planning and building to development areas	Ρ	109	See new integrated discussion at end of Land Use and Public Facilities and Utilities elements	79
49	49-15	Duerk	Apply environmental responsibility principles to student housing development	Ρ	126	See new integrated discussion at end of Land Use and Public Facilities and Utilities elements	79
53	53-04	Heatherington	Model advanced environmental design	Ρ	154	See Design requirements	79
54	54-02	Wilmore	Apply "new urbanism" concepts to housing on campus	D	128	For consideration in site planning	79
59	59-02	McDonald	Editing suggestions to strengthen consciousness of resource requirements	Ρ	153	See new integrated discussion at end of Land Use and Public Facilities and Utilities elements	79
3	03-29	Mandeville	Add specific language to retain environmentally sensitive areas in open, undeveloped use	Ρ	78	Text addition	82
45	45-02	Holland	Wants paragraph to state "action" statements	Р	78	Text addition	82

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49	49-09	Duerk	Suggests discussion of levels of environmental stewardship	Р	76	See Natural Environment principles (p. 78)	82
29	29-23	Scotto	Identify prime agricultural land as environmentallly sensitive	Ρ	73	Master Plan recognizes environmental value of prime agricultural land in text, but designates it as Outdoor Teaching and Learning on land use maps	83
29	29-28	Scotto	Add protection for prime agricultural lands	Р	80	Covered in Principles (revised text) in both Natural Environment and Outdoor Teaching and Learning elements	83
45	45-03	Holland	Change Cal Poly "can" to Cal Poly "will or should	Р	79	Text clarification	83
45	45-03	Holland	Discuss global air, water and energy impacts	E	79	Refer to response; no text change required	83
45	45-03	Holland	Wants more consistent verbiage used	Р	78	Text clarification	83
45	45-04	Holland	Biodiversity should not be hyphenated	Р	79	Text correction	83
45	45-04	Holland	Change plant to native biotic communities	Р	79	Text correction	83
45	45-05	Holland	Expand Biodiversity discussion	Р	79	Text addition	83
45	45-06	Holland	Reword the definition of Viability	Р	79	Text addition	83
21	21-02	Sutliff	Edit Enhancement statement	Р	79	Text addition	84
26	26-01	Vilkitis	Wants the riparian system to be refered to as stream system (more broad)	Ρ	81	Text clarification; comment also provides input for Guiding Principles and Goals for the Cal Poly Creek Management and Enhancement Plan, appended to the Master Plan	85
29	29-27	Scotto	Concern about criticism of grazing practices	Ρ	78	Text has been removed as issue here, as grazing and land management practices are more fully addressed in Outdoor Teaching and Learning element	88
29	29-29	Scotto	Add to trails discussion regarding security	Р	84	Text addition	88
29	29-30	Scotto	Suggests using "management measures" rather than "best management practices"	Р	85	Text clarification	89
43	43-09	Marx	Elaborate on outdoor teaching and learning activities	Р	86	Text addition	90
13	13-01	Muhlen	Concern about moving the irrigation training facility	Р	88	ITRC not being moved	92
29	29-31	Scotto	Reflect research regarding soils and earth sciences	Р	89	Text addition	93
29	29-41	Scotto	Discuss sheep operations in Goldtree area	Р	89	Text has been amended to remove this characterization.	93

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36	36-06	Rutherford	Data on use of Cheda Ranch for sheep and rodeo stock	Ρ	44	See text change, p. 89	93
36	36-14	Rutherford	Clarify use of Cheda Ranch by sheep operations	Р	89	Text addition	93
36	36-15	Rutherford	Notes competition between ancillary activities and teaching	Ρ	89	Text clarification	93
43	43-20	Marx	Indicates use of Goldtree area by sheep operations	Ρ	195	Text addition in Outdoor Teaching and Learning element (p. 89)	93
29	29-32	Scotto	Add corrals at Escuela Ranch	Р	90	Map change	94
31	31-03	Shelton	Mistakes on naming areas on maps	Р	90	Map change	94
29	29-26	Scotto	Add as an issue: encroachment of campus onto agricultural land	Ρ	77	Discussed under Issues in Outdoor Teaching and Learning element	95
29	29-26	Scotto	Include "encroachment of campus onto prime agricultural land" as an issue on p. 77	Ρ	91	Text addition on page 91 where more appropriate	95
49	49-01	Duerk	Editing suggestions to strengthen commitment to sustainability planning and building practices	Ρ	91	Text addition	95
21	21-02	Sutliff	Add section asking colleges to identify outdoor teaching and learning needs	Р	92	Text addition under general principles	96
21	21-02	Sutliff	Edit Visibility and Integration statements	Р	93	Text clarification	97
36	36-20	Rutherford	Concern about grassland loss	E	260	Refer to response; no text change required	97
3	03-04	Mandeville	General 3. Retain Outdoor Teaching and Learning lands in open, undeveloped use	Р	94	Text addition, clarifiying future status of Outdoor Teaching and Learning lands	98
29	29-33	Scotto	Change "should" to "will"	Р	94	Text clarification	99
33	33-06	Bartholomy	Interest in sustainable agriculture	Р	94	See Outdoor Teaching and Learning element	99
36	36-22	Rutherford	Concern about conversion of agricultural lands	E	313	See clarification in response	99
45	45-07	Holland	Feedmill is one word	Р	97	Dictionaries differ regarding usage	102
3	03-05	Mandeville	General 4. Protect Stenner as well as Brizzolara creek	Ρ	98	Text has been added	103
3	03-30	Mandeville	Give equivalent attention to Stenner Creek	Р	98	Refer to response; text has been added.	103
21	21-02	Sutliff	Add environmental sensitivity requirement and othe edits	Ρ	99	Text addition	103
21	21-07	Sutliff	Designate Stenner Creek as an Enhancement Area now	Ρ	98	Refer to response; text has been added and Stenner Creek is addressed in a study by V.L.Holland.	103
45	45-01	Holland	Contribution of guiding principles for creek management and enhancement	Ρ	97	Text addition	103
34	34-03	Ashley	Compliment on campus instructional core	Р	101	No response required	105
21	21-02	Sutliff	Additions to Issue statements	Р	101	Text addition	106

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50	50-05	Mumford	Add "support" space	Р	101	Text addition	106
59	59-01	McDonald	Editing suggestions to strengthen consciousness of environmental issues	Ρ	102	Text addition	106
59	59-01	McDonald	Editing suggestions to strengthen consciousness of resource requirements	Ρ	100	Text addition	106
59	59-01	McDonald	Editing suggestions to strengthen consciousness of resource requirements	Ρ	101	Text addition	106
21	21-02	Sutliff	Edit Circulation statement	Р	103	Text addition	108
35	35-02	Johnson	UU expansion at present and possible satellite locations	Ρ	104	Integration and Social Environment principles reflect need for dispersed activities	109
31	31-01	Shelton	Second Dairy Lagoon not on maps	Р	105	Map change	110
3	03-31	Mandeville	Trade-offs between providing commercial services for students, faculty and staff on and off campus	Ρ	106	The range of retail businesses and other activities would remain specialized and not constitute a full urban commercial center – and thus not compete directly with San Luis Obispo's downtown.	111
35	35-01	Johnson	Incorporate UU program areas for expansion	Р	106	Text addition	111
35	35-04	Johnson	Acknowledge student entertainment facility needs	Р	106	Addressed in primary campus activity center	111
55	55-07	Elfrink	Consider relocating Visitor Center further onto campus	Ρ	194	Map change shows a different orientation of the Visitor Center; adds buffer	114
30	30-01	Solomon	Concerns for the layout of the new BRAE bldg.	Ρ	112	Text addition to recognize concern when site planning occurs	117
42	42-02	Kaminaka	Concerns for the large vehicles used in BRAE and other ag. Classes, need more room for maneuvering	Ρ	112	Text addition	117
21	21-03	Sutliff	Southwest Area needs specific plan	Ρ	115	Chapter 7 identifies the Southwest Area for one of several implementation studies	120
49	49-14	Duerk	Suggests including section views of site to show topography	Ρ	117	Implementation studies for the Southwest area will address topography	120
21	21-04	Sutliff	North Perimeter should not be a broad pedestrian way	Ρ	117	Text clarification	122
35	35-03	Johnson	Consider reuse of Crandall Gym for Union &/or Recreation	Ρ	117	Text addition	122
35	35-09	Johnson	Consider reuse of Crandall Gym for Union &/or Recreation (repeated comment)	Ρ	117	Text addition	122
21	21-05	Sutliff	Green Space Plan needs further resolution	Ρ	119	Chapter 7 identifies pedestrian systems as one of several implementation studies	124

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21	21-02	Sutliff	Edit Campus Landscape Plan requirements	Р	121	Text clarification	127
29	29-35	Scotto	Include erosion control	Р	122	Already addressed as "minimizing erosion"	127
59	59-01	McDonald	Editing suggestions to strengthen consciousness of resource requirements	Р	123	Text addition	128
3	03-07	Mandeville	General 6. Affirm student housing impacts as major community concern	Р	124	See additional section added to Residential Communities element.	129
3	03-32	Mandeville	Expand on commitment to student housing, timing and financial feasibility	Р	128	See additional section added to Residential Communities element.	129
6	06-11	Lajoie	Support for mix of housing types	Р	126	No response required	129
10	10-01	Greenwald	Request for analysis of housing situation in the community	Ρ	124	See discussion of Market Analysis added to Residential Communities element.	129
34	34-08	Ashley	Consider alternative housing design on campus, including more height, underground parking	E	317	See detailed response	129
40	40-02	Steinmaus	Concern for "student ghettos" off campus; supports on- campus housing	Ρ	126	See Residential Communities element	129
40	40-02	Steinmaus	Concern for "student ghettos" off campus; supports on- campus housing	Ρ	139	See Residential Communities element	129
48	48-01	Christianson	Housing Element inadequate	Р	125	See rewritten Residential Communities element	129
48	48-02	Christianson	Claim that Cal Poly displaces lower wage earners	Р	125	See rewritten Residential Communities element	129
48	48-03	Christianson	Lack of housing as impediment to attracting employees to area	Р	125	See rewritten Residential Communities element	129
48	48-05	Christianson	Suggests that Cal Poly commit land and resources to housing	Р	125	See rewritten Residential Communities element	129
48	48-07	Christianson	Appends data on housing need in SLO area	Р	125	Acknowledged and appreciated	129
6	06-12	Lajoie	Support for expanding services for students living on campus	Ρ	127	No response required	133
11	11-01	Watts	Concerns for the use of Poly Canyon	E	258	DEIR addresses impacts - comment appears to misconstrue proposed housing location	135
17	17-01	Saavedra	Concerns on the placement of the residences north of Brizzolara Creek	Ρ	59	See Constraints and Opportunities analysis	135
17	17-02	Saavedra	Concerns about housing impact on wildlife and habitat	E	258	DEIR addresses impacts	135
18	18-01	Gifford	Suggest housing to be built on existing areas	Р	59	See Constraints and Opportunities analysis	135
20	20-01	Anonymous	Redevelop North Mountain residence halls?	Р	131	See Residential Communities element	135

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43	43-23	Marx	Consider more intense student housing, including use of existing parking lots (specific sites listed)	Ρ	128	Master Plan appreciates this suggestion and will consider reuse of additional parking areas and integration of parking into multi-use structures (See Parking element)	135
3	03-32	Mandeville	Trade-offs between providing commercial services for students, faculty and staff on and off campus	Ρ	189	The range of retail businesses and other activities would remain specialized and not constitute a full urban commercial center – and thus not compete directly with San Luis Obispo's downtown.	136
3	03-47	Mandeville	Testimony and correspondence from Naoma Wright to SLO City Council, 12/5/00 and 12/600 request for Cal Poly and Cuesta to provide more student housing	Ρ	128	See additional sections added to Residential Communities element.	136
10	10-02	Greenwald	Call for Cal Poly to create plan to address housing shortage	Ρ	128	See additional sections added to Residential Communities element.	136
34	34-09	Ashley	Urges Cal Poly, Cuesta and City of San Luis Obispo to find other student housing locations	Ρ	136	See additional sections added to Residential Communities element.	136
43	43-10	Marx	Concerns about affordability and marketability of student residences	Ρ	127	See discussion of Market Analysis added to Residential Communities element.	136
48	48-04	Christianson	Concern about economic and environmental impacts of efforts to ease housing deficit	Ρ	125	Recognized more explicitly in additional section in Residential Communities element	136
58	58-04	RQN	Recognize and address current student housing shortage	Ρ	124	See additional sections added to Residential Communities element.	136
43	43-23	Marx	Consider more intense student housing, including use of existing parking lots (specific sites listed)	E	317	See detailed response and text additions	137
48	48-06	Christianson	Seeks Cal Poly's participation in ACTION for Healthy Communities	Ρ	128	See additional sections added to Residential Communities element.	137
55	55-08	Elfrink	Basis for locating 136 beds - and is that a maximum? Why not elsewhere?	Ρ	132	The site was selected because it is adjacent to existing student housing, and the tree-lined swale to the south can serve as a buffer. The number of beds represents one estimate of how many units could be built on the site; however, the specific number of students housed will depend on building type and will be determined by more detailed feasibility analysis.	137
23	23-04	Kransdorf	Support for residence halls just south of Yosemite	Р	132	No response required	139

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34	34-04	Ashley	Support for relocating housing previously shown in Feed mill area	Ρ	129	No response required	139
43	43-22	Marx	Continuing concerns about student housing north of Brizzolara Creek	Ρ	130	DEIR addresses impacts	139
55	55-09	Elfrink	Basis for 136 beds - precedents for future development in area?	Ρ	132	The revised map shows the limits of the area designated for student housing in the Master Plan.	139
57	57-04	Shredder	Wonders whether people care about proposed student housing locations	E	128	Numerous comments received from both campus and community members	139
55	55-10	Elfrink	Visual and noise impacts of new student housing	E	132	Text addition, noting importance of noise, light and visual impacts	140
3	03-15	Mandeville	Previous 2. Follow City policies and standards for off- campus housing	Ρ	135	See text in Environmental Consequences discussion	142
58	58-15	RQN	Concerns about impacts of housing west of Highway 1	Ρ	135	See text in Environmental Consequences discussion	142
3	03-16	Mandeville	Previous 3. Seek CSU policy change to allow fraternity housing on campus	Ρ	136	CSU policy does not permit campuses to provide housing for organizations with selective membership	143
3	03-10	Mandeville	General 9. Cite Heery Sports Facilities Master Plan	Ρ	137	Text clarification indicates that Heery Plan was used for Sports Complex, but its other recommendations are superceded by the campus Master Plan	145
3	03-33	Mandeville	Clarify references to Heery Sports Facilities Master Plan, especially with respect to possible relocation of Mustang Stadium	Ρ	137	Text clarification indicates that Heery Plan was used for Sports Complex, but its other recommendations are superceded by the campus Master Plan	145
21	21-08	Sutliff	Outdoor Fields condition is out of date	Ρ	137	Text clarification	145
43	43-11	Marx	Clarify references to Heery Sports Facilities Master Plan	Ρ	142	Text clarification in introduction to Recreation element indicates that Heery Plan was used for Sports Complex, but its other recommendations are superceded by the campus Master Plan	145
3	03-34	Mandeville	Clarify status of Mustang Stadium, including potential for remodeling rather than relocation	Ρ	138	Text removed here; clarified later in Recreation element	146
35	35-08	Johnson	Allow for expansion of recreation at current location & new residential areas	Ρ	144	Considered as reuse of Mott Gym	147

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35	35-10	Johnson	Replace recreation fields with any Sports Complex changes	Р	140	Addressed by Continuity principle	147
35	35-12	Johnson	Allow for expansion of recreation at current location & new residential areas	Р	139	Addressed by Proximity principle	147
3	03-09	Mandeville	General 8. Cite Jones and Stokes sound study	Ρ	144	Jones and Stokes sound study now cited in text and in environmental impact analysis as well	150
35	35-08	Johnson	Allow for expansion of recreation at current location & new residential areas	Р	145	Addressed as part of informal outdoor and indoor recreation	150
43	43-12	Marx	Questions need for additional sports facilities; calls for more analysis	Ρ	142	Text addition	150
52	52-02	Neighbors	Suggests specific language to mitigate impacts in sports complex area	Р	142	Text addition, consistent with expectations in environmental impact analysis	150
52	52-04	Neighbors	Reference 1997 Jones and Stokes sound study	Р	143	Jones and Stokes sound study now cited in text and in environmental impact analysis as well	150
52	52-12	Neighbors	Add specific language to clarify mitigation of light and glare impacts on residential areas and open space	E	296	See additional text	150
58	58-06	RQN	Add commitment to mitigation of light and glare	Р	59	Text clarification	150
58	58-16	RQN	Support for mitigation of impacts of future sports facilities	Р	142	No response required	150
58	58-17	RQN	Reference 1997 Jones and Stokes sound study	Р	143	Jones and Stokes sound study now cited in text and in environmental impact analysis as well	150
58	58-18	RQN	Reference 1997 Jones and Stokes sound study	Р	144	Jones and Stokes sound study now cited in text and in environmental impact analysis as well	150
3	03-34	Mandeville	Clarify status of Mustang Stadium, including potential for remodeling rather than relocating	E	319	Text has been changed; refer to Alternatives Section	151
29	29-36	Scotto	Will ARDFA be displaced?	E	143	Yes	151
52	52-03	Neighbors	Asks that Heery plan not be used as a basis for any future football stadium location/design	Ρ	143	The Master Plan used the Heery Plan analysis to assess potential sites. However, if and when the stadium might be relocated additional site, design and impact studies will be conducted.	151
52	52-05	Neighbors	Consider possible future football stadium as new project because not just relocation of same size facility	Р	143	If and when the stadium might be relocated additional site, design and impact studies will be conducted.	151
52	52-11	Neighbors	Address feasibility of remodeling Mustang stadium (compare light and glare impacts)	E	315	Text has been changed; refer to Alternatives Section	151

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58	58-19	RQN	Need to mitigate any light and glare impacts of practice field	Ρ	145	See language in Environmental Consequences discussion	152
35	35-11	Johnson	ASI role in development & management of recreation	Р	145	Text addition	153
4	04-01	Moss	Needs discussion on available water resources	Р	147	Text change; refer to public services section of the EIR	155
43	43-13	Marx	Clarify discussion of recycling	Р	150	Text clarification	158
29	29-37	Scotto	Critique of environmental analysis of move of Corporation Yards to Old Poultry Unit area	E	153	Clarification of text	161
43	43-15	Marx	Suggests making TES a landmark	Ρ	154	Addition to Invisibility principle in Public Facilities and Utilities element allows for "environmental aesthetic that balances beauty and function"	161
49	49-19	Duerk	Support for principles in Public Facilities and Utilities element; urges implementation	Ρ	153	No response required	161
16	16-01	Holan	Wants sustainable practices in development	Р	154	See Design requirements	162
33	33-02	Bartholomy	Concern with energy and resource use	Ρ	153	See new integrated discussion at end of Public Facilities and Utilities element	162
33	33-03	Bartholomy	Concern with life cycle analysis for buildings	Р	153	See new integrated discussion at end of Land Use and Public Facilities and Utilities elements	162
46	46-01	Okano	Wants housing built with sustainability in mind	Р	154	See Design requirements	162
49	49-18	Duerk	Suggested additions to infrastructure capacity and distribution section	Р	146	Wording not suitable in this location - rather later in Public Facilities and Utilities element	162
49	49-18	Duerk	Suggested additions to infrastructure capacity and distribution section	Ρ	147	Wording not suitable in this location - rather later in Public Facilities and Utilities element	162
49	49-18	Duerk	Suggested additions to infrastructure capacity and distribution section	Р	148	Wording not suitable in this location - rather later in Public Facilities and Utilities element	162
49	49-18	Duerk	Suggested additions to infrastructure capacity and distribution section	Р	149	Wording not suitable in this location - rather later in Public Facilities and Utilities element	162
53	53-03	Heatherington	Use infill sites for housing	E	317	Discuss infill option	162
59	59-02	McDonald	Editing suggestions to strengthen consciousness of resource requirements	Ρ	ix	More specific discussion on p. 153	162
59	59-03	McDonald	Add provisions regarding energy and resource use to building design and renovation	Ρ	147	More specific discussion on p. 154	162

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59	59-03	McDonald	Add provisions regarding energy and resource use to building design and renovation	Р	154	See new integrated discussion at end of Land Use and Public Facilities and Utilities elements	162
59	59-04	McDonald	Editing suggestions to strengthen consciousness of resource requirements	Р	149	More specific discussion on p. 153	162
21	21-02	Sutliff	Addition to Solid Waste and Recycling section	Р	150	Text addition	163
36	36-04	Rutherford	Impact of fuel prices on operations	Р	158	Text addition regarding dependence on fossil fuels	163
49	49-11	Duerk	Consider integration of energy and resource recovery facility with agricultural facilities	Р	89	See new integrated discussion at end of Public Facilities and Utilities element	163
49	49-12	Duerk	Consider integration of energy and resource recovery facility with student housing in Brizzolara Creek area	Р	97	See new integrated discussion at end of Public Facilities and Utilities element	163
49	49-16	Duerk	Consider water recovery and recycling as part of Brizzolara Creek enhancement	Р	129	See new integrated discussion at end of Public Facilities and Utilities element	163
58	58-07	RQN	Concerned with traffic impacts and mitigation	Р	155	No response required	164
9	09-01	DeCarli	Concern about safety at Stenner Creek Entrance	Р	156	Issue recognized in Circulation element; any proposed development on Cheda Ranch will address access issues	165
29	29-10	Scotto	Stenner Creek Road intersection (identified on p. 50) should be discussed on page 46	Р	50	Discussed later in Circulation element	165
29	29-10	Scotto	Stenner Creek Road intersection (identified on p. 50) should be discussed on page 46	Р	156	Discussed in Circulation element	165
6	06-14	Lajoie	Support for Circulation principles	Р	157	No response required	166
6	06-01	Lajoie	Support for University's commitment to public transportation	Р	158	No response required	167
9	09-04	DeCarli	Bicycle access on service roads	Р	159	Text addition, p. 158	167
23	23-01	Kransdorf	Supports reduction of reliance on automobile	Р	157	No response required	167
24	24-10	Jud	Review LOS discussion with respect to pedestrians	E	268	See response for clarification	168
49	49-20	Duerk	Add ADA considerations to pedestrian orientation	Р	159	Text addition	168
5	05-05	McCluskey	Modify language consistent with EIR re: California Blvd entrance	Р	162	Text change	171
9	09-05	DeCarli	RR Ped-Bike trail	Р	163	Text addition, p. 162	171
24	24-08	Jud	Consider traffic calming on east Perimeter	Р	163	Text addition; see also, p. 159	172
3	03-35	Mandeville	Add "controls to inhibit at-grade pedestrian crossing" along railroad right of way	Р	164	Map change	173

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3	03-36	Mandeville	"Americans with Disabilities Act"	Р	165	Text correction	174
3	03-37	Mandeville	Site pedestrian path along Brizzolara Creek outside riparian corridor; minimize creek crossings	Р	165	Text addition	174
49	49-20	Duerk	Add ADA considerations to pedestrian circulation design	Ρ	164	Text addition and clarification	174
6	06-15	Lajoie	Consider electric bicycle use and storage	Р	166	Text addition	176
14	14-01	Ladd	Wants more accommodations for bicycles	Ρ	167	Detailed bicycle planning to be included in implementation	176
33	33-07	Bartholomy	Suggests expanding bicycle use, including solar and electric energy	Ρ	165	Text addition	176
40	40-01	Steinmaus	States a hinderance for riding bicycles	Ρ	167	Detailed bicycle planning to be included in implementation	176
3	03-38	Mandeville	Support for electric or low-emissions vehicles for shuttle service	Ρ	168	Text addition	177
9	09-06	DeCarli	Transit Improvements incorporating state-of-the-art technology	Ρ	168	Text additions, pp. 168 and 179	177
9	09-07	DeCarli	Campus Shuttle	Р	168	Text additions	178
3	03-39	Mandeville	Roadway section does not show pedestrian crossings	Р	170	Text correction	179
9	09-08	DeCarli	Support California Blvd. extension with bike lanes	Р	171	No response required	181
25	25-01	Lawson	Concern about vehicle-pedestrian conflicts on Via Carta at and north of Highland Drive	Ρ	172	Consider ideas as part of implementation	182
25	25-02	Lawson	Proposes additional road crossing Brizzolara Creek	Ρ	172	Consider ideas as part of implementation	182
41	41-01	Robertshaw	Close the road next to the Campus market	Р	172	Text addition	182
9		DeCarli	Intersection designs	Р	173	Text addition	183
25	25-03	Lawson	Suggests intersecton redesign options	Р	173	Consider ideas as part of implementation	183
42	42-01	Kaminaka	Concerns for the instructional core vehicle access, too many conflicts	Р	174	See Circulation element	183
6	06-16	Lajoie	Strong support for coordination with local transit providers and continued bus subsidy	Ρ	168	No response required	186
54	54-01	Wilmore	Support for circulation and parking proposals	D	155	No response required; See Circulation, Alternative Transportation and Parking elements	186
24	24-01	Jud	Need to correct bus routes on Exhibit 5.22	Р	177	Map change	187

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3	03-14	Mandeville	Previous 1. Bolder commitment to alternative transportation	Ρ	178	See note at end of Alternative Transportation element	188
6	06-17	Lajoie	Add Support as a principle for alternative transportation	Ρ	178	See added Principle to Alternative Transportation element	188
8	08-02	Newland	Financial incentives to use transit services	E	275	See also p. 178-179	188
9	09-02	DeCarli	Innovative Transit Financing	Р	158	No response required, see also page 179	188
9	09-10	DeCarli	Financial Feasibility	Ρ	178	Further analysis of incentives to use alternative transportation will be part of Master Plan implementation	188
24	24-02	Jud	Need secure funding for local bus service	Ρ	179	Cal Poly is exploring alternative sources of funding to contribute to public transportation	188
3	03-40	Mandeville	Confirm feasibility of reduction in parking demand	E	276	Text has been clarified in Plan	189
5	05-06	McCluskey	Trip reduction assumptions and Alternative Tranportation - concern that modal split objectives may not be met	Ρ	179	The circulation analysis in the DEIR illustrates the combination of policies and incentives that can achieve the parking reduction goal. Table added to Master Plan text in Parking element	189
5	05-09	McCluskey	Work with City, County, SLOCOG on short and long- range transit plans for Cal Poly	Ρ	179	Text addition	189
6	06-18	Lajoie	Concern with air quality associated with parking structures	E	184	Addressed in Environmental Impact Report	189
9	09-03	DeCarli	Vehicle trip reduction	Р	158	No response required, see also page 179	189
9	09-11	DeCarli	Vague Plan Components	Ρ	179	The circulation analysis in the DEIR illustrates the combination of policies and incentives that can achieve the parking reduction goal. Table added to Master Plan text in Parking element	189
9	09-12	DeCarli	Parking Fees	Р	179	No response required	189
15	15-02	Anonymous	Concern about need for transit services to discourage cars	Ρ	155	Alternative Transportation element calls for coordinated transportation with City and County	189
24	24-03	Jud	Need measurable modal split objectives	Ρ	179	The circulation analysis in the DEIR illustrates the combination of policies and incentives that can achieve the parking reduction goal. Table added to Master Plan text in Parking element	189
24	24-04	Jud	Potential for Cal Poly leadership in regional light rail	Р	179	Text addition	189
24	24-05	Jud	Consider higher parking fees; permit restrictions	Р	179	See Alternative Transportation element	189
24	24-06	Jud	Increase public transit access	Р	179	See Alternative Transportation element	189
24	24-07	Jud	Consider light rail terminals at Cal Poly	Р	179	Text addition	189

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28	28-01	Lang	Concerns for student transportation	Р	179	See Alternative Transportation chapter	189
40	40-03	Steinmaus	Parking issues on campus; supports shuttle	Р	168	See Circulation element	189
40	40-03	Steinmaus	Parking issues on campus; supports shuttle	Р	174	See Circulation element	189
44	44-03	Carroll	Why more parking instead of mass transit?	Р	179	See Alternative Transportation element	189
5	05-10	McCluskey	Amend Environmental Consequences box to include risk of severe consequences if trip reduction plans fail	E	179	Text addition	190
6	06-02	Lajoie	Need to make mitigation of traffic impacts contingent on public transit subsidy	E	209	See Text clarification	190
6	06-05	Lajoie	Need to make mitigation of traffic impacts contingent on public transit subsidy	E	287	See Text clarification	190
43	43-16	Marx	Clarify statement about vehicle trip reduction	Р	181	Text clarification	191
9	09-13	DeCarli	Parking Location	Р	182	No response required	192
3	03-19	Mandeville	Previous 6. Give high priority to parking studies and mitigation	Ρ	183	Parking Management is already identified as one of the important Focused Studies needed to implement the Master Plan. Indeed, work is already underway to explore alternative sources of financial support for alternative transportation.	193
9	09-14	DeCarli	Parking Structure Locations - need project EIR	Р	184	No response required	193
13	13-01	Muhlen	Location of the third parking structure	Ρ	184	Master Plan shows alternative locations considered; no parking structure site on ITRC	193
24	24-09	Jud	Move parking structure #3 west of railroad	E	184	Most land is prime agricultural land along Highland Drive and critical to Outdoor Teaching and Learning	193
58	58-20	RQN	Need to mitigate any light and glare impacts of future parking structures	Ρ	184	Text addition	194
14	14-03	Ladd	Consider parking beneath housing	Р	185	Text addition	195
16	16-02	Holan	Suggest underground parking	Р	185	Text addition	195
18	18-02	Gifford	Build taller structures to save land	Р	66	See Constraints and Opportunities analysis	195
22	22-01	Piirto	Concerns for the logging unit future	Р	94	The locations have been refined to show that they will not occur on any present or future NRM facilities.	195
23	23-06	Kransdorf	Suggests more parking structures	Р	183	See Constraints and Opportunities analysis	195
29	29-17	Scotto	Inconsistent designation of development suitability in area near Stenner Creek Road	Ρ	61	Legend and designations on Exhibit 4.11 have been clarified	195
29	29-38	Scotto	Questions regarding "remote parking"	Р	161	Map clarification	195

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Letter number	Comment #	Name	Comment on Master Plan & DEIR (October 2000)	Plan or DEIR	Page in Plan/DEIR (Oct. 2000)	Modifications to Master Plan	Page in Plan/FEIR (Jan. 2001)
32	32-01	Pillsbury	Concern about proposed remote parking lot near Stenner Creek	Р	185	Additional text added for clarification	195
32	32-02	Pillsbury	Concerns for the future of the Christmas tree farm ad logging unit	Р	185	Additional text added for clarification	195
36	36-21	Rutherford	Concern about conversion of agricultural lands	E	261	Refer to response; no text change required	195
53	53-02	Heatherington	Combine parking beneath residential structures	Ρ	185	Text addition	195
3	03-11	Mandeville	General 10. Document parking space reduction	Р	185	See new table added to Parking element	196
3	03-40	Mandeville	Confirm feasibility of reduction in parking demand	Ρ	185	Cal Poly concurs that reduction parking demand depends upon the success of its policies and incentives	196
6	06-19	Lajoie	Support for reduction in parking demand	Р	185	No response required	196
44	44-03	Carroll	Why more parking instead of mass transit?	Р	185	See plans for reduction in parking demand	196
23	23-07	Kransdorf	Concern about students needing to drive off campus for retail services	Ρ	189	See Support Services element	199
35	35-06	Johnson	for retail services Clubs/organizations need multipurpose rooms		190	Text addition	200
50	50-06	Mumford	Add discussion of planning for support services	Р	190	Text addition	200
3	03-06	Mandeville	General 5. Concern about conflict/competition between on and off campus retail	Ρ	189	The range of retail businesses and other activities would remain specialized and not constitute a full urban commercial center – and thus not compete directly with San Luis Obispo's downtown.	202
3	03-24	Mandeville	Previous 10. Clarify "commercial component" in campus core and Goldtree area	Ρ	189	The range of retail businesses and other activities in the campus core would remain specialized and not constitute a full urban commercial center – and thus not compete directly with San Luis Obispo's downtown. At Goldtree an applied research park would be developed in partnership with the local community. Thus, local businesses would have an opportunity to be considered as vendors and service providers as well as occupants of the applied research park.	202

Letter number	Comment #	Name	Comment on Master Plan & DEIR (October 2000)	Plan or DEIR	Page in Plan/DEIR (Oct. 2000)	Modifications to Master Plan	Page in Plan/FEIR (Jan. 2001)
3	03-31	Mandeville	Trade-offs between providing commercial services for students, faculty and staff on and off campus	Ρ	189	The range of retail businesses and other activities would remain specialized and not constitute a full urban commercial center – and thus not compete directly with San Luis Obispo's downtown.	202
35	35-05	Johnson	Clubs/organizations need formal & informal space	Р	192	Text addition	202
35	35-07	Johnson	Acknowledge alternative child care locations	Р	192	Text addition	202
35	35-07	Johnson	5		134	Text addition	202
54	54-05	Wilmore	Support for services and facilities on campus for student residents	D	14	No response required; See also pp. 127, 179, 189	202
54	54-06	Wilmore	Request for consideration of "privatization" of housing and commercial services on campus	D	189	As planning for an increased range and volume of services occurs, the campus will need to determine which it should offer directly and which might be provided through franchise or "privatization."	203
43	43-17	Marx	Clarify discussion of Ancillary Activities	Р	193	Text clarification	204
58	58-14	RQN	Impacts of development near Slack and Grand	Ρ	132	See Environmental Consequences analysis. Also, revised map shows buffer adjacent to neighborhood.	204
58	58-21	RQN	Concern about impact of ancillary activities in general	Ρ	193	Comment noted.	204
29	29-39	Scotto	Be consistent in use of terms for Main Campus and ranches	Ρ	194	Text clarification	205
54	54-04	Wilmore	Support for ancillary and conference facilities	D	194	No response required; see pp. 194-195	205
3	03-28	Mandeville	Clarify Visitor Center site and conference facility expectations at Grand and Slack	Ρ	71	Map change shows more limited area; adds buffer; see also text changes on p. 195	206

Letter number	Comment #	Name	Comment on Master Plan & DEIR (October 2000)	Plan or DEIR	Page in Plan/DEIR (Oct. 2000)	Modifications to Master Plan	Page in Plan/FEIR (Jan. 2001)
3	03-41	Mandeville	Concern that development of ancillary activities in the Goldtree area may compete with off-campus activities and generate impacts	E	196	At Goldtree an applied research park would be developed in partnership with the local community. Thus, local businesses would have an opportunity to be considered as vendors and service providers as well as occupants of the applied research park. Ancillary activities not would create significant peak traffic demand. They would also be contained within facilities so concerns about aesthetics, light and glare would need to be addressed during site and building design and development.	206
23	23-03	Kranzdorf	Clarify Visitor Center site and conference facility expectations at Grand and Slack	Р	195	Text addition	206
34	34-06	Ashley	Objects to conclusion that loss of valley grasslands would not be significant	E	260	Refer to response; no text change required	206
36	36-13	Rutherford	Clarify future use of Cheda Ranch, in view of Goldtree discussions	Ρ	72	Text clarification	206
55	55-05	Elfrink	Clarify Visitor Center site and conference facility expectations at Grand and Slack	Р	195	Text addition clarifies nature of conference facilities, not intended to include overnight accommodations	206
57	57-05	Shredder	Wonders whether people care about ancillary activities	E	194	Numerous comments received from campus and community	206
58	58-22	RON	Concern about commercial component of ancillary activities that might draw non-student clientele	Ρ	194	The nature of conference and applied research activities is quite different from cultural and sporting events, or even daily class schedules. Thus, neither of these ancillary activities would create the same level of peak traffic demand. They would also be contained within facilities so concerns about aesthetics, light and glare would need to be addressed during site and building design and development.	206
34	34-11	Ashley	Concern about proposed Visitor Center and ancillary activities near Grand and Slack	Р	194	Map change shows more limited area; adds buffer	207
34	34-11	Ashley	Concern about impacts in Grand and Slack area	E	257	Refer to response; no text change required	207

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Letter number	Comment #	Name	Comment on Master Plan & DEIR (October 2000)	Plan or DEIR	Page in Plan/DEIR (Oct. 2000)	Modifications to Master Plan	Page in Plan/FEIR (Jan. 2001)
55	55-06	Elfrink	Traffic impacts of Visitor Center on Grand Avenue	E	195	Access will be from Grand Ave. Site planning studies will address circulation and access.	207
58	58-10	RQN	Request for recognition of neighborhood impact at Grand Ave. and Slack Street	Р	58	Map change	207
58	58-23	RQN	Concern about magnitude of impacts of ancillary activities	Р	196	Further development in the Goldtree area will involve more detailed studies of impacts	207
58	58-24	RQN	Concern about visibility of Goldtree site	Ρ	196	Further development in the Goldtree area will involve more detailed studies of impacts	207
3	03-12	Mandeville	General 11. Clarify future uses in Goldtree area:		194	At Goldtree an applied research park would be developed in partnership with the local community. Thus, local businesses would have an opportunity to be considered as vendors and service providers as well as occupants of the applied research park.	208
3	03-41	Mandeville	Concern that development of ancillary activities in the Goldtree area may compete with off-campus activities and generate impacts	Ρ	194	At Goldtree an applied research park would be developed in partnership with the local community. Thus, local businesses would have an opportunity to be considered as vendors and service providers as well as occupants of the applied research park. Ancillary activities not would create significant peak traffic demand. They would also be contained within facilities so concerns about aesthetics, light and glare would need to be addressed during site and building design and development.	208
29	29-42	Scotto	Critique of environmental analysis of Goldtree area	E	257	Remote parking options will not be located in such a	208
36	36-19	Rutherford	Questions research park location, analysis	E	221	Refer to response; no text change required	208
36	36-18	Rutherford	Add traffic and wildlife analysis for Cheda/Goldtree	E	208	Refer to response; no text change required	209
43	43-19	43-19 Marx Concerns about access to Goldtree area		Ρ	195	Site planning and feasibility analysis will provide more detailed evaluation of access options	209
47	47-01	Anonymous	Concerns for increased enrollment and unique environment of SLO	E	258	DEIR addresses impacts	211

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3	03-41	Mandeville	Summary Environmental Impacts Table, Noise and Aesthetics	E	212	No change required in text; refer to response	223
3	03-41	Mandeville	Summary Environmental Impacts Table, Noise, Mitigation	E	210	No change required in text; refer to response	223
3	03-41	Mandeville	Summary Environmental Impacts Table, Aesthetics, Mitigation	E	211	No change required in text; refer to response	224
3	03-41	Mandeville	Summary Environmental Impacts Table, Aesthetics, Mitigation	E	211	No change required in text; refer to response	224
3	03-41	Mandeville	Summary Environmental Impacts Table, Aesthetics, Mitigation	E	212	No change required in text; refer to response	224
3	03-41	Mandeville	Summary Environmental Impacts Table, Aesthetics, Residual Impact	E	211	No change required in text; refer to response	224
3	03-41	Mandeville	Summary Environmental Impacts Table, Public Services, Mitigation	E	213	No change required in text; refer to response	226
49	49-17	Duerk	Need to address water quality/run-off from Sports Complex	Ρ	139	Refer to response; no text change required	246
56	56-02	Fine	Water quality impacts from Sports complex	E	232	Water quality impacts are addressed by Sports Com	246
29	29-44	Scotto	Questions cumulative impact analysis	E	261	No change required in text; refer to response	261
37	37-01	Gambs	Contributions to wildlife portion of DEIR	E	234	Incorporated in DEIR	264
31	31-04	Shelton	Goldtree listed as 180 acres	E	326	Reference to Goldtree in this context is to area surveyed by biologists.	271
3	03-08	Mandeville	General 7. Re-evaluate siting of student housing, esp. near Brizzolara Creek	E	258	DEIR addresses impacts	272
19	19-01	Gifford	Does not want development near Poly Canyon	E	258	DEIR addresses impacts	272
23	23-05	Kransdorf	Concern about housing near Brizzolara Creek	E	258	DEIR addresses impacts	272
34	34-05	Ashley	Strong concern about housing north of Brizzolara Creek	E	258	Refer to response; no text change required	272
34	34-07	Ashley	Concern about impacts on Brizzolara Creek	E	257	Refer to response; no text change required	272
43	43-22	Marx	Continuing concerns about impacts of student housing north of Brizzolara Creek	E	258	Refer to response; no text change required	272
44	44-01	Carroll	Concerned about housing near Poly Canyon	E	258	DEIR addresses impacts	272
44	44-02	Carroll	Claims no EIR on development near Poly Canyon	E	258	DEIR addresses impacts	
51	51-01	Beccia	Concerns on the placement of residences north of Brizzolara Creek	E	258	DEIR addresses impacts	272
53	53-01	Heatherington	Concerns regarding housing at the mouth of Poly Canyon near Brizzolara Creek	E	E 258 DEIR addresses impacts		272
27	27-01	Anonymous	Concerns for animals in proposed housing site	E	258	DEIR addresses impacts	273

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34	34-10	Ashley	Concern about impacts in Goldtree area	E	257	Refer to response; no text change required	273
36	36-17	Rutherford	Questions determination of less than significant impact, re: human use, loss of grassland, prime agricultural land	E	206	Refer to response; no text change required	274
29	29-43	Scotto	Questions regarding soil analysis and significance	Е	261	No change required in text; refer to response	275
29	29-45	Scotto	Critique of lack of involvement of agricultural specialists in analysis	E	325	Reference to Goldtree in this context is to area surveyed by biologists. No change required	275
59	59-05	McDonald	Editing suggestions to DEIR	E	266	Text modification made	280
5	05-01	McCluskey	Concerns about intersection data at California and Foothill	E	269	Revised ATE report	290
5	05-03	McCluskey	Concerns about transit analysis	E	275	See response for clarification	290
24	24-11	Jud	Review LOS calculcations with respect to increases in background traffic	E	268	Text change for clarification	294
5	05-02	McCluskey	Trip reduction assumptions and Alternative Tranportation - quanitify modal split objectives	E	276	See detailed response	295
5	05-07	McCluskey	Trip reduction assumptions and Alternative Tranportation - discrepancies between plan, traffic study and DEIR	E	276	See plan clarification	295
5	05-08	McCluskey	Mitigation monitoring needed to achieve modal split objectives	E	278	See detailed response 5-2	295
8	08-03	Newland	Traffic signal at California and 101	E	279	Refer to response; no text change is required.	295
6	06-04	Lajoie	Need to add vehicle and stationary sources	E	284	No change required in text; refer to response	296
6	06-03	Lajoie	Address impact of additional boilers	E	209	No change required in text; refer to response	300
6	06-07	Lajoie	Concern with asbestos during demolition and renovation activities	E	305	No change required in text; refer to response	300
6	06-06	Lajoie	Concern with air quality associated with parking structures	E	287	No change required in text; refer to response	301
57	57-03	Shredder	Suggests plan involves "explosive growth"	E	286	See discussion in EIR comparing proposed growth for Cal Poly with San Luis Obispo area	302
52	52-08	Neighbors	Noise and light mitigation must be monitored	E	292	Refer to response; no text change required	304
52	52-16	Neighbors	Noise and light mitigation must be monitored	E	296	Additional environmental review will be required	304
52	52-07	Neighbors	Address feasibility of remodeling Mustang stadium (compare noise impacts)	E	315	Text has been changed; refer to Alternatives Section	306

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Letter number	Comment #	Name	Comment on Master Plan & DEIR (October 2000)	Plan or DEIR	Page in Plan/DEIR (Oct. 2000)	Modifications to Master Plan	Page in Plan/FEIR (Jan. 2001)
52	52-09	Neighbors	See Jones and Stokes and other studies for alternative noise mitigation	E	292	The Jones and Stokes study has been cited in the bibliography. A summary of its findings have been incorporated into the discussion of the Mustang Stadium relocation	306
52	52-06	Neighbors	Need more effective mitigation for noise	ligation for noise E 292 biblio incorr Stadii		The Jones and Stokes study has been cited in the bibliography. A summary of its findings have been incorporated into the discussion of the Mustang Stadium relocation	308
3	03-20	Mandeville	Previous 7. Clarify language in EIR regarding light and glare			See RQN correspondence from December 4 and June 6, 2000	310
52	52-13	Neighbors	Need more effective mitigation for light and glare - Class II finding not acceptable based on proposed mitigation	E	296	Additional mitigation has been added to EIR	311
52	52-15	Neighbors	Apply similar mitigation measures for light and glare if basketball arena is built	E	296	See clarification in response	311
52	52-14	Neighbors	Suggestions for alternative, more effective mitigation of light and glare	E	296	Additional mitigation has been added to EIR	312
4	04-01	Moss	Information lacking from table regarding wells	E	302	Text change; refer to public services section of the EIR	315
3	03-42	Mandeville	Need to clarify availability of water	E	302	See modifications in EIR	319
39	39-01	Cooke	Concerns about the Water Supply for Cal Poly	E	302	Text has been amended to clarify.	319
59	59-05	McDonald	Editing suggestions to DEIR	E	303	See modifications in EIR	320
4	04-02	Moss	Wants development and implementation of water demand management program	E	213	A water demand management program is included a	321
4	04-03	Moss	Proposes the need to prepare a drought contingency plan as a proposed mitigation	E	304	A drought contingency program is included as mitigation for project impacts	321
6	06-09	Lajoie	Dust control under APCD jurisdiction	E	310	No change required in text; refer to response	326
6	06-08	Lajoie	Recommends mitigation measures for fossil fueled equipment during construction	E	310	Text has been changed accordingly	327
56	56-01	Fine	Concerns for enrollment impacts on the environment of the San Luis Obispo area	E	315	See DEIR discussion of alternatives	332
59	59-05	McDonald	Editing suggestions to DEIR	E 316 S		See modifications in EIR	333
21	21-01	Sutliff	Request for list of all additional studies and actions	P 329 See Chapter 7, updated		345	
54	54-03	Wilmore	Land and financing options for student, faculty and staff housing	D	15	See also pp. 134, 331	346

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2	02-02	Settle	Recommends "realistic and sincere implementation"	Р	333	Noted	348
3	03-25	Mandeville	Previous 11. Provide for additional environmental review for future projects	Р	332	Chapter 7 describes how future projects will be reviewed within the context of the program EIR for the Master Plan.	348
5	05-04	McCluskey	Need project EIRs for parking structures, intersections, etc.	E	332	Chapter 7 describes how future projects will be reviewed within the context of the program EIR for the Master Plan.	348
3	03-18	Mandeville Previous 5. Commitment to unified analysis and planning with City		Ρ	333	As part of the Communication and Consultation section of Chapter 7, the Master Plan includes provision for consultation with elected officials and local and regional agencies	349
52	52-10	Neighbors	Add working with neighbors as a component of noise mitigation	E	292	See p. 348?	350
52	52-17	Neighbors	Add working with neighbors as a component of light		296	Note University consultation with neighbores	350
55	55-02	Elfrink	Request for more notice, consideration of neighbors by Cal Poly	Р	334	As part of the Communication and Consultation section of Chapter 7, the Master Plan provides for early meetings with neighbors so as to design projects to relieve potential impacts.	350
55	55-13	Elfrink	Notification of neighbors regarding any development, EIRs, etc. near Grand and Slack	Ρ	334	As part of the Communication and Consultation section of Chapter 7, the Master Plan provides for early meetings with neighbors so as to design projects to relieve potential impacts. Chapter 7 also addresses future environmental review.	350
55	55-14	Elfrink	Request for City/Cal Poly MOU to avoid concerns of unilateral actions	Ρ	334	As part of the Communication and Consultation section of Chapter 7, the Master Plan includes provision for consultation with elected officials and local and regional agencies	350
3	03-13	-13 Mandeville General 12. Include plan amendment process with provision for community notification, involvement ar consultation		Р	333	A section on plan monitoring, review and revision has been added to Chapter 7.	353
3	03-42 Mandeville Strengthen discussion of process, particularly for amendment		Strengthen discussion of process, particularly for plan amendment	Ρ	333	A section on plan monitoring, review and revision has been added to Chapter 7.	353
43	43-02	Marx	Need section on how plan will be updated	Ρ	333	A section on plan monitoring, review and revision has been added to Chapter 7.	353

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O = Organization CP = Cal Poly Affiliated Note Page 0 = no text reference

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Letter number	Comment #	Name	Comment on Master Plan & DEIR (October 2000)	Plan or DEIR	Page in Plan/DEIR (Oct. 2000)	Modifications to Master Plan	Page in Plan/FEIR (Jan. 2001)
3	03-43	Mandeville	Review list of implementation guidelines, standards, and studies for completeness	Р	337	Chapter 7 has been revised to include a more comprehensive list of implementation studies	354
49	49-05	Duerk	Suggestion to assess sustainability of existing conditions	Р	45	This suggestion is being added to the list of implementation studies (Chapter 7)	354
35	35-01	Johnson	Reference UU Master Plan process and results	Р	340	Text addition	358
29	29-20	Scotto	Clarify map legend	Р	71	Map change	iii
3	03-01	Mandeville	eville General 1. A. Reduce size of ancillary activity area at Grand and Slack		194	Map change shows more limited area; adds buffer	vi
29	29-02	Scotto	Questions about soil classification and analysis os areas suitable for ancillary activities and remote parking, particularly on Cheda ranch	Ρ	vi	Maps of the areas suggested for ancillary facilities and remote parking have been added in Chapter 4, Existing Conditions, showing that these proposed sites are not on prime (class I) soils.	vi
36	36-01	Rutherford	Concern about suitability of Cheda Ranch area for ancillary activities and/or remote parking	Р	vi	Discussed in more detail Existing Conditions chapter and in Parking and Ancillary Activities and Facilities elements	vi
55	55-03	Elfrink	Development potential at Slack and Grand	Р	194	Map change shows more limited area; adds buffer	vi
29	29-01	Scotto	Add "prime" to agricultural land designation	Р	V	Text addition	viii
49	49-01	Duerk	Editing suggestions to strengthen commitment to sustainability planning and building practices	Р	viii	Text addition	viii
59	59-01	McDonald	Editing suggestions to strengthen consciousness of resource requirements	Ρ	viii	Text addition	viii
29	29-03	Scotto	Questions designation of applied research park site	Ρ	х	Text clarification	xi
36	36-02	Rutherford	What does "modest-sized" research park mean?	Ρ	х	Analysis for the DEIR considered a possible development of about 400,000 square feet of building plus parking.	xi
29	29-36         Scotto         Designate proposed field house with a letter and legend		Designate proposed field house with a letter and on legend	Р	xiii	Map change	xiii

## Table 2

This table contains the responses to the June, 2000 Master. It is sorted by the pate references to the responses – last column, "Page in Plan/DERIR (Oct. 2000).

Chap- ter	Comment from	Affiliation	Date	Comment on Preliminary Draft (May 2000)	Page in Prelim Plan (May 2000)	Modifications to Master Plan (October 2000)	Page in Plan/DEIR (Oct. 2000)	Comments	Code
Over- all	Kennedy, Robert E.	Cal Poly - President emeritus	9-Jun	CSU and community contexts		See Introduction, Guiding Framework, and Long- Range Enrollment chapters	Ch. 1, 2, 3		А
Over- all	City Council	City of San Luis Obispo	12-Jun	Cover letter for staff report and residents' letters; concern about commitment to implementation		See principles and implementation sections	15; Ch. 7		A
Over- all	Aborne, Sam and General	ASI President	12-Aug	Concern that plan depends on changes in student behavior	162		179	Particularly with respect to alternative transportation, the Master Plan considers both policies and incentives to change behavior	I
ES	Sutliff, Dale	Cal Poly - CAED, LA	25-May	Need to credit other sources, e.g. LA GIS Lab		See acknowledgements	ii		А
ES	Herron, Dan	SLOCOG	14-Apr	Add summary of impacts		See DEIR	x-xi; 204-15		A
ES	Sutliff, Dale	Cal Poly - CAED, LAC	12-Jun	Illustration should be reviewed and modified	xi, 107f	Diagrammatic illustration changed in response to multiple suggestions	xiii		А
1	Dollar, Don	neighbor	5-Jun	Set high goals for Plan implementation	4	See aspirations and principles associated with Cal Poly mission.	4		А
1	Sutliff, Dale	Cal Poly - CAED, LA	10-Apr	Several suggestions for changes to principles.	3, 4	Additional principle identifies environmental responsibility associated with Cal Poly mission	4, 79		A
1	Marx, Steven	Cal Poly - CLA, English	1-Jun	Encourage "sustainable campus"	14, 55	Additional principle identifies environmental responsibility associated with Cal Poly mission	4, 79		А
1	Monday club notes	various	10-May	Concern with sustainability	4	Additional principle identifies environmental responsibility associated with Cal Poly mission	4, 79		A
1	RQN	neighbors	5-Jun	Recommendation for proactive, rather than reactive response by Cal Poly to neighborhood concerns.	47-48		5-9; 15; 16-19; and Ch. 7	The development of the campus Master Plan and Implementation represents a proactive process by Cal Poly	А
2	General			More detail regarding principles	12-15		13	Guiding Framework intended to be general; see later chapters for detail.	Р
2	Senate resolutions	Cal Poly - Academic Senate	6-Jun	Academic quality concerns	12	Academic quality addressed in principles and academic plans for enrollment growth	1-2, 11, 32-38		A

Page 1

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I = To be addressed during implementationC = Considered, but not acted on

Code: A = Addressed

P = Partially addressed

Chap- ter	Comment from	Affiliation	Date	Comment on Preliminary Draft (May 2000)	Page in Prelim Plan (May 2000)	Modifications to Master Plan (October 2000)	Page in Plan/DEIR (Oct. 2000)	Comments	Code
2	Senate resolutions	Cal Poly - Academic Senate	6-Jun	Operating budget and growth concerns; resolution calls for making enrollment growth contingent on receiving budget commitments first	15	Budget issues addressed in principles and implementation chapter	11; 15; 330-31		A
2	Slem, Chuck	Cal Poly - CLA, Psych	n.d.	Concerned with enrollment increase, academic quality	12	Academic quality addressed in principles and academic plans for enrollment growth	1-2, 11, 32-38		А
2	Sanville, Terry	City staff	21-Apr	Suggestions to reconsider programmatic emphasis	13		13; 32-38	Academic program mix (polytechnic emphasis) is central to Cal Poly mission.	С
2	RQN	neighbors	5-Jun	Wording request to clarity responsibility for mitigation "on and off campus."	13		13	Master Plan mitigates impacts; reduces housing shortage; addresses neighborhood issues, but cannot promise to "eliminate" impacts	Ρ
2	Hall, Russell	neighbor	12-Jun	Concerned there is no willingness to identify "impact zones" or establish Co-Lead Agency	13, 192		13	No change - Campus responsibility governed by CEQA and CSU	С
2	SLO Staff Report	City staff	6-Jun	Suggestion for stronger wording on alternative transportation; expand self-mitigation to services and resources	13	See physical plan elements and DEIR	13	No change to principles, due to detail in later chapters	Ρ
2	Bianchi, Shirley	SLO County Supervisor	12-Jun	RQN issues, Mustang Stadium, Goldtree	13 and elsewhere	See responses to RQN concerns.			Р
2	Pinard, Peg	SLO County Supervisor	9-Jun	RQN issues	13 and elsewhere	See responses to RQN concerns.			Р
2	Tingle, Bryce	SLO County staff	13-Jun	Too generic in approach to issues; Include all recommended principles in an appendix.	16-19		16-19	Principles recommended by 1999 task forces available on website	Ρ
3	Collins, Curtis	neighbor	12-Jun	Not convinced that Cal Poly needs to grow.	26-29		Ch. 3	Chapter 3 explains the demand and campus responsibility for educating additional students	С
3	SLO Staff Report; Sanville,Terry	City staff	6/6 and 4/21	Suggestions to study degree length; consider different calendars, etc.; clarify enrollment data	23, 27	See enrollment scenarios for options that do not require increases in physical capacity; also, see revised enrollment tables. DEIR addresses resource and service capacity.	24-28; 29-31		A
3	Herron, Dan	SLOCOG	14-Apr	Clarify enrollment numbers; clarify how scenarios used	v, 26-29	See revised enrollment tables and discussion of use of enrollment scenarios	24; 29-31		А

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Chap- ter	Comment from	Affiliation	Date	Comment on Preliminary Draft (May 2000)	Page in Prelim Plan (May 2000)	Modifications to Master Plan (October 2000)	Page in Plan/DEIR (Oct. 2000)	Comments	Code
3	RQN	neighbors	5-Jun	"Cal Poly should provide housing on campus for as much of th[e] existing shortage as possible"	28	800 beds to be built by 2002 reduce housing shortage and Master Plan student housing program accommodates all new undergraduates	13, 30, 124	Student housing projects are planned to be completed ahead of enrollment growth.	Ρ
4	General			More detail regarding existing conditions; esp. constraints and opportunities analysis	46-50	See revised wording.	59-60	Chapter 4 represents a summary. See later elements and DEIR for more detail.	Ρ
4	Frankel, Ruggles, Saunders, Segal	neighbors	12-Jun	Development on west side of campus can impact use of Ferrini Open Space on Bishop's Peak; should identify noise & light as impacts to Bishop's Peak area; support Neighborhood Task Force recommendations	35, 49	Existing Conditions chapter provides general overview; additional details on plan components in Ch. 5; See also discussion of environmental setting in Ch. 6, DEIR	59		A
4	SLO Staff Report	City staff	6-Jun	Suggested addition of Public Utilities Commission	46	Additional wording added.	56		А
4	SLO Staff Report	City staff	6-Jun	Suggested additions to traffic issues	49	Additional wording added.	59		А
4	RQN	neighbors	5-Jun	Mapping of potential neighborhood conflict with Monterey Heights, east of Grand Ave.	48		58	Comment recognized; map shows general areas of conflict rather than specific blocks or streets	Ρ
4	RQN	neighbors	5-Jun	Concerns about light and glare; noise	49	See commitment to mitigation in principles and provisions for mitigation in DEIR	13; 288-292; 293-97	Constraints and Opportunities analysis presents issues at general level.	А
4	RQN	neighbors	5-Jun	Concerns about buffer for neighborhood.	48-50	Informal recreation on west side of Slack street adds to green space adjacent to residential neighborhoods	140-42	Master Plan proposes no new development adjacent to residential neighborhoods except for Visitor Center near Slack Street.	A
4	RQN	neighbors	5-Jun	Concerns about Goldtree area; ancillary activities in general	48-50, 180	See additional details on plan components in Ch. 5 and DEIR.	59; 193-97	Existing Conditions chapter provides general overview.	Р
LU	General			More detail in Land Use element	57		69	Land Use element intended as overview.	Р
LU	Sanville, Terry	City staff	21-Apr	Concern with scale of housing (or other development) west of Highway 1	62	See DEIR	293-97	Density, massing and design details will be worked out with the City.	I
NE	Sutliff, Dale	Cal Poly - CAED, LAC	12-Jun	Concern about ecological integrity and continuity of wildlife habitats and corridors	65	Covered in Natural Environment principles.	79		А
NE	Collins, Tarren	Sierra Club	7-Jun	More detailed mapping and inventory	66	DEIR contains more detailed inventory of plant communities in areas proposed for new development	Appendix B to DEIR	Other areas will be mapped more fully during Master Plan implementation	Ρ

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NE	Frankel, Ruggles, Saunders, & Segal	neighbors	12-Jun	Expand discussion of Morros as setting for SLO and campus	66	Additional wording added. See also, DEIR.	76; 219		A
NE	Dollar, Don	neighbor	5-Jun	Be steward of open lands ~ concerned about "P"; allow public access on Cal Ply lands; clean up Architectural Village.	68-74	See Natural Environment and Outdoor Teaching and Learning elements	76-85; 96-99	The "P" will be addressed in master plan implementation.	A
NE	Collins, Tarren	Sierra Club	7-Jun	Oppose housing near Brizzolara Creek	71	Revised plan establishes Brizzolara Creek enhancement area; moves student housing	81; 97		А
NE	Biological Sciences Department	Cal Poly - CSM, Bio Sci	12-Jun	Biological resources of Brizzolara Creek	71, 116	Revised plan establishes Brizzolara Creek enhancement area; moves student housing. See DEIR, too.	81; 97		A
NE	Marx, Steven	Cal Poly - CLA, English	7-Jun	Housing in floodplain (H-3 and H-4) is mistake. Need to apply Nat. Env. Principles.	71, 116	Revised plan establishes Brizzolara Creek enhancement area; moves student housing	81; 97		A
NE	Sutliff, Dale	Cal Poly - CAED, LAC	12-Jun	Corridor protection for Poly Canyon and Brizzolara Creek; restore Feedmill area	71, 116	Revised plan establishes Brizzolara Creek enhancement area; moves student housing	81; 97		А
NE	SLO Staff Report	City staff	6-Jun	Concern with watershed protection	71	See DEIR	230-33		А
NE	SLO Staff Report	City staff	6-Jun	Suggested expansion of BMPs	73	Additional reference to BMPs in Outdoor Teaching and Learning element	85; 94-99	To be developed as part of Master Plan implementation	I
OTL	Scotto, Ken	Cal Poly - CAGR LUC	6-Jun	Show Pavilion on all maps; feedlot to be incorporated in BCEC; horseshoeing facility not mentioned; identify nexus of how Pavilion will replace access provided by Bull Test; need map with proposed agricultural corridor; concern regarding new housing proximity to EHS unit; fence students out of grazing fields; dorm lights on livestock; show Farm Operations as moving to Future Corporation Yards	75-80; 83-85	Maps altered; descriptions in Outdoor Teaching and Learning element modified.	86-90; 94-96 and multiple exhibits		A
OTL	Sutliff, Dale	Cal Poly - CAED, LAC	12-Jun	Expand examples of how outdoor teaching and learning activities are integrated into campus	83		93	Additional detail to be developed as part of Master Plan implementation	I

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CIC	General			Sites for specific academic programs, disciplines or colleges			xiii	The Master Plan designates general areas for development rather than sites for specific programs.	I
CIC	Sanville, Terry	City staff	21-Apr	Encouragement of visual diversity as well as continuity	91	Wording modified	103		А
CIC	Monday club notes	various	10-May	Interest in possible historic buildings	91	See discussion of areas within campus instructional core; and DEIR in particular.	115-16; 263-66		А
CIC	UU Master Plan	Cal Poly - ASI	18-May	Activities and design considerations in UU/Centennial Green area	94	See changes and additions to Campus Instructional Core element	104-114		А
CIC	Davis, Hiram	Cal Poly - Library	13-Jun	Current library space is inadequate; do not de- centralize library activities; need support of traditional print resources; library staff would be more effective if all resources housed in single area	94-95; 101-2	Library expansion and redesign intended as part of northwest area	106-7; 113-14		A
CIC	Monday club notes	various	10-May	Concern about heights in center of campus	98		110-11	Building massing studies show potential for greater building heights and gain of open space	С
CIC	Sutliff, Dale	Cal Poly - CAED, LAC	12-Jun	Retain Bradley Park-SW quadrant; assess staging of landscape improvements; supports finding good Poly Grove solutions.	xi, 107f		115, 120-23	Details of landscape guidelines and design of Bradley Park area as part of implementation	I
CIC	Levenson, Harvey	Cal Poly - CLA, GRC	3-May	Are we upgrading Graphic communication building facilities?	106		xiii, 120	Infill and renovation are covered in the Master Plan, but not shown in detail in the maps	I
CIC	Soloman, Ken	Cal Poly - CAGR, BRAE	26-May	Concern about layout of new building for Bioresource and Ag, Engineering.	95; 99-100		107; 112-13	Design of northeast area, including replacement of Bldg. 8 is part of implementation, with involvement of users	I
CIC	Tryon, Bette	Cal Poly - CLA, Psych	9-Jun	Child Development program would like to be in Plan with lab, offices & pre-school lab				Details at program level not shown in Master Plan	I
CIC	Lajoie, Barry	SLO APCD	20-Jun	Suggestions for services on campus to reduce need for off-campus trips	114	See activities in campus centers and residential centers	104-8, 191-92		А
RES	Allan, Preston	Cal Poly - SA, Housing	4-Apr	Wording and factual changes on housing section		Changes made in Preliminary draft			А
RES	SLO Staff Report	City staff	6-Jun	Note importance of student competition with non- student households	113	Wording added	126		А

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RES	Dollar, Don	neighbor	5-Jun	Add even more housing~50% of students	115		128	Master Plan calls for housing approximately one third of undergraduate students on campus.	^{}-} Р
RES	Sanville, Terry	City staff	21-Apr	Question about the likelihood that students will want to live on campus	58		126-34	Market studies have shown that students should be interested in apartment-style housing.	A
	Biological Sciences Department	Cal Poly - CSM, Bio Sci	12-Jun	housing units H-3 & H-4 major disturbance to riparian corridor, so eliminate; build H-5, H-6 & H-7 first; build housing near Slack and Grand to north side of drainage; perhaps use H-8 & H-9 for student housing; hold H-1 and H-2 in abeyance and avoid if possible (could be a grassland mitigation site)	71, 116	Master Plan changes include rearrangement of student residential communities, particularly to allow for Brizzolara Creek Enhancement Project. See DEIR, too.	81; 97; 128-32		A
RES	Collins, Curtis	neighbor	12-Jun	Concern about housing in southwest corner of campus	118-19	Revised Master Plan creates a full residential community in this area	132-34		Р
RES	RQN	neighbors	5-Jun	Concern about student residences near Grand and Slack	120	See modified proposal for H-6 residential area, separated from Slack Street; and DEIR	130; 132		А
RES	RQN; Simon, Richard	neighbors	5-Jun	Concern about residences west of Highway 1	120	See discussion of faculty and staff housing; and DEIR	134-36	Provision of faculty and staff housing follows a principle of the master plan to address community impacts.	I
RES	Monday club notes	various	10-May	Faculty/staff housing sites	121	See discussion of faculty and staff housing; and DEIR	130; 132		А
RES	SLO Staff Report	City staff	6-Jun	Fraternity locations	121		136	As stated in the preliminary draft of the Master Plan, Cal Poly is limited by CSU policy.	С
REC	Frankel, Ruggles, Saunders, & Segal	neighbors	12-Jun	Suggested wording change	129		142	Master Plan language change not seen as necessary.	С
REC	Frankel, Ruggles, Saunders, & Segal	neighbors	12-Jun	Concern about noise related to sports facilities	130	See additional wording; and DEIR discussion of noise issues and mitigation	143-45; 288-92	Need to cite Jones and Stokes 1997 sound study more explicitly	Ρ
REC	RQN	neighbors	5-Jun	Concern about noise related to sports facilities	130-31	See additional wording; and DEIR discussion of noise issues and mitigation	143-45; 288-92	Need to cite Jones and Stokes 1997 sound study more explicitly	Р

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REC	Frankel, Ruggles, Saunders, & Segal	neighbors	12-Jun	Concern about possible relocation of Mustang Stadium	130-31	See DEIR	143-44; 290		A
REC	Dollar, Don	neighbor	5-Jun	Allow public access on Cal Poly land	131	See provision for trails	145		А
PFU	SLO Staff Report	City staff	6-Jun	Encouragement of use of recycled water	139		154	Included in plan components	А
С	SLO Staff Report	City staff	6-Jun	Request for policy about commuting and parking	59	See Circulation, Parking and Alternative Transportation elements	158; 178; 182- 83	The Land Use element provides an overview, leading to detail in the subsequent elements.	A
С	Paulsen, Jacquie	Cal Poly - AFD, Univ. Police	3-Apr	Corrections on circulation and alternative transportation sections.	140	Changes made in Preliminary draft	155		A
С	Collins, Curtis	neighbor	5/4 and 6/12	Circulation and parking impacts in Alta Vista area	140-41		15568; 176- 79	Alternative Transportation programs are designed to reduce traffic circulation and parking requirements	А
С	SLO Staff Report	City staff	6-Jun	California-Foothill land use and traffic issues	140-41		155-56; 162	Details will be develop during implementation - particularly design of parking structure and new student housing	I
С	SLO Staff Report	City staff	6-Jun	Clarification of bike connections and routes	141, 162	Wording modified	156		А
С	Sanville, Terry	City staff	21-Apr	Alternative traffic calming; question about feasibility and usefulness of grade-separated pedestrian crossings	148-50		162-65	Suggestions to be considered during implementation	I
С	Lajoie, Barry	SLO APCD	20-Jun	Accommodate electric bicycles	151		165-67	Details to be developed as part of Implementation	I
С	Monday club notes	various	10-May	Bicycle circulation needs further development	152	Some adjustments made in revised Master Plan	165-67	Details to be developed as part of Implementation	I
С	Goldenberg, Stuart	Cal Poly - CSM, Math	6-Jun	Bicycles - need to have adequate Class II around Highland and Perimeter, and route joining the roads west of business building & a route like Via Carta but wider.	152	Some adjustments made in revised Master Plan	165-67	Details to be developed as part of Implementation	I
С	Kelly-Sneed, Kieran	Cal Poly - CAED, ARCE student	9-May	Allow bicycles on inner Perimeter and Dexter (anywhere state vehicles are allowed)	152	Some adjustments made in revised Master Plan	165-67	Details to be developed as part of Implementation	I

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С	Steinmaus, Scott	Cal Poly - CAGR, Crop Sci	17-May	Supports bike paths and vehicle reduction	152	Some adjustments made in revised Master Plan	165-67	Details to be developed as part of Implementation	I
С	Aeilts, Tony	Cal Poly - AFD, Univ. Police	20-Jun	Bicycle issues - task force initiated	152	Some adjustments made in revised Master Plan	165-67	Details to be developed as part of Implementation	I
С	Paulsen, Jacquie	Cal Poly - AFD, Univ. Police	3-Apr	Service access should include buses, shuttles, etc.	144	Wording added	168, 174		A
С	Risser, Joe	Cal Poly - AFD, Risk Mgt	22-May	Ensure service routes are clearly marked for emergency use (concerned about making them look too pedestrian); access to campus is inadequate for emergency vehicles; need adequate access for delivery vehicles; evacuation plan	157		117-18, 174	Access will be provided as part of implementation plan for closing S. Perimeter and N. Perimeter to through traffic as well as other circulation changes	I
С	Rinzler, Paul	Cal Poly - CLA, Music	12-May	Concern of impacts from Perimeter being pedestrian only	105, 157		118, 174	Access will be provided as part of implementation plan for closing S. Perimeter to through traffic	I
С	Paulsen, Jacquie	Cal Poly - AFD, Univ. Police		Service access on campus	144, 157		117-18, 174	Access will be provided as part of implementation plan for closing S. Perimeter and N. Perimeter to through traffic as well as other circulation changes	I
С	Walter, Virginia	Cal Poly - CAGR, EHS		Residence halls are too close to EHS production unit; roadway too close	146, 151	Circulation to residential complexes north of Brizzolara Creek realigned.	161; 166		Р
С	Hannings, Dave	Cal Poly - CAGR, EHS	31-May	Serious concern about roads accessing residential sites H-1 & H-2 going by EHS	146, 151	Circulation to residential complexes north of Brizzolara Creek realigned.	161; 166		Р
С	Scotto, Ken	Cal Poly - CAGR LUC	6-Jun	Need transportation plan for farm roads outside of core; show blend of roads/trails in traffic plan; consider additional bridge over Brizzolara for parking structure; Concerns about parking structure, Via Carta circulation	146; 157; 167	Circulation to extended campus added to plan components	94; 174	Detailed circulation plans to be part of master plan implementation	I
AT	Lajoie, Barry	SLO APCD	20-Jun	Support for trip reduction, including student housing on campus; concern with financial support for public transit ridership by Cal Poly students	153, 161		179	Commitment expressed in Master Plan	A

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AT	Herron, Dan	SLOCOG	14-Apr	Clarify parking strategy; looking for operational details of alternative transportation; supports freshmen and geographic controls.	162		178-80; 185-86	Additional detail will be developed as part of Master Plan implementation	I
AT	Campbell, Cindy	Cal Poly - AFD, Univ. Police	5-Apr	Several suggested wording changes and corrections to text; eliminate intersection designs that rely on U. Police for management during events; separate operational plan for alternative transportation;	162, 170	Changes made in Preliminary draft		Further operational changes to be part of Master Plan implementation	I
AT	SLO Staff Report	City staff	6-Jun	Comment on different methods for determing modal split	163		180	Master Plan uses past data; agreement that campus and city should coordinate future studies	Ρ
AT	SLO Staff Report	City staff	6-Jun	Suggestions for trip reduction.	143, 159, 162	See Alternative Transportation element as well as DEIR	178-80; 285		А
PK	RQN	neighbors		Concern about light from proposed parking structures	168	See additional wording; and DEIR	184; 293-97		А
PK	Lajoie, Barry	SLO APCD	20-Jun	Concern about air quality around parking structures	168	See DEIR	280-87		А
PK	Herron, Dan	SLOCOG	14-Apr	Parking analysis and student driving behavior	170		186	More parking analysis will be developed as part of Master Plan implementation	I
PK	SLO Staff Report	City staff	6-Jun	Parking ratios and restrictions	170		185-86	Plan did not add the requested data directly.	Ρ
PK	SLO Staff Report	City staff	6-Jun	Parking restrictions encouraged	170		185-86		А
SS	Aborne, Sam and General	ASI President	30-Aug	Sites for support services	177	Some services shown on revised illustrative diagram.	xiii, 192	General services will be incorporated in larger structures, so they do not show independently on maps.	Ρ
SS	Sanville, Terry	City staff	21-Apr	Concern about support services for residential communities	14	Physical plan elements provide more detail	104-15; 127; 187-92	Additional planning for "living/learning" needs will occur as residential communities are designed.	I
SS	Schwartz, Debora	Cal Poly - English	7-Aug	Concern about child care needs of present and future faculty	173	Diagrammatic illustration shows expanded child care center.	xiii, 187-92	Additional services will be considered as part of Master Plan implementation	А
ANC	Stover, Vickie	Cal Poly - AFD	5-May	Need more specific proposal for Visitor Information Center at Slack and Grand	180	Visitor Center shown in more detail in Master Plan maps and text	xiii, 194-95		А

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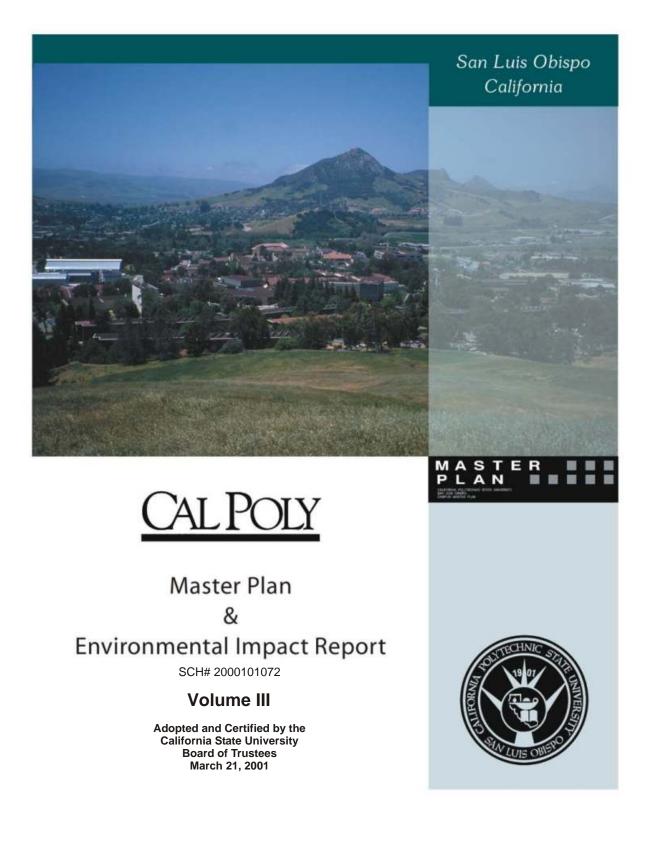
Chap- ter	Comment from	Affiliation	Date	Comment on Preliminary Draft (May 2000)	Page in Prelim Plan (May 2000)	Modifications to Master Plan (October 2000)	Page in Plan/DEIR (Oct. 2000)	Comments	Code
ANC	Biological Sciences Department; Ashley, Phil	Cal Poly - CSM, Bio Sci	12-Jun	Goldtree ~ deep valley soils, foraging habitat - site needs careful evaluation	71, 116	See additional wording and DEIR, Appendix C.	195-97		A
ANC	RQN	neighbors	5-Jun	Concern about potential development with commercial component	179		193-97	The Master Plan does not propose ancillary activies with a commercial component	А
ANC	RQN	neighbors	5-Jun	Concerns about Goldtree area; ancillary activities in general	48-50, 180	See additional details on plan components in Ch. 5 and DEIR.	193-97		Ρ
ANC	Frankel, Ruggles, Saunders, & Segal	neighbors	12-Jun	Concerns about Goldtree area; west side of campus	180	See additional details on plan components in Ch. 5 and DEIR.	193-97		Ρ
ANC	Bianchi, Shirley	SLO County Supervisor	12-Jun	Goldtree concerns	180	See additional details about plan components in Ch. 5 and DEIR	193-97		Р
ANC	Monday club notes	various	10-May	Goldtree concerns	180	See additional details about plan components in Ch. 5 and DEIR	193-97		Р
7	Schwartz, Ken	City Council member		Concern about both negative and positive impact of Cal Poly	189	See additional wording	333		А
7	Monday club notes	various	10-May	Phasing, budget issues	184	See clarification in Guiding Framework, as well as Ch. 7	15; 330-31		А
7	Slem, Chuck	Cal Poly - CLA, Psych	n.d.	Concerned with funding management of construction and change; insure up-front funding; develop a Management of Change Process.	12		329-36	Implementation and phasing should add consideration of change processes	I
7	Frankel, Ruggles, Saunders, & Segal	neighbors	12-Jun	Desire for Cal Poly to follow through on commitment to early involvement of neighbors	190		334	Commitment made as part of master plan process	A
7	Sutliff, Dale	Cal Poly - CAED, LA	25-May	Call for broad and frequent communication and consultation	191		334-36	Details to be developed as part of Implementation	I
7	Tingle, Bryce	SLO County staff	13-Jun	Intergovernmental recommendations lacking	190		334	Intergovernmental issues covered further in Implementation	I
7	Ketcham, Gary	Cal Poly - CAGR	8-Jun	Plan should have a comprehensive Farm and Ranch Maintenance Program covering costs, boundary fencing, farm roads, and communication within CAGR.	192		335-36	Land management practices to be developed as part of Master Plan implementation	I

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Studen	nt Projects								
С	Judd, Eugene - cover for student letters, CE 222	Cal Poly - CENG, CE students	31-May	Public transportation should be addressed clearly - light rail, bus terminals & shuttle; location of Parking Structure 3 should be thought about; attached several papers for CE 222.	153	Ideas considered in discussions of Master Plan alternatives			Ρ
С	Civil & Env Engineering - Transp Eng students	Cal Poly - CENG, CE students	1-Jun	Several student letters packaged following similar format for Plan review; numerous comments on proposals for transportation and circulation and alternative transportation.	150	Ideas considered in discussions of Master Plan alternatives			Р
Over- all	CRP 353	Cal Poly - CAED, CRP students	12-Jun	Wide range of analysis and suggestions comprising an "alternative" master plan developed by the third year lab in City and Regional Planning over the 1999-2000 academic year		Ideas considered in discussions of Master Plan alternatives			Р
PFU	CRP 438	Cal Poly - CAED, CRP students	Winter 2000	Class report titled "Environmental Quality Control: A Protocol for Pollution Prevention"; issues include waste management, hazardous waste and transportation, environmental audit recommended	139	Ideas considered in discussions of Master Plan alternatives			Р

# Finding of Fact and Statement of Overriding Considerations Mitigation Measures Monitoring and Reporting Plan



## **Trustees of the California State University**

The California State University California State University, Long Beach University Student Union 1212 Bellflower Boulevard Long Beach, California

# Resolutions

The attached resolutions were adopted by the Board of Trustees at its meeting of March 20-21, 2001, held in the University Student Union of California State University, Long Beach, 1212 Bellflower Boulevard, Long Beach, California

### **BOARD OF TRUSTEES**

### Election of Five Members to Committee on Committees for 2001/2002 (RBOT 03-01-04)

**RESOLVED,** By the Board of Trustees of The California State University, that the following trustees are elected to constitute the board's Committee on Committees for the 2001-2002 term:

Martha C. Fallgatter, Chair William D. Campbell Debra Farar Dee Dee Myers Stanley Wang

Resolution for Cal Poly click here

## **COMMITTEE OF THE WHOLE**

## Amended Policy on Punitive Damages (RCOW 03-01-01)

**RESOLVED,** By the Board of Trustees of The California State University, as follows:

Whenever an award of punitive damages is entered by a judge or jury against any California State University employee, former employee, agent, or member of the Board of Trustees, an investigation shall be conducted into the facts and circumstances giving rise to the claim and the evidence presented at the trial of the action, and a report shall be prepared for the Board. Any Board member who is the object of such an investigation shall not participate in the subsequent decision-making about his or her personal circumstances. The Board shall then reach its own conclusion as to whether all of the following circumstances pertain:

- 1. The judgment is based on an act or omission of the employee, former employee, agent, or member of the Board of Trustees acting within the course and scope of his or her employment or other function within the California State University.
- 2. At the time of the act giving rise to the liability, the employee, former employee, agent, or member of the Board of Trustees acted, or failed to act, in good faith, without actual malice and in the apparent best interests of the California State University.
- 3. Payment of the claim or judgment would be in the best interests of the California State University.

Where all of the above criteria are met, the Board shall either apply to the Legislature for approval of payment of the punitive award in accord with Government Code section 825(b), or use its best efforts to identify a non-state source of funds appropriate to the circumstances presented, including funds held by the various legally separate auxiliary organizations within the CSU, and to encourage payment from those non-state fund sources as an appropriate service to the mission of the CSU.

# **COMMITTEE ON FINANCE**

# Auxiliary Organization Tax Exempt Financing at California State University, Fresno for the Save Mart Center (RFIN 03-01-09)

**RESOLVED,** By the Board of Trustees of the California State University, that the trustees support the construction of The Save Mart Center at California State University, Fresno and authorize the campus in consultation with the Chancellor's Office to execute agreements necessary to implement the development plan for the project.

#### COMMITTEE ON UNIVERSITY AND FACULTY PERSONNEL

#### **Executive Compensation (RUFP 03-01-02)**

**RESOLVED**, by the Board of Trustees of the California State University, that Dr. William B. Eisenhardt shall receive a salary set at the annual rate of \$185,004 effective July 1, 2001, the date of his appointment as president of the California Maritime Academy and he shall be required to occupy the official CMA presidential residence (Residence #2) as a condition of employment; and that Dr. Richard R. Rush shall receive a salary set at the annual rate of \$200,004 and a housing allowance set at the annual rate of \$28,752, June 1, 2001 or soon thereafter, effective with his appointment as president of the California State University, Channel Islands.

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#### CSU Health Care Reimbursement Account Plan (RUFP 03-01-03)

**RESOLVED**, by the Board of Trustees of the California State University, that the CSU Health Care Reimbursement Account Plan be made available to executives of the California State University effective June 1, 2001.

## **COMMITTEE ON EDUCATIONAL POLICY**

## Academic Planning and Program Review (REP 03-01-01)

**RESOLVED,** by the Board of Trustees of the California State University, that the amended projections on the Academic Plans for the California State University (as contained in Attachment A to Agenda Item 2 of the March 20-21, 2001, meeting of the Committee on Educational Policy), be approved and accepted as the basis for necessary facility planning; and be it further

**RESOLVED,** that those degree programs included in the Academic Plans are authorized for implementation, at approximately the dates indicated, subject in each instance to the chancellor's determination of need and feasibility, and provided that financial support, qualified faculty, facilities, and information resources sufficient to establish and maintain the programs will be available; and be it further

**RESOLVED**, that degree programs not included in the Academic Plans are authorized for implementation only as pilot programs, subject in each instance to conformity with current procedures for establishing pilot programs.

## COMMITTEE ON CAMPUS PLANNING, BUILDINGS AND GROUNDS

## Amend the 2000/01 Capital Outlay Program, Nonstate Funded (RCPBG 03-01-03)

**RESOLVED,** By the Board of Trustees of the California State University that the 2000/01 Nonstate Funded Capital Outlay Program is amended to include \$500,000 for preliminary plans, working drawings, construction, and equipment for the San Francisco State University, Residence Dining Center Addition.

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## Amend the 2000/01 Capital Outlay Program, State Funded (RCPBG 03-01-04)

**RESOLVED**, By the Board of Trustees of The California State University, that:

- The 2000/01 State Funded Capital Outlay Program is amended to include \$5.2 million for preliminary plans, working drawings, construction, and equipment for the California State Polytechnic University, Pomona, Center for Animal and Veterinary Science Education, Phase Ia project as Priority 27.
- 2. CSPU Pomona will include the balance of funding required for Phase Ia in a future capital outlay budget request based on campus priorities.

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## Certify a Final Environmental Impact Report and Approve the Campus Master Plan Revision for San Diego State University (RCPBG 03-01-05)

**RESOLVED,** By the Board of Trustees of the California State University, that:

- 1. The FEIR and the Addendum to the FEIR (collectively "the FEIR") for the SDSU campus master plan revision was prepared to address the environmental effects, mitigation measures and project alternatives associated with approval of that project, and all discretionary actions relating thereto, and that project consists of the following project components: (1) two academic/research buildings, a performing arts complex, a science research building, a physical plant and an addition to the North Life Sciences Building; and (2) a faculty office/classroom/gallery building and parking structure, an addition to the communication building, a new campus childcare center, an addition to the International Student Center and a central park.
- 2. The FEIR (State Clearinghouse No. 2000051026) was prepared pursuant to the California Environmental Quality Act (CEQA) and the state CEQA Guidelines.

- 3. This resolution is adopted pursuant to the requirements of Section 21081 of the Public Resources Code and Section 15091 of the state CEQA Guidelines, which require that the Board of Trustees make findings prior to approval of a project (along with statements of facts supporting each finding).
- 4. This board hereby adopts the findings of fact and related mitigation measures provided under separate cover for Agenda Item 3 of the March 20-21, 2001 meeting of the Committee on Campus Planning, Buildings and Grounds, which identify specific impacts of the proposed project and related mitigation measures and which are incorporated by reference; and the findings of fact and the related mitigation measures are incorporated by reference.
- 5. The board's findings include specific overriding considerations that outweigh certain remaining significant impacts.
- 6. The FEIR has been prepared to address the environmental impacts, mitigation measures, project alternatives, comments and responses to comments associated with the approval of the SDSU campus master plan revision pursuant to the requirements of CEQA and the state CEQA Guidelines.
- 7. Prior to certification of the FEIR, the Board of Trustees has reviewed and considered the above-mentioned FEIR. The board hereby certifies the FEIR for the SDSU campus master plan revision as complete and adequate in that the FEIR addresses all environmental impacts of the proposed project and fully complies with the requirements of CEQA and the state CEQA Guidelines. For the purpose of CEQA, the record of the proceedings for the project comprises the following:
  - A. The DEIR for the SDSU campus master plan revision;
  - B. The FEIR and Addendum, including comments received on the DEIR and responses to comments;
  - C. The proceedings before the Board of Trustees relating to the subject project, including testimony and documentary evidence introduced prior to or at the meeting; and
  - D. All attachments, documents incorporated, and references made in the documents specified in items (A) through (C) above.

All of the above information is on file with the California State University, Office of the Chancellor, Capital Planning, Design and Construction, 401 Golden Shore, Long Beach, California, 90802, and San Diego State University, Office of Facilities Planning and Management, Administration Building, Room 130, 5500 Campanile Drive, San Diego, California 92182-1624.

- 8. The board certifies the FEIR for the SDSU campus master plan revision.
- 9. The mitigation measures identified in the Mitigation Monitoring Plan are hereby adopted and shall be monitored and reported in accordance with the Mitigation Monitoring Plan, which is under separate cover for Agenda Item 3 of the March 20-21, 2001 meeting of the Committee on Campus Planning, Buildings and Grounds, which meets the requirements of CEQA (Public Resources Code Section 21081.6).
- 10. The SDSU campus master plan revision, dated March 2001, is hereby approved.
- 11. The chancellor or his designee is requested under the Delegation of Authority granted by the Board of Trustees to file the Notice of Determination with respect SDSU campus master plan revision.

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## Certify a Final Environmental Impact Report and Approve the Campus Master Plan Revision for California Polytechnic State University, San Luis Obispo (RCPBG 03-01-06)

**RESOLVED,** By the Board of Trustees of the California State University, that:

- 1. The FEIR for the Cal Poly campus master plan was prepared to address the potential significant environmental effects, mitigation measures and project alternatives associated with approval of the proposed campus master plan, and all discretionary actions relating thereto, including the component construction projects as identified on Page 230, Project Description, of the FEIR.
- 2. The FEIR (State Clearinghouse No. 2000081102) was prepared pursuant to the California Environmental Quality Act (CEQA) and the state CEQA Guidelines.
- 3. This resolution is adopted pursuant to the requirements of Section 21081 of the Public Resources Code and Section 15091 of the state CEQA Guidelines, which require that the Board of Trustees make findings prior to the approval of a project (along with statements of facts supporting each finding).

- 4. This board hereby adopts the findings of fact and related mitigation measures provided under separate cover for Agenda Item 4 of the March 20-21, 2001 meeting of the Committee on Campus Planning, Buildings and Grounds, which identify specific impacts of the proposed project and related mitigation measures which are hereby incorporated by reference.
- 5. The board's findings include specific overriding considerations that outweigh certain remaining significant impacts.
- 6. The FEIR has been prepared to address the environmental impacts, mitigation measures, project alternatives, comments and responses to comments associated with the approval of the Cal Poly campus master plan revision pursuant to the requirements of CEQA and the state CEQA Guidelines.
- 7. Prior to certification of the FEIR, the Board of Trustees has reviewed and considered the above-mentioned FEIR. The board hereby certifies the FEIR for the Cal Poly campus master plan revision as complete and adequate in that the FEIR addresses all environmental impacts of the proposed project and fully complies with the requirements of CEQA and the state CEQA Guidelines. For the purpose of CEQA, the record of the proceedings for the project comprises the following:
  - A. The DEIR for the Cal Poly campus master plan revision;
  - B. The FEIR, including comments received on the DEIR and responses to comments;
  - C. The proceedings before the Board of Trustees relating to the subject project, including testimony and documentary evidence introduced prior to or at the meeting; and
  - D. All attachments, documents incorporated, and references made in the documents as specified in items A through C above.

All of the above information is on file with the California State University, Office of the Chancellor, Capital Planning, Design and Construction, 401 Golden Shore, Long Beach, California 90802-4210 and California Polytechnic State University, San Luis Obispo, Department of Facilities Planning and Management, 1 Grand Avenue, San Luis Obispo, California 93407.

- 8. The board certifies the FEIR for the Cal Poly campus master plan revision, including its component construction projects.
- 9. The board finds that the FEIR has sufficiently analyzed the environmental impacts and mitigation measures for the campus master plan revision,

including the component construction projects identified in the FEIR, and that the resolutions and approvals being provided by the board apply to the construction of these component projects. The board shall consider the FEIR in connection with any approvals of the component projects.

- 10. The mitigation measures identified in the Mitigation Monitoring and Reporting Plan are hereby adopted and shall be monitored and reported in accordance with the Mitigation Monitoring and Reporting Plan, which is under separate cover for Agenda Item 4 of the March 20-21, 2001 meeting of the Committee on Campus Planning, Buildings and Grounds, which meets the requirements of CEQA (Public Resources Code Section 21081.6).
- 11. The Cal Poly campus master plan revision, dated March 2001, is hereby approved with the goal of serving 17,500 full-time equivalent students.
- 12. The chancellor or his designee is requested under the Delegation of Authority granted by the Board of Trustees to file the Notice of Determination with respect to the Cal Poly campus master plan revision.

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## Preliminary State and Nonstate Funded Five-Year Capital Improvement Program 2002/03 Through 2006/07 (RCPBG 03-01-07)

**RESOLVED**, By the Board of Trustees of The California State University, that:

- 1. The Preliminary State and Nonstate Funded Five-Year Capital Improvement Program 2002/03 through 2006/07 totaling \$3,552,135,000 and \$1,697,373,000 respectively are approved.
- 2. The chancellor is requested to explore all reasonable funding methods available and communicate to the governor and the legislature the need to provide funds for the CSU state funded plan in order to develop the facilities necessary to serve all eligible students.
- 3. The chancellor is directed to return to the Board of Trustees for approval of the *final* State and Nonstate Funded Five-Year Capital Improvement Program 2002/03 through 2006/07, including the 2002/03-action year request, no later than the November 13-14, 2001 board meeting.

## Approval of Schematic Plans (RCPBG 03-01-08)

**RESOLVED**, By the Board of Trustees of The California State University, that:

- 1. The board finds that the Negative Declaration for the California Maritime Academy, Engineering Building Renovation/Addition has been prepared in accordance with the requirements of the California Environmental Quality Act.
- 2 The proposed project will not have a significant effect on the environment, and the project will benefit The California State University.
- 3. The chancellor is requested under Delegation of Authority by the Board of Trustees to file the Notice of Determination for the project.
- 4. The schematic plans for the California Maritime Academy, Engineering Renovation/Addition are approved at a project cost of \$7,249,000 at CCCI 3909.

# COMMITTEE ON GOVERNMENTAL RELATIONS

# 2001-2002 Legislative Report No. 2 (RGR 03-01-03)

**RESOLVED**, By the Board of Trustees of the California State University, that the 2001-02 Legislative Report No. 2 is adopted.

## COMMITTEE ON INSTITUTIONAL ADVANCEMENT

# Naming of Facility – San José State University (RIA 03-01-06)

**RESOLVED**, By the Board of Trustees of the California State University, that the new athletic conditioning, strength-building and rehabilitation facility at San José State University be named the Koret Athletic Training Center.

#### AGENDA

#### COMMITTEE ON CAMPUS PLANNING, BUILDINGS AND GROUNDS

## Meeting: 8:35 a.m., Wednesday, March 21, 2001 CSULB, University Student Union, Multipurpose Room ABC

Stanley T. Wang, Chair Ralph R. Pesqueira, Vice Chair William D. Campbell Murray L. Galinson Harold Goldwhite Frederick W. Pierce, IV Ali C. Razi

## **Consent Items**

Approval of Minutes of January 24, 2001

- 1. Amend the 2000/01 Capital Outlay Program, Nonstate Funded, Action
- 2. Amend the 2000/01 Capital Outlay Program, State Funded, Action

#### **Discussion Items**

- 3. Certify a Final Environmental Impact Report and Approve the Campus Master Plan Revision for San Diego State University, *Action*
- 4. Certify a Final Environmental Impact Report and Approve the Campus Master Plan Revision for California Polytechnic State University, San Luis Obispo, *Action*
- 5. Status Report on the 2001/02 State Funded Capital Outlay Program, Information
- 6. Preliminary State and Nonstate Funded Five-Year Capital Improvement Program 2002/03 Through 2006/07, *Action*
- 7. Approval of Schematic Plans, Action

# For Cal Poly Master Plan click HERE

## MINUTES OF MEETING OF COMMITTEE ON CAMPUS PLANNING, BUILDINGS AND GROUNDS

Trustees of The California State University Office of the Chancellor Glenn S. Dumke Conference Center 401 Golden Shore Long Beach, California

January 24, 2001

## **Members Present**

Stanley T. Wang, Chair Ralph R. Pesqueira, Vice Chair William D. Campbell Harold Goldwhite Laurence K. Gould, Jr., Chair of Board, ex officio Frederick W. Pierce IV Ali C. Razi Charles B. Reed, Chancellor, ex officio

## **Members Absent**

Murray L. Galinson

#### **Other Trustees Present**

Daniel Cartwright Martha C. Fallgatter Debra S. Farar William Hauck Shailesh J. Mehta Neel I. Murarka Dee Dee Myers

#### **Chancellor's Office Staff**

Richard P. West, Executive Vice Chancellor and Chief Financial Officer Jackie R. McClain, Vice Chancellor, Human Resources Douglas X. Patiño, Vice Chancellor, University Advancement Christine Helwick, General Counsel

Chair Wang greeted the audience and called the meeting to order at 8:47 a.m.

## **Approval of Minutes**

The minutes of November 8, 2000, were approved as submitted.

## Annual Report on Completed California State University Capital Outlay Projects

Mr. Drohan, assistant vice chancellor, capital planning, design and construction, indicated that this is the second annual report to be presented to the Board that includes performance data on all the completed capital outlay projects between October 1, 1999, and September 30, 2000, regardless of the fund source.

With the use of a handout and a slide presentation, Mr. Drohan stated this report is a compilation of the ten state-funded capital outlay projects totalling approximately \$92.4 million and eleven nonstate funded projects totalling approximately \$88.3 million. With the exception of the Maritime Academy's new lab and library renovation, he noted that all of the state-funded projects involved either renovation or infrastructure type of work. Historically, these are the most difficult in terms of imposed constraints and staying within budget and the time frames. Therefore, the report summary must be viewed in this context. The nonstate funded projects addressed all new building programs.

In reviewing the state-funded projects, Mr. Drohan noted that the errors and omissions change order performance data was higher than the industry standard of approximately three percent, which was attributable to one project—the CSU Channel Islands renovation of the existing California mission-style facilities that was completed in 1999 for the start of fall classes. This project was on a fast track and much of the normal up-front testing to determine the condition of the facilities could not be accomplished. This resulted in an inordinate number of change orders that dealt with unforeseen conditions. He stated that good bids were submitted for the project allowing the campus to stay close to budget, while showing a particularly high percentage in the errors and omission column of the report.

Another note of interest that Mr. Drohan mentioned was the fact that only one construction claim was filed for all 21 state and nonstate funded projects. His department's definition of a construction claim is one that is initiated by the contractor and goes to at least the Construction Claims Board for review and possibly beyond that point. There were claims filed with these projects, but the progressive and active management of the construction process both at the campuses and with the construction managers in the Department of Capital Planning, Design and Construction, enabled us to settle all of them during and through the construction closeout period.

In referencing the information on the screen, Trustee Pierce inquired as to whether change orders were included in the total-cost-of-completed-projects figure shown at the top of the slide. Mr. Drohan stated that the top figure is the total budget number that includes design, change-order work, and construction costs.

The performance report for nonstate-funded projects showed a higher average of staying within budget. Mr. Drohan said that the campuses have more flexibility in augmenting and adjusting the budgets on the nonstate-funded projects, particularly donor-funded projects.

In looking at the state-funded projects slide, the example cited was the seismic upgrade at the California Maritime Academy. This project was completed below budget due to the active management of the design process which resulted in a different and more cost-effective design solution, thus allowing the savings to be used for other projects and extending the use of limited state resources.

In closing, Mr. Drohan mentioned that his staff is now using an automated data base system that will facilitate the production of the mid-year report to the trustees, will allow for more sophistication in analysing the various types of delivery methods, and permit an expansion of the data base for next year's report in order to provide more information. Mr. Drohan stated that his staff has achieved a lot in producing this report and acknowledged that the campuses are doing a good job in the management of the capital outlay process.

Trustee Razi requested that he receive a copy of the detailed version of the report so that he will be able to study the report more thoroughly on a campus-by-campus basis.

Trustee Pierce stated that he was also wanted a copy of the detailed version and is especially interested in looking at the contractor performance data.

Executive Vice Chancellor and Chief Business Officer Richard P. West complimented Mr. Drohan, his staff, and the campuses in the outstanding work they have done in managing the construction of these projects. The different dynamics in the marketplace and the pressure involved in getting the projects completed is immense. He said that the state-funded projects are even more difficult because we cannot expand the scope or the amount of dollars invested, therefore the campuses have to use bid alternates to stay within budget and scope. This type of accomplishment is due to a strong management team.

## Status Report on the 2001/02 State Funded Capital Outlay Program—Governor's Budget

Mr. Drohan reviewed the item as printed in the handout and stated that all campus projects are the same as previously agreed to and prioritized. He noted that the CSU's five-year capital outlay program exceeds 2½ billion dollars and the proposed funding will fall far short of meeting our

needs. Mr. Drohan emphasized the importance of demonstrating our capital outlay needs in Sacramento and seeking a reliable source of funding to implement those needs.

Trustee Cartwright inquired if staff anticipates any changes in the budget to deal with the current energy crisis and the governor's executive order on green buildings.

Mr. Drohan replied that Chancellor Reed would be giving an update to the trustees later in the day regarding the energy issues. Also, he stated that Mr. Bob Schulz, chief of architecture, capital planning, design and construction, has been very active in working with the Department of the State Architect in developing some standards on the green building subject. At the same time, Mr. Drohan mentioned that Ms. Elvyra San Juan, chief of facilities management, and he were discussing with the Department of Finance the possibility of adjusting our unit costs to take into consideration some of these system that would exceed Title 24 requirements and provide for enhanced life-cycle operational costs.

## **Approval of Schematic Plans**

This item proposed the approval of the schematic plans for California State University, Channel Islands—East Campus Residential Development Phase I Faculty and Staff Housing and California State University, Northridge—Western Center for Adaptive Aquatics.

Mr. Richard West prefaced the presentation of this item by saying that usually when a schematic item is presented to the Board, the design item is presented to the Committee on Campus Planning, Buildings and Grounds and the financing package is presented to the Committee on Finance. For the CSU Channel Islands residential development project, the financing package will be presented to the Finance Committee at its March 2001 meeting.

Mr. West reminded the committee members that a site authority board governs the non-academic space at Channel Islands. The board is made up of nominated members of the CSU Board of Trustees, CSU administrators, and local government representatives and has seen the designs and financial picture of this proposal. Early in the takeover of the Camarillo State Hospital, Mr. West stated that the CSU proposed that a major portion of the sale of the residences would be applied to financing the renovation of the academic space of the facility. The first couple of years have been difficult financially. No income will be realized until the third or fourth year of operation, which will be 2002 and the opening of the campus. As faculty and staff are hired, an important element of this campus community will be to have housing available.

In viewing two slides, Mr. West summarized the projected net present value to be generated over a 40year period from various types of income (rental, sales and property taxes) that will amount to approximately \$300 million. The funds will be applied to various debt services, cost of construction and modification of space, as well as the operating expenses associated with maintaining the rental facilities. Mr. West pointed out that this projected income does not mean that the campus is not going to need some investment of capital resources from the state in the

early years of operation. More details on the financial plan will be presented at the March meeting.

Trustee Razi stated that he thought the Channel Islands project was a joint venture that included a developer as well as the Joint Power Authority.

Mr. West responded that Trustee Razi is correct. Originally Catellus was the developer, and in the spring 2000, the CSU assumed responsibility for this part of the venture. Staff hired the firm of Brookfield to oversee the development on a fee basis, but they are not at risk. The CSU has assumed the management of the development risk.

Trustee Razi inquired if the developer is involved in the design to reduce cost as well as estimating the cost.

Mr. Drohan answered that Brookfield is currently reviewing the architect's schematic plans and upon completion and the inclusion of value engineering, both parties will agree on the cost. This is an ongoing process.

Trustee Razi expressed his concern for staff to make sure that the cost does not suddenly go up and absorb all of the funds designated for education.

Trustee Goldwhite applauded staff in the planning of affordable faculty/staff housing. He asked if there is a plan to provide at least office space, if not housing, for those faculty members who are hired in the early stages.

Mr. Drohan said that a couple of strategies are being considered to assure that temporary facilities are available.

With the use of a computerized presentation, Mr. Drohan reviewed the CSU Northridge Western Center for Adaptive Aquatics project as printed in the agenda. He indicated that the appropriate CEQA documents have been filed on this project and no adverse comments had been received.

The committee recommended approval by the board of the proposed resolution (RCPBG 01-24-01).

# Certify a Mitigated Negative Declaration, Approve the Campus Master Plan Revision, Amendment to the Nonstate Funded Capital Outlay Program and Schematic Plans for the Internet Switching Center Phase I at California State University, Hayward

Mr. Drohan stated that this item follows the Finance Committee's action on the previous day. After a review of the item, Mr. Drohan noted that the appropriate CEQA documents had been filed and no adverse comments were received.

The committee recommended approval by the board of the proposed resolution (RCPBG 01-24-02).

Mr. Drohan introduced Mr. Mark Gutheinz, Chief of Plant, Energy and Utilities, as Capital Planning, Design and Construction's newest staff member.

In reference to the state's energy crisis, Trustee Pesqueira asked that staff prepare for the board a matrix of how each CSU campus will manage its electrical needs over a long-term period of time.

Mr. Drohan responded that such a report would be presented at the Board's May 2001 meeting.

## Adjournment

The meeting adjourned at 9:25 a.m.

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#### COMMITTEE ON CAMPUS PLANNING, BUILDINGS AND GROUNDS

#### Amend the 2000/01 Capital Outlay Program, Nonstate Funded

#### **Presentation By**

J. Patrick Drohan Assistant Vice Chancellor Capital Planning, Design and Construction

#### Summary

This agenda item requests approval to add one project to the 2000/01 nonstate funded capital outlay program.

## San Francisco State University Residence Dining Center Addition

PWCE \$500,000

#### **Background and Scope**

San Francisco State University would like to proceed with the design and construction of an addition to the residence dining center. The existing 31,083 gross square foot (GSF) dining hall is a rectangular two-level structure. It consists of approximately 16,658 GSF of dining and conference area on the ground floor, and approximately 14,425 GSF of basement area. A sunken terrace at the entrance to the dining center is currently used as an outside eating area and for special events during good weather. The dining center was designed to serve the 824 dormitory residents in Mary Ward and Mary Park Halls. The Village at Centennial Square will add 760 beds creating an increased demand to provide meal service to campus residents. The proposed project will accommodate this demand by enclosing the sunken terrace and connecting it to the main dining area. Interior work includes ceiling and lighting systems; wall and floor finishes; and electrical, plumbing, mechanical and telecommunications systems. The addition will comply with the requirements of the American with Disabilities Act. Other elements of the project include conference and special events space, exterior site development and landscaping. The proposed project is on the master plan and will be funded by the Service Provider for the San Francisco State University Foundation, Inc.

The following resolution is recommended for approval:

**RESOLVED,** By the Board of Trustees of the California State University that the 2000/01 Nonstate Funded Capital Outlay Program is amended to include \$500,000 for preliminary

## Revised

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## COMMITTEE ON CAMPUS PLANNING, BUILDINGS AND GROUNDS

## Amend the 2000/01 Capital Outlay Program, State Funded

## **Presentation By**

J. Patrick Drohan Assistant Vice Chancellor Capital Planning, Design and Construction

## Summary

This item proposes to amend the 2000/01 state funded capital outlay program to add a new project as Priority 27 on the trustees' priority list.

## **Background and Scope**

The 2000/01 support budget included \$2 million to fund PWCE for the CSPU Pomona, Center for Animal and Veterinary Science Education, Phase Ia capital outlay project. Phase Ia consists of 12,000 gross square feet of space for pathology and necropsy laboratories, lab support space, and lecture classrooms at an estimated cost of \$5.2 million. The total estimated cost for Phases Ia, Ib, and II is \$47.4 million with components including a clinical and research facility, large animal production facilities, a waste management facility, a feed mill facility, a meat science and production laboratory, and site improvements. The multi-building complex will support the educational and research mission of the College of Agriculture's Department of Animal and Veterinary Sciences for 168 full-time equivalent students.

While the \$2 million budgeted is insufficient to fund Phase Ia, we are requesting approval to establish the project in the trustees' 2000/01 program. Discussions will continue with the Department of Finance regarding changing the scope of the budget act language to enable the CSU to expend the \$2 million on preliminary plans for the entire project (Phases I and II).

The following resolution is recommended for approval:

**RESOLVED**, By the Board of Trustees of The California State University, that:

- 1. The 2000/01 State Funded Capital Outlay Program is amended to include \$5.2 million for preliminary plans, working drawings, construction, and equipment for the California State Polytechnic University, Pomona, Center for Animal and Veterinary Science Education, Phase Ia project as Priority 27.
- 2. CSPU Pomona will include the balance of funding required for Phase Ia in a future capital outlay budget request based on campus priorities.

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## COMMITTEE ON CAMPUS PLANNING, BUILDINGS AND GROUNDS

## Certify a Final Environmental Impact Report and Approve the Campus Master Plan Revision for San Diego State University

## **Presentation By**

J. Patrick Drohan Assistant Vice Chancellor Capital Planning, Design and Construction

## Summary

This item requests the following actions by the Board of Trustees for San Diego State University:

- Certification of a Final Environmental Impact Report (FEIR)
- Approval of a Campus Master Plan Revision

Attachment A to the item is the proposed campus master plan dated March 2001 and Attachment B is the existing campus master plan dated May 1999.

Included in the agenda mailing are the FEIR, an Addendum to the FEIR, and the Findings of Fact and Statement of Overriding Considerations with the Environmental Mitigation Measures Monitoring and Reporting Plan.

There are no significant remaining contested issues based on CSU responses to the comments received in the public review period. San Diego State University (SDSU) and the City Redevelopment Agency will implement mitigation measures for the College Community Redevelopment project that will address all potential significant issues identified in the Draft EIR (DEIR).

## Background

The existing SDSU campus master plan provides for 25,000 full-time equivalent students. The proposed campus master plan revision continues to provide for 25,000 FTES while improving, enhancing and rehabilitating campus facilities. The primary goal of the proposal is to create a template of uniform planning for future campus development. The project components have been designed in a manner that is consistent with the November 1997 *SDSU Physical Master Plan, Phase 1, Existing Conditions*, which states a need for new campus facilities and sets forth

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guidelines for campus landscaping, lighting, visual quality, gateways, open areas and other campus features. The existing master plan focuses on campus boundaries, parking facilities, athletic facilities, pedestrian malls, and existing and future campus buildings and structures.

## **Campus Master Plan**

The proposed campus master plan revision includes redevelopment of several classroom, office, research and student facilities, and provides for the development of several new buildings, a physical plant and corporation/maintenance yard, parking structure and central campus park area. The project was divided into two groups of "project components" for purposes of the environmental analysis. One group was identified and analyzed on a program level and the other was analyzed on a project level. The program level components consist of two academic/research buildings, a performing arts complex, a science research building, a physical plant, and an addition to the north life sciences building. The project level components consist of a faculty office/classroom/gallery building and parking structure, an addition to the communication building, a new campus childcare center, an addition to the International Student Center and a central park. As discussed in greater detail below, since completion of the FEIR, a project-level environmental analysis is provided in an Addendum to the FEIR.

## **Proposed Project Components**

Attachment A identifies each of the proposed new facilities using "PGM" in rectangles for program components and "PJT" in ovals for the project level components as indicated below:

## **Program Level Components**

PGM-1N: Site for new Academic/Research Building A

- PGM-1S: Site for new Academic/Research Building B
- PGM-2: Site for new Performing Arts Complex
- PGM-3: Site for new Science Research Building (this will require the demolition of the Industrial Technology Building 9)
- PGM-4: Site for new Physical Plant
- PGM-5: Site for North Life Sciences Addition (this will add a five-floor addition to the existing Life Sciences North Building 35 and displace a temporary campus office facility 817)

## **Project Level Components**

PJT-1: Site for new Faculty Office/Classroom/Gallery/Parking Structure 8 (this will require the demolition of the existing Family Studies and Consumer Science Building 7 while relocating the Campus Childcare Center 85 as PJT-3)

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- PJT-2: Site for School of Communication Addition
- PJT-3: Site for new Campus Childcare Center
- PJT-4: Site for International Student Center Addition (this will add 12,000 square feet to the existing International Student Center 74)
- PJT-5: Site for new Central Park (development of this park will include demolition of the Education Building 6)

## **Fiscal Impact**

Implementation of the proposed campus master plan revision adds state funded improvements estimated at \$127 million and nonstate improvements estimated at approximately \$10 million totaling an estimated \$137 million in current dollars.

## California Environmental Quality Act (CEQA) Action

A comprehensive FEIR has been prepared pursuant to the requirements of CEQA and the state CEQA Guidelines. The FEIR is presented to the Board of Trustees for certification as part of this agenda item. A Notice of Preparation/Initial Study was prepared in May 2000 for the proposed campus master plan revision and circulated to interested public agencies, organizations, community groups and individuals for their input. The campus held a public information meeting on May 18, 2000 to obtain public input on the proposed project and the DEIR. This DEIR review period began on September 13, 2000 and ended on October 30, 2000. The campus also held a September 28, 2000 public information meeting for public input on the DEIR. The FEIR incorporates both the comments received on the DEIR, and the written responses to those comments. Significant issues derived from those comments are included in this item under issues identified through public participation.

The DEIR addressed potential impacts associated with the SDSU campus master plan revision. The DEIR identified the following resources with potentially significant impacts for which mitigation measures are included in the FEIR:

Geotechnical and Soil Resources Water Quality/Hydrology Biological Resources Visual Quality Traffic/Access/Parking Noise Air Quality Cultural Resources CPB&G Agenda Item 3 March 20-21, 2001 Page 4 of 10

A complete listing and discussion of project impacts and proposed mitigation measures are included in the FEIR describing the procedures that will be used to implement the mitigation measures.

Subsequent to completion of the FEIR, a project-level environmental analysis was prepared for project component PGM-1N, the existing Academic/Research Building with two additional future buildings. That additional analysis is provided in an Addendum to the FEIR. The additional analysis warranted some changes to the FEIR to account for the detailed analysis of the PGM-1N component. However, the analysis did not involve substantial changes to the proposed campus master plan revision requiring a major revision to the FEIR. Neither did it result in new information which indicated: (i) the existence of significant effects not discussed in the FEIR; (ii) that significant effects previously discussed will be substantially more severe than shown in the FEIR; (iii) that mitigation measures or alternatives previously found not to be feasible would be feasible and would substantially reduce one or more significant effects of the project; or (iv) that mitigations measures or alternatives which are considerably different from those analyzed in the FEIR would substantially reduce one or more significant effects on the environment. Therefore, pursuant to CEQA and the state CEQA Guidelines, the project-level analysis of component PGM-1N was appropriately addressed in the Addendum to the FEIR.

## **Issues Identified Through Public Participation**

Public comments were received from the City of San Diego. Those comments and CSU responses to the comments are provided in the FEIR. The comment letters raised the following significant issues:

Traffic and Access Biological Resource Water Quality/Hydrology

Responses have been prepared to address the concerns raised and to indicate where and how the EIR addresses these specific issues. Where appropriate, changes made in the DEIR in response to these comments are indicated in the response and the actual EIR revisions are contained in the FEIR. Findings of fact, the specific mitigation measures and the appropriate statement of overriding consideration for impacts that cannot be mitigated are included in a separate document in the agenda mailing. A summary of the responses to these comments follows:

**1. Traffic and Access.** Some comments questioned the traffic impacts caused by increased trips at the intersection of College Avenue and "Z" Street in terms of intersection capacity. The comments also suggested that the mitigation proposed to reduce those impacts to a level below significance must be implemented in conjunction with development of the campus master plan project.

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**CSU Response:** Traffic mitigation measures approved for a previously adopted FEIR prepared for the College Community Redevelopment project, under the Redevelopment Agency of the City of San Diego, require the widening of College Avenue to six lanes and the installation of a new traffic signal to permit left turn access to the SDSU parking structure east of College Avenue. The university's traffic consultant has noted that the city's traffic engineering design requirements make it highly unlikely that a traffic signal could be located at this location because of its proximity to the major intersection of College Avenue and Canyon Crest Drive. Additionally, the physical constraints on College Avenue preclude widening to permit a turn lane at this location. This leads to the logical conclusion that the signal would be installed at the "Z" Street intersection located approximately 300 feet to the south, which is the first intersection that could be widened to permit left turns. Left turns for the parking structure could also be accommodated at the "Z" Street intersection. The proposed project does not include a traffic signal at College Avenue and "Z" Street to accommodate the new inbound left turn trips during the morning and evening peak hours because the project-related traffic impacts would be mitigated through the widening of College Avenue and the addition of the new traffic signal in the vicinity of "Z" Street under the College Community Redevelopment project FEIR mitigation program. Therefore, with implementation of the mitigation in the FEIR for the College Community Redevelopment project, the proposed SDSU project's traffic impacts would be reduced to less than significant levels.

With regard to mitigation of the proposed project's traffic impacts, CEQA requires that a project include all feasible mitigation measures, which may reduce the project's environmental impacts. If the lead agency for a given project has no legal authority to fund or otherwise implement, independent of CEQA, the measures required to mitigate a particular environmental impact, then the measures are not considered feasible and not required under CEQA. CSU has no authority or funding to require the construction of off-site traffic improvements. Therefore, the mitigation measures proposed to reduce the project's traffic impacts at the intersection of College Avenue and "Z" Street are not feasible under CEQA. Consequently, those measures cannot be implemented in conjunction with development of the campus master plan revision.

Under CEQA, when mitigation of a significant environmental impact is not feasible, the lead agency may address such impacts with "overriding considerations." CSU has considered the possibility that the master plan project may be completed prior to completion of the necessary traffic improvements in connection with the College Community Redevelopment project. Should such circumstances occur, CSU has identified numerous overriding considerations, supported by substantial evidence, which outweigh the project's significant traffic impacts. Those overriding considerations are set forth in the CEQA Findings of Fact and Statement of Overriding Considerations.

**2. Biological Resource.** Some comments suggested that the DEIR should have analyzed the proposed project's impacts on biological resources within certain geographic areas collectively

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designated as a multiple habitat planning area in the City of San Diego's Multiple Species Conservation Plan.

**CSU Response:** The DEIR includes measures for avoiding potential impacts to biological resources in proximity to the project component sites. The DEIR states that the limits of grading should be staked, fencing should be erected and a qualified biologist should be retained to monitor construction activities at the component sites with a potential to affect adjacent biological resources. The DEIR states that, if construction is conducted during breeding season, a breeding bird survey should be conducted to ensure that there are no state- or federally-listed endangered species in the vicinity. If a listed bird species is found within 500 feet of the construction site, the DEIR recommends that construction activities should be deferred until the end of the breeding season. The DEIR also states that Best Management Practices should be implemented to control erosion, runoff, dust, noise and any other potentially harmful indirect biological impacts during construction. Based on the design and location of the project components, as well as the foregoing mitigation measures and other measures related to noise, lighting and drainage, the proposed project is consistent with the San Diego County Multiple Species Conservation Plan Land Use Adjacency Guidelines pertaining to drainage, toxics, lighting, noise, barriers, invasive and brush management.

**3. Water Quality/Hydrology.** Some comments suggested that the DEIR should have analyzed the proposed project's potential to cause water quality impacts on the multiple habitat planning area.

*CSU Response:* The DEIR contains measures recommended to mitigate the proposed project potential water quality impacts. Those measures include: (i) removal of demolition and excavated material from the project site to prevent potential surface and groundwater contamination; (ii) elimination of standing water during construction; (iii) proper storage of onsite hazardous materials; (iv) compliance with National Pollutant Discharge Elimination System permit requirements; (v) control of storm water runoff to prevent erosion; (vi) control of storm water runoff within the SDSU campus during construction; and (vii) proper disposal of on-site waste materials. The DEIR also recommends appropriate modification of the existing storm drain system as necessary to accommodate expected increases in peak runoff quantities. Based on the design and location of the project components, as well as the foregoing mitigation measures, the proposed project is consistent with the San Diego County Multiple Species Conservation Plan Land Use Adjacency Guidelines pertaining to drainage and toxics.

## Alternatives

The alternatives section of the FEIR has been prepared in accordance with CEQA and the state CEQA Guidelines. The preferred alternative is the proposed project. The alternatives shown

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below were analyzed and compared to the proposed project in the FEIR. The ability of each alternative to reduce impacts was also identified and considered in the FEIR. The alternatives analyzed in the FEIR included:

Alternative 1: No Project Alternative. This alternative is required by CEQA, and it compares the present existing condition of the project site against the significant effects that would result from implementation of the proposed project.

**Alternative 2: A-PJT-1 Alternative.** This alternative compares the significant effects that would result from constructing the proposed Faculty Office/Classroom/Gallery/Parking Structure 8 component PJT-1 on the site designated for that facility under the proposed project against the construction of the facility in Parking Lot W.

Alternative 3: A-PJT-2 Alternative. This alternative compares the significant effects that would result from constructing the proposed Communication Building Additions component PJT-2 on the site designated for that facility under the proposed project against the construction of the facility on the plaza north of the existing Communication Building.

Alternative 4: A-PJT-3a Alternative. This alternative compares the significant effects that would result from constructing the proposed Campus Childcare Center component PJT-3 on the site designated for that building under the proposed project against the construction of the building on the site of campus Parking Lot A.

Alternative 5: A-PJT-3b Alternative. This alternative compares the significant effects that would result from constructing the proposed Campus Childcare Center component PJT-3 on the site designated for that building under the proposed project against the construction of the building on the site of campus Parking Lot G.

Alternative 6: A-PJT-3c Alternative. This alternative compares the significant effects that would result from constructing the proposed Campus Childcare Center component PJT-3 on the site designated for that building under the proposed project against the construction of the building on the site of campus Parking Lot V and the International Student Center.

**Alternative 7: A-PJT-4a Alternative.** This alternative compares the significant effects that would result from constructing the proposed International Student Center Addition component PJT-4 on the site designated for that building under the proposed project against the construction of the building on the site of campus Parking Lot A.

**Alternative 8: A-PJT-4b Alternative.** This alternative compares the significant effects that would result from constructing the proposed International Student Center Addition component PJT-4 on the site designated for that building under the proposed project against the construction of the building on the site of campus Parking Lot W.

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Please see the alternatives section of the FEIR for a detailed discussion of the alternatives to the proposed project. The alternatives were rejected as infeasible, and the proposed project was found to be preferable to the rejected alternatives. Please see the CEQA Findings of Fact and Statement of Overriding Considerations for further information regarding the project alternatives.

The following resolution is recommended for approval:

**RESOLVED,** By the Board of Trustees of the California State University, that:

- 1. The FEIR and the Addendum to the FEIR (collectively "the FEIR") for the SDSU campus master plan revision was prepared to address the environmental effects, mitigation measures and project alternatives associated with approval of that project, and all discretionary actions relating thereto, and that project consists of the following project components: (1) two academic/research buildings, a performing arts complex, a science research building, a physical plant and an addition to the North Life Sciences Building; and (2) a faculty office/classroom/gallery building and parking structure, an addition to the International Student Center and a central park.
- 2. The FEIR (State Clearinghouse No. 2000051026) was prepared pursuant to the California Environmental Quality Act (CEQA) and the state CEQA Guidelines.
- 3. This resolution is adopted pursuant to the requirements of Section 21081 of the Public Resources Code and Section 15091 of the state CEQA Guidelines, which require that the Board of Trustees make findings prior to approval of a project (along with statements of facts supporting each finding).
- 4. This board hereby adopts the findings of fact and related mitigation measures provided under separate cover for Agenda Item 3 of the March 20-21, 2001 meeting of the Committee on Campus Planning, Buildings and Grounds, which identify specific impacts of the proposed project and related mitigation measures and which are incorporated by reference; and the findings of fact and the related mitigation measures are incorporated by reference.
- 5. The board's findings include specific overriding considerations that outweigh certain remaining significant impacts.

CPB&G Agenda Item 3 March 20-21, 2001 Page 9 of 10

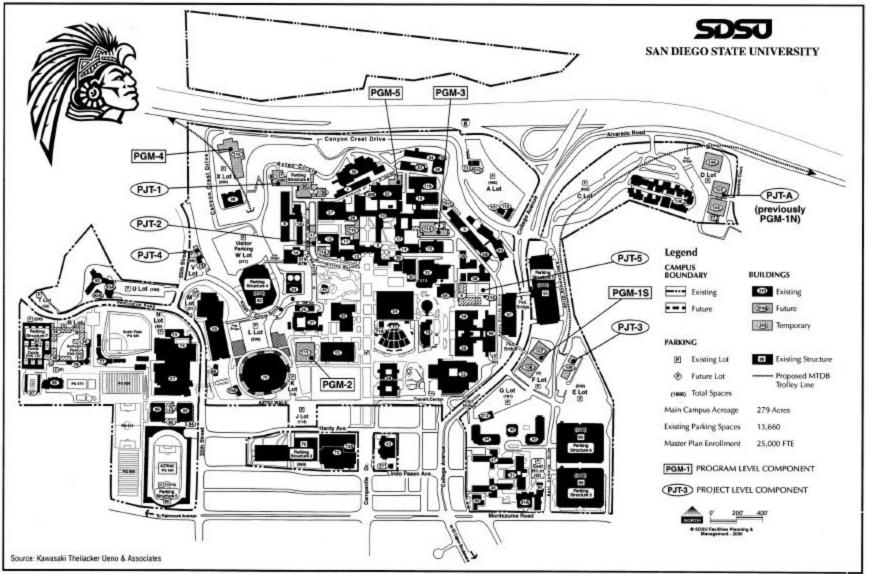
- 6. The FEIR has been prepared to address the environmental impacts, mitigation measures, project alternatives, comments and responses to comments associated with the approval of the SDSU campus master plan revision pursuant to the requirements of CEQA and the state CEQA Guidelines.
- 7. Prior to certification of the FEIR, the Board of Trustees has reviewed and considered the above-mentioned FEIR. The board hereby certifies the FEIR for the SDSU campus master plan revision as complete and adequate in that the FEIR addresses all environmental impacts of the proposed project and fully complies with the requirements of CEQA and the state CEQA Guidelines. For the purpose of CEQA, the record of the proceedings for the project comprises the following:
  - A. The DEIR for the SDSU campus master plan revision;
  - B. The FEIR and Addendum, including comments received on the DEIR and responses to comments;
  - C. The proceedings before the Board of Trustees relating to the subject project, including testimony and documentary evidence introduced prior to or at the meeting; and
  - D. All attachments, documents incorporated, and references made in the documents specified in items (A) through (C) above.

All of the above information is on file with the California State University, Office of the Chancellor, Capital Planning, Design and Construction, 401 Golden Shore, Long Beach, California, 90802, and San Diego State University, Office of Facilities Planning and Management, Administration Building, Room 130, 5500 Campanile Drive, San Diego, California 92182-1624.

- 8. The board certifies the FEIR for the SDSU campus master plan revision.
- 9. The mitigation measures identified in the Mitigation Monitoring Plan are hereby adopted and shall be monitored and reported in accordance with the Mitigation Monitoring Plan, which is under separate cover for Agenda Item 3 of the March 20-21, 2001 meeting of the Committee on Campus Planning, Buildings and Grounds, which meets the requirements of CEQA (Public Resources Code Section 21081.6).

CPB&G Agenda Item 3 March 20-21, 2001 Page 10 of 10

- 10. The SDSU campus master plan revision, dated March 2001, is hereby approved.
- 11. The chancellor or his designee is requested under the Delegation of Authority granted by the Board of Trustees to file the Notice of Determination with respect SDSU campus master plan revision.



**PROPOSED MASTER PLAN – MARCH 2001** 

ATTACHMENT A CPB&G-Item 3 March 20-21, 2001 Page 1 of 2 ATTACHMENT A CPB&G—Item 3 March 20-21, 2001 Page 2 of 2

## SAN DIEGO STATE UNIVERSITY CAMPUS MASTER PLAN **Proposed March 2001**

#### FACILITY LEGEND: EXISTING FACILITY/Proposed Facility

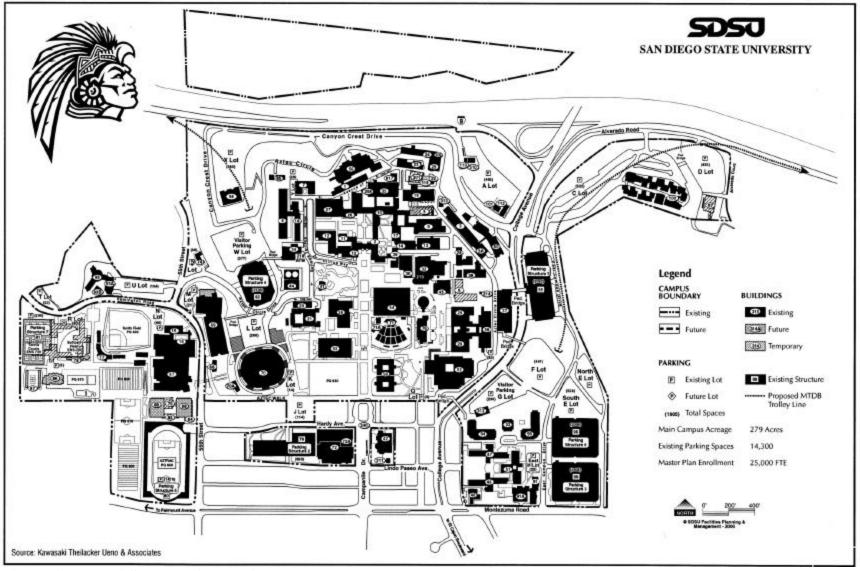
1.	ART - SOUTH	47.
2.	HEPNER HALL	
3.	CHEMISTRY - GEOLOGY	48.
3A.	CHEMISTRY - GEOLOGY	
	ADDITION	
5.	ENGINEERING LABORATORY	49.
7.	FAMILY STUDIES	
8.	STORM HALL	50.
10.	LIFE SCIENCE - SOUTH	
11.	LITTLE THEATER	50A
12.	SPEECH &	51.
	TELECOMMUNICATIONS	
13.	PHYSICS	52.
14.	PHYSICS - ASTRONOMY	53.
15.	ATHLETICS	54.
16.	PETERSON GYMNASIUM	55.
17.	PHYSICAL SCIENCES	56.
18.	NASATIR HALL	58.
19.	ENGINEERING	59.
20.	EXERCISE & NUTRITIONAL	60.
	SCIENCES ANNEX	67.
21.	EXERCISE & NUTRITIONAL	
	SCIENCES	68.
22.	CAM LAB (COMPUTER AIDED	69.
	MECHANICS)	70.
23.	PHYSICAL PLANT/BOILER SHOP	70A
24.	PHYSICAL PLANT	71.
25.	COGENERATION PLANT	71A
26.	HARDY MEMORIAL TOWER	
27.	PROFESSIONAL STUDIES & FINE	72.
	ARTS	72A
28.	COMMUNICATIONS CLINIC	
29.	STUDENT SERVICES - WEST	73.
30.	ADMINISTRATION	74.
32.	EAST COMMONS	
33.	Residential Dining	75.
34.	WEST COMMONS	
35.	LIFE SCIENCE-NORTH	
36.	THEARE ARTS	76.
37.	<b>BUSINESS ADMINISTRATION &amp;</b>	77.
	MATHEMATICS	78.
38.	NORTH EDUCATION	79.
39.	FACULTY/STAFF CENTER	80.
40.	HOUSING & RESIDENTIAL LIFE	81.
41.	SCRIPP'S COTTAGE	82.
42.	STUDENT HEALTH SERVICES	83.
44.	PHYSICAL PLANT/CHILL PLANT	84.
45.	AZTEC SHOPS BOOKSTORE	86.
46.	MAYA HALL (COEDUCATIONAL	80. 87.
	RESIDENCE)	90.
		90.

47.	OLMECA HALL (COEDUCATIONAL
48.	RESIDENCE) TARASTEC HALL
40.	(COEDUCATIONAL
	RESIDENCE)
49.	TOLTEC HALL (COEDUCATIONAL
43.	RESIDENCE)
50.	ZAPOTEC HALL (COEDUCATIONAL
50.	RESIDENCE)
50A.	TEMPLO DEL SOL
51.	ZURA HALL (COEDUCATIONAL
011	RESIDENCE)
52.	AZTEC CENTER
53.	MUSIC
54.	LOVE LIBRARY
55.	PARKING STRUCTURE I
56.	ART - NORTH
58.	ADAMS HUMANITIES
59.	STUDENT SERVICES - EAST
60.	SCIENCE LABORATORY
67.	Athletics Administration Building/Hall
	of Fame
68.	ARENA MEETING CENTER
69.	AZTEC RECREATION CENTER
70.	COX ARENA at AZTEC BOWL
70A.	ARENA TICKET OFFICE
71.	OPEN AIR THEATER
71A.	OPEN AIR THEATER HOSPITALITY
	HOUSE
72.	KPBS RADIO/TV
72A.	GATEWAY CENTER/
	EXTENDED STUDIES
73.	RACQUETBALL COURTS
74.	INTERNATIONAL STUDENT
~~	CENTER
75.	FOOTBALL COACHES
	OFFICES/WEIGHT TRAINING
70	FACILITY
76.	LLA/CENTENNIAL HALL
77.	TONY GWYNN STADIUM
78. 79.	Softball Center PARKING STRUCTURE 2
80.	PARKING STRUCTURE 5
81.	Parking Structure 7/Tennis Courts
82.	PARKING STRUCTURE 4
83.	ATHLETICS OFFICES
84.	ATHLETICS TRAINING FACILITY
86.	Aquaplex
87.	Tennis Center

Social Science, Faculty Office,

Parking Structure No. 8 91. TENOCHCA HALL (COEDUCATIONAL RESIDENCE) 91A. TULA HALL Art Gallery 92 CHAPULTEPEC HALL 93. (COEDUCATIONAL RESIDENCE) CHOLULA HALL 93A 93B. MONTY'S MARKET 94. Residential Suites, West 95. Residential Suites, East Parking Structure 6 96. REHABILITATION CENTER 97. 98. BUSINESS SERVICES PARKING STRUCTURE 3 99. 100. VILLA ALVARADO HALL (COEDUCATIONAL RESIDENCE) 101. MAINTENANCE GARAGE Cogeneration/Chill Plant 102 Academic/Research Bldg. A1 104. 105. Academic/Research Bldg. A2 106. Academic/Research Bldg. A3 107. Academic/Research Bldg. B1 108. Academic/Research Bldg. B2 Campus Childcare Canter 109. 111. Performing Arts Complex **RESOURCE CONSERVATION** 112. 113. WASTE FACILITY 114. Science Research Building 115 Physical Plant School of Communication Addition 116. 117. School of Communication Addition School of Communication Addition 118 Engineering Building Addition 119. PHYSICAL PLANT SHOPS 201. 208. BETTY'S HOTDOGGER 209. INFORMATION BOOTH (PARKING) 240. TRANSIT CENTER FIELD EQUIPMENT STORAGE 302. 303. GROUNDS STORAGE EHS STORAGE SHED 310. SUBSTATION D 311. SUBSTATION B 312 SUBSTATION A 313. SHIPPING/RECEIVING/ 314.

- MAIL/CENTRAL STORES
- 817. DEAN OF SCIENCE EXTENSION



**APPROVED MASTER PLAN – MAY 1999** 

ATTACHMENT B CPB&G-Item 3 March 20-21, 2001 Page 1 of 2 ATTACHMENT B CPB&G—Item 3 March 20-21, 2001 Page 2 of 2

## SAN DIEGO STATE UNIVERSITY CAMPUS MASTER PLAN **Approved May 1999**

SCRIPP'S COTTAGE

#### FACILITY LEGEND: EXISTING FACILITY/Proposed Facility

1.	ART - SOUTH	41.
2.	HEPNER HALL	42.
3.	CHEMISTRY - GEOLOGY	44.
3A.	CHEMISTRY - GEOLOGY	45.
	ADDITION	46.
5.	ENGINEERING LABORATORY	
6.	EDUCATION	47.
7.	FAMILY STUDIES	
8.	STORM HALL	48.
9.	INDUSTRIAL TECHNOLOGY	
10.	LIFE SCIENCE - SOUTH	49.
11.	LITTLE THEATER	
12.	SPEECH &	50.
	TELECOMMUNICATIONS	
13.	PHYSICS	50A.
14.	PHYSICS - ASTRONOMY	51.
15.	ATHLETICS	
16.	PETERSON GYMNASIUM	52.
17.	PHYSICAL SCIENCES	53.
18.	NASATIR HALL	54.
19.	ENGINEERING	55.
20.	EXERCISE & NUTRITIONAL	56.
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	MECHANICS)	
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33.	Residential Dining	73.
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38.	NORTH EDUCATION	77.
39.	FACULTY/STAFF CENTER	78

- FACULTY/STAFF CENTER 39 40.
  - HOUSING & RESIDENTIAL LIFE
- STUDENT HEALTH SERVICES PHYSICAL PLANT/CHILL PLANT AZTEC SHOPS BOOKSTORE MAYA HALL (COEDUCATIONAL RESIDENCE) OLMECA HALL (COEDUCATIONAL RESIDENCE) TARASTEC HALL (COEDUCATIONAL RESIDENCE) TOLTEC HALL (COEDUCATIONAL RESIDENCE) ZAPOTEC HALL (COEDUCATIONAL RESIDENCE) TEMPLO DEL SOL ZURA HALL (COEDUCATIONAL **RESIDENCE**) AZTEC CENTER MUSIC LOVE LIBRARY PARKING STRUCTURE I ART - NORTH ADAMS HUMANITIES STUDENT SERVICES - EAST SCIENCE LABORATORY Athletics Administration Building/Hall of Fame ARENA MEETING CENTER AZTEC RECREATION CENTER COX ARENA at AZTEC BOWL ARENA TICKET OFFICE OPEN AIR THEATER OPEN AIR THEATER HOSPITALITY HOUSE **KPBS RADIO/TV** GATEWAY CENTER/ EXTENDED STUDIES RACQUETBALL COURTS INTERNATIONAL STUDENT CENTER
  - FOOTBALL COACHES OFFICES/WEIGHT TRAINING
- FACILITY
- LLA/CENTENNIAL HALL
- TONY GWYNN STADIUM
- Softball Center 78.
- PARKING STRUCTURE 2

- PARKING STRUCTURE 5 80
- 81. Parking Structure 7/Tennis Courts
- PARKING STRUCTURE 4 82.
- ATHLETICS OFFICES 83.
- ATHLETICS TRAINING FACILITY 84.
- CHILD CARE FACILITY 85.
- Aquaplex 86
- 87. Tennis Center
- TENOCHCA HALL 91.
  - (COEDUCATIONAL RESIDENCE)
- 91A. TULA HALL
- CHAPULTEPEC HALL 93.
- (COEDUCATIONAL RESIDENCE) 93A. CHOLULA HALL
- 93B. MONTY'S MARKET
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- Residential Suites, East 95.
- 96. Parking Structure 6
- REHABILITATION CENTER 97
- BUSINESS SERVICES 98
- PARKING STRUCTURE 3 99
- VILLA ALVARADO HALL 100. (COEDUCATIONAL RESIDENCE)
- 101. MAINTENANCE GARAGE
- 102. Cogeneration/Chill Plant
- **RESOURCE CONSERVATION** 112.
- 113. WASTE FACILITY
- Engineering Building Addition 119
- PHYSICAL PLANT SHOPS 201.
- BETTY'S HOTDOGGER 208
- 209. INFORMATION BOOTH
  - (PARKING)
- TRANSIT CENTER 240.
- FIELD EQUIPMENT STORAGE 302.
- GROUNDS STORAGE 303.
- 310. EHS STORAGE SHED
- SUBSTATION D 311.
- SUBSTATION B 312.
- SUBSTATION A 313.
- SHIPPING/RECEIVING/ 314.
- MAIL/CENTRAL STORES 817. DEAN OF SCIENCE EXTENSION

- 79

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## COMMITTEE ON CAMPUS PLANNING, BUILDINGS AND GROUNDS

## Certify a Final Environmental Impact Report and Approve the Campus Master Plan Revision for California Polytechnic State University, San Luis Obispo

## **Presentation By**

J. Patrick Drohan Assistant Vice Chancellor Capital Planning, Design and Construction

## Summary

This item requests the following actions by the Board of Trustees for California Polytechnic State University, San Luis Obispo (Cal Poly):

- Certification of a Final Environmental Impact Report (FEIR)
- Approval of a Campus Master Plan Revision to Increase the Master Plan Enrollment Ceiling from 15,000 to 17,500 Full-Time Equivalent Students (FTES)

Proposed project components include additional instructional space, housing facilities, applied research space and parking structures. Attachment A is the proposed campus master plan dated March 2001 and Attachment B is the existing campus master plan dated January 2000.

Included in the agenda mailing are the FEIR and the Findings of Fact and Statement of Overriding Considerations with the Environmental Mitigation Measures Monitoring and Reporting Plan.

The following is provided pursuant to the trustees' request that potential contested issues be noted early in the agenda material:

**1. Regional Circulation Issues.** Some comments indicated that CSU should address off-campus roadway issues that will be affected by campus development.

*CSU Response:* Cal Poly has identified master plan impacts at certain locations of the roadway infrastructure as significant. It has identified a program of improvements to be implemented as the appropriate mitigation to the extent feasible to reduce project traffic impacts to less than significant levels. However, implementation and monitoring of the traffic mitigation within the jurisdiction of other public agencies, including the City of San Luis Obispo and the California Department of Transportation (Caltrans), are the responsibility of these public agencies vested

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with the authority, responsibility, and revenue sources to implement roadway infrastructure improvements.

**2. "Goldtree" Research Park Development Issues.** The City of San Luis Obispo indicated concerns about future development of the "Goldtree" site located west of the main campus.

*CSU Response:* An applied research park would be developed in partnership with the local community at Goldtree. The site is relatively low-value grazing land, has low visibility from Highway 1, is adjacent to the City's wastewater treatment plant, and near the California Men's Colony. Additional environmental analysis will be undertaken when the project plan for the site has been developed.

**3. Housing Development near Brizzolara Creek.** There were many concerned comments about the proximity of student housing complexes proposed near Brizzolara Creek.

*CSU Response:* The master plan team made extensive efforts to relocate the two housing complexes at a suitable distance from the creek corridor that resulted in the creation of the Brizzolara Creek Enhancement Project and the re-adsorption of units initially proposed for location along the creek.

**4.** Loss of Foraging Habitat. Concerns were raised regarding development in certain locations on campus and the gradual and cumulative loss of deep valley soil grass habitat that is important for raptor and other animals.

**CSU Response:** Valley grasslands consisting of species typical of pasture vegetation are not considered a sensitive plant community at the state or federal level, nor are they considered sensitive by the California Native Plant Society. Therefore, the loss of this vegetative community is not considered a significant impact. The biological analysis indicates that there is adequate foraging habitat on surrounding campus lands for sensitive bird species, and that development of the site would not result in loss of nesting or other habitat for such species.

**5. Impacts to Adjacent Neighborhoods.** Many comments were received about possible impacts to adjoining neighborhoods from light and noise.

*CSU Response:* Cal Poly has modified its plan to include mitigation measures that will reduce the likelihood of impacts. Directives are established for lighting placement and design. Noise, especially from any developed or relocated sports facility, will be analyzed as part of the facility design and mitigated through speaker disbursement and location.

**6.** Alternative Transportation. Several comments were received about the university's program for alternative transportation, with special emphasis on maintaining the bus subsidy.

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*CSU Response:* Cal Poly's primary approach to addressing alternative transportation for the master plan is to house all new enrollment on campus, thereby reducing the need for automobile transportation by students. In addition, Cal Poly will institute a number of measures to reduce traffic and demand for parking, including restrictions on freshmen parking, geographic controls and other measures. Cal Poly will continue to subsidize the bus passes at least to current levels.

Volume II of the FEIR contains all of the public comments received as well as detailed responses.

## Background

The Board of Trustees' CSU Growth Plan directed that proposals be developed for modification of physical master plan ceilings at five campuses including Cal Poly. The Cal Poly master plan revision represents the culmination of a four-year planning process. The plan will guide the future development of the university entering the 21st century up to a 17,500 FTES academic cap from the current 15,000 FTES. The master plan provides a framework for the university's decisions concerning allocation and management of resources, capital outlay programs and construction planning for facilities and improvements needed to accommodate 17,500 FTES.

Specifically, the master plan provides strategies to achieve the university's mission:

- Polytechnic
- "Learn by doing"
- Primarily undergraduate
- Student-centered community
- State-of-the-art education (programs, practice, pedagogy and services)
- Social and intellectual diversity
- Statewide service area
- Technological currency

## **Campus Master Plan**

The campus master plan addresses academic program demand, physical and environmental constraints and opportunities, and capital and operating budget requirements to support a future enrollment of 17,500 academic year FTES and 2,500 summer FTES. The plan anticipates a modest increase in technology-supported instruction and enhancements to curricula and advising to accelerate student progress to degree completion. Together these operational changes are designed to increase summer enrollment, apply technology, facilitate student progress, and increase college year enrollment by about nine percent without increasing fall headcount. The physical development of the plan focuses on land use and circulation issues associated with

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increasing enrollment during the academic year, as this scenario involves the most extensive change on campus. Enrollment growth projections translate into a fall headcount of approximately 20,900 students and about 3,200 regular faculty and staff (17 percent over present capacity) to be accomplished in phases over approximately twenty years. Because demographers expect the demand for higher education to increase rapidly through about 2010, the earlier phases of the plan may need to accommodate more enrollment than later phases. The campus master plan redevelops and consolidates academic facilities within an expanded instructional core south of Brizzolara Creek. At the same time, the plan is designed to protect natural environmental features and agricultural lands that form the character of the campus. A central feature of the plan involves creating new student residential communities accommodating approximately 3,000 additional students and provision of faculty and staff housing. Student services and recreational facilities would be expanded commensurate with increased enrollment. Although parking may increase over existing numbers, the ratio of parking to students is planned to decrease during the planning period.

#### **University Land Uses**

The campus master plan takes a broad approach to the analysis of the most suitable future use of all university land in San Luis Obispo County, including management practices to protect the university's unique natural environment. The master plan team has applied principles from campus and community task forces that met during spring 1999 to designate future land uses and develop the following physical plan elements:

*Natural Environment.* Environmentally sensitive areas and assets are designated as an overlay determined by physical and biological features of the land. Principles focus on stewardship, protection and restoration.

*Outdoor Teaching and Learning.* "Living laboratories" (e.g., agricultural fields and units, ecological study areas, and design village) are central to Cal Poly's mission and must remain integrated with the campus.

*Campus Instructional Core.* Additional enrollment requires about 250,000 square feet of new instructional space in the campus core. Principles focus on creating a compact, "student-friendly, learner-centered" area with more open space and better pedestrian and bicycle circulation. *Residential Communities.* New student housing complexes are conceived as living/learning communities, directly accessible to the campus instructional core. New undergraduate student housing for 3,000 students on campus will reduce community impacts of enrollment growth.

*Recreation.* Flexible outdoor recreational fields and indoor facilities will serve the changing student population.

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*Circulation, Alternative Transportation and Parking.* Circulation systems provide improved access to the campus and movement within it. The campus master plan encourages alternative forms of transportation to reduce congestion and parking. Internal circulation focuses on "user-friendly" pedestrian access and increasing vehicle access efficiency. Parking is consolidated and ratios are decreased.

*Public Facilities and Utilities.* Essential support facilities can be located outside the campus instructional core unless they require a central location to function effectively.

*Support Activities and Services.* A wide array of academic and support activities must be available to serve Cal Poly's diverse student, faculty, staff and visitor populations in both the instructional core and new residential communities.

Ancillary Activities and Services. A number of activities that serve the broader community, as well as Cal Poly, are complementary to the university's instructional mission. However, not all of these facilities need to be provided within the campus instructional core.

## **Proposed Revisions**

Attachment A identifies the proposed revisions with a hexagon numbering system as indicated below:

Hexagon 1:	Foundation Administration Addition
Hexagon 2:	Engineering III
Hexagon 3:	Davidson Music Center Addition
Hexagon 4:	Activities Center
Hexagon 5:	University Police
Hexagon 6:	Foundation Warehouse Expansion
Hexagon 7:	New Corporation Yard
Hexagon 8:	New Farm Shop/Transportation Services
Hexagon 9:	Alumni Center/Professional Development Conference Center
Hexagon 10:	Chorro Creek Bull Test
Hexagon 11:	Parking Structure 2
Hexagon 12:	Parking Structure 3
Hexagon 13:	Children's Center Addition
Hexagon 14:	Visitor Center
Hexagon 15:	Goldtree Research Park
Hexagon 16:	Faculty/Staff Housing South
Hexagon 17:	New Feed Mill
Hexagon 18:	Agriculture Pavilion
Hexagon 19:	Athletic Field House

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> Hexagon 20: Athletic Field Facility Hexagon 21: Student Housing Hexagon 22: Student Housing 1 Hexagon 23: Student Housing 2 Hexagon 24: Student Housing 3 Hexagon 25: Student Housing 4 Hexagon 26: Student Housing 5 Hexagon 27: Student Housing 6 Hexagon 28: Student Housing 7 Hexagon 29: The Center for Science and Mathematics Hexagon 30: Centennial Building 1 Hexagon 31: Centennial Building 2 Hexagon 32: Centennial Building 3 Hexagon 33: Centennial Building 4 Hexagon 34: Centennial Building 5 Hexagon 35: Architecture 2 Hexagon 36: Architecture 3 Hexagon 37: College of Engineering Research Center Hexagon 38: Engineering 3 Addition Hexagon 39: Center for Technology/Enhanced Learning Hexagon 40: Agriculture Learning Center Hexagon 41: Northeast Polytechnic Center 1 Hexagon 42: Northeast Polytechnic Center 2

#### **Fiscal Impact**

Implementation of the proposed campus master plan revision adds state funded improvements at approximately \$550 million and nonstate funded improvements at \$300 million for an estimated cost of \$850 million in current dollars.

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#### **Integration of the Plan and CEQA**

At the outset, the university chose to integrate environmental analysis into the development of the campus master plan. During the development of the plan, analysis of environmental constraints and opportunities informed the plan-making process. Resulting findings guided and to some extent limited the alternatives considered under the plan. For example, prime agricultural lands were identified early in the planning process so that no development would be proposed in those areas. Land use, housing and transportation policies were designed to reduce the likelihood of impacts from the many proposals considered. Recent experience with other campus projects, as well as input from Master Plan Task Forces, reminded the master plan team of sensitivities in adjoining neighborhoods.

#### California Environmental Quality Act (CEQA) Action

A comprehensive FEIR has been prepared pursuant to the requirements of CEQA and the state CEQA Guidelines. The FEIR is presented to the Board of Trustees for certification as part of this agenda item. A Notice of Preparation (NOP) and Initial Study were prepared in August 2000 for the proposed campus master plan (i.e., the proposed project). The NOP/Initial Study was circulated to interested public agencies, organizations, community groups and individuals in order to receive input on the scope of the Draft Environmental Impact Report (DEIR) analysis. The campus also held numerous public information meetings to obtain public input on the campus master plan and scope of the DEIR analysis. The campus held public meetings to obtain public comment on the DEIR on November 15 and 16, 2000. The DEIR was circulated for public comment from October 10, 2000 through December 8, 2000.

The DEIR addressed potential impacts associated with the Cal Poly campus master plan. The DEIR identified the following resource with unavoidable significant impacts for which mitigation measures are included and for which the resolution includes the required overriding considerations:

Air Quality – Construction and Operational

The DEIR identified the following resources with potentially significant impacts for which mitigation measures are included that reduce impacts to levels below significant:

Geology and Soils Hydrology and Water Quality Biological Resources Agriculture Cultural and Historic Resources Circulation CPB&G Agenda Item 4 March 20-21, 2001 Page 8 of 13

> Noise Aesthetics Public Services and Utilities Construction Impacts

A complete listing and discussion of project impacts and proposed mitigation measures are included in the FEIR describing the procedures that will be used to implement the mitigation measures.

## **Issues Identified Through Public Participation**

Public comments were received from forty-two individuals on the DEIR. Seventeen letters from public agencies or organizations were submitted commenting on the DEIR, including the California Regional Water Quality Control Board, City of San Luis Obispo, Air Pollution Control District, California Department of Transportation, and San Luis Obispo Council of Governments. The following issues were raised:

- 1. Regional Circulation Issues
- 2. "Goldtree" Research Park Development
- 3. Housing Development near Brizzolara Creek
- 4. Loss of Foraging Habitat
- 5. Impacts to Adjacent Neighborhoods
- 6. Alternative Transportation

Responses have been prepared to address the concerns raised and to indicate where and how the EIR and campus master plan address environmental issues. Where appropriate, changes made in the DEIR in response to these comments are indicated in the response and the actual EIR revisions are contained in Section 6.0 of the campus master plan. Findings of fact and the specific mitigation measures and the statement of overriding consideration for impacts that cannot be mitigated are included in a separate document in the agenda mailing. A summary of the responses to these comments follows:

**1. Regional Circulation Issues.** Some comments indicated that CSU should address off-campus roadway issues that will be affected by campus development.

*CSU Response:* Cal Poly has identified master plan impacts at certain locations of the roadway infrastructure as significant, and has identified a program of improvements to be implemented as the appropriate mitigation, to the extent feasible, to reduce project traffic impacts to less than significant levels. Cal Poly will work with its neighboring jurisdictions to identify improvements to regional circulation. However, monitoring and implementation of the mitigation for locations within the jurisdiction of other public agencies, including the City of San Luis Obispo and

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Caltrans, are the responsibility of these public agencies that are vested with the authority, responsibility, and revenue sources to implement roadway infrastructure improvements. Allocation of funds received by regional and local agencies for roadway improvements within their jurisdictions in order to meet recognized needs is solely within the authority and purview of these agencies.

**2. "Goldtree" Research Park Development.** The City of San Luis Obispo indicated concerns about future development of the "Goldtree" site located west of the main campus.

*CSU Response:* An applied research park would be developed in partnership with the local community at Goldtree. Local businesses would have an opportunity to be considered as vendors and service providers as well as occupants of the applied research park. The site is in a location that has relatively low-value grazing land, low visibility from Highway 1, is adjacent to the city's wastewater treatment plant, and near the California Men's Colony. Additional environmental work will be undertaken when a project for the site has been developed.

**3. Housing Development near Brizzolara Creek.** Many comments concerned the proximity of student housing complexes proposed near Brizzolara Creek.

*CSU Response:* The master plan team made extensive efforts to relocate the two housing complexes at a suitable distance from the creek corridor that resulted in the creation of the Brizzolara Creek Enhancement Project and the re-adsorption of units initially proposed for location along the creek.

**4. Loss of Foraging Habitat.** Concerns were raised regarding development in certain locations on campus and the gradual and cumulative loss of deep valley soil grass habitat that is important for raptor and other animals.

*CSU Response:* The grasslands are currently used for grazing and foraging of animal species. Valley grasslands consisting of species typical of pasture vegetation are not considered a sensitive plant community at the state and federal level, or by the California Native Plant Society. Therefore, the loss of this vegetative community is not considered a significant impact. In order to consider the loss of foraging habitat a significant impact under CEQA, CSU would have to find that the proposed development would "have a substantial adverse effect [through habitat modification]" on sensitive species as defined in the EIR. Cal Poly finds that there is adequate foraging habitat on surrounding Cal Poly lands for sensitive bird species, and that development of the site would not result in loss of nesting or other habitat for such species.

**5. Impacts to Adjacent Neighborhoods.** Many comments raised concerns about possible impacts to adjoining neighborhoods from light and noise.

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*CSU Response*: Cal Poly has modified its plan and EIR to include mitigation measures that will reduce the likelihood of impacts. Directives are established for lighting placement and design. Noise, especially from any developed or relocated sports facility, will be analyzed as part of the facility design and mitigated through speaker disbursement and location.

**6.** Alternative Transportation. Several comments were received about the university's program for alternative transportation with special emphasis on maintaining the bus subsidy.

*CSU Response:* Cal Poly's foremost approach to addressing alternative transportation is to house all new enrollments on campus, thereby reducing the need for automobile transportation by students. In addition, Cal Poly will institute a number of measures to reduce traffic and demand for parking, including restrictions on freshmen parking, geographic controls and other measures. Cal Poly will continue to subsidize the bus passes at least to current levels.

## Alternatives

The FEIR alternatives section has been prepared in accordance with CEQA and the state CEQA Guidelines. The preferred alternative is the proposed project, including revisions to the Cal Poly campus master plan as indicated on Attachment A. The alternatives shown below were analyzed and compared to the proposed project in the FEIR and the ability of each alternative to reduce impacts was also identified and considered in the FEIR.

Alternative 1: No Project alternative required by CEQA considers no new development on campus and continuation of the campus under the current master plan.

Alternative 2: Alternative Enrollment Scenarios that consider different approaches to increasing the education potential of the university without necessarily increasing enrollment.

*Alternative 3: Alternatives to Plan Components* considers modifications to several of the larger components of the master plan, including alternatives to on-campus housing, remodeling Mustang Stadium, and alternative parking approaches.

**NOTE:** A number of alternative locations and approaches were considered for all components of the master plan. These were often eliminated early because of the constraints analysis prepared prior to developing the master plan. These alternatives are often described in marginal notes throughout the master plan.

For a detailed discussion of the alternatives to the proposed project, please see page 332 of the FEIR. The alternatives to the proposed project were rejected as infeasible or less environmentally sound, and the proposed project was found to be preferable to the rejected alternatives. For

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specific findings regarding the infeasibility of the rejected alternatives please see the CEQA Findings of Fact and Statement of Overriding Considerations.

The following resolution is recommended for approval:

**RESOLVED,** By the Board of Trustees of the California State University, that:

- 1. The FEIR for the Cal Poly campus master plan was prepared to address the potential significant environmental effects, mitigation measures and project alternatives associated with approval of the proposed campus master plan, and all discretionary actions relating thereto, including the component construction projects as identified on Page 230, Project Description, of the FEIR.
- 2. The FEIR (State Clearinghouse No. 2000081102) was prepared pursuant to the California Environmental Quality Act (CEQA) and the state CEQA Guidelines.
- 3. This resolution is adopted pursuant to the requirements of Section 21081 of the Public Resources Code and Section 15091 of the state CEQA Guidelines, which require that the Board of Trustees make findings prior to the approval of a project (along with statements of facts supporting each finding).
- 4. This board hereby adopts the findings of fact and related mitigation measures provided under separate cover for Agenda Item 4 of the March 20-21, 2001 meeting of the Committee on Campus Planning, Buildings and Grounds, which identify specific impacts of the proposed project and related mitigation measures which are hereby incorporated by reference.
- 5. The board's findings include specific overriding considerations that outweigh certain remaining significant impacts.
- 6. The FEIR has been prepared to address the environmental impacts, mitigation measures, project alternatives, comments and responses to comments associated with the approval of the Cal Poly campus master plan revision pursuant to the requirements of CEQA and the state CEQA Guidelines.
- 7. Prior to certification of the FEIR, the Board of Trustees has reviewed and considered the above-mentioned FEIR. The board hereby certifies the FEIR for the Cal Poly campus master plan revision as complete and adequate in that the FEIR addresses all environmental impacts of the

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> proposed project and fully complies with the requirements of CEQA and the state CEQA Guidelines. For the purpose of CEQA, the record of the proceedings for the project comprises the following:

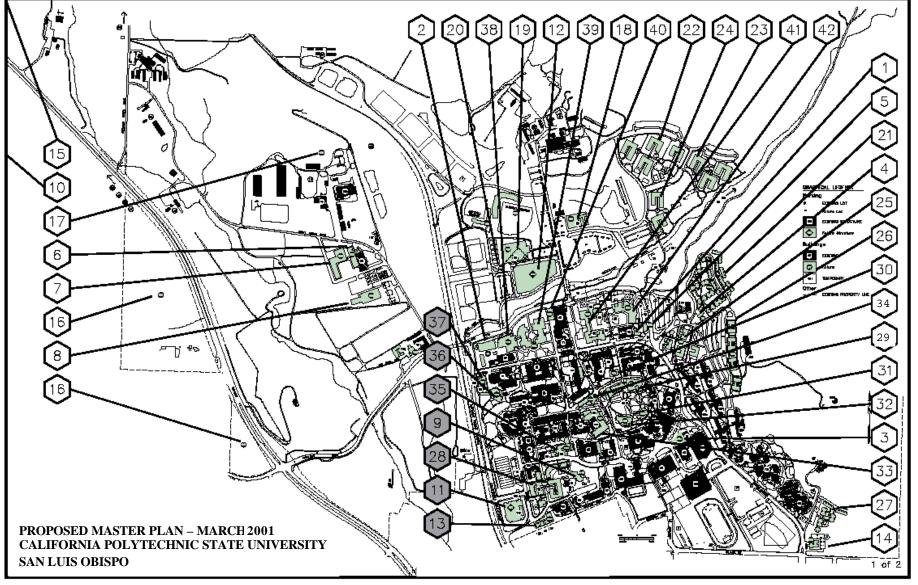
- A. The DEIR for the Cal Poly campus master plan revision;
- B. The FEIR, including comments received on the DEIR and responses to comments;
- C. The proceedings before the Board of Trustees relating to the subject project, including testimony and documentary evidence introduced prior to or at the meeting; and
- D. All attachments, documents incorporated, and references made in the documents as specified in items A through C above.

All of the above information is on file with the California State University, Office of the Chancellor, Capital Planning, Design and Construction, 401 Golden Shore, Long Beach, California 90802-4210 and California Polytechnic State University, San Luis Obispo, Department of Facilities Planning and Management, 1 Grand Avenue, San Luis Obispo, California 93407.

- 8. The board certifies the FEIR for the Cal Poly campus master plan revision, including its component construction projects.
- 9. The board finds that the FEIR has sufficiently analyzed the environmental impacts and mitigation measures for the campus master plan revision, including the component construction projects identified in the FEIR, and that the resolutions and approvals being provided by the board apply to the construction of these component projects. The board shall consider the FEIR in connection with any approvals of the component projects.
- 10. The mitigation measures identified in the Mitigation Monitoring and Reporting Plan are hereby adopted and shall be monitored and reported in accordance with the Mitigation Monitoring and Reporting Plan, which is under separate cover for Agenda Item 4 of the March 20-21, 2001 meeting of the Committee on Campus Planning, Buildings and Grounds, which meets the requirements of CEQA (Public Resources Code Section 21081.6).

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- 11. The Cal Poly campus master plan revision, dated March 2001, is hereby approved with the goal of serving 17,500 full-time equivalent students.
- 12. The chancellor or his designee is requested under the Delegation of Authority granted by the Board of Trustees to file the Notice of Determination with respect to the Cal Poly campus master plan revision.



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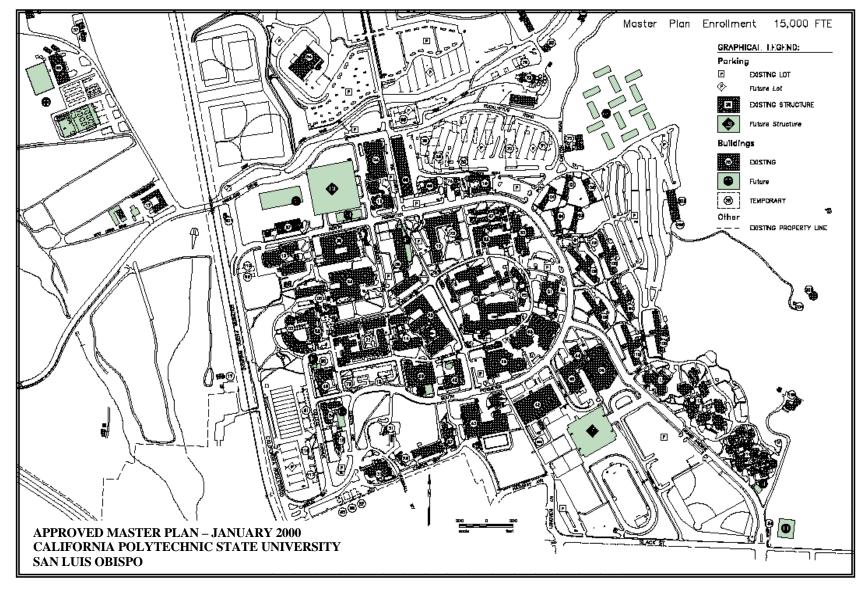
#### CALIFORNIA POLYTECHNIC STATE UNIVERSITY, SAN LUIS OBISPO CAMPUS MASTER PLAN Proposed March 2001

#### FACILITY LEGEND: EXISTING FACILITY/Proposed Facility

1	ADMINISTRATION	26	GRAPHIC ARTS	35	ROBERT E.		RECEIVING
2	EDUCATION	27	HEALTH CENTER		KENNEDY		WAREHOUSE
3	BUSINESS	28	ALBERT B. SMITH		LIBRARY	71	
4	RESEARCH		ALUMNI AND	36	MANUFACTURING		TRANSPORTATI
	DEVELOPMENT		CONFERENCE	38	MATHEMATICS		ON
	CENTER		CENTER		AND SCIENCE		SERVICES
5	ARCHITECTURE &	29	HOUSING OFFICE	39	MEATS UNIT	74	UNIVERSITY
		30	HORSESHOEING		ABATTOIR		POLICE
	ENVIRONMENTAL		UNIT	40	ENGINEERING	74E	University Police
	DESIGN	32	HORSE UNIT		SOUTH	75	MUSTANG
6	PERFORMING	33	CLYDE P. FISHER	41	Engineering III		SUBSTATION
	ARTS		SCIENCE HALL	42	ROBERT E. MOTT		
	CENTER	34	WALTER F.		PHYSICAL		
7	ADVANCED		DEXTER		EDUCATION		
	TECHNOLOGY		BUILDING	43	RECREATION		
	LABORATORIES				CENTER		
8	AGRICULTURAL			43A	PHYSICAL		
	ENGINEERING				EDUCATION		
8A	AGRICULTURAL				CLASSROOMS		
	ENGINEERING				AND OFFICES		
	SHOP			44	CAL POLY		
9	FARM SHOP				THEATRE		
10	ALAN A. ERHART			45	H. P. DAVIDSON		
	AGRICULTURE				MUSIC CENTER		
11	AGRICULTURAL			45A	Davidson Music		
	SCIENCES				Center Addition		
12	AIR			46	NATATORIUM		
	CONDITIONING			47	FACULTY OFFICES		
13	ENGINEERING				NORTH		
14	FRANK E. PILLING			48	ENVIRONMENTAL		
	BUILDING				HORTICULTURE		
15	FOUNDATION				SCIENCE		
				51	PRESIDENT'S		
	INISTRATION				RESIDENCE		
15A	Foundation			52	SCIENCE		
	Administration			53	SCIENCE NORTH		
	Addition			55	BEEF CATTLE		
16	BEEF UNIT				EVALUATION		
17	CROPS UNIT				CENTER		
18	DAIRY SCIENCE			56	SWINE UNIT		
19	DINING COMPLEX			57	VETERINARY		
20	ENGINEERING			<b>5</b> 0	HOSPITAL		
201	EAST			58	WELDING		
20A	ENGINEERING			60	CRANDALL		
	EAST				GYMNASIUM		
OFF	FACULTY			61	MUSTANG		
OFFI				65	STADIUM		
21	ENGINEERING			65	JULIAN A.		
22	WEST				MCPHEE		
22	ENGLISH				UNIVERSITY		
23	FEED MILL FOOD PROCESSING			<i>L L</i>	UNION Activities Contor		
24 25				66 70	Activities Center FACILITY		
25	FACULTY OFFICES EAST			70	SERVICES /		

76	OLD POWER	129	AVILA RI
	PLANT	130	GRAND A
77	RODEO ARENA		PARKIN
78	ROSE FLOAT SHOP		STRUCI
80	HOUSING	131	Parking S
	WAREHOUSE /	132	Parking S
		133	CHILDRE
	ENVIRONMENTAL		CENTE
	HEALTH	133F	Children's
	AND SAFETY		Addition
81	HILLCREST	134	VISITOR
82	FOUNDATION		INFORM
	WAREHOUSE	134A	Visitor Cel
82C	New Corporation	150	POULTRY
000	Yard		INSTRU
82D	Foundation	151	CENTE
	Warehouse	151	Goldtree I
82E	Expansion New Farm Shop /	152	Park Faculty/Si
02E	Transportation	132	North
	Services	153	Faculty/Si
85	COTTAGE 1	155	South
86	COTTAGE 2	154	New Feed
87	COTTAGE 2 COTTAGE 3	160	SPORTS (
92	POLY GROVE REST	164	Agricultur
12	ROOM	165	Athletic F
96	HOBBY GARAGE	166	Athletic F
100	SHASTA HALL	170	Student H
101	DIABLO HALL	171	Student H
102	PALOMAR HALL	172	Student H
103	WHITNEY HALL	173	Student H
104	LASSEN HALL	174	Student H
105	TRINITY HALL	175	Student H
106	SANTA LUCIA	176	Student H
	HALL	177	Student H
107	MUIR HALL	180	The Cente
108	SEQUOIA HALL		Science a
109	FREMONT HALL		Mathemat
110	TENAYA HALL	181	Centennia
111	Alumni Center/		1
	Professional	182	Centennia
	Development		2
	Conference Center	183	Centennia
112	VISTA GRANDE		3
113	SIERRA MADRE	184	Centennia
	HALL		4
114	YOSEMITE HALL	185	Centennia
115	CHASE HALL		5
116	JESPERSEN HALL	186	Architectu
117	HERON HALL	190	Architectu
117T	CAD RESEARCH	191	College of
110	CENTER		Engineeri
119	MODOC HALL CHEDA RANCH	102	Research
121 122		192	Engineeri
122	PARKER RANCH PETERSON RANCH	102	Addition
123	STUDENT	193	Center for Technolog
124	SERVICES		Enhance
125	SERRANO RANCH	194	Agricultur
125	CHORRO CREEK	1/7	Center
120	RANCH	195	Northeast
126D	Chorro Creek Bull		Center 1
	Test	196	Northeast
127	ESCUELA RANCH	-	Center 2
128	PARSON'S		
	RESIDENCE		

	AVII A DEGIDENCE
29	AVILA RESIDENCE
30	GRAND AVENUE
	PARKING
	STRUCTURE
. 1	
31	Parking Structure 2
32	Parking Structure 3
33	CHILDREN'S
	CENTER
3F	Children's Center
51	
	Addition
84	VISITOR
	INFORMATION
4A	Visitor Center
50	POULTRY SCIENCE
	INSTRUCTIONAL
	CENTER
51	Goldtree Research
1	
	Park
52	Faculty/Staff Housing
	North
53	Faculty/Staff Housing
	South
54	New Feed Mill
	SPORTS COMPLEX
50	SPORTS COMPLEX
54	Agriculture Pavilion
55	Athletic Field House
66	Athletic Field Facility
0'0	Student Housing
1	Student Housing 1
2	Student Housing 2
3	Student Housing 3
4	Student Housing 4
5	Student Housing 5
6	Student Housing 6
7	Student Housing 7
30	The Center for
,0	Science and
	Mathematics
. 1	
31	Centennial Building
	1
32	Centennial Building
	2
33	Centennial Building
	3
34	Centennial Building
-	-
. ~	4
35	Centennial Building
	5
36	Architecture 2
0	Architecture 3
91	College of
	Engineering
	Research Center
02	Engineering 3
12	0
	Addition
93	Center for
	Technology/
	Enhanced Learning
94	Agriculture Learning
	Center
95	Northeast Polytechnic
-	Center 1
96	
.0	Northeast Polytechnic
	Center 2



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#### CALIFORNIA POLYTECHNIC STATE UNIVERSITY, SAN LUIS OBISPO CAMPUS MASTER PLAN Approved January 2000

#### FACILITY LEGEND: EXISTING FACILITY/Proposed Facility

1 2	ADMINISTRATION	25	FA E
	EDUCATION	26	
3	BUSINESS	26	GR
4	RESEARCH	26A	Gr
	DEVELOPMENT	27	HE
	CENTER	28	AL
5	ARCHITECTURE	29	HC
	AND	30	HC
			U
	ENVIRONMENTAL	31	Hoi
	DESIGN	32	НО
6	PERFORMING	33	CL
0	ARTS	55	S
	CENTER	34	W
7		54	
7	Advanced		DE
Techr	ıology		В
	Laboratories	35	RC
8	BIORESOURCE		K
	AND		L
	AGRICULTURAL	36	MA
	ENGINEERING	38	MA
9	FARM SHOP		Α
10	ALAN A. ERHART		Е
10	AGRICULTURE	39	M
11	AGRICULTURAL	57	(4
11		40	
10	SCIENCES	40	EN
12	AIR		S
	CONDITIONING	41	En
13	ENGINEERING		(1
14	FRANK E. PILLING		P
	BUILDING	42	RC
15	FOUNDATION		P
			Е
ADM	INISTRATION	43	RE
16	BEEF UNIT		С
17	CROPS UNIT	43A	PH
18	DAIRY SCIENCE	454	E
18A	DAIRY PRODUCTS		C
	TECHNOLOGY		0
	CENTER	44	CA
19	UNIVERSITY		Т
	DINING	45	H.
	COMPLEX		N
20	ENGINEERING	46	NA
	EAST	46A	Na
20A	ENGINEERING		A
	EAST	47	FA
	FACULTY	17	N
OFFI		48	EN
		40	
21	ENGINEERING		H
	WEST		S
22	ENGLISH	49	Fa
23	FEED MILL	51	PR
24	FOOD PROCESSING		R

A	FACULTY OFFICES EAST GRAPHIC ARTS Graphic Arts Press HEALTH CENTER ALUMNI HOUSE HOUSING OFFICE HORSESHOEING UNIT	
	Housing Center	
	HORSE UNIT	
	CLYDE P. FISHER SCIENCE HALL	
	WALTER F.	
	DEXTER	
	BUILDING	
	ROBERT E.	
	KENNEDY	
	LIBRARY	
	MANUFACTURING MATHEMATICS	
	AND HOME	
	ECONOMICS	
	MEATS UNIT	
	(ABATTOIR)	
	ENGINEERING	
	SOUTH	
	Engineering III (Eng/Arch R&R	
	Phase I)	
	ROBERT E. MOTT	
	PHYSICAL	
	EDUCATION	
	RECREATION	
4	CENTER	
+	PHYSICAL EDUCATION	
	CLASSROOMS /	
	OFFICES	
	CAL POLY	
	THEATRE	
	H. P. DAVIDSON	
	MUSIC CENTER NATATORIUM	
ł	Natatorium	
1	Addition	
	FACULTY OFFICES	
	NORTH	
	ENVIRONMENTAL	
	HORTICULTURE SCIENCE	
	Faculty Offices 3	
	PRESIDENT'S	
	RESIDENCE	

52	SCIENCE	105	TRINITY HALL
53	SCIENCE NORTH	106	SANTA LUCIA
54	SHEEP UNIT		HALL
55	BEEF CATTLE	107	MUIR HALL
	EVALUATION	108	SEQUOIA HALL
	CENTER	109	FREMONT HALL
56	SWINE UNIT	110	TENAYA HALL
57	VETERINARY	111	Alumni Center/
	HOSPITAL		Professional
58	WELDING		Development
60	CRANDALL		Conference Center
	GYMNASIUM	112	VISTA GRANDE
61	MUSTANG		<b>REST AURANT</b>
	STADIUM	113	SIERRA MADRE
64	Bookstore Annex/		HALL
	Northwest Complex	114	YOSEMITE HALL
65	JULIAN A.	115	CHASE HALL
	MCPHEE	116	JESPERSEN HALL
	UNIVERSITY	117	HERON HALL
	UNION	117T	CAD RESEARCH
66	Student Housing		CENTER
	Complex	119	MODOC HALL
70	FACILITY	124	STUDENT
	SERVICES /		SERVICES
	RECEIVING	128	PARSON'S RANCH
	WAREHOUSE		RESIDENCE
71		129	AVILA RESIDENCE
	TRANSPORTATI	130	Parking Structure I
	ON	131	Parking Structure II
	SERVICES	132	Student Services
74	PUBLIC SAFETY		Addition
75	MUSTANG	133	CHILDREN'S
	SUBSTATION		CENTER
76	OLD POWER	134	VISITOR
	PLANT		INFORMATION
77	RODEO ARENA		(GRAND AVE)
78	ROSE FLOAT LAB	150	POULTRY SCIENCE
80	HOUSING	160	Sports Complex
	WAREHOUSE	201	PUMPHOUSE 1
81	HILLCREST		(@ POLY GROVE)
82	FOUNDATION	202	PUMPHOUSE 2
	WAREHOUSE		(@ WATER
85	COTTAGE 1		RESERVOIR)
86	COTTAGE 2		
87	COTTAGE 3		
92	POLY GROVE REST		
	ROOM		
96	STUDENT HOBBY		
	GARAGE		
100	SHASTA HALL		
101	DIABLO HALL		
102			
	PALOMAR HALL		
103	PALOMAR HALL WHITNEY HALL		
103 104			

203	WATER
	RESERVOIR
	1 (@ PUMPHOUSE
	202)
204	WATER
	RESERVOIR
	2 (UPHILL FROM
	203)
205	PUMPHOUSE 3
206	WATER

RESERVOIR

#### **Information Item**

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#### COMMITTEE ON CAMPUS PLANNING, BUILDINGS AND GROUNDS

#### Status Report on the 2001/02 State Funded Capital Outlay Program

#### **Presentation By**

J. Patrick Drohan Assistant Vice Chancellor Capital Planning, Design and Construction

#### Summary

This item presents a comparison between the CSU 2001/02 state funded capital outlay program request and the funding level recommended by the Legislative Analyst's Office.

#### Background

The California State University's proposed 2001/02 Capital Outlay Program and Five-Year Capital Improvement Program 2001/02 through 2005/06 were presented at the September 2000 Board of Trustees' meeting. Although the 2001/02 state funded request identified campus needs totaling \$555.8 million, the trustees approved a priority list totaling \$207 million based on the anticipated funding level from the 1998 four-year general obligation bond measure (Proposition 1A). The trustees also requested that the chancellor explore with the governor and legislature possibilities of funding the entire \$555.8 million program.

The Legislative Analyst's Office will publish the *Analysis of the 2001/02 Budget Bill* in February 2001. The governor's budget maintained the \$207 million CSU request with a few adjustments to the program, which were reported to the board at the January meeting. A handout will be presented comparing the trustees' budget request, the governor's proposed budget, and the recommendations by the Legislative Analyst's Office.

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#### COMMITTEE ON CAMPUS PLANNING, BUILDINGS AND GROUNDS

Preliminary State and Nonstate Funded Five-Year Capital Improvement Program 2002/03 Through 2006/07

#### **Presentation By**

J. Patrick Drohan Assistant Vice Chancellor Capital Planning Design and Construction

#### Summary

This item requests the Board of Trustees' approval of the preliminary state and nonstate funded fiveyear capital improvement program 2002/03 through 2006/07.

#### Background

The Board of Trustees adopted the categories and criteria to be used in setting project priorities for the CSU state funded five-year capital improvement program at the January 2001 meeting. The draft Preliminary State and Nonstate Funded Five-Year Capital Improvement Program was presented at the February 2001 Executive Council meeting. The Chancellor's Office has now revised the program based on additional review and discussion with the campuses.

#### State and Nonstate Funded Five-Year Capital Improvement Program 2002/03-2006/07

The CSU state funded capital outlay program for 2002/03 identifies campus needs totaling \$429.3 million and a five-year plan totaling \$3.6 billion.

As reported to the board at the November 2000 meeting, the program's schedule and format has been developed in accordance with new legislation requiring a five-year statewide infrastructure plan (AB 1743). We are seeking the board's approval of the preliminary program in order to submit our project requests to the Department of Finance for consideration in the development of the statewide five-year plan. Once the administration defines a projected funding level based on statewide needs and estimated resources, we will return to the board for approval of the final five-year plan including the 2002/03-action year request. CSU priorities include the completion of previously funded projects, telecommunication infrastructure, seismic strengthening, renovation of older facilities, and growth for campus enrollments. Additional refinements to project scope and budget will occur prior to requesting final board approval. The projects are indexed at the July 2001 Engineering News-Record California

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Building Construction Cost Index (CCCI 4019) pending the Department of General Services' CCCI projection for July 2002.

Funding for the program is dependent upon voter approval of a future general obligation bond measure.

The nonstate program identifies a \$1.7 billion five-year plan that will be funded through campus auxiliary organizations, public/public and public/private partnerships, donations, and the student union, housing and parking programs. The latter three programs rely on user fees to repay bonds issued by the Board of Trustees.

## Action

Approval by the board is requested for the preliminary state funded five-year capital improvement program 2002/03 through 2006/07 for \$3,552,135,000. The program is being distributed under separate cover of this agenda item. In order to keep funding options open, the resolution directs staff to negotiate with the Governor's Office during the budget process to maximize funding opportunities for the campuses. Approval is also sought for the preliminary five-year nonstate funded capital improvement program in the amount of \$1,697,373,000. A summary of both programs follows:

Preliminary State Funded Five-Year Capital Improvement Program at CCCI 4019 Summary (In Thousands of Dollars)					
Category	2002/03	2003/04	2004/05	2005/06	2006/07
I. Existing Facilities/Infrastructure					
IA. Critical Infrastructure	111,969	36,517	25,000	25,000	25,000
Deficiencies					
IB. Modernization /Renovation	150,194	993,868	503,661	212,568	317,302
II. New Facilities/ Infrastructure	167,163	538,770	226,490	145,009	73,624
Totals	429,326	1,569,155	755,151	382,577	415,926

Preliminary State Funded Five-Year Capital Improvement Program Summary (Percent by Category)					
Category	2002/03	2003/04	2004/05	2005/06	2006/07
I. Existing Facilities/Infrastructure					
IA. Critical Infrastructure Deficiencies	26.1	2.3	3.3	6.5	6.0
IB. Modernization /Renovation	35.0	63.3	66.7	54.9	76.0

#### **Action Item**

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II. New Facilities/ Infrastructure	38.9	34.4	30.0	38.6	18.0
Totals	100.0	100.0	100.0	100.0	100.0
Preliminary Nonstate Funded Five	e-Year Capit	al Improven	nent Progra	m at CCCl	[ 4019
Sur	nmary (in thous	ands of dollars)			
Category	2002/03	2003/04	2004/05	2005/06	2006/07
I. Donor/Grants/Other	113,568	288,649	69,346	73,377	34,036
II. Housing Program	41,074	410,214	285,656	102,205	36,656
III. Parking Program	3,044	110,265	4,183	256	0
IV. Student Union Program	6,300	51,604	53,632	0	13,308
Totals	163,986	860,732	412,817	175,838	84,000

The following resolution is recommended for approval:

**RESOLVED**, By the Board of Trustees of The California State University, that:

- 1. The Preliminary State and Nonstate Funded Five-Year Capital Improvement Program 2002/03 through 2006/07 totaling \$3,552,135,000 and \$1,697,373,000 respectively are approved.
- 2. The chancellor is requested to explore all reasonable funding methods available and communicate to the governor and the legislature the need to provide funds for the CSU state funded plan in order to develop the facilities necessary to serve all eligible students.
- 3. The chancellor is directed to return to the Board of Trustees for approval of the *final* State and Nonstate Funded Five-Year Capital Improvement Program 2002/03 through 2006/07, including the 2002/03-action year request, no later than the November 13-14, 2001 board meeting.

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#### COMMITTEE ON CAMPUS PLANNING, BUILDINGS AND GROUNDS

#### **Approval of Schematic Plans**

#### **Presentation By**

J. Patrick Drohan Assistant Vice Chancellor Capital Planning, Design and Construction

#### Summary

Schematic plans for the California Maritime Academy, engineering building renovation/addition will be presented for approval. The project architect is TLCD Architecture.

#### **Background and Scope**

The California Maritime Academy became a part of the CSU in July 1995. Several campus infrastructure/facility improvement projects have been completed since that time. The engineering building renovation/addition provides two basic uses: light labs/lecture space and heavy labs. The proposed project renovates 12,705 assignable square feet (ASF) of existing space addressing the building systems, code deficiencies for fire/life safety, and requirements of the American with Disabilities Act. It also accommodates programmatic needs as a secondary effect to the laboratory/library addition. New space totaling 9,215 ASF is for growth in the marine transportation program, and replacement space for two engineering programs providing faculty offices, laboratories and lecture facilities for 233 full-time equivalent students (FTES). Brick and cement plaster are two of the major exterior building materials. The east elevation facing the recently completed lab building integrates the use of brick wainscot with a cement plaster body and a parapet capped with a 6" stainless steel flashing that will visually tie the two buildings together. Type III construction (masonry, steel and wood) is required for the heavy lab areas. The office and lecture areas will be a combination of wood framed shear walls, metal studs at non-bearing walls and wood joists for the roof-framing members.

#### **Timing** (Estimated)

Completion of Preliminary Drawings Completion of Working Drawings Construction Start Construction Completion Occupancy April 2001 June 2001 November 2001 September 2002 September 2002 CPB&G Agenda Item 7 March 20-21, 2001 Page 2 of 3

## **Basic Statistics**

Gross Building Area	29,133 square feet
Assignable Building Area - New	9,215 square foot.
Renovated Area	12,705 square foot
Assignable Building Area - Total	21,920 square foot
Efficiency	75 percent

#### Cost Estimate—California Construction Cost Index CCCI 3909

Building Cost including Group 1 Equipment (\$163 per gross square foot)		\$4,739,000
<ul> <li>Systems Breakdown</li> <li>a Substructure (Foundation)</li> <li>b Shell (Structure and Enclosure)</li> <li>c. Interiors (Partitions)</li> <li>d. Services (HVAC, Plumbing, Electrical, Fire Protection)</li> <li>d. Other Building Construction</li> </ul>	(\$ per GSF) \$20.87 \$47.27 \$23.00 \$51.93 \$19.60	
Site Development (includes Landscaping)		284,000
Construction Cost		\$5,023,000
Fees and Contingency		<u>1,189,000</u>
Total Project Costs (\$213 per gross square foot) Group II Equipment		\$6,212,000 <u>1,037,000</u>
Grand Total		<u>\$7,249,000</u>

## **Cost Comparison**

This project's \$163 per GSF is comparable to the Pomona engineering labs replacement project approved by the board in September 1996 at \$157 per GSF when adjusted to CCCI 3909.

#### **Funding Data**

Funding for the project includes \$6,886,000 from state funds and \$363,000 from private donor funds totaling \$7,249,000.

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#### California Environmental Quality Act Action

An initial study was prepared and a Negative Declaration was filed with the State Clearinghouse on February 8, 2001. The 30-day public review period ends on March 12, 2001. Any adverse comments received during the review period will be reported at the meeting, and a copy of the Negative Declaration will be available.

The following resolution is recommended for approval:

**RESOLVED,** By the Board of Trustees of The California State University, that:

- 1. The board finds that the Negative Declaration for the California Maritime Academy, Engineering Building Renovation/Addition has been prepared in accordance with the requirements of the California Environmental Quality Act.
- 2 The proposed project will not have a significant effect on the environment, and the project will benefit The California State University.
- 3. The chancellor is requested under Delegation of Authority by the Board of Trustees to file the Notice of Determination for the project.
- 4. The schematic plans for the California Maritime Academy, Engineering Renovation/Addition are approved at a project cost of \$7,249,000 at CCCI 3909.

## AGENDA

#### TRUSTEES OF THE CALIFORNIA STATE UNIVERSITY

California State University Office of the Chancellor 401 Golden Shore Long Beach, California

May 16, 10:00 a.m.

Presiding: Laurence K. Gould, Chair

**Call To Order and Roll Call** 

**Chair's Report** 

**Chancellor's Report** 

Report of the CSU Alumni Council: President: Larry Adamson

Report of the California State Student Association: Shaun Lumachi

Report of California Postsecondary Education Commission: Ralph Pesqueira

#### Approval of Minutes of Board of Trustees' Meeting of March 21, 2001

#### **Board Items**

- 1. Recognition of the Women's Basketball Team at California State Polytechnic University Pomona, *Information*
- 2. Recognition of the Men's Soccer Team at California State University, Dominguez Hills, *Information*

#### **Report of Committees**

Committee of the Whole: Chair—Larry Gould

Committee on Educational Policy: Chair – Dee Dee Myers

#### Committee on Organization and Rules: Chair—Roberta Achtenberg

1. Schedule of Board of Trustees' Meetings, 2002

Committee on Audit: Chair – Frederick W. Pierce, IV

#### **Committee on Finance:** *Chair – William Hauck*

- 2. Approval for the Issuance of Debt Instruments Supported by the Sonoma State University Parking System Revenue Bonds, Series A, and Related Matters
- 3. Proposed Dissolution of Auxiliary Organization at California State University, Stanislaus-Stockton
- 4. Approval for the Issuance of the Debt Instruments supported by bonds of the California State University Housing Revenue Bond System for an Apartment Complex at California Polytechnic State University, San Luis Obispo and Related Matters

## Committee on Governmental Relations: Chair – Martha Fallgatter

1. 2001/2002 Legislative Report No. 3

## Committee on Institutional Advancement: Acting Chair – Roberta Achtenberg

- 1. Naming of Academic Program--California State University, Fresno
- 2. Naming of Academic Program---California State University, Fresno

#### Committee on Collective Bargaining: Chair – Ralph Pesqueira

#### Committee on Campus Planning, Building and Grounds: Chair – Stanley Wang

- 3. Approval of an Amendment to the Nonstate Funded Capital Outlay Program and Schematic Plans for the International Polytechnic High School at California State Polytechnic University, Pomona
- 4. Certify the Final Environmental Impact Report, Approve the Campus Master Plan Revision, Amend Nonstate Funded Capital Outlay Program and Schematic Plans for the National Training Center/Sports Complex at California State University, Dominguez Hills

## **Old Business**

#### **New Business**

Election of Chair and Vice Chair for 2001/2002 Election of Members to Standing Committees of the Board of Trustees for 2001/2002 Election of Members to the California Postsecondary Education Commission

## **Public Comment**

#### Adjournment

#### MINUTES OF MEETING OF BOARD OF TRUSTEES

Trustees of The California State University California State University, Long Beach University Student Union, Multipurpose Room ABC 1215 Bellflower Boulevard Long Beach, California

March 21, 2001

#### **Trustees Present**

Laurence K. Gould Jr., Chair Daniel Cartwright Martha C. Fallgatter Debra S. Farar Murray L. Galinson Harold Goldwhite William Hauck Shailesh J. Mehta Neel I. Murarka Dee Dee Myers, Vice Chair Frederick W. Pierce IV Ali Razi Charles B. Reed, Chancellor Anthony M. Vitti Stanley T. Wang

#### **Trustees Absent**

Cruz Bustamante, Lt. Governor Gray Davis, Governor Delaine Eastin, Superintendent of Public Education Robert Hertzberg, Speaker of the Assembly Roberta Achtenberg William D. Campbell Bob Foster Ralph Pesqueira

#### **Chancellor's Office Staff**

Christine Helwick, General Counsel Jackie R. McClain, Vice Chancellor, Human Resources Freda H. Otto, Administrative Officer in Charge, University Advancement David S. Spence, Executive Vice Chancellor and Chief Academic Officer Richard West, Executive Vice Chancellor and Chief Financial Officer

Chair Gould called the meeting to order at 10:45 a.m.

## **Chair's Report**

Chair Gould thanked President Maxson and his colleagues for their tremendous job of hosting the Board of Trustees at Cal State Long Beach.

Chair Gould noted the importance of faculty in the CSU, and about the effort that the CSU is placing on creating conditions to attract and retain high quality faculty in the future.

Chair Gould spoke about the issue of affordable housing for faculty at CSU and the continuing effort to urge legislators and the Governor to approve CSU's request for \$5 million to establish an employee housing assistance program.

Chair Gould noted the CSU's work to secure solid benefits for all of its employees by getting legislation passed that allows the Board of Trustees to address this issue. He reported that CSU is the first public university in California to offer benefits to domestic partners of CSU employees.

Chair Gould spoke of CSU's efforts to improve facilities though working with private donors as well as state supported construction and maintenance.

The Chair noted the work of each of the University Presidents as well as other staff members who help to secure large gifts such as the \$15 million gift from Paul Orfalea, the founder of Kinko's, to Cal Poly San Luis Obispo.

The Chair reported that the CSU has received a total of \$457 million in grants and contracts from public and private organizations an increase of 90 percent and during the past year alone,

Chair Gould noted that the growth in student population of 30,000 has helped the CSU to keep its commitment to accessibility and affordability. He also noted that student fees have gone down making them one of the lowest of any four-year public university system in the country.

Chair Gould recognized CSU students for the national recognition they have brought to the CSU because of their community service.

Chair Gould spoke of the CSU's continuing commitment and partnership with K-12 schools. This outreach project has been so successful that Gov. Davis has proposed to double this effort this year.

Chair Gould recognized Chancellor Reed, Executive Vice Chancellors West and Spence and their entire team for creating the UC/CSU partnership with Governor Davis that envisions a continuous, stable funding base for this university.

Chair Gould recognized Trustee Ali Razi who is finishing his term on the board. He thanked him for his dedication and commitment to the mission of the CSU and especially to the Trustee Scholarship.

Chair Gould also recognized Trustee Hauck whose term on the board has expired as well. However he noted Trustee Hauck's willingness to be reappointed for another term, and remarked that he will support Trustee Hauck's reappointment.

## **Chancellor's Report**

Chancellor Reed thanked Long Beach State for hosting the meeting. The Chancellor gave special thanks to the staff at Long Beach for their work in hosting a successful meeting.

Chancellor Reed welcomed the faculty, staff, and students who were able to sit in on the meeting.

The Chancellor joined Chairman Gould in his appreciation for Trustees Razi and Hauck.

Chancellor Reed thanked the trustees for their outstanding work in finding two new presidents. He stated that Dick Rush and Bill Eisenhardt are nationally respected leaders who will bring experience and enthusiasm to their new positions at CSU Channel Islands and the Maritime Academy.

The Chancellor reported that The CSU has testified about its 2001/02 budget before the Senate and Assembly budget subcommittees and is waiting to hear what will happen with the May Revise. The Chancellor reiterated the CSU's commitment to push very hard for a total compensation pool of 6 percent. He also noted that the CSU is looking for an additional \$12 million for student services.

Chancellor Reed reported that Proposition 1A, which was a reliable capital outlay funding source runs out next year. He stated that the CSU is requesting authorization for a new four-year bond in 2002.

The Chancellor spoke about the continuing concern about energy costs, particularly the rise in natural gas prices and the increasing stress that it will put on the budget. These and other energy issues could have a major effect on current and future budgets.

Chancellor Reed noted Dr. Spence's presentation on the education doctorate. The Chancellor believes that the CSU can offer the access, affordability, and high-quality expertise that no other college or university in the state can offer.

The Chancellor reported on the Governor's Teaching Fellows program, and expressed his pride that CSU was chosen to administer the program.

Chancellor Reed made several announcements including that President Lyons received the Franklin H. Williams Award from the Peace Corps; that CSU Dominguez Hills received the American Association of Colleges for Teacher Education (AACTE) award for promoting diversity in teacher education; that CSU, Sacramento was chosen, for the second time, to host the U.S. Track and Field Olympic Trials for the 2004 Olympics; and that the CSU Northridge Matadors and the Fresno State Bulldogs had reached the NCAA Division I basketball championships.

Chair Gould and President Baker joined Chancellor Reed at the podium to recognize Cal Poly San Luis Obispo on its 100 years of academic excellence in serving the state of California.

# **Report of the CSU Alumni Council**

Larry Adamson, president, reported for the Alumni Council

# **Report from the California State Student Association**

Shaun Lumachi, chair, reported for the CSSA.

# **Report from the California Postsecondary Education Commission**

Chair Gould referred the trustees to the report contained in their packets.

## **Approval of Minutes**

The minutes of the Board of Trustees' meeting of January 24, 2001 were approved as submitted

## Agenda Items for the Board of Trustees

Chair Gould reported there was one item for consideration for the Board of Trustees

# Election of Five Members to Committee on Committees for 2001/2002 (RBOT 03-01-04)

Chair Gould called for the motion; there was a second.

The Board of Trustees approved the following resolution:

**RESOLVED,** By the Board of Trustees of The California State University, that the following trustees are elected to constitute the board's Committee on Committees for the 2001-2002 term:

Martha C. Fallgatter, Chair William D. Campbell Debra Farar Dee Dee Myers Stanley Wang

## **Reports of Committees**

## **Report from the Committee of the Whole**

Trustee Gould reported that the committee heard one action item.

## Amended Policy on Punitive Damages (RCOW 03-01-01)

Trustee Gould moved the resolution; there was a second.

The Board of Trustees approved the following resolution:

**RESOLVED,** By the Board of Trustees of The California State University, as follows:

Whenever an award of punitive damages is entered by a judge or jury against any California State University employee, former employee, agent, or member of the Board of Trustees, an investigation shall be conducted into the facts and circumstances giving rise to the claim and the evidence presented at the trial of the action, and a report shall be prepared for the Board. Any Board member who is the object of such an investigation shall not participate in the subsequent decision-making about his or her personal circumstances. The Board shall then reach its own conclusion as to whether all of the following circumstances pertain:

- 1. The judgment is based on an act or omission of the employee, former employee, agent, or member of the Board of Trustees acting within the course and scope of his or her employment or other function within the California State University.
- 2. At the time of the act giving rise to the liability, the employee, former employee, agent, or member of the Board of Trustees acted, or failed to act, in good faith, without actual malice and in the apparent best interests of the California State University.
- 3. Payment of the claim or judgment would be in the best interests of the California State University.

Where all of the above criteria are met, the Board shall either apply to the Legislature for approval of payment of the punitive award in accord with Government Code section 825(b), or use its best efforts to identify a nonstate source of funds appropriate to the circumstances presented, including funds held by the various legally separate auxiliary organizations within the CSU, and to encourage payment from those non-state fund sources as an appropriate service to the mission of the CSU.

## **Committee on Finance**

Trustee Hauck reported that the committee heard six information items and the one action item.

## Auxiliary Organization Tax Exempt Financing at California State University, Fresno for the Save Mart Center (RFIN 03-01-09)

Trustee Hauck moved the resolution: there was a second

The Board of Trustees approved the following resolution:

**RESOLVED,** By the Board of Trustees of the California State University, that the trustees support the construction of The Save Mart Center at California State University, Fresno and authorize the campus in consultation with the Chancellor's Office to execute agreements necessary to implement the development plan for the project.

## **Committee on Organization and Rules**

Trustee Farar reported that the committee heard one information item.

## **Committee On University And Faculty Personnel**

Trustee Pierce reported that the committee heard two action items.

#### Executive Compensation (RUFP 03-01-02)

Trustee Pierce moved the resolution; there was a second.

The Board of Trustees approved the following resolution:

**RESOLVED**, by the Board of Trustees of the California State University, that Dr. William B. Eisenhardt shall receive a salary set at the annual rate of \$185,004 effective July 1, 2001, the date of his appointment as president of the California Maritime Academy and he shall be required to occupy the official CMA presidential residence (Residence #2) as a condition of employment; and that Dr. Richard R. Rush shall receive a salary set at the annual rate of \$200,004 and a housing allowance set at the annual rate of \$28,752, June 1, 2001 or soon thereafter, effective with his appointment as president of the California State University, Channel Islands.

## CSU Health Care Reimbursement Account Plan (RUFP 03-01-03)

Trustee Pierce moved the resolution; there was a second.

The Board of Trustees approved the following resolution:

**RESOLVED**, by the Board of Trustees of the California State University, that the CSU Health Care Reimbursement Account Plan be made available to executives of the California State University effective June 1, 2001.

## **Committee On Collective Bargaining**

Trustee Fallgatter reported that the committee took the following actions: Adopted the CSU initial proposals for bargaining with the Union of American Physicians and Dentists, the State Employees Trades Council, and the International Union of Operating Engineers; and ratified the tentative agreements with all CSU unions to provide healthcare reimbursement accounts.

#### **Committee On Audit**

Trustee Pierce reported that the committee heard one discussion item.

#### **Committee On Educational Policy**

Trustee Myers reported that the committee acted on an item dealing with honorary degrees in closed session. Trustee Myers also reported that the committee heard one information item, and one action item.

#### Academic Planning and Program Review (REP 03-01-01)

Trustee Myers moved the resolution; there was a second.

The Board of Trustees approved the following resolution:

**RESOLVED,** by the Board of Trustees of the California State University, that the amended projections on the Academic Plans for the California State University (as contained in Attachment A to Agenda Item 2 of the March 20-21, 2001, meeting of the Committee on Educational Policy), be approved and accepted as the basis for necessary facility planning; and be it further

**RESOLVED,** that those degree programs included in the Academic Plans are authorized for implementation, at approximately the dates indicated, subject in each instance to the chancellor's determination of need and feasibility, and provided that financial support, qualified faculty, facilities,

and information resources sufficient to establish and maintain the programs will be available; and be it further

**RESOLVED,** that degree programs not included in the Academic Plans are authorized for implementation only as pilot programs, subject in each instance to conformity with current procedures for establishing pilot programs.

## **Committee On Campus Planning, Buildings And Grounds**

Trustee Wang reported that the committee heard one information item, and six action items.

## Amend the 2000/01 Capital Outlay Program, Nonstate Funded (RCPBG 03-01-03)

Trustee Wang moved the resolution; there was a second.

The Board of Trustees approved the following resolution:

**RESOLVED,** By the Board of Trustees of the California State University that the 2000/01 Nonstate Funded Capital Outlay Program is amended to include \$500,000 for preliminary plans, working drawings, construction, and equipment for the San Francisco State University, Residence Dining Center Addition.

#### Amend the 2000/01 Capital Outlay Program, State Funded (RCPBG 03-01-04)

Trustee Wang moved the resolution; there was a second.

The Board of Trustees approved the following resolution:

**RESOLVED**, By the Board of Trustees of The California State University, that:

- 1. The 2000/01 State Funded Capital Outlay Program is amended to include \$5.2 million for preliminary plans, working drawings, construction, and equipment for the California State Polytechnic University, Pomona, Center for Animal and Veterinary Science Education, Phase Ia project as Priority 27.
- 2. CSPU Pomona will include the balance of funding required for Phase Ia in a future capital outlay budget request based on campus priorities.

## Certify a Final Environmental Impact Report and Approve the Campus Master Plan Revision for San Diego State University (RCPBG 03-01-05)

Trustee Wang moved the resolution; there was a second

The Board of Trustees approved the following resolution:

**RESOLVED,** By the Board of Trustees of the California State University, that:

- 1. The FEIR and the Addendum to the FEIR (collectively "the FEIR") for the SDSU campus master plan revision was prepared to address the environmental effects, mitigation measures and project alternatives associated with approval of that project, and all discretionary actions relating thereto, and that project consists of the following project components: (1) two academic/research buildings, a performing arts complex, a science research building, a physical plant and an addition to the North Life Sciences Building; and (2) a faculty office/classroom/gallery building and parking structure, an addition to the communication building, a new campus childcare center, an addition to the International Student Center and a central park.
- 2. The FEIR (State Clearinghouse No. 2000051026) was prepared pursuant to the California Environmental Quality Act (CEQA) and the state CEQA Guidelines.
- 3. This resolution is adopted pursuant to the requirements of Section 21081 of the Public Resources Code and Section 15091 of the state CEQA Guidelines, which require that the Board of Trustees make findings prior to approval of a project (along with statements of facts supporting each finding).
- 4. This board hereby adopts the findings of fact and related mitigation measures provided under separate cover for Agenda Item 3 of the March 20-21, 2001 meeting of the Committee on Campus Planning, Buildings and Grounds, which identify specific impacts of the proposed project and related mitigation measures and which are incorporated by reference; and the findings of fact and the related mitigation measures are incorporated by reference.
- 5. The board's findings include specific overriding considerations that outweigh certain remaining significant impacts.
- 6. The FEIR has been prepared to address the environmental impacts, mitigation measures, project alternatives, comments and responses to comments associated with the approval of the SDSU campus master

plan revision pursuant to the requirements of CEQA and the state CEQA Guidelines.

- 7. Prior to certification of the FEIR, the Board of Trustees has reviewed and considered the above-mentioned FEIR. The board hereby certifies the FEIR for the SDSU campus master plan revision as complete and adequate in that the FEIR addresses all environmental impacts of the proposed project and fully complies with the requirements of CEQA and the state CEQA Guidelines. For the purpose of CEQA, the record of the proceedings for the project comprises the following:
  - A. The DEIR for the SDSU campus master plan revision;
  - B. The FEIR and Addendum, including comments received on the DEIR and responses to comments;
  - C. The proceedings before the Board of Trustees relating to the subject project, including testimony and documentary evidence introduced prior to or at the meeting; and
  - D. All attachments, documents incorporated, and references made in the documents specified in items (A) through (C) above.

All of the above information is on file with the California State University, Office of the Chancellor, Capital Planning, Design and Construction, 401 Golden Shore, Long Beach, California, 90802, and San Diego State University, Office of Facilities Planning and Management, Administration Building, Room 130, 5500 Campanile Drive, San Diego, California 92182-1624.

- 8. The board certifies the FEIR for the SDSU campus master plan revision.
- 9. The mitigation measures identified in the Mitigation Monitoring Plan are hereby adopted and shall be monitored and reported in accordance with the Mitigation Monitoring Plan, which is under separate cover for Agenda Item 3 of the March 20-21, 2001 meeting of the Committee on Campus Planning, Buildings and Grounds, which meets the requirements of CEQA (Public Resources Code Section 21081.6).
- 10. The SDSU campus master plan revision, dated March 2001, is hereby approved.
- 11. The chancellor or his designee is requested under the Delegation of Authority granted by the Board of Trustees to file the Notice of Determination with respect SDSU campus master plan revision.

the requirements of the California Environmental Quality Act.

- 2 The proposed project will not have a significant effect on the environment, and the project will benefit The California State University.
- 3. The chancellor is requested under Delegation of Authority by the Board of Trustees to file the Notice of Determination for the project.
- 4. The schematic plans for the California Maritime Academy, Engineering Renovation/Addition are approved at a project cost of \$7,249,000 at CCCI 3909.

#### **Committee On Governmental Relations**

Trustee Fallgatter reported that the committee heard and approved one action item.

#### 2001-2002 Legislative Report No. 2 (RGR 03-01-03)

Trustee Fallgatter moved the resolution; there was a second.

The Board of Trustees moved the following resolution:

**RESOLVED**, By the Board of Trustees of the California State University, that the 2001-02 Legislative Report No. 2 is adopted.

#### **Committee on Institutional Advancement**

Trustee Razi reported that the committee approved one item on the calendar and heard one information item and one action item.

#### Naming of Facility – San José State University (RIA 03-01-06)

Trustee Razi moved the resolution; there was as second.

The Board of Trustees approved the following resolution

**RESOLVED**, By the Board of Trustees of the California State University, that the new athletic conditioning, strength-building and rehabilitation facility at San José State University be named the Koret Athletic Training Center.

#### **Communications and Correspondence**

#### **Old Business**

#### **New Business**

#### **Public Comments**

The board heard comments from the following individuals who requested to speak before the board:

- 1. Charles Goetzel, President of the Academic Professionals of California.
- 2. M.J. 'Kip' King, Service disabled veteran.
- 3. Dr. Rita R. Boggs, Carson, CA resident
- 4. Royce Love, Carson, CA resident
- 5. Rev. Patrick McPolin, Casa Claret
- 6. Susan Meisenhelder, CFA President
- 7. Harry Barron, Carson, CA resident
- 8. Tony Brock, Safe Passage Tennis Program
- 9. Margo Kasdan, CFA Association Vice President
- 10. Mike Raspberry, Carson, CA resident
- 11. Dr. Rudy Vanterpool, CSUDH Professor
- 12. Rick Price, University Heights Homeowners' Association, Carson, CA
- 13. Thomas Clayton, Carson, CA resident
- 14. Ardrall Johnson, Carson CA resident
- 15. Stuart Pardau, Esq. Representing Carson Harbor Village
- 16. H.R. Norwood, Carson, CA resident
- 17. Ledgis Williams, Carson, CA resident
- 18. Robert Lesley, Carson, CA resident
- 19. Rova Williams, Carson, CA resident
- 20. Ms. Cindy Grager, Carson, CA resident
- 21. Walter "Ray" Winbush, Carson, CA resident
- 22. Halleemon Anderson, ASI President, CSUDH

#### Adjournment

The meeting adjourned at 12:15 p.m.

### Certify a Final Environmental Impact Report and Approve the Campus Master Plan Revision for California Polytechnic State University, San Luis Obispo (RCPBG 03-01-06)

Trustee Wang moved the resolution; there was a second.

The Board of Trustees approved the following resolution:

**RESOLVED,** By the Board of Trustees of the California State University, that:

- 1. The FEIR for the Cal Poly campus master plan was prepared to address the potential significant environmental effects, mitigation measures and project alternatives associated with approval of the proposed campus master plan, and all discretionary actions relating thereto, including the component construction projects as identified on Page 230, Project Description, of the FEIR.
- 2. The FEIR (State Clearinghouse No. 2000081102) was prepared pursuant to the California Environmental Quality Act (CEQA) and the state CEQA Guidelines.
- 3. This resolution is adopted pursuant to the requirements of Section 21081 of the Public Resources Code and Section 15091 of the state CEQA Guidelines, which require that the Board of Trustees make findings prior to the approval of a project (along with statements of facts supporting each finding).
- 4. This board hereby adopts the findings of fact and related mitigation measures provided under separate cover for Agenda Item 4 of the March 20-21, 2001 meeting of the Committee on Campus Planning, Buildings and Grounds, which identify specific impacts of the proposed project and related mitigation measures which are hereby incorporated by reference.
- 5. The board's findings include specific overriding considerations that outweigh certain remaining significant impacts.
- 6. The FEIR has been prepared to address the environmental impacts, mitigation measures, project alternatives, comments and responses to comments associated with the approval of the Cal Poly campus master plan revision pursuant to the requirements of CEQA and the state CEQA Guidelines.
- 7. Prior to certification of the FEIR, the Board of Trustees has reviewed and considered the above-mentioned FEIR. The board hereby certifies the FEIR for the Cal Poly campus master plan

revision as complete and adequate in that the FEIR addresses all environmental impacts of the proposed project and fully complies with the requirements of CEQA and the state CEQA Guidelines. For the purpose of CEQA, the record of the proceedings for the project comprises the following:

- A. The DEIR for the Cal Poly campus master plan revision;
- B. The FEIR, including comments received on the DEIR and responses to comments;
- C. The proceedings before the Board of Trustees relating to the subject project, including testimony and documentary evidence introduced prior to or at the meeting; and
- D. All attachments, documents incorporated, and references made in the documents as specified in items A through C above.

All of the above information is on file with the California State University, Office of the Chancellor, Capital Planning, Design and Construction, 401 Golden Shore, Long Beach, California 90802-4210 and California Polytechnic State University, San Luis Obispo, Department of Facilities Planning and Management, 1 Grand Avenue, San Luis Obispo, California 93407.

- 8. The board certifies the FEIR for the Cal Poly campus master plan revision, including its component construction projects.
- 9. The board finds that the FEIR has sufficiently analyzed the environmental impacts and mitigation measures for the campus master plan revision, including the component construction projects identified in the FEIR, and that the resolutions and approvals being provided by the board apply to the construction of these component projects. The board shall consider the FEIR in connection with any approvals of the component projects.
- 10. The mitigation measures identified in the Mitigation Monitoring and Reporting Plan are hereby adopted and shall be monitored and reported in accordance with the Mitigation Monitoring and Reporting Plan, which is under separate cover for Agenda Item 4 of the March 20-21, 2001 meeting of the Committee on Campus Planning, Buildings and Grounds, which meets the requirements of CEQA (Public Resources Code Section 21081.6).

- 11. The Cal Poly campus master plan revision, dated March 2001, is hereby approved with the goal of serving 17,500 full-time equivalent students.
- 12. The chancellor or his designee is requested under the Delegation of Authority granted by the Board of Trustees to file the Notice of Determination with respect to the Cal Poly campus master plan revision.

## Preliminary State and Nonstate Funded Five-Year Capital Improvement Program 2002/03 Through 2006/07 (RCPBG 03-01-07)

Trustee Wang moved the resolution; there was a second.

The Board of Trustees approved the following resolution:

**RESOLVED**, By the Board of Trustees of The California State University, that:

- 1. The Preliminary State and Nonstate Funded Five-Year Capital Improvement Program 2002/03 through 2006/07 totaling \$3,552,135,000 and \$1,697,373,000 respectively are approved.
- 2. The chancellor is requested to explore all reasonable funding methods available and communicate to the governor and the legislature the need to provide funds for the CSU state funded plan in order to develop the facilities necessary to serve all eligible students.
- 3. The chancellor is directed to return to the Board of Trustees for approval of the *final* State and Nonstate Funded Five-Year Capital Improvement Program 2002/03 through 2006/07, including the 2002/03-action year request, no later than the November 13-14, 2001 board meeting.

### Approval of Schematic Plans (RCPBG 03-01-08)

Trustee Wang moved the resolution; there was a second.

The Board of Trustees approved the following resolution.

**RESOLVED**, By the Board of Trustees of The California State University, that:

1. The board finds that the Negative Declaration for the California Maritime Academy, Engineering Building Renovation/Addition has been prepared in accordance with

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### REPORT OF CHAIR LAURENCE K. GOULD, JR. Board of Trustees The California State University March 21, 2001

Every year we like to hold a Board of Trustees meeting on a California State University campus. Last year we were at San Jose. Next year we'll be at Sacramento. This year we're at Long Beach. GO BEACH!

Haven't President Maxson and all of his colleagues done a tremendous job of hosting us at this meeting? Thanks to all of you.

Because we have so many members of the California State University community in attendance, today I want to focus on the nature of this university, on some of the challenges facing California State University, and on how we've met some of those challenges in the past and plan to deal with others in the future.

First of all, there's no doubt about it. California State University is simply America's finest university. With our unwavering commitment to access, affordability and high quality, we have a mission and a record to match any other university - bar none. I am so proud of the California State University. And each and every one of you has a right to be proud of everything you do to ensure the successes of California State University.

The California State University faculty is the heart and soul of this institution. Every one of my colleagues on this Board knows that, and we value our faculty tremendously. California State University's faculty is teaching the next generation of California's leaders, and for that we - and all of California - are greatly indebted to you.

California State University has taken, and is taking, many steps to put in place conditions that will retain our excellent faculty and will help attract high quality faculty to replace those who are retiring - one of the great challenges facing the university. We have made a <u>priority</u> of increasing salaries. California State University asked for and received a 6% compensation increase for faculty this year, and we have requested another 6% increase for the next fiscal year. If we receive the six percent this year, it will bring the total increase over the past five years to nearly 31%. In the past three years alone, the California State University faculty salary gap has been reduced by about half, to 3.9 percent.

Two weeks ago at California State University's annual Legislative Day in Sacramento, the number one message we gave to Legislators was how important it is for California State University to receive the additional two percent compensation increase for faculty and staff over

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and above the four percent increase already recommended by Gov. Davis. I think that message went through loud and clear. We are committed to increasing faculty and staff salaries, and I want to commend publicly Trustee Vitti for all of his leadership in this effort. He has been steadfast and a stalwart.

We know that affordable housing continues to be one of the major issues facing our current and future faculty and staff members. At Cal State Channel Islands I sit on the site authority that is building housing that will be sold and rented and affordable prices. We will use the availability of this affordable housing to attract high quality faculty to this campus. Trustee Farar and I just returned from a visit to California State University Monterey Bay. There we saw a superb program of affordable housing for faculty, staff and students. No doubt, the affordable housing on that campus attracts quality faculty to teach at Monterey Bay. During yesterday's discussions we heard about Cal State Fullerton's successful plans to build 86 new homes in Buena Park for university employees. That's just the beginning. Cal State Fullerton is cooperating with several other local cities to build affordable housing for faculty and staff, and we hope those plans come We're trying to replicate these and other efforts as best we can on all of our to fruition. campuses. We have asked all of our campus presidents to reexamine the local housing situation and assess what the university can do to help. In Sacramento, we will continue to urge our legislators and the governor to approve California State University 's request for \$5 million to establish an employee housing assistance program.

We strive to provide our faculty, staff and students with better support and facilities. In our libraries all the campuses now bid together to subscribe to the periodicals students and faculty use most. This joint approach has saved us money and frees up other dollars to obtain other books and journals for students and scholars. Many of California State University's physical facilities are aging. We have finally turned the corner on deferred maintenance and are augmenting state construction funds with support from private donors.

California State University has received record amounts of external support in the last two years. Our presidents and advancement personnel work day and night and during the majority of their mealtimes every week garnering this support. But we all know that advancement is not the province of University Advancement or the presidents alone. Faculty and staff members are also great contributors to our fundraising efforts.

Cal Poly San Luis Obispo just received a \$15 million gift--the largest gift in California State University history--from Kinko's founder Paul Orfalea. Mr. Orfalea, who is not an alumnus, became interested in the university after striking up a conversation with Tom Dalton, a senior research associate in the College of Liberal Arts, when they were both at a local car dealership. After this staff member told him about Cal Poly, Mr. Orfalea was intrigued and wanted to learn more. He visited the campus, talked with faculty, students, and administrators and then decided

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to make a major contribution to the university. But his initial contact came through a staff member. Many foundations make grants to universities not simply because of the institution itself but because of the presence of outstanding faculty members. Let me give just one example. The internationally famous Robert Wood Johnson Foundation just gave \$12-1/2 million to San Diego State University, and it did so because Professor James Sallis is at that campus. He will use that grant to develop a healthy living program. This external support is extremely important for the California State University.

Since I became a trustee in 1996, California State University has grown by more than 30,000 students. We have kept our doors open and we are now serving all of those students. We are keeping California State University's commitment to accessibility. At the same time, we are also keeping our commitment to affordability. In fact, California State University's system-wide student fees are 10 percent <u>lower</u> than they were in 1996. At \$1,428 per academic year, California State University has the one of the lowest system-wide fees of any four-year public university in the country. In addition, California now offers what is probably the best financial aid program of any in the country--the new Cal Grant program. California State University - and especially our Chancellor and his staff - played an essential role in the negotiations that led to the final passage of this program, and we can be proud of that.

Our students are always a great source of pride for this university, and this year our students brought national recognition to California State University because of their community service. More than 135,000 students throughout the California State University system perform a total of 33.6 million hours of community service every year. At a minimum wage rate, that equals \$193 million of service.

Everyone in this room shares California State University's commitment to access, affordability and high quality. From the Chancellor to the custodian, we all share a love for the mission of this university. Faculty makes this mission come alive every day as they teach. California State University's accessibility and affordability make the mission real for our students. The worth of the mission is expressed by so many alumni who have told me, "Larry, California State University made college accessible for me - and gave me a superb education." And no one holds the mission of this university dearer than the Trustees.

Indulge me a moment or two. Today marks the last meeting for two of our trustees under their current terms. One is Trustee Ali Razi. Trustee Razi has declined to submit his name to the Governor for possible reappointment, but I want to tell you about this gentleman. When he was first asked by the Governor to be a Trustee, he said he didn't want to serve on the Board unless he was sure that mission was important. He investigated and now he is always the first to say that California State University is so important because it's mission is so important. And when he got on the Board, he found out that the funds for Trustee scholarship had run out. So he rolled

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up his sleeves, twisted all of our arms and raised the funds so that we could not only continue the awards but double the number of scholarships. Ali, thank you for everything you do.

And the other Trustee whose term is expiring is Bill Hauck. Bill is a living, breathing California State University success story. A San Jose State grad who was essentially held Shaun Lumachi's current position some time ago, Bill now is tremendously admired in Sacramento as head of the California Business Roundtable and he is always tremendously helpful in our dealings with the Legislature. I understand that Bill has indicated to the Governor that he would be willing to continue serving on this Board, and as I have said to you before, I'm ready to support or oppose your reappointment - whatever will help you most.

California State University functions so well as a system because we have so many capable individuals who all work <u>together</u> for the benefit of the university. I am honored to be a part of this institution, and I thank every one of you for all you do to make this America's finest university.

#### REPORT OF CHANCELLOR CHARLES B. REED Board of Trustees The California State University March 21, 2001

Thank you Chairman Gould. I appreciate that report and your kind words.

I also want to thank Long Beach State for hosting us this morning. Bob – please give special thanks to all of your staff that worked so hard to host a successful meeting here on campus.

To the faculty, staff, and students who are able to join us today – welcome.

I also want to join Chairman Gould in his appreciation for Trustees Razi and Hauck. Ali, You have served us well and we are grateful for your generosity and commitment. Your help with the Trustees' Scholarship has inspired all of us.

Bill, we have been honored by your service and we hope that we will be seeing you here again.

I want to thank our trustees for the outstanding work they did in finding us two new presidents. Dick Rush and Bill Eisenhardt are nationally respected leaders who will bring experience and enthusiasm to their new positions at CSU Channel Islands and the Maritime Academy. We look forward to welcoming them to the CSU family.

The CSU has testified about its 2001/02 budget before the Senate and Assembly budget subcommittees. We are waiting to hear what will happen with the May Revise.

We are continuing to push very hard for an additional 2 percent increase for faculty and staff compensation (above the 4 percent proposed by Gov. Davis) to bring our total compensation pool to 6 percent. We're also looking for an additional \$12 million for student services.

Proposition 1A, which was a reliable capital outlay funding source for four years, runs out next year. We are requesting authorization for a new four-year bond in 2002 - ideally on the March 2002 ballot. We are looking for a bond that would provide the CSU with at least \$330 million each year – a total of \$4 billion to serve the three higher education segments for four years. This bond will help us with badly needed renovations, repairs, and new construction.

We are still concerned about the future of our energy costs. You may have seen some news articles about our contract with Enron Energy Services. We have a good relationship with Enron, and Enron and their corporate leadership have committed, as far as the cost of electric power to us, through the term of the contract of March 2002. But we have a disagreement about direct access, which includes their meter on our campuses. We are going to continue to work

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that through. The UC is very concerned about their future energy costs if they lose the direct access. We are working to ensure that Enron honors its commitment to the fourth year of its contract.

Also, we continue to be concerned about the rise in natural gas prices. Potentially this is going to eat away at our budget faster than anything else. We have asked the governor and legislature for a total of \$41.1 million to recognize increased natural gas prices for the current year and for 2001/02. These and other energy issues could have a major effect on current and future budgets.

As you heard in Dave Spence's presentation, the CSU has launched an effort to secure the right to grant an education doctorate (Ed.D.). We know that California needs more Ed.D.s in its K-12 schools, community colleges, and university schools of education. Our state's existing private and public programs tend to be costly, inaccessible to working students, and lacking in diversity. We believe that the CSU can offer the access, affordability, and high-quality expertise that no other college or university in the state can offer.

Last Friday in San Jose we joined Gov. Davis in honoring the first Governor's Teaching Fellows. This program offers \$20,000 fellowships to students to pursue a teaching credential, as long as they teach for four years in a low-performing school. The CSU was proud to be chosen to administer this program. We selected 250 fellows this year. From now on we will choose 1,000 fellows per year.

I want to thank President Welty and his staff for their work on the event center in Fresno.

Congratulations to President Lyons for receiving the Franklin H. Williams Award from the Peace Corps. The award is given to those who served admirably in the Peace Corps and then went on to serve their communities. Dr. Lyons served in the Peace Corps in Ecuador in the late 1960s.

Congratulations to CSU Dominguez Hills for receiving an award from the American Association of Colleges for Teacher Education (AACTE) for promoting diversity in teacher education.

Congratulations to Sacramento State for being chosen to host the U.S. Track and Field Olympic Trials for a second time. They will host the trials for the 2004 Olympics.

Congratulations to the CSU Northridge Matadors and the Fresno State Bulldogs for reaching the NCAA Division I basketball championships. These teams represented us well on the national stage – at the "big dance."

Next, I would like to ask Chairman Gould and President Baker to join me up at the podium. Over the past 100 years, Cal Poly San Luis Obispo has served the state of California and its

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students with academic excellence. Cal Poly has earned a national reputation as a university that offers outstanding academic programs at an affordable price. Through its teaching, research, and outreach to the community, Cal Poly exemplifies the best that the CSU has to offer. President Baker, on behalf of the California State University, I would like to congratulate you and your university on its 100th anniversary. We wish you many more years of success.

Mr. Chairman, that concludes my report.

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#### **BOARD OF TRUSTEES**

# Recognition of the Women's Basketball Team at California State Polytechnic University, Pomona

#### **Presentation By**

Charles B. Reed Chancellor

Bob H. Suzuki President California State Polytechnic University Pomona

#### Summary

During the current academic year, the women's basketball team at California State Polytechnic University, Pomona won the National Collegiate Athletic Association Division II tournament. This is their fourth national title and the first since 1986. Members of the team will be recognized.

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#### **BOARD OF TRUSTEES**

#### **Recognition of the Men's Soccer Team at California State University Dominguez Hills**

#### **Presentation By**

Charles B. Reed Chancellor

James E. Lyons, Sr. President California State University Dominguez Hills

#### Summary

During the current academic year, the men's soccer team at California State University, Dominguez Hills won the Division II, National Collegiate Athletic Association tournament. Members of the team will be recognized.

### APPENDIX E Mitigation Monitoring Program Master Plan Update Final EIR California Polytechnic State University, San Luis Obispo

Section 21081.6 of the Public Resources Code requires all state and local agencies to establish monitoring or reporting programs whenever approval of a project relies upon a mitigated negative declaration or an environmental impact report (EIR). The monitoring or reporting program must ensure implementation of the measures being imposed to mitigate or avoid the significant adverse environmental impacts identified in the mitigated negative declaration or EIR.

The mitigation monitoring program (MMP) is required for all mitigation measures adopted by California Polytechnic State University San Luis Obispo (Cal Poly) as conditions of the project. Should Cal Poly adopt the Final EIR (FEIR), Cal Poly would agree to adopt all mitigation measures identified in the FEIR for the Master Plan Update and the mitigation measures shall be required to avoid potentially significant adverse environmental impacts.

A memorandum will be prepared at the specified phase of construction or planning which will state that each of the listed mitigation measures has been satisfactorily completed.

Discussion	When to Implement	Responsible Person/ Agency	Report Due
Geology			
Landslide. Mitigation measures would need to be developed on the basis of site-specific study of the landslide. The general degree of required mitigation would depend on the findings, which could range from: 1) finding that the existing landslide is relatively stable and therefore no significant mitigation is needed; to 2) the existing landslide is marginally stable and will require extensive strengthening and/or subsurface drainage improvements to provide adequate factors of safety for design and construction. This EIR therefore recommends that such a study be performed to estimate the factor of safety of the existing landslide for existing static and earthquake loading conditions, and to evaluate what impact the proposed site improvements could have on the stability of the landslide. The study will specify mitigation measures for any site improvements that are needed.	Planning of H-4, H-6 and Grand/Slack ancillary facilities	Cal Poly	Completion
Biological Resources			
Goldtree. A site-specific spring botanical survey will be completed prior to construction. Areas supporting sensitive plant species shall be avoided; disturbed populations will be replanted in a suitable area at a ratio deemed appropriate by a qualified biologist.	Planning/ design	Cal Poly	Completion
Drainage plan. Prior to construction of the Bull Test facility, a construction and operational drainage plan will be drafted with contingencies for storm event and system failures. Limitation of Cattle Access. Cattle will not be allowed to enter the creek.	Construction /operation	Cal Poly	Completion

Discussion	When to Implement	Responsible Person/ Agency	Report Due
Reservoir maintenance should be scheduled outside of the breeding and nesting periods of sensitive species that may inhabit the area, and should be approved by jurisdictional agencies where appropriate.	Ongoing	Cal Poly	Prior to initiation of activity
Future development at the Design Village shall be restricted to areas not limited by serpentine soils, Army Corps jurisdictional wetlands greater that 1/10 th of an acre in size, and other areas populated by sensitive plant species, unless impacts to plants can be mitigated by replanting and /or relocation. Prior to construction, a site-specific biological and jurisdictional wetlands delineation shall be prepared.	Construction	Cal Poly	Initiation
Pedestrian Restriction. The northern and eastern portions of the H-1 and H-2 projects will be designed to prevent direct pedestrian access to the native grassland and biological preserve. In general, access to buildings and recreation areas will be oriented towards the main campus and away from sensitive areas to the north and east. Pedestrian traffic in the area of Brizzolara Creek will be designed in accordance with the "Goals and Guidelines for the Cal Poly Creek Management and Enhancement Plan" included as Appendix F. Signs will be posted to indicate the sensitivity of the areas. Plant Population Restoration. Suitable areas exist on campus for replanting of <i>Calochortus obispoensis</i> . Any populations or individuals of <i>Calochortus obispoensis</i> disturbed by the construction of the H-1 and H-2 housing projects will be replanted in suitable areas at ratios deemed suitable by a qualified biologist.	Planning/ design	Cal Poly	Completion
The Highland Drive realignment shall be designed with drainage systems sensitive to the creek corridor. Drainage shall incorporate silt and grease traps and/or vegetative buffer strips to prevent pollution and sedimentation of the creek. Landscaping shall consider native vegetation compatible with the riparian area where it is appropriate. Inlets that drain to the creek will be marked accordingly.	Planning/ design	Cal Poly	Completion
Cultural Resources Buildings deemed potentially eligible for listing on the NRHP will be studied to determine their significance. If they are determined to be significant, Cal Poly will undertake proper documentation of the resources. Determination of historical significance shall be made on any campus structure older than 50 years prior to removal or substantial remodeling.	Planning/ design	Cal Poly	Completion
Prior to design, Phase II archaeological studies will be completed at known sites; determination of significance will be made, and appropriate mitigation measures followed, as suggested by the archaeologist.	Planning/ design	Cal Poly	Completion
Where soil surfaces are undeveloped and visible and where no previous survey has been completed, Phase I archaeological surveys will take place prior to construction.	Construction	Cal Poly	Completion
Circulation         Mount Bishop Road/Highland Drive. This location will need to have all-way stop control removed at some time prior to the full implementation of the Master Plan.         California Boulevard/Highland Drive. The extension of California Blvd. to Highland would result in a new atgrade three-way intersection. Monitoring the intersection will be required; however, it seems likely that a signal will be needed.	Planning/ design	Cal Poly	Completion

Discussion	When to Implement	Responsible Person/ Agency	Report Due
Via Carta/Highland Drive. Via Carta north of its intersection with Highland Drive will need to be widened to accommodate vehicular and pedestrian traffic. The intersection should be monitored to see if signalization is necessary.			
The University will need to implement a campus shuttle or other alternative transportation modes to accomplish parking reduction goals.	Prior to build- out of the Master Plan	Cal Poly	Completion
The following mitigation measures has been added to reinforce the need for improved transit and reduced parking:			
Cal Poly will institute the following measures, or measures achieving equivalent results, in order to meet its stated policy of 2,000 parking space reduction, in addition to improving circulation on local streets: freshman restrictions, Bike/pedestrian enhancement, geographic controls, continued bus subsidy, car/vanpools, faculty/staff incentives, parking fee increases, entertainment/services on campus, on-campus shuttle, modified enrollment scenarios, city transit improvements, and remote parking.			
California Boulevard/Taft Street. The peak hour traffic forecasts meet warrants for consideration of traffic signals. California Boulevard/U.S. 101 north bound ramps. The peak hour traffic forecasts meet warrants for	Prior to build- out of the Master Plan	Cal Poly	Completion
consideration of traffic signals. Air Quality			
No additional mitigation are required for traffic-related impacts.	Planning	Cal Poly	Completion
Stationary source emissions. Cal Poly shall implement the following or similar APCD-approved energy-reducing measures to reduce stationary source emissions:			
<ul> <li>Shade tree planting along the southern exposures of buildings</li> <li>Building orientation to take advantage of natural light and heating and cooling</li> </ul>			
Design. The structures shall be designed with multiple exits in order to reduce the time required to vacate the cars. Walls should be generally open allowing for free passage of outside air through the structures.	Planning/ design	Cal Poly	Completion
Parking payment options. Prepayment of parking fees should be considered to prevent vehicle queuing when leaving.			
Reduction of exit time. The University shall incorporate management strategies contained in Section 2 of the Cal Poly Parking and Commuter Services Event Parking Management Plan (Draft) for the structures.			

Discussion	When to Implement	Responsible Person/ Agency	Report Due
Prior to construction, specific air quality models will be conducted for the off-campus housing projects.	Planning/ design	Cal Poly	Completion
Mustang Stadium. A specific noise analysis and mitigation plan will be developed for the Stadium when the relocation is proposed. Design recommendations at this time include the following:	Planning/ design	Cal Poly	Completion
Public Address System. In general, speakers should be oriented towards the interior of the stadium and/or directed downward. More speakers with a smaller output dispersed throughout the stadium would have less external noise than a few, louder speakers.			
Building Orientation. The stadium should be designed to be oriented away from sensitive receptors. Design should minimize noise directed towards these areas.			
Off campus housing facilities north of Highland and at Highland and Highway 1 should be sited to minimize noise and should incorporate acoustic design intended to reduce interior noise to acceptable levels.	Planning/ design	Cal Poly	Completion
Aesthetics			
All exterior lighting associated with the proposed Master Plan shall be hooded. No unobstructed beam of light shall be directed toward sensitive uses (e.g., Brizzolara Creek, Drumm Reservoir, environmental and Horticultural Sciences (EHS), and neighborhoods). The use of reflective materials in all structures shall be minimized (e.g., metal roofing, expanses of reflective glass on west-facing walls).	Planning/ design	Cal Poly	Plan Check
Parking Structures. All interior lighting associated with proposed parking structures shall be directed internally with lamp "cut-off shields." Unobstructed beams of light shall not be directed toward land uses outside the structures and shall not interfere with vehicular traffic on nearby streets. Examples of specifications for minimizing light and glare include the following:	Planning/ design	Cal Poly	Plan check
All lights must be shielded to avoid glare and light spill-over onto adjacent areas and onto public right-of-way areas; Landscape illumination should be done with low level, unobtrusive fixtures;			
Parking structure lighting shall be designed to provide the minimum safe lighting levels. Per IES standards, this is 6 foot-candles (fc) maintained throughout internal to the structure, and 1 fc minimum on the roof; The use of reflective materials on the exterior of all structures shall be minimized; Internal lightwells will be provided to maximize the amount of natural light; Light fixtures will include a vertical component to create an even distribution of light; Solid rails shall be included around the perimeter to block light spillage from headlights on cars within the			
structure; and All roof light fixtures shall be located on the interior columns to keep light from spilling out on to adjacent areas, and will include "cut-off" shields.			

Discussion	When to Implement	Responsible Person/ Agency	Report Due
Mustang Stadium. If this project were to occur, final design should include measures to reduce light and glare visible to area residents. The stadium will be redesigned from that which is shown in the Heery Plan in order to accomplish the following measures:	Planning/ design	Cal Poly	Plan check/ Environ- mental review
All lights must be designed to avoid glare and spillover onto adjacent areas and onto public right of way areas and minimize impacts to adjacent neighborhoods.			
The use of reflective materials will be minimized Landscape illumination will be accomplished with low-level, unobtrusive fixtures Minimum safe lighting levels will be used in adjacent parking and other facilities.			
Further analysis of the lighting and glare impacts would be required as part of future environmental review for this project.			
Highway 1 (Gateway to the City of San Luis Obispo)	Design/	Cal Poly	completion
City Consultation. Prior to design finalization, the University shall consult with the City regarding the visual impact of the proposed off-campus housing on the City gateway.	planning		
Compliance with County Guidelines. If the proposed facilities lie within 100 feet of Highway 1, the bull test and Goldtree facility will comply with County Guidelines for design near scenic highways.			
Public Services			
Police. The University will provide for at least the equivalent of 3.3 additional police personnel to serve the anticipated growth. The University will work with the campus police to determine an adequate level of service ratio for the campus and will plan for provision of needed personnel.	Prior to buildout of the Plan	Cal Poly	Completion
Because future water demand will begin to tax the University's supply of Whale Rock water, the following programs should be instituted:	Prior to buildout of the plan or	Cal Poly	Inception
<ul> <li>Water Conservation Program. The University should develop a program designed to reduce overall water consumption on campus. The program will incorporate water-saving fixtures into new development, retrofit older facilities over time, and modify landscaping irrigation requirements.</li> <li>Drought contingency plan. As part of implementation of the Master Plan, the University will draft a drought contingency plan to address potential water shortages associated with extended drought conditions.</li> </ul>	during a drought event; conservation program as part of early implemen-		
Additional Water Supply. The University should investigate the availability of additional water supplies over the next twenty-year horizon.	tation of the Plan		
Construction Impacts			•
Aesthetics. Off-campus Projects. Construction at the Goldtree and off-campus housing facilities will locate	Construction	Contractor	Plan check

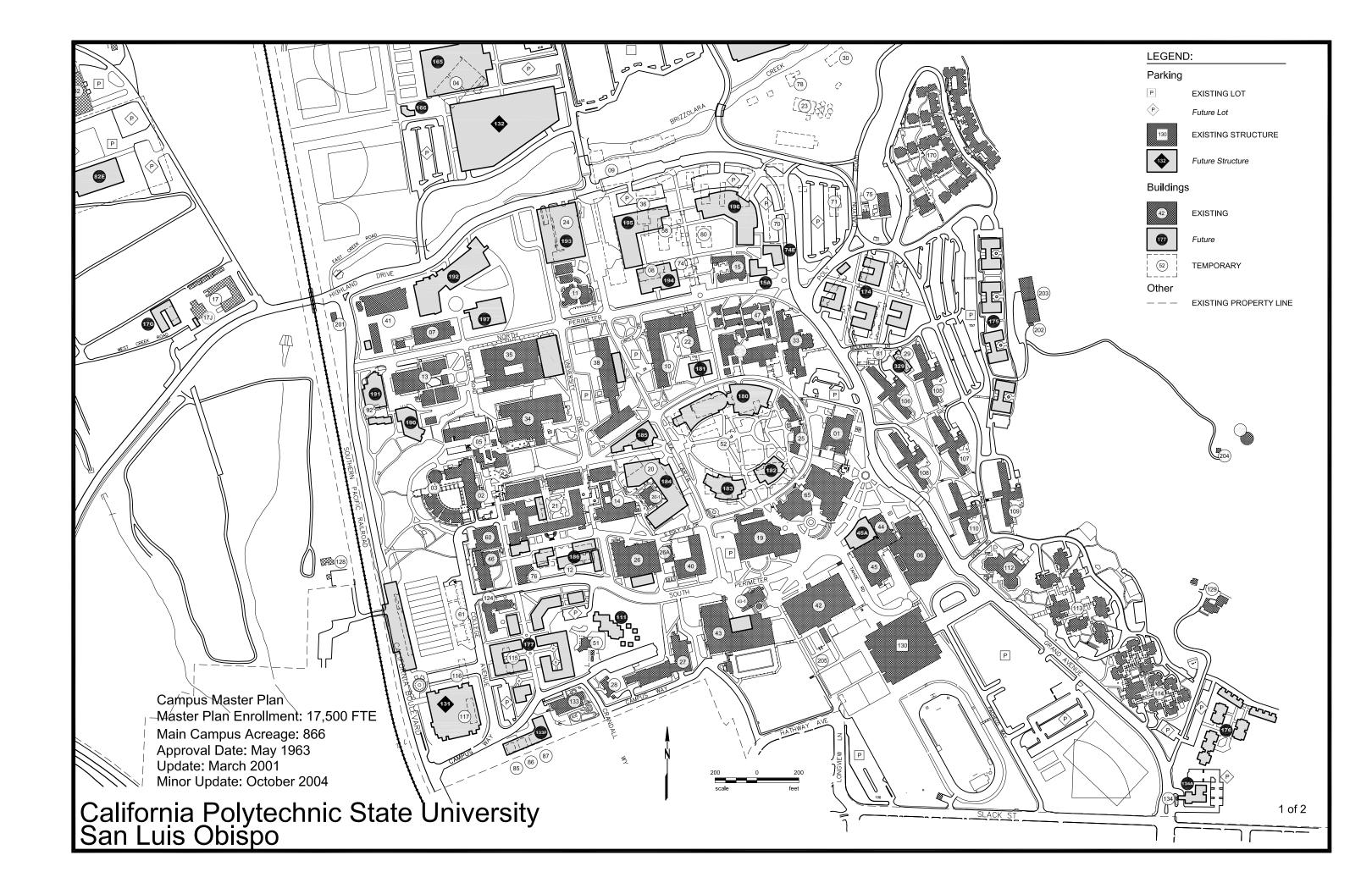
	Discussion	When to Implement	Responsible Person/ Agency	Report Due
stc	ckpiling and staging areas shall be located out of view where feasible			
Ai	r Quality	Construction	Contractor	Plan check
DU	JST CONTROL			
H. I. J. K. L. M. N. O. In cor EC To pro all	Unpaved areas shall be wetted down, to eliminate dust formation, a minimum of twice a day to reduce particulate matter. When wind velocity exceeds 15 mph, site shall be watered down more frequently. Store all volatile liquids, including fuels or solvents in closed containers. No open burning of debris, lumber or other scrap will be permitted. Properly maintain equipment to reduce gaseous pollutant emissions. Exposed areas, new driveways and sidewalks shall be seeded, treated with soil binders, or paved as soon as possible. Cover stockpiles of soil, sand and other loose materials. Sweep project area streets at least once daily. Appoint a dust control monitor to oversee and implement all measures listed in this Article. The Contractor shall maintain continuous control of dust resulting from construction operations. Particular care must be paid to door openings to prevent construction dust and debris from entering the adjacent areas. When wind conditions create considerable dust, such that a nuisance would generate complaints, the Contractor shall either suspend grading operations, and/or water the exposed areas. Water down the project site, access routes, and lay down areas whenever generate dust becomes a nuisance. The campus reserves the right to request watering of the site whenever dust complaints are received. It shall be the University's sole discretion as to what constitutes a nuisance. QUIPMENT EMISSION CONTROL the extent feasible, the applicant shall utilize newer construction equipment (manufactured after 1990) that oduces fewer emissions, especially for the highest emitting pieces of diesel-fired heavy equipment. In any case, equipment shall be properly tuned and maintained. Additional measures that would reduce construction- ated emissions include, but are not limited to: Retarding fuel injection timing two degrees from the manufacturer's recommendation.			
To pro all	the extent feasible, the applicant shall utilize newer construction equipment (manufactured after 1990) that oduces fewer emissions, especially for the highest emitting pieces of diesel-fired heavy equipment. In any case, equipment shall be properly tuned and maintained. Additional measures that would reduce construction- ated emissions include, but are not limited to:			

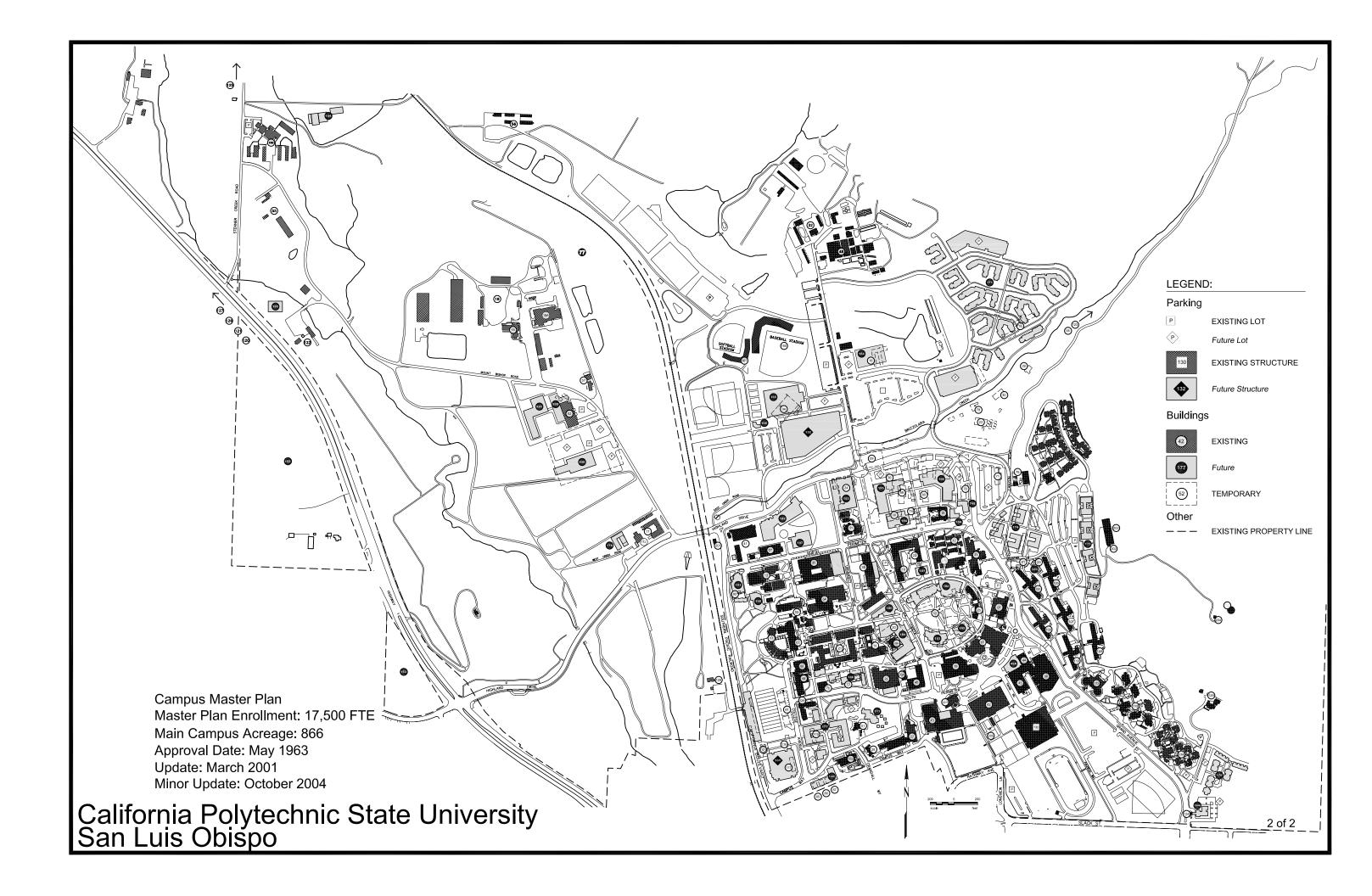
Discussion	When to Implement	Responsible Person/ Agency	Report Due
The use of Caterpillar pre-chamber, diesel-fired engines (or equivalent low NO _x engine design) in heavy equipment used to construct the project to further reduce NO _x emissions. The project shall require that all fossil-fueled equipment shall be properly maintained and tuned according to manufacturers specifications. The project proponent shall require that all off-road and portable diesel-powered equipment including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, shall be fueled exclusively with CARB certified diesel fuel. During construction activities at each of the locations identified above where equipment emissions are projected to exceed the District's thresholds, the project proponent shall install catalytic soot filters on the two pieces of equipment (per site) projected to generate the greatest emissions. Where the catalytic soot filters are determined to be unsuitable, the project proponent shall install and use an oxidation catalyst. Suitability is to be determined by an independent California Licensed Mechanical Engineer who will submit for District approval, a Suitability Report identifying and explaining the particular constraints to using the preferred catalytic soot filter.			
DUST CONTROL			
Dust generated by construction activities shall be kept to a minimum by full implementation of the following measures: During construction, the amount of disturbed area shall be minimized.			
Onsite vehicle speeds should be reduced to 15 mph or less;			
Exposed ground areas that are left exposed after project completion should be sown with a fast- germinating native grass seed and watered until vegetation is established;			
After clearing, grading, earth moving, or excavation is completed, the entire area of disturbed soil shall be treated immediately by watering or revegetating or spreading soil binders to minimize dust generation until the area is paved or otherwise developed so that dust generation will be minimized;			
All roadways, driveways, and sidewalks associated with construction activities should be paved as soon as possible. In addition, building and other pads shall be laid as soon as possible after grading, unless seeding or soil binders are used.			
Construction drainage plan. Prior to construction, the contractor shall draft a drainage and activity plan to protect channels on the Goldtree, Grand/Slack, H-1, H-2 and H-3 housing sites, Highland Drive, Parking Structure III and the Brizzolara Creek Enhancement Projects and their associated habitats. The plan will emphasize avoidance, and erosion and runoff control. The University will consult with appropriate jurisdictional agencies prior to activity.	Construction	Contractor	Plan check
Grand/Slack - northern drainage. The University will consult with the Army Corps of Engineers well in advance	Planning	Cal Poly	Completion

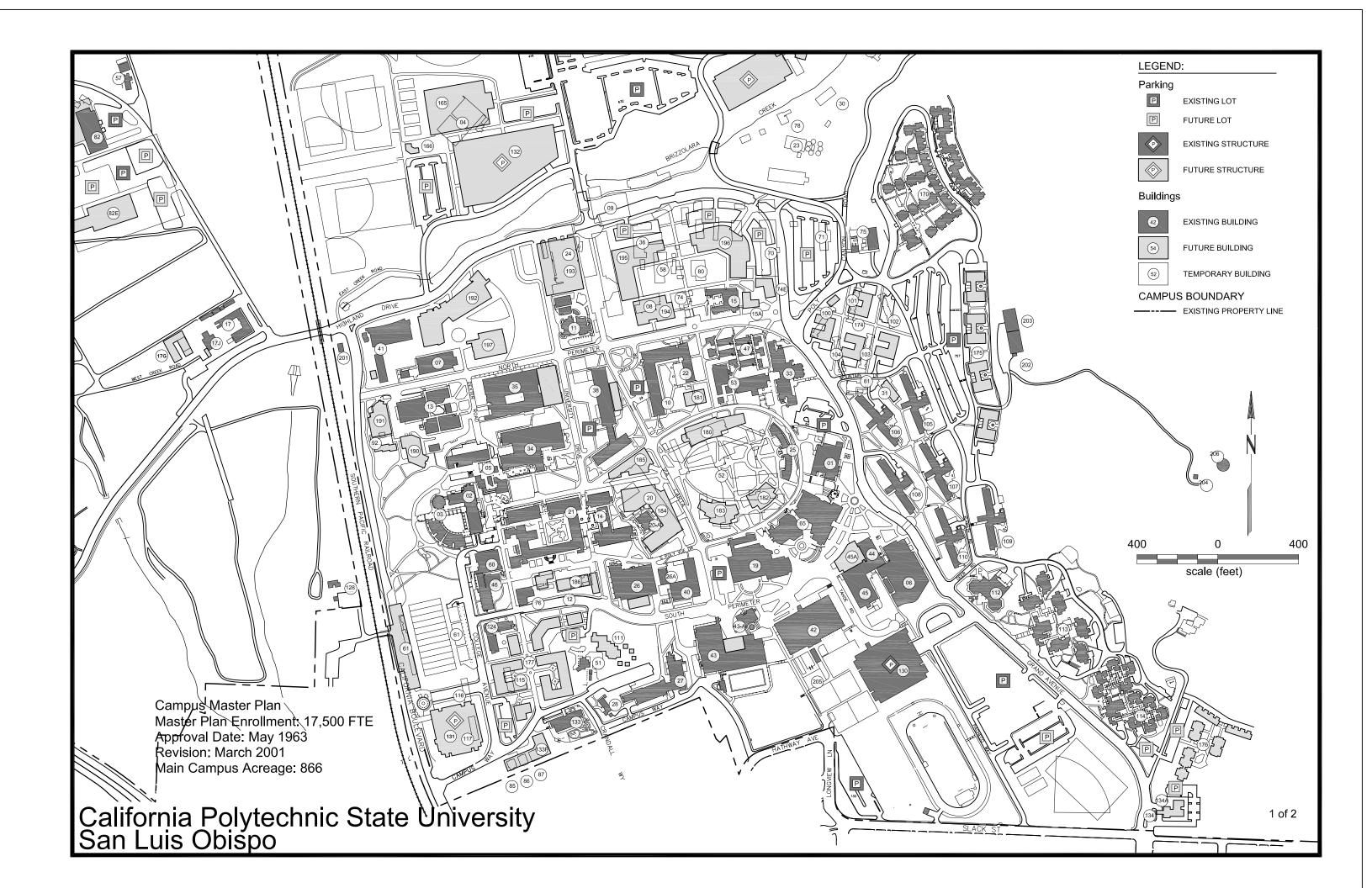
Discussion	When to Implement	Responsible Person/ Agency	Report Due
of construction to determine permitting requirements.			

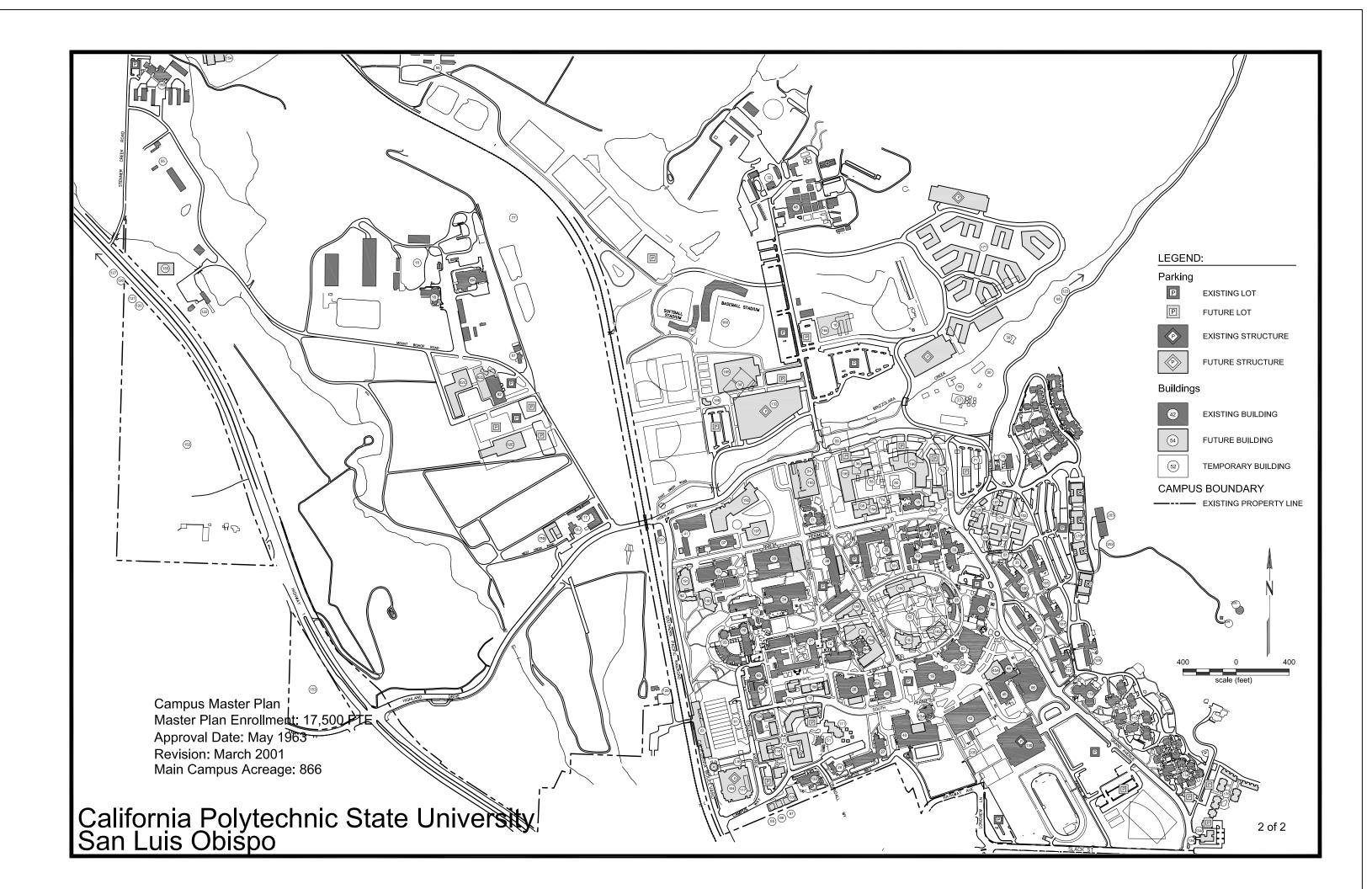
	Discussion	When to Implement	Responsible Person/ Agency	Report Due
	logical Resources. Develop, for each enhancement project and other direct alteration, a set of performance adards, incorporating the following requirements:	Planning	Cal Poly	Plan check
•	Timing – Highly invasive activities shall be scheduled to avoid breeding and nesting periods of sensitive species, including steelhead, and southwestern pond turtle			
•	Erosion control – Erosion of banks and streambed will be minimized through approved methods (per agencies listed above)			
•	Revegetation - Disturbed areas shall be revegetated with native species to provide nesting habitat, and connections to adjacent areas for migration			
The	e University shall consult with appropriate jurisdictional agencies prior to activity			
No	ise. Cal Poly shall apply the following during construction:	Construction	Contractor	Plan Check
Cal	l Poly Standard Requirements			
А. В.	The requirements of the Article are in addition to those of Article 4.02 of the Contract General Conditions. Maximum noise levels within 1,000 feet of any classroom, laboratory, residence, business, adjacent buildings, or other populated area; noise levels for trenchers, pavers, graders and trucks shall not exceed 90 dBA at 50 feet as measured under the noisiest operating conditions. For all other equipment, noise levels shall not exceed 85 dBA at 50 feet.			
C.	Equipment: equip jackhammers with exhaust mufflers and steel muffling sleeves. Air compressors should be of a quiet type such as a "whisperized" compressor. Compressor hoods shall be closed while equipment is in operation. Use electrically powered rather than gasoline or diesel powered forklifts. Provide portable noise barriers around jack hammering, and barriers constructed of 3/4-inch plywood lined with 1-inch thick fiberglass on the work side.			
D.	Operations: keep noisy equipment as far as possible from noise-sensitive site boundaries. Machines should not be left idling. Use electric power in lieu of internal combustion engine power wherever possible. Maintain equipment properly to reduce noise from excessive vibration, faulty mufflers, or other sources. All engines shall have properly functioning mufflers.			
E.	Scheduling: schedule noisy operations so as to minimize their duration at any given location, and to minimize disruption to the adjoining users. Notify the Trustees and the Architect in advance of performing work creating unusual noise and schedule such work at times mutually agreeable.			
F.	Do not play radios, tape recorders, televisions, and other similar items at construction site.			
G.	When work occurs in or near occupied buildings, the Contractor is cautioned to keep noise associated with any activities to a minimum. If excessively noisy operations that disrupt academic activities are anticipated,			
	they must be scheduled after normal work hours.			
Н.	All work in the area of the residence halls will be restricted to 10:00 a.m. to 10:00 p.m., seven days per week,			
	throughout the year. No work will be allowed in the residence hall areas during the finals week. University			

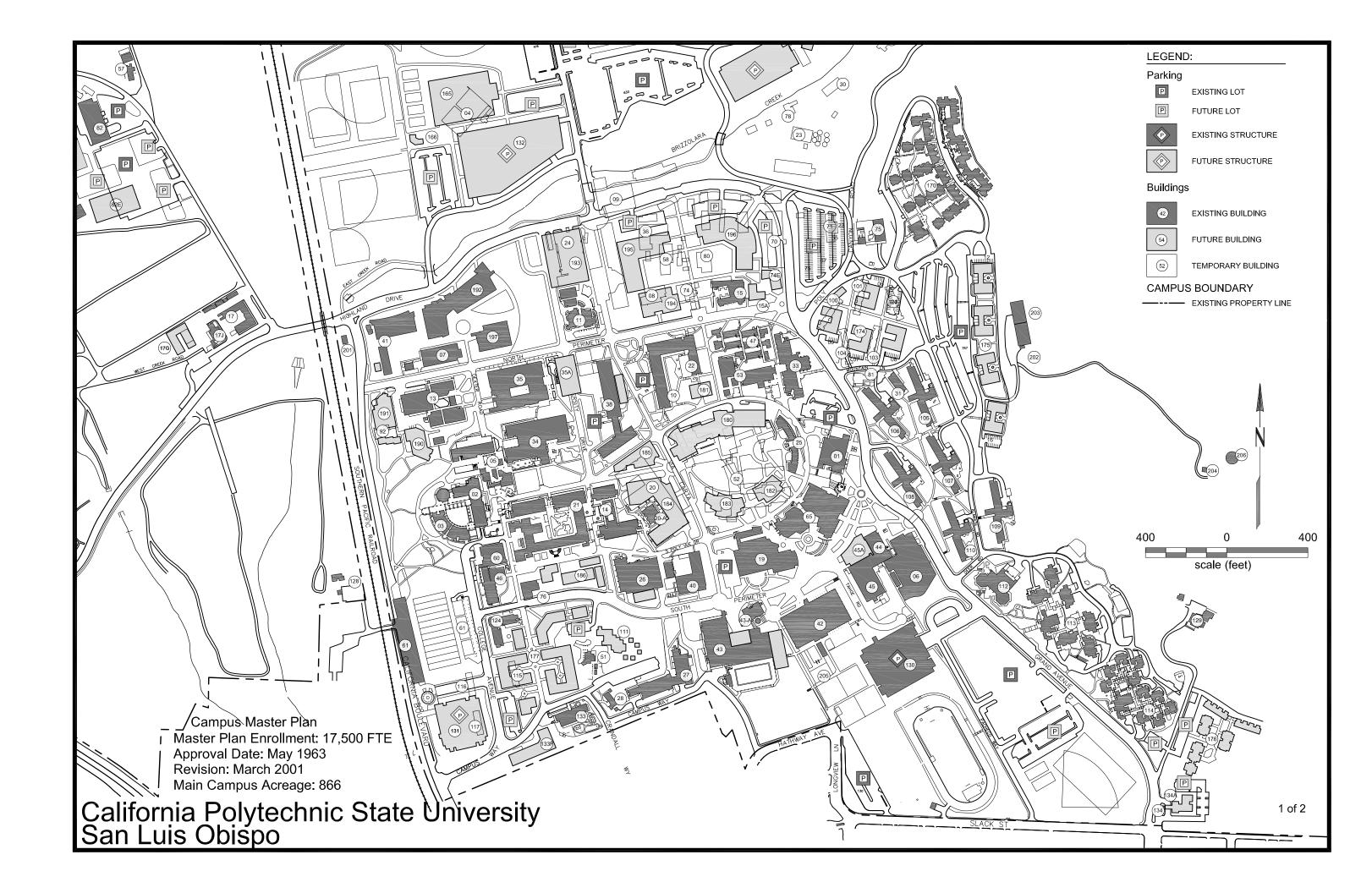
Discussion	When to Implement	Responsible Person/ Agency	Report Due
reserves the right to stop construction work, including but not limited to noisy work, during the following events: Commencement, Open house, Finals Week, residence hall move-in, or at other times that may be identified by the University. University reserves the right to stop noisy work at any time when said work disrupts classes.			
In addition to these standard measures, the following measures are recommended:			
• A haul route plan shall be prepared for review and approval by the University which designates hall routes as far as possible from sensitive receptors.			
• Stockpiling and vehicle staging areas shall be located as far as practical from occupied structures.			
• Whenever practical, the noisiest construction operations shall be scheduled to occur together in the construction program to avoid continuous periods of noise generation. Scheduling of noisier construction activities shall also take advantage of summer sessions and other times when classes are not in session.			
• Project construction activities that generate noise in excess of 60 dB at the project site boundary shall be limited to the hours of 7 a.m. to 6 p.m.			
Pile Driver Use. If possible, the use of pile drivers shall be minimized in construction. Alternative techniques that produce less noise, such as drilled or bored piles, shall be considered.			
Circulation Plan. Where vehicle and pedestrian routes and residential areas conflict with construction activities, a circulation plan will be developed, which will include warning signs and detours, as well as efforts to minimize noise in residential areas.	Construction	Contractor	Plan Check

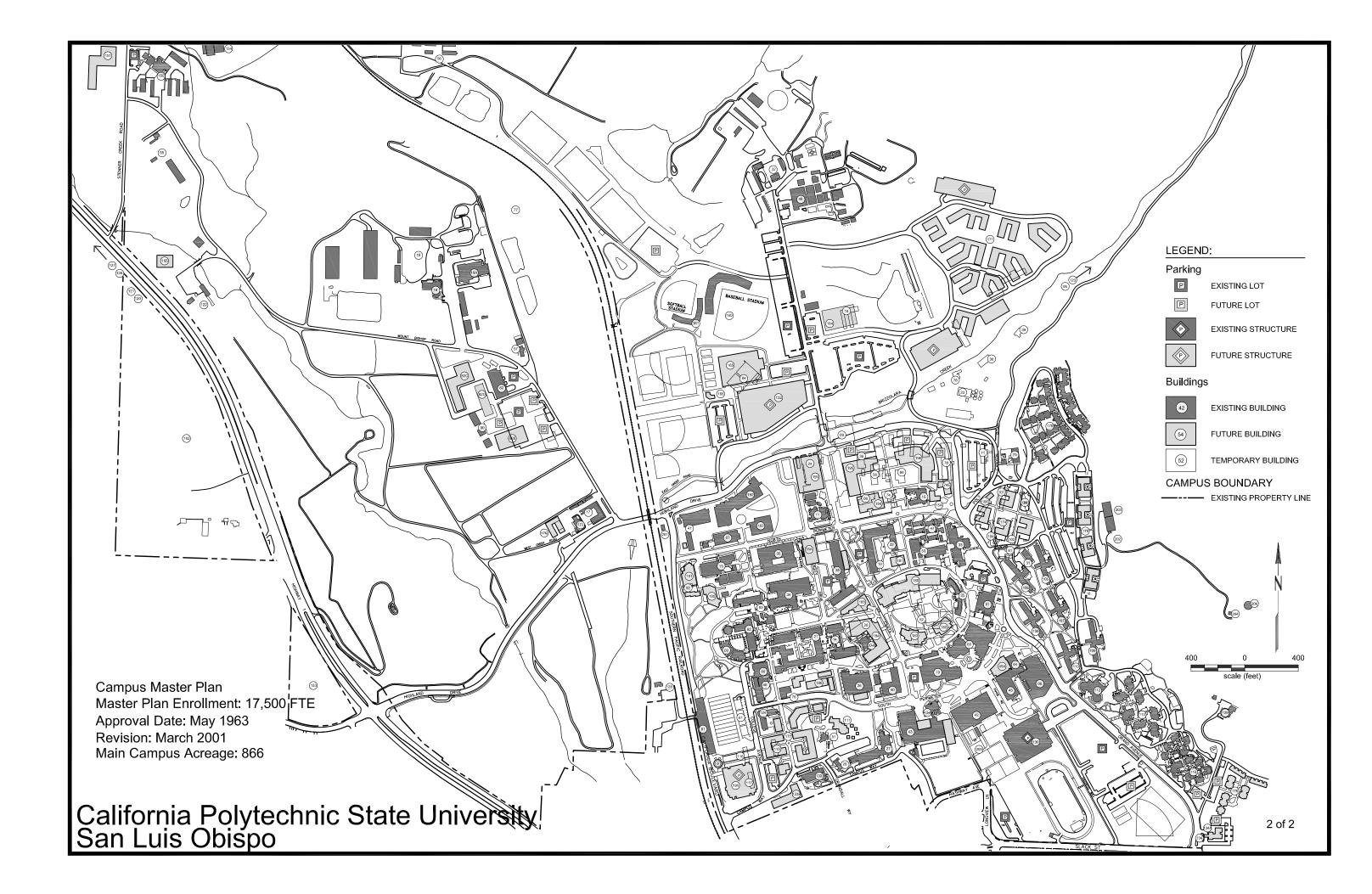












#### Master Plan Enrollment: 17,500 FTE

Master Plan approved by the Board of Trustees: May 1963 Master Plan Revision approved by the Board of Trustees: June 1965, June 1966, June 1968, November 1970, February 1975, September 1981, March 1983, July 1984, September 1985, November 1986, March 1987, June 1989, March 1997, February 1998, March 2001

- 1. Classroom Building
- 1. Administration
- 2. Cotchett Education Building
- 3. Business
- 4. Research Development Center
- 5. Architecture &
- Environmental Design
- 6. Performing Arts Center
- 7. Advanced Technology
- 8. Agricultural Engineering
- 8A. Agricultural Engineering Shop9. Farm Shop
- 9. Farm Shop
- 10. Alan A. Erhart Agriculture
- 11. Agricultural Sciences
- 13. Engineering
- 14. Frank E. Pilling Building
- 15. Foundation Administration
- 15A. Foundation
- Administration Addition
- 16. Beef Unit
- 17. Crops Unit
- 17G. Crops Unit West Greenhouse
- 17J. Crops Unit Lab
- 18. Dairy Science
- 19. Dining Complex
- 20. Engineering East
- 20A. Engineering East Faculty Offices
- 21. Engineering West
- 22. English
- 24. Food Processing
- 25. Faculty Offices East
- 26. Graphic Arts
- 26A. Printing Press
- 27. Health Center
- 28. Albert B. Smith Alumni and Conference Center
- 31. Housing Administration Building
- 32. Horse Unit
- 33. Clyde P. Fisher Science Hall
- 34. Walter F. Dexter Building
- 35. Robert E. Kennedy Library
- 36. Manufacturing
- 38. Mathematics and Science
- 40. Engineering South
- 41. Engineering III
- 42. Robert E. Mott Physical Education
- 43. Recreation Center
- 43A. Kinesiology
- 44. Alex & Faye Spanos Theater
- 45. H. P. Davidson Music Center
- 45A. *Davidson Music Center Addition* 46. Natatorium
- 46. Natatorium
- 47. Faculty Offices North48. Environmental
- Horticultural Science
- 51. President's Residence
- 52. Science

- 53. Science North
- 55. Beef Cattle Evaluation Center

127. Escuela Ranch

128. Parson's Residence

131. Parking Structure 2

132. Parking Structure 3

133F. Children's Center Addition

Instructional Center

152. Faculty/Staff Housing North

153. Faculty/Staff Housing South

151. Goldtree Research Park

133. Children's Center

134. Visitor Information

134A. Visitor Center

150. Poultry Science

154. New Feed Mill

155. New Abattoir

160. Baggett Stadium

161. Bob Janssen Field 164. *Agriculture Pavilion* 

165. Athletic Field House

166. Athletic Field Facility

174. Student Housing 4 175. Student Housing 5

176. Student Housing 6

177. Student Housing 7

180. The Center for Science

181. Centennial Building 1

182. Centennial Building 2

183. Centennial Building 3

184. Centennial Building 4

185. Centennial Building 5

191. College of Engineering

Research Center

193. Center for Technology/

Enhanced Learning

197. Bonderson Engineering

Projects Center

201. Pumphouse 1

202. Pumphouse 2203. Water Reservoir 1

205. Pumphouse 3

LEGEND

204. Water Reservoir 2

206. Water Reservoir 3

Facilities Data Base (SFDB)

Existing Facility / Proposed Facility

Note: Building numbers correspond

with building numbers in the Space and

194. Agriculture Learning Center

195. Northeast Polytechnic Center 1

196. Northeast Polytechnic Center 2

186. Architecture 2

190. Architecture 3

192. Engineering IV

170. Cerro Vista Apartments

171. Student Housing North

130. Grand Avenue Parking Structure

- 56. Swine Unit
- 57. Veterinary Hospital
- 58. Welding
- 60. Crandall Gymnasium
- 61. Alex G. Spanos Stadium
- 65. Julian A. McPhee
- University Union
- 70. Facility Services/
- Receiving Warehouse 71. Transportation Services
- 74. University Police
- 74E. University Police
- 75. Mustang Substation
- 76. Old Power Plant
- 77. Rodeo Arena
- 80. Housing Warehouse/ Environmental Health and Safety
- 81. Hillcrest
- 82. Foundation Warehouse 82C. *Foundation Warehouse*
- Expansion
- 82D. New Corporation Yard
- 82E. New Farm Shop/
- *Transportation Services* 85. Cottage 1
- 86. Cottage 2
- 87. Cottage 3
- 92. Poly Grove Rest Room
- 100. Shasta Hall
- 101. Diablo Hall
- 102. Palomar Hall
- 103. Whitney Hall
- 104. Lassen Hall
- 105. Trinity Hall
- 106. Santa Lucia Hall
- 107. Muir Hall
- 108. Sequoia Hall
- 109. Fremont Hall
- 110. Tenaya Hall
- 111. Alumni Center/Professional Development Conference Center
- 112. Vista Grande
- 113. Sierra Madre Hall
- 114. Yosemite Hall
- 115. Chase Hall116. Jespersen Hall117. Heron Hall

119. Modoc Hall

121. Cheda Ranch

122. Parker Ranch

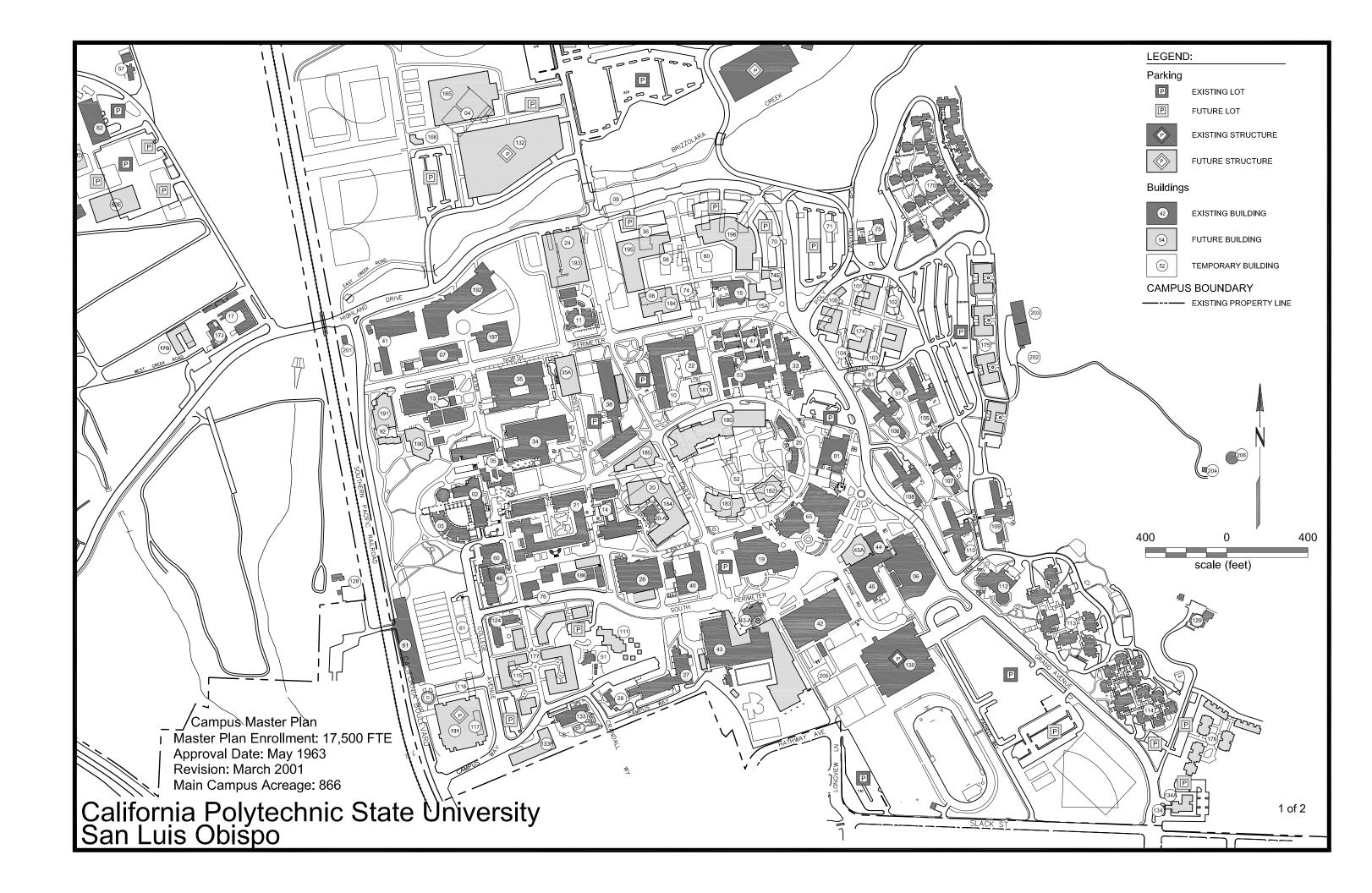
123. Peterson Ranch

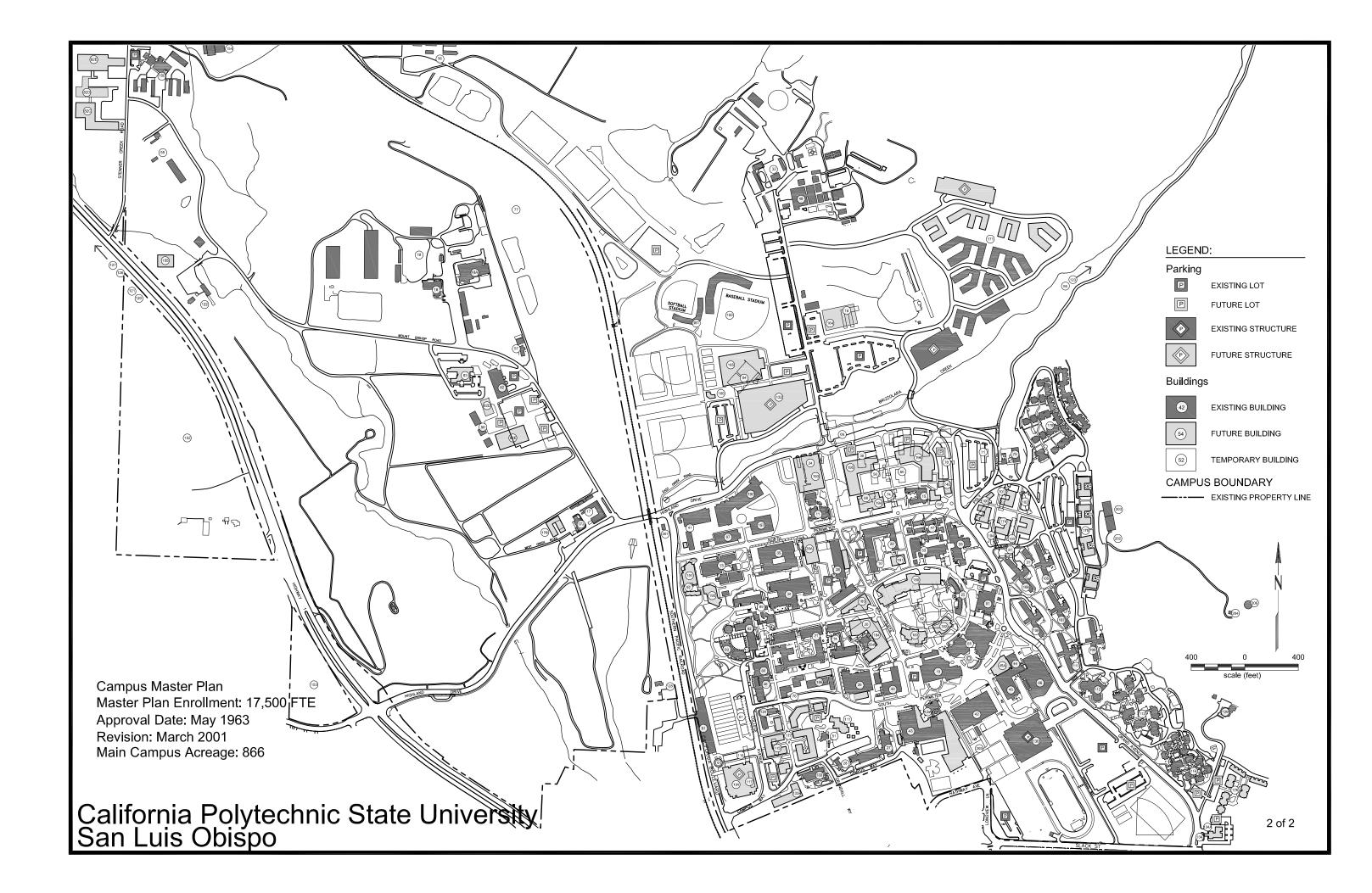
125. Serrano Ranch

124. Student Services

126. Chorro Creek Ranch

126D. Chorro Creek Bull Test





## California Polytechnic State University, San Luis Obispo

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- 2. Cotchett Education Building
- 3. Business
- 4. Research Development Center
- 5. Architecture & Environmental Design
- 6. Christopher Cohan Center
- 7. Advanced Technology Laboratories
- 8. Bioresource and Agricultural Engineering
- 8A. Bioresource and Agricultural Engineering Shop
- 9. Farm Shop
- 10. Alan A. Erhart Agriculture
- 11. Agricultural Sciences
- 13. Engineering
- 14. Frank E. Pilling Building
- 15. Cal Poly Corporation Administration
- 15A. Cal Poly Corporation Administration Addition
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- 17J. Crops Science Lab
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- 30. Horseshoeing Unit
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- 41. Engineering III
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- 43A. Kinesiology
- 44. Alex & Faye Spanos Theater
- 45. H. P. Davidson Music Center
- 45A. Davidson Music Center Addition
- 46. Old Natatorium
- 47. Faculty Offices North
- 48. Environmental Horticultural Science
- 50. Mt. Bishop Warehouses
- 51. University House
- 52. Science
- 53. Science North
- 55. Beef Cattle Evaluation Center
- 56. Swine Unit

- 57. Veterinary Hospital
- 58. Welding
- 60. Crandall Gymnasium
- 61. Alex G. Spanos Stadium
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- 77. Rodeo Arena
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- 82D. Corporation Warehouse Expansion
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- 109. Fremont Hall
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- 111. Alumni Center/Professional Development Conference Center
- 112. Vista Grande
- 113. Sierra Madre Hall
- 114. Yosemite Hall
- 115. Chase Hall
- 116. Jespersen Hall
- 117. Heron Hall
- 117T. CAD Research Center
- 121. Cheda Ranch
- 122. Parker Ranch
- 123. Peterson Ranch
- 124. Student Services
- 125. Serrano Ranch
- 126. Chorro Creek Ranch
- 127. Escuela Ranch
- 127D. Beef Center
- 128. Parson's Residence
- 129. Avila Ranch
- 130. Grand Avenue Parking Structure
- 131. Parking Structure 2
- 132. Parking Structure 3
- 133. Orfalea Family and ASI Children's Center
- 133F. Children's Center Addition
- 134. Visitor Information
- 134A. Visitor Center
- 150. Poultry Science Instructional Center
- 151. New Corporation Yard
- 152. Faculty/Staff Housing North
- 153. Bella Montana
- 154. Animal Nutrition Center
- 155. Meats Processing Center
- 160. Baggett Stadium

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- 164. Agriculture Pavilion
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- 166. Athletic Field Facility
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   Poly Canyon Village
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- 176. Student Housing 6
- 177. Student Housing 7
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- 182. Centennial Building 2
- 183. Centennial Building 3
- 184. Centennial Building 4
- 185. Centennial Building 5
- 186. Construction Innovation Center
- 187. Simpson Strong-Tie
- 190. Architecture 3
- 191. College of Engineering Research Center
- 192. Engineering IV
- 193. Center for Technology/Enhanced Learning
- 194. Agriculture Learning Center
- 195. Northeast Polytechnic Center 1
- 196. Northeast Polytechnic Center 2
- 197. Bonderson Engineering Project Center

#### LEGEND

Existing Facility / Proposed Facility

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