FINAL INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION FOR THE CAL POLY I FIELD IMPROVEMENTS PROJECT

Prepared for:
CALIFORNIA POLYTECHNIC STATE UNIVERSITY, SAN LUIS OBISPO

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INTRODUCTION

California Polytechnic State University, San Luis Obispo (The University or Cal Poly), in association with Associated Students Incorporated (ASI), proposes improvements to the natural grass field north of Slack Street (known as the Cal Poly I Field) to serve as a practice facility for the Cal Poly Athletics Department (Cal Poly Athletics) and other campus sports and recreational activities. ASI is a private, non-profit organization created to complement the core academic mission of the California State University (CSU) by providing a variety of services and essential services on CSU campuses. An Initial Study is being completed at this time to provide preliminary evaluation of the potential impacts of the project, and to identify the type of formal CEQA document that will be required for the project. The level of specificity of environmental analysis is commensurate with the level of project detail available at the time of this writing. Where practical, this Initial Study identifies information that will be needed to initiate subsequent environmental review and measures that may help guide the development of project specifications.

PROJECT LOCATION AND SETTING

Cal Poly is located northeast of the City of San Luis Obispo, on California's central coast approximately midway between San Francisco and Los Angeles. The university campus occupies over 6,000 acres. University lands include range land, agricultural areas and natural preserves, in addition to more developed areas. The more developed portion of campus is identified as the "campus instructional core" and includes academic, housing and administrative buildings, as well as agricultural support facilities. The campus instructional core is generally bound by Highland Drive on the north, California Boulevard on the west, Slack Street on the south, and foothills on the east.

Cal Poly's I Field is located in the southeastern portion of campus, north of Slack Street between Grand Avenue and Longview Lane. I Field currently consists of approximately 2.5 acres of natural grass lawn. There are temporary sheds and storage containers in the southern portion of the field and a concrete pathway extends along the eastern edge from Slack Street into the central campus instructional core. There are two mature eucalyptus trees at the south end of the field and several landscape variety trees along the western edge of the field. The project site is within the Recreation, Athletics, and Physical Education land use category of the 2001 Cal Poly Master Plan. Current uses of the field are generally limited to passive recreational uses and limited football and soccer practices.

The project site is generally surrounded by Slack Street and single-family residences within the City of San Luis Obispo to the south; an approximately 112-space surface parking lot (Lot G-2) and single-family residences within the City of San Luis Obispo to the west; University tennis and swimming facilities, Mott Gym, and the Grand Avenue parking structure to the north; and track and field areas to the east. Just past the track and field areas is Student Housing South, a freshman housing complex containing 1,475 beds of dormitory-style freshman housing within seven 3-to 5-story buildings and an adjacent four-level parking structure. Student Housing South is currently under construction and construction is estimated to be complete in the summer of 2018.

The project location and setting are shown in Figures 1 through 3, below.

PROJECT OBJECTIVES

The project is being pursued with the following objectives:

- Provide additional facilities on campus to support Cal Poly Athletics activities and intermural and student sports and recreational activities;
- Continue to utilize campus lands for the "highest and best use" and increase land use efficiency in the campus core;
- Provide public services that support the University efficiently, with the flexibility to meet changing needs;
- Cluster uses that need to be, or benefit from being, near one another, and consolidate related activities where possible and focus on efficient and effective operations with continuous operational improvements; and
- Consider sustainability, alternative sources, self-sufficiency, life-cycle costing, and other strategies to minimize impacts on the environment.

Figure 1. Project Vicinity

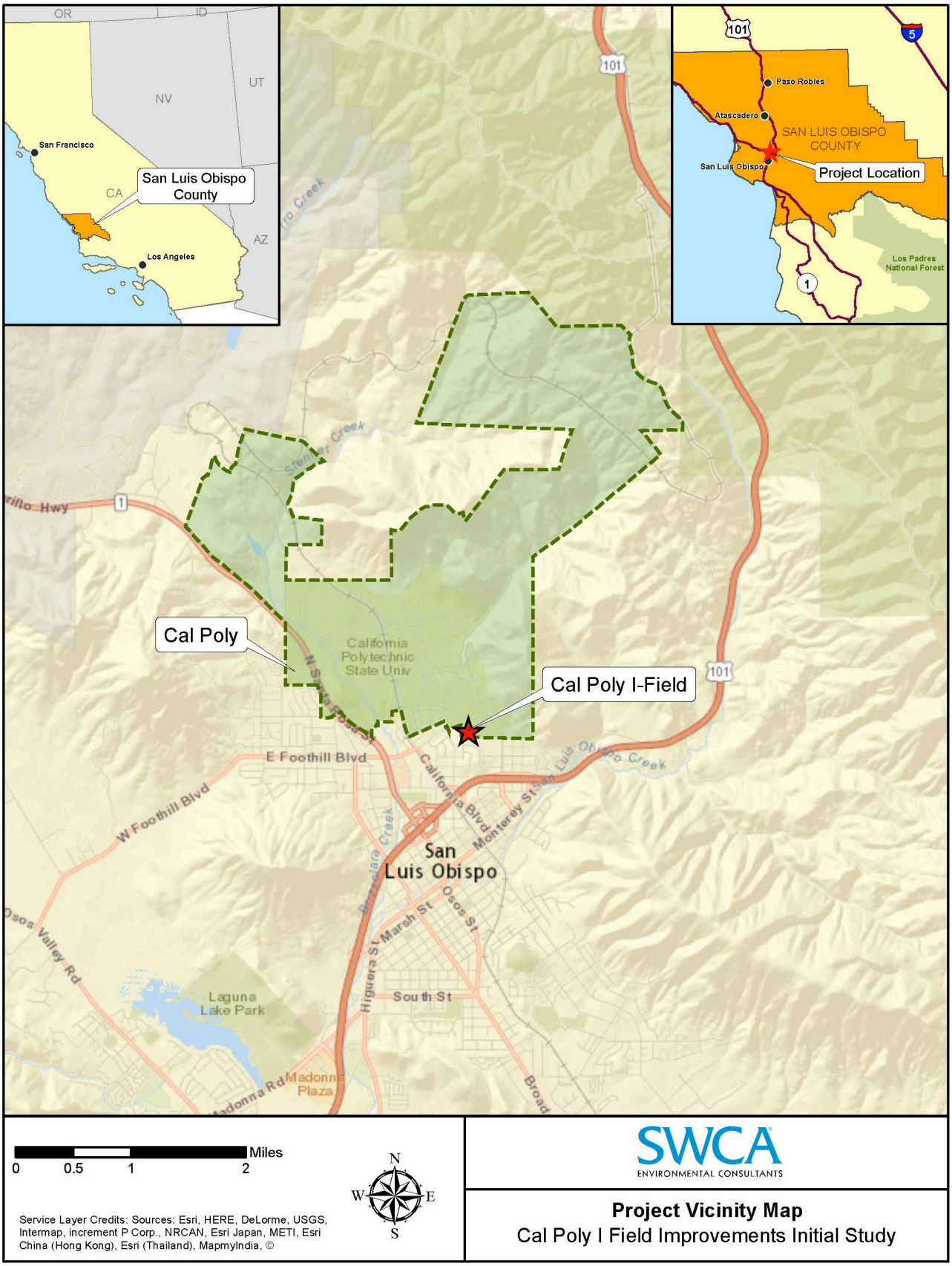


Figure 2. Project Location – Overview

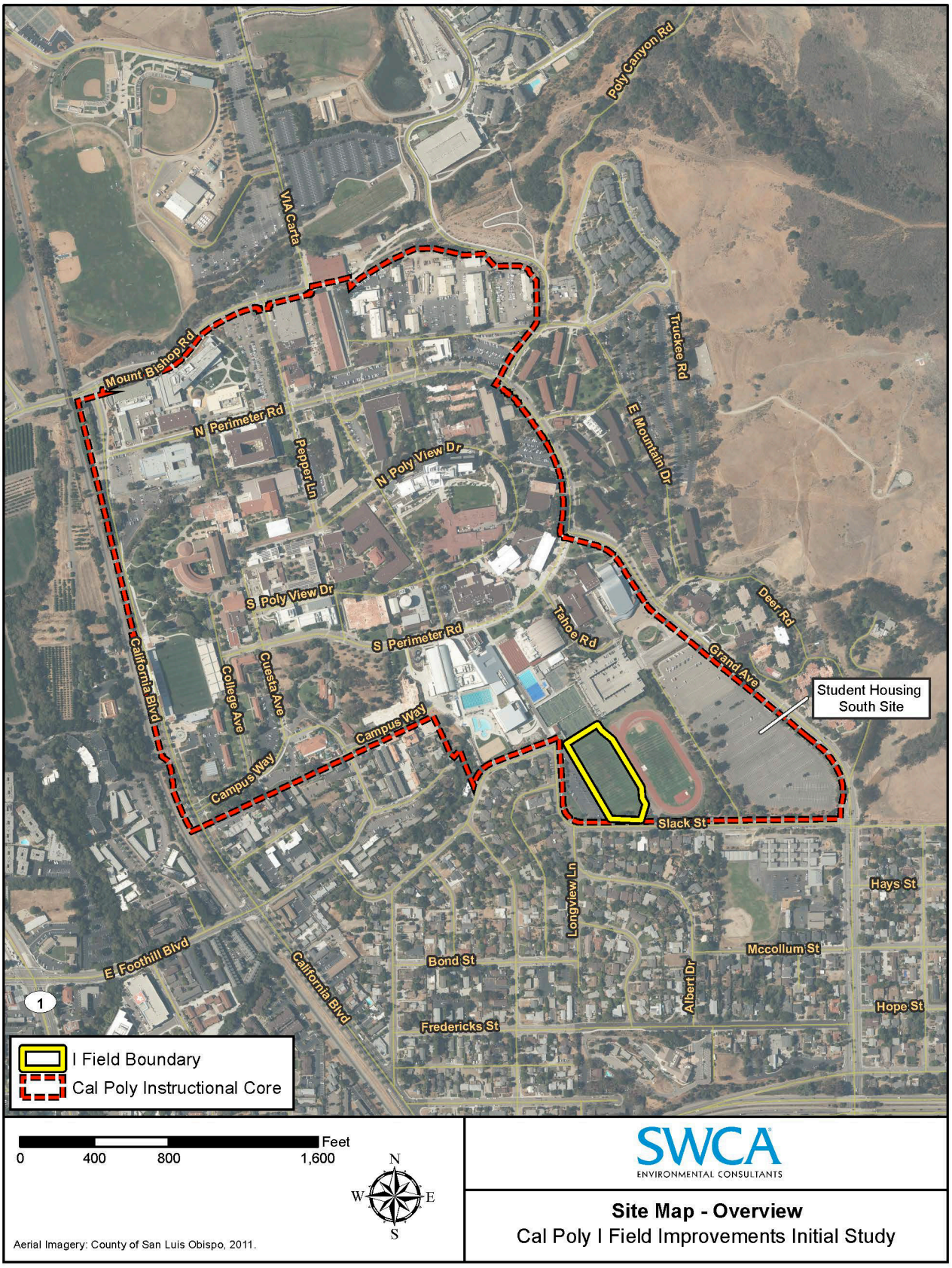
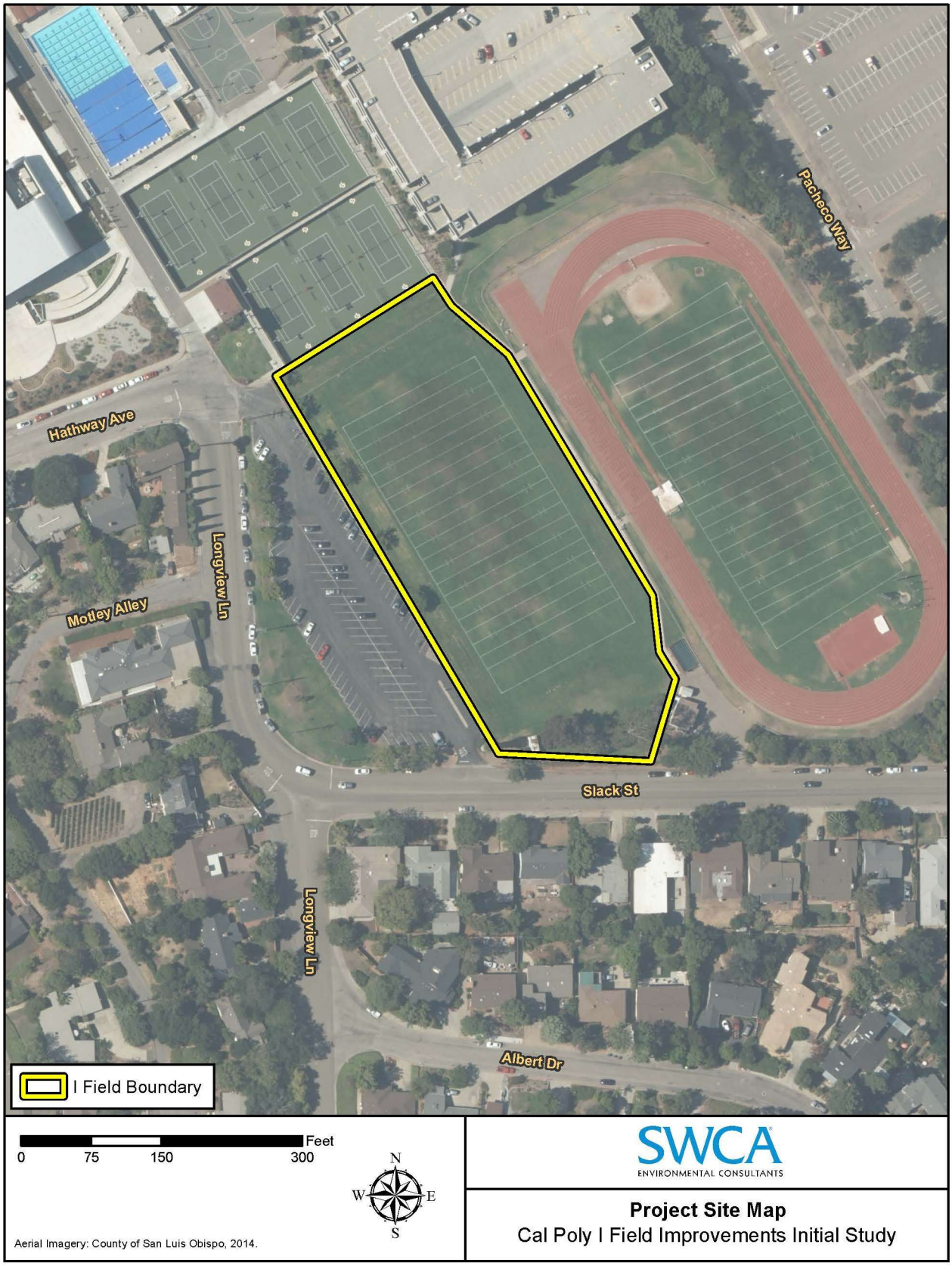


Figure 3. Project Site



PROJECT DESCRIPTION

Cal Poly and ASI (the project proponents) propose to construct an artificial turf field at Cal Poly I Field to serve as a practice location for Cal Poly football, men's and women's soccer, intramural sports, and other student activities and tournaments. Cal Poly Athletics and ASI would partner financially to construct the project and would also share use of the field, most likely through development of a block schedule that outlines which partner has the right to use the field during particular days and times.

The practice field would be available for use all year long, but the most intensive uses would occur during Cal Poly's regular academic school year (i.e., the fall, winter, and spring terms lasting from mid-September through mid-June). During the school year, I Field would typically be used for football and soccer practices on Mondays through Fridays from 6:00 am to 3:00 pm. Football practices would be held throughout the NCAA football season, which generally runs August through December and March through April. Men's and women's soccer practices would be held throughout the school year, and the I Field may also be used for morning conditioning workouts during the summer term.

Intramural flag football and soccer events would be held at the field during the fall, winter, and spring academic terms, and would generally run from the second week of classes until the ninth week of classes in each term. In the future, it is possible that ASI could expand to include other intramural sports and additional intramural league events could eventually be held at the field. Intramural events would take place Thursdays through Sundays, and would be held back-to-back on the hour from 5:00 pm until the fields close at 12:00 am. Other student events, such as kickball, whiffle ball, and ultimate Frisbee tournaments would be held on occasion throughout the year. These tournaments are held roughly three times per academic term and would generally consist of a 1- or 2-day-long event over the weekend (usually Friday evening to Saturday afternoon). No bleachers are proposed at the field, and no large spectator events are anticipated.

The project would include the following components and improvements:

- Site grading to achieve a level site that is 80 yards wide (between the surface parking lot to the west and the track to the east), and a minimum of 140 yards long (between Slack Street to the south and the tennis courts to the north). This may require expansion of the field area west into the surface parking lot (anticipated to be less than 10 feet). If the site cannot meet the desired dimensions, then Cal Poly and ASI would construct the field to be as wide and long as possible.
- Construction of a retaining wall along the northern, western, and southern portions of the field and placement of fill material to eliminate the current natural downward grass slope towards the tennis courts, with stairs up to the playing surface.
- Site grading and removal of cut material at the south end of the field to eliminate the current natural raised slope to the campus border at Slack Street.
- Construction of the playing field with an artificial turf (crumb rubber infill) type of playing surface. A Field Turf or similar type of product would be required.
- Permanent striping of the playing field for:
  - NCAA Football
  - NCAA Soccer
  - Intramural Flag Football
- Installation of two permanent NCAA Football field goal posts (sleeved for removal if necessary) and two 20-foot tall goal post nets to catch kicked footballs, at the north and south ends of the field.
- Installation of a scoreboard with football and soccer specific capabilities.
- Removal of two eucalyptus trees from the south end of the field and five landscape variety trees along the west side of the field near the parking lot.
- Construction of an 8-foot-tall fence along the southern boundary of the site adjacent to Slack Street and a 6-foot-tall fence along the remainder of the site perimeter (northern, eastern, and western sides of the

field). Fencing along the eastern side of the site would be located along the existing concrete pathway leading into the campus instructional core. Site fencing would include three lockable gates large enough to accommodate service vehicle access. Green windscreen with Cal Poly logo branding would be added to all fencing (6-foot and 8-foot tall fencing) as well as the 20-foot tall goal post nets.

- Removal of the temporary sheds and storage containers located at the south end of the field.
- Placement of six 70-foot tall field light poles with six light-emitting diode (LED) full cutoff light fixtures mounted at the top of each pole (three on each side of the field) to light for recreational purposes. Lights would be shrouded to minimize light pollution.
- Construction of a metal storage building on the south end of the field.
- Construction of two filming towers for video recording purposes at the east and north sides of the field, including the installation of any necessary electrical facilities to power the filming towers and necessary network connections for football filming needs. The filming towers would be approximately 8 feet wide, 16 feet long, and 36 feet high. They would be permanently placed and would include an open platform at the top (no enclosed structure).
- Construction of an audio system for public address (PA) announcements, music, or crowd noise simulation.
- Installation of a watering system to cool the field down when needed and four hose bibs at the end of each side of the field.
- Installation of two drinking fountains, located on the east and west sides of the field.

Project Schematic Plans are included as Appendix A.

PURPOSE OF THE INITIAL STUDY

An initial study is an informational document used in planning and decision making. The initial study is not intended to recommend approval or denial of the project. The CSU Trustees have prepared this initial study to determine if the project would have a significant effect on the environment. The purposes of the initial study are to:

- Provide the lead agency with information to use in deciding whether to prepare an EIR or negative declaration;
- Enable the lead agency to modify the project to avoid adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a negative declaration;
- Document the factual basis for the finding, in a negative declaration, that a project will not have a significant impact on the environment.

APPLICABLE REGULATIONS

The 2001 Cal Poly Master Plan is the primary document governing land use and capital improvements on campus through the year 2020. The Master Plan includes several elements which guide development on campus, including, but not limited to: Campus Instructional Core, Residential Communities, Circulation, and Parking. The Master Plan establishes land uses for the entire campus and outlines principles to guide future development. The Master Plan does not set specific standards for development; however, development pursuant to the Master Plan is conditioned by mitigation measures outlined in the Master Plan EIR, as applicable.

NPDES Phase II Regulations (Non-point Source Stormwater Pollution Prevention). The project encompasses an area more than one acre in size; a Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the project pursuant to the approval of the Regional Water Quality Control Board (RWQCB). The SWPPP will outline site management practices for site preparation, construction, and post-construction phases of the project.

INITIAL STUDY ENVIRONMENTAL CHECKLIST

This section discusses potential environmental impacts associated with approval of the proposed project.

Required Information

Project Title: Cal Poly I Field Improvements Project

Lead Agency: California State University Board of Trustees
401 Golden Shore
Long Beach, CA 90802-4210

Contact Person: Julie Hawkins, AICP
Campus Planner, Facilities Planning and Capital Projects
Building 70
Cal Poly State University
San Luis Obispo, CA 93407
(805) 756-6563

Project Location: North of Slack Street between Grand Avenue and Longview Lane, Cal Poly State University, San Luis Obispo, California

Project Sponsor: Cal Poly Athletics, ASI

Master Plan Designation: Recreation, Athletics, and Physical Education

Project Description: Construct and operate an artificial turf field at Cal Poly I Field to serve as a practice location for Cal Poly football, Cal Poly men's and women's soccer, intramural sports, and other student activities and tournaments.

Surrounding Land Uses and Setting: Surrounding land uses include: single family residential neighborhoods within the City of San Luis Obispo to the south and west, and recreational facilities (i.e., track fields, tennis courts, recreation center, Mott Gym, and swimming facilities), Student Housing South (1,475 beds of dormitory-style freshman housing within seven 3-to 5-story buildings and an adjacent four-level parking structure, currently under construction), and the Grand Avenue Parking Structure within Cal Poly State University to the north and east.

California State University (CSU) and Other Public Agencies whose approval will be sought: California State University: Approval of schematic plans and related actions; Regional Water Quality Control Board; County of San Luis Obispo Air Pollution Control District; and, others as may be necessary.

CEQA Guidance

Appendix G of the State CEQA Guidelines was used in answering the checklist questions:

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the discussion. A "No Impact" answer is adequately supported if the discussion shows that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained when it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be

significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from earlier analyses may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (State CEQA Guidelines Section 15063[c][D]). In this case, a brief discussion should identify the following:

    a) *Earlier Analysis Used*. Identify and state where they are available for review.

    b) *Impacts Adequately Addressed*. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c) *Mitigation Measures*. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. *Supporting Information Sources*: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

    a) the significance criteria or threshold, if any, used to evaluate each question; and

    b) the mitigation measure identified, if any, to reduce the impact to less than significance

Identification of the potential for residual significant adverse environmental impacts would trigger the need for preparation of an EIR. For issue areas in which no significant adverse impact would result or impacts would be reduced to a less-than-significant level by mitigation, further analysis is not required.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact with Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
I. AESTHETICS				
Would the proposal:				
a. Have a substantial adverse effect on a scenic vista?			X	
b. Substantially damage scenic resources, including, but not limited to, tree, rock outcroppings, and historic buildings within a scenic state highway?				X
c. Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in this area?		X		

Background

The information in this section relies on the Visual Impact Assessment prepared for the project (SWCA 2017), which is included as Appendix B.

Cal Poly's I Field is located in the southeastern portion of campus, north of Slack Street between Grand Avenue and Longview Lane. I Field currently consists of approximately 2.5 acres of natural grass lawn. There are temporary sheds and storage containers in the southern portion of the field and a concrete pathway extends along the eastern edge from Slack Street into the central campus instructional core. There are mature eucalyptus trees and shrubs at the south end of the field and several landscape variety trees along the western edge of the field. The project site is within the Recreation, Athletics, and Physical Education land use category of the 2001 Cal Poly Master Plan. Current uses of the field are generally limited to passive recreational uses and limited football and soccer practices.

The project site is generally surrounded by Slack Street and single-family residences within the City of San Luis Obispo to the south. Southeast of the project site the topography rises above the elevation of the project site and the southern portion of campus. West of the project an approximately 112-space surface parking lot and single-family residences within the City of San Luis Obispo border the campus. University tennis and swimming facilities and the Grand Avenue parking structure are located to the north; and track and field areas to the east. Just east of the track and field areas is Student Housing South, a freshman housing complex containing 1,475 beds of dormitory-style freshman housing within seven 3-to 5-story buildings and an adjacent four-level parking structure. Student Housing South is currently under construction and construction is estimated to be complete in the summer of 2018.

Project Visibility. The project would be seen to varying degrees from the surrounding residential neighborhoods. These neighborhoods include areas primarily south and southwest of campus. Topography, residential development, and mature vegetation limit much of the views to the project site from the surrounding area. Portions of the project would be visible from sections of nearby public roadways and their associated residences, including but not limited to Slack Street, Longview Lane, Albert Drive, and Hathaway Street. Of these local roadways the project would be most readily seen from segments of Slack Street and Longview Lane, which both front the project site. Currently, the project site includes mature trees and shrubs along its Slack Street perimeter, and various ornamental trees throughout the adjacent parking lot and along Longview Lane.

The local topography causes portions of the adjacent residential neighborhood to the south to be somewhat elevated above the campus and the project site. As a result, some of these areas can have broader views of the surrounding landscape. The surrounding hills are also often part of the overall viewshed from these locations.

Views of the Santa Lucia foothills are most pronounced from these viewpoints. Because of the mature trees and landscaping throughout these established neighborhoods, views of the campus and the project site are often filtered or blocked. As seen from the public roads servicing these neighborhoods, the residences themselves often preclude views to the campus and the project site. Where visible, views from these neighborhoods show the project site in the context of the greater campus development. The viewshed from these elevated areas typically include the Performing Arts Center, the Grand Avenue parking structure, the Recreation Center, student housing along Grand Avenue, and portions of the existing track and field area and the I Field project site.

From within the campus itself, project visibility would generally be limited to viewpoints in the southern-most portion of the campus, in the vicinity of the project. Views of the project from closer viewpoints within campus in the immediate project vicinity would primarily include the screened perimeter fencing, film towers, scoreboard, goal posts and field lighting poles. The field surface itself would have little to no visibility from the surrounding area, except from the upper levels of the parking structure and the new student housing. From more distant viewpoints in the surrounding area, the upper portions of the field lighting poles would be the only visible elements of the project. The size of existing buildings and density of development including the Performing Arts Center, Recreation Center, and other related structures north of the project site would preclude much of the project visibility from the campus core.

Discussion of Checklist Answers

a. Scenic vistas are considered to be views which are either defined as such by the University or the City of San Luis Obispo, and/or are expansive views of a highly valued landscape for the benefit of the general public. Scenic vistas seen from the project area and the vicinity include views of the Morros to the west and northwest, and views of the Santa Lucia foothills to the east and northeast. If the project would significantly degrade the scenic landscape as viewed from public roads, or in particular designated Scenic Roadways, or from other public areas, this would be considered a potentially significant impact on the scenic vista.

As seen from the neighborhoods south of the project, the project would not be in the foreground views of the Morros and would not affect the scenic vista. From these neighborhood viewpoints the Morros are oriented further to the west, and the project would be northeast of that viewing direction.

From viewpoints south and southwest of the project, views to the Santa Lucia foothills to the north and northeast are currently partially obscured by mature trees along Slack Street and Longview Lane, and by existing campus development along Grand Avenue. As seen from these locations, the project's proposed removal of two existing large eucalyptus trees along Slack Street would somewhat open-up views to the background hillsides to the north and northeast. The project however proposes to replant trees and other vegetation between the I Field and Slack Street, which would over time reduce views to the hills again. It is expected that the new landscaping would take approximately 15 to 20 years to mature in size and substantially block views of the distant hills. In the meantime the project would place six 70-foot light poles into the fore and mid-ground view of the hillside backdrop. Despite placement of the poles, removal of the large eucalyptus trees would open-up views through the site to the hillsides. This would result in a net increase in views to the Santa Lucia foothills from viewing locations south and southwest of the project for approximately 15 to 20 years, until the proposed landscape vegetation grew to mature heights. However, the view would be slightly degraded do the newly-intervening light poles. The visual profiles of the light poles would be narrow and would occupy a very small portion of the scenic vista, but they would cause a minor interruption of the natural backdrop, and would extend above the primary ridgeline as seen from some locations.

Both on and off-campus views of the project from the west and northwest would be less affected by the proposed tree removal along Slack Street (refer to Appendix B, Visual Impact Assessment, Figure 13). From these locations, the lowest portions of the Santa Lucia foothills are partially obscured by campus and community vegetation and development, and the upper portions of the hills are generally visible. From these off-campus west and northwest views the project would add elements such as retaining walls, fencing, and towers into the lower portions of the existing views. Since these lower portions of the hills are already somewhat blocked, these elements would have little to no effect on the Santa Lucia foothills scenic vista. The proposed field lighting poles would however extend upward into the fore and mid-

ground of the hillside view. As with viewpoints to the south, the visual profiles of the light poles would occupy only a small portion of the scenic vista. However they would cause a minor interruption of the upper hillside view, and would be seen silhouetting above the primary ridgeline.

Views from within the campus east of the project would be affected in various ways. At viewpoints from the adjacent track facility, because of the close proximity and elevation, project elements would block the lower and middle portions of Bishop Peak. The proposed field light poles would extend up and be seen in view of the upper portions of the hillside. As seen from other campus viewpoints to the east, such as the Performing Arts plaza, parking structure and student housing, the majority of the project elements would be lower in elevation and not affect scenic views. The field lights would extend into the lower portions of the distant views as seen from these viewing locations. Because of their narrowness, the poles would have only a minimal effect on scenic views.

Impacts to a scenic vista would be less than significant.

b. State Route (SR) 1 between San Luis Obispo and the northern San Luis Obispo County boundary line is an Officially Designated State Scenic Highway and All American Road. SR 1 is located approximately 0.6 mile west of I Field, but views of the field are blocked by existing development, vegetation, and topography. This CEQA threshold does not apply because the project is not within the view corridor of any officially designated state scenic highway.

According to the City of San Luis Obispo General Plan Conservation and Open Space and Circulation Elements, the nearest designated scenic roadway to the project is a short section of Grand Avenue near Slack Street. Because of intervening vegetation and development, the project would not be seen or have an effect on views from that or any other section of scenic roadway.

No new or increased impacts would occur.

c. Project related actions would be considered to have a significant impact on the visual character of the setting if they altered the area in a way that substantially changed, detracted from, or degraded the visual quality as seen from moderately sensitive public viewpoints in the area and was inconsistent with defined policies regarding visual character. The degree to which proposed change reflects documented community values and meets users' and other viewers' aesthetic expectations is the basis for determining levels of significance. Visual contrast may be used as a measure of the potential impact that the project may have on the visual character of the site.

The visual context of the project site is mostly influenced by the uses and buildings of University development. Although bordered to the south, southeast and southwest by predominantly residential neighborhoods, the project location is clearly within the campus boundary. Accordingly, viewer expectations related to the project site would consider campus-style development appropriate, including scale, usage, and patterns consistent with the rest of the University. The project would maintain the current recreational use of the site. This recreational use would be intensified, and the degree of associated development would increase; however these changes would be in keeping with the density of recreational uses seen in the surrounding athletic facilities in this portion of the campus. The proposed elements of the project including fencing, lights, goal posts, filming towers, nets, and perimeter landscaping would all be considered consistent with the visual character of the site and its surroundings.

Photo simulations of the proposed project are included in Appendix B (refer to Appendix B, Visual Impact Assessment, Figures 3 through 5). Impacts on visual character and quality would be less than significant.

d. The project would result in a significant impact if it subjects public viewing locations to a substantial amount of point-source lighting visibility at night, or if project illumination results in a noticeable spillover effect into the nighttime sky, increasing the ambient light over the region. The height and placement of lighting, source of illumination, and fixture types combined with viewer locations, adjacent reflective elements, and atmospheric conditions can affect the degree of change to nighttime views. If the

project results in direct visibility of a substantial number of lighting sources, or allows a substantial amount of light to project toward the sky, significant impacts on nighttime views and aesthetic character would result.

The project is part of an institutional/suburban environment with a moderate amount of existing ambient light and visible point-source lighting. The project site itself currently generates no lighting, although the immediate area includes parking lot lighting, street lights along Slack Street, Longview Lane, Grand Avenue, Albert Drive, and other surrounding roads. The Performing Arts Center, sporting venues, and existing parking structure all contribute to the existing nighttime lighting level. For safety reasons the campus is lit at night and produces a moderate amount of ambient nighttime lighting visible from the surroundings. Residential lighting can also be seen throughout the area.

The project proposes up to six 70-foot tall field lights with six LED light fixtures mounted at the top of each pole. The project description and plans describe the lighting as utilizing full cut-off light shielding. The associated photometric diagrams provided by the lighting manufacturer (refer to Figures 5 through 9 of Appendix B, Visual Impact Assessment) indicate that the proposed field lighting would result in no spillover to the surrounding residential neighbors or the university campus. The diagrams show a minor amount of low-level spill-over onto an approximately 250-foot section of the westbound lane of Slack Street directly adjacent to the project.

The proposed removal of two existing eucalyptus trees along the southern perimeter of the project site adjacent to Slack Street would contribute to the visibility of the sports field lighting. These mature trees are approximately 75-feet tall and their removal would open-up views to the light arrays at the tops of the poles. The five replacement trees proposed by the project for that area would take several decades to reach heights approaching that of the existing trees. One of the proposed tree species, *lophostemon confertus* (Brisbane box), would never obtain those heights.

According to the information provided by the lighting manufacturer, potential impacts caused by lighting and glare would be minimal. However, given the high degree of sensitivity to light pollution indicated in the University Masterplan Guidelines as well as City of San Luis Obispo General Plan and Zoning Ordinances, any deviation from the lighting manufacturer's data or inadvertent residual light trespass could result in substantial lighting impacts to the surrounding area. Because of the project's proximity to public viewpoints and residential areas, combined with the 70-foot height of the field lighting poles, the project has the potential to cast a substantial new source of light and glare into the surrounding area, resulting in potentially significant direct long-term impacts to nighttime views.

Impacts associated with nighttime lighting and glare would be less than significant with mitigation incorporated.

Mitigation Measures

Mitigation is available that could potentially reduce the visual impacts of the project to a less than significant level, as follows:

AES-1 Prior to project construction, an evaluation of the lighting manufacturer's lighting data (Appendix B, Visual Impact Assessment, Figure 5) shall be conducted for the purpose of confirming that no light trespass would occur beyond the campus boundary and that no point-source light would be visible from beyond the campus boundary. The Report shall be prepared by a qualified engineer who is not a prospective vendor or manufacturer of the lighting system to be used on the project. The lighting evaluation shall include the following at a minimum:

a. If off-campus light trespass or point-source visibility is identified in the Lighting Evaluation Report, specific recommendations shall be identified to eliminate such trespass and/or visibility. Recommendations may include but not be limited to: repositioning lights, lowering heights, increasing sizes of cut-off shields, altering types of luminaires or wattage, or modifying operational procedures.

b. The University shall implement the recommendations made by the Lighting Evaluation Report. The results of the independent lighting evaluation shall be field verified to ensure light trespass has been adequately eliminated at off-campus locations and no point-source lighting is visible from beyond the campus boundary.

AES-2 Prior to construction of the retaining wall, the project plans shall be revised to save the existing eucalyptus trees located between the I Field and Slack Street upon confirmation by a certified arborist that retaining the trees would not pose a safety hazard. A certified arborist shall evaluate the trees to determine whether or not they can be feasibly and safely retained onsite. If retaining any of the trees is determined to be possible, the certified arborist shall provide written recommendations to confirm that no impacts would occur to the trees to be retained or their root zones as a result of project construction and operation. All recommendations of the certified arborist shall be incorporated into the project plans and implemented by the University prior to construction of the retaining wall.

Conclusion

Implementation of these measures would ensure potential glare and lighting trespass impacts as seen from the off-campus surrounding area would be less than significant. As a result, visual impacts based on new source of light or glare would be considered significant but mitigable.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact with Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
II. AGRICULTURE AND FORESTRY RESOURCES				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section				X

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact with Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
51104(g))?				
d. Result in the loss of forest land or conversion of forest land to non-forest use?				X
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Background

A significant portion of the University's holdings are devoted to agriculture. The University has extensive livestock operations, ranches, and cultivated croplands including vineyards, row crops, and orchards, in addition to more intensive agricultural facilities such as feedlots. Agricultural operations are generally located in the northern portions of campus, northwest of California Boulevard and north of Highland Drive.

I Field is located in the southeast portion of the Cal Poly Instructional Core, and is surrounded by developed recreational facilities, parking, and residential uses on all sides. There are no agricultural uses within 0.5 mile of the project site. The project site and surrounding areas are designated as Urban and Built-up Land in the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP).

Discussion of Checklist Answers

a-e. There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Significance in the project vicinity, and no portion of the project site or surrounding areas are zoned for agricultural use or subject to a Williamson Act contract. There are no forest lands or timberlands in the project vicinity. The project would result in a long-term reduction in water use, as the irrigated lawn would be converted to artificial turf. Due to the lack of proximate farmlands and agricultural uses, the project would not involve other changes that would convert Important Farmland or agricultural resources to non-agricultural use.

Therefore, no new or increased impacts to agricultural resources would occur.

Mitigation Measures

None anticipated.

Conclusion

The project would not affect agricultural resources. No new or increased impacts would occur.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact with Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
III. AIR QUALITY				
Where available, the significance criteria established by the applicable air quality management or pollution control district may be relied upon to make the following determinations. **Would the project:**				
a. Conflict with or obstruct implementation of the applicable air quality plan?			X	
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d. Expose sensitive receptors to substantial pollutant concentrations?		X		
e. Create objectionable odors affecting a substantial number of people?			X	

Background

Cal Poly is within the South Central Coast Air Basin, which encompasses all of San Luis Obispo, Santa Barbara, and Ventura Counties. Air quality within the County is regulated by the San Luis Obispo County Air Pollution Control District (SLOAPCD).

The SLOAPCD is responsible for monitoring the County's compliance with state and federal air quality standards. These standards represent allowable atmospheric contaminant concentrations at which the public health and welfare are protected, and include a factor of safety. In San Luis Obispo County, ozone and respirable particular matter (PM_{10}) are the air pollutants of main concern, since exceedances of state health-based standards for those pollutants are experienced here in most years. For this reason, San Luis Obispo County has been designated as a non-attainment area for the state ozone and PM_{10} standards. The County is in attainment of all other standards.

Discussion of Checklist Answers

a. The applicable air quality plan is the San Luis Obispo County Air Pollution Control District (APCD) Clean Air Plan (2001). The plan projects air quality emissions and standard attainment goals based on growth rates in population and vehicle travel in San Luis Obispo County. The project would not conflict with or obstruct the Clean Air Plan because it does not include additional development growth, urban sprawl, or result in a long-term increase in vehicle miles traveled.

Impacts would be less than significant.

b-c. The project would not result in additional long-term vehicle trips or point source emissions, except for minimal maintenance activities. Due to its proximity to the Grand Avenue Parking Structure, the project would eliminate existing trips between existing campus parking lots and the Sports Complex (where

football practices are currently held), resulting in an overall reduction in campus trips. Therefore, operational emissions would be negligible.

Construction of the proposed project would result in the emission of additional short-term criteria air pollutants from mobile and/or stationary sources. "Criteria pollutants" under the Clean Air Act are ozone (O3), nitrogen dioxide (NO2), carbon monoxide (CO), sulfur dioxide (SO2), particulate matter less than or equal to 10 microns in size (PM_{10}), particulate matter less than or equal to 2.5 microns in size (PM2.5), and lead (Pb). An area is designated in attainment when it is in compliance with the National Ambient Air Quality Standards and/or the California Ambient Air Quality Standards. San Luis Obispo County is designated as attainment and/or unclassifiable of all federal standards with the exception of the 8-hour O3 standard for the eastern portion of the County; the western portion of the County is designated as attainment for the federal 8-hour O3 standard. The County is designated as nonattainment for the state 8-hour and 1-hour O3 standards and the state PM_{10} standards, but is designated as attainment for all other state criteria pollutant standards.

Construction of the proposed project would result in a temporary addition of pollutants to the local air basin caused by soil disturbance, dust emissions, and combustion pollutants from on-site construction equipment, as well as from employee vehicles and off-site trucks hauling construction materials. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions. Implementation of the proposed project would generate construction-related air pollutant emissions from two general activity categories: entrained dust and equipment and vehicle exhaust emissions. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM10 and PM2.5 emissions. Exhaust from internal combustion engines used by construction equipment and hauling (dump trucks) and vendor trucks (i.e., delivery trucks) and worker vehicles results in emissions of oxides of nitrogen (NOx), reactive organic gases (ROG) (also referred to as volatile organic compounds (VOCs)), CO, PM10, and PM2.5. ROGs and NOx are important because they are precursors to O3.

Emissions resulting from the project were estimated using the most recent version of the California Emissions Estimator Model (CalEEMod) and modeling assumptions, outputs, and an emissions summary have been included as Appendix C. Based on the emissions modeling, the project is not expected to exceed applicable construction emissions thresholds. Construction related emissions are summarized in the following table:

Table 1. Comparison of Unmitigated Construction Emission Impacts to APCD Quarterly Thresholds

	Quarterly Maximum Emissions (tons/quarter)		
	ROG + NO_X [a]	**DPM [b]**	**Fugitive PM_{10}, Dust**
Project Emissions	1.2	0.04	0.1
Quarterly Tier 1 Threshold [c]	2.5	0.13	2.5
Project Construction Emissions Exceed Threshold?	No	No	No

[a] Summation of individual Reactive Organic Gases (ROG) and Nitrates of Oxygen (NOx) outputs.
[b] Used exhaust PM10 and PM2.5 emissions as proxy for Diesel Particulate Matter (DPM) emissions.
[c] Emission thresholds taken from "CEQA Air Quality Handbook: A Guide for Assessing the Air Quality Impacts for Projects Subject to CEQA Review," SLOAPCD, April 2012. Emission thresholds listed are for Quarterly Tier 1.

Impacts would be less than significant.

d. There are several sensitive receptors located immediately adjacent to the project site, including single family residences along Slack Street and Longview Lane. Construction activities associated with the proposed project would result in temporary sources of fugitive dust and construction vehicle emissions including diesel particular matter (DPM). Onsite soils may include undocumented components, including

naturally-occurring asbestos which would be particularly hazardous to sensitive receptors if airborne. Due to the proximity of sensitive receptors, standard dust and emission control measures will be required consistent with SLOAPCD regulations. The potential presence or absence of naturally-occurring asbestos will also be required and, if present, appropriate measures must be identified to reduce health risks to a less than significant level.

Impacts will be less than significant with mitigation incorporated.

e. Earthwork, construction, and demolition activities would result in the emission of diesel fumes and other odors typically associated with construction activities. Any odors associated with construction and demolition activities would be temporary and would cease upon project completion.

Impacts would be less than significant.

Mitigation Measures

To ensure emissions generated during construction activities are reduced to a level that is less than significant, the following mitigation is provided in accordance with the Cal Poly Master Plan and Final EIR (Cal Poly 2001):

AQ-1 Dust Control[1]

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.

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.

[1] Dust control measures have been modified from the original measures provided in the *Cal Poly Master Plan and Environmental Impact Report* (2001) to reflect current SLOCAPCD recommendations as provided in the SLOCAPCD *CEQA Air Quality Handbook* (SLOCAPCD 2012).

In addition to the measure listed above, the following dust control measures shall be implemented to reduce fugitive dust emissions generated during construction activities in accordance with the *Cal Poly Master Plan and Final EIR* (Cal Poly 2001):

- ~~During construction,~~ Reduce the amount of disturbed area where possible ~~shall be minimized~~.
- On-site vehicle speeds should be reduced to 15 miles per hour 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 dirt stockpile areas shall be sprayed daily and covered with tarps or other dust barriers as needed.
- Use water trucks, APCD approved dust suppressants, or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site and from exceeding the District's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible.
- All roadways 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.
- Rock pads and/or rumble strips (or similar) shall be installed where vehicles enter and exit unpaved areas onto streets, or trucks and equipment shall be washed off before leaving the site. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.
- All PM10 mitigation measures shall be shown on grading and building plans.
- The contractor or builder shall consider the use of a SLOAPCD-approved dust suppressant where feasible to reduce the amount of water used for dust control.
- The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints and reduce visible emissions below the SLOAPCD's limit of 20 percent opacity for greater than 3 minutes in any 60 minute period. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such person(s) shall be provided to the SLOAPCD Compliance Division prior to the start of any grading, earthwork or demolition.
- Effective February 25, 2000, the APCD prohibited developmental burning of vegetative material within San Luis Obispo County. If you have any questions regarding these requirements, contact the ACPD Engineering & Compliance Division at (805) 781-5912.

The following mitigation measures is provided in accordance with the Cal Poly Master Plan and Final EIR (Cal Poly 2001) to reduce NOx, ROG and diesel particulate matter emissions generated from on-site construction equipment:

AQ-2 Equipment Emission Control[2]

- On-road diesel vehicles shall comply with Section 2485 of Title 13 or the California Code of Regulations. This regulation limits idling from diesel-fueled commercial vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles:

    - Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and

    - Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in sleeper berth for greater than 5 minutes at any location when within 1,000 feet of a restricted area, except as noted in Subsection (d) of the regulation.

- Off-road diesel equipment shall comply with the 5-minute idling restriction identified in Section 2449(d)(2) of the California Air Resources Board's In-Use Off-Road Diesel regulation.

- The project shall require that all fossil-fueled equipment shall be properly maintained and tuned according to manufacturer's 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.

- Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State off-Road Regulation.

- Use on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation.

- Construction or trucking companies with fleets that that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NOx exempt area fleets) may be eligible by proving alternative compliance.

- All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit.

- Electrify equipment when feasible.

- Substitute gasoline-powered in place of diesel-powered equipment, where feasible.

- Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.

- No on or off-road diesel equipment shall be allowed to idle within 1,000 feet of sensitive receptors. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the idling restrictions limit. To the extent feasible, no equipment staging areas shall be located within 1,000 feet of any sensitive receptors.

[2] Equipment emission control measures have been modified from the original measures provided in the *Cal Poly Master Plan and Environmental Impact Report* (2001) to reflect current SLOCAPCD recommendations as provided in the SLOCAPCD *CEQA Air Quality Handbook* (SLOCAPCD 2012).

- Proposed truck routes shall be evaluated and selected to ensure routing patterns have the least impact to residential dwellings and other sensitive receptors, such as schools, parks, day care centers, nursing homes, and hospitals.

In addition to the amended Master Plan mitigation identified above, the following mitigation will be implemented:

AQ-3 In the event materials potentially containing asbestos are to be disturbed or removed from the project site, the Construction Contractor shall comply with the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M – asbestos NESHAP). These requirements include, but are not limited to: 1) written notification, within at least 10 business days of activities commencing, to the APCD, 2) asbestos survey conducted by a Certified Asbestos Consultant, and 3) applicable removal and disposal requirements of identified ACM.

AQ-4 The presence or absence of naturally-occurring asbestos must be determined prior to start of soil disturbing activities. If Naturally Occurring Asbestos (NOA) is not present on-site, an exemption request will be filed with the SLOAPCD. If NOA is present on-site, the project will comply with all requirements outlined in the Asbestos Airborne Toxic Control Measures.

AQ-5 Prior to ground disturbance and construction, the Construction Contractor shall ensure a geologic evaluation is conducted to determine if the area disturbed is exempt from the Air Resources Board Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (93105). If the site is not exempt from the ATCM requirements, the Construction Contractor shall comply with all requirements outlined in the Asbestos ATCM, which may include development of an Asbestos Dust Mitigation Plan and an Asbestos Health and Safety Program for approval by the San Luis Obispo APCD.

AQ-6 Prior to ground disturbance and construction, the Construction Contractor shall obtain all required permits for the use of portable equipment, 50 horsepower or greater, from the San Luis Obispo APCD.

Conclusion

The project is consistent with the Clean Air Plan. Long-term operational impacts would be less than significant and modeled short-term construction-related emissions do not exceed applicable SLOAPCD thresholds. Implementation of standard dust and emission control measures would reduce potential impacts to nearby sensitive receptors to less than significant levels and the project would not create a source of objectionable odors. With implementation of standard measures and compliance with the Cal Poly Master Plan and Final EIR (Cal Poly 2001), SLOAPCD regulations, and the SLOAPCD CEQA Air Quality Handbook (SLOAPCD 2012), impacts would be less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact with Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
IV. BIOLOGICAL RESOURCES				
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact with Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native residents or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f. Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Background

The project site is located within the southern portion of the campus instructional core in an area surrounded by recreational fields and sports facilities, surface parking lots and parking structures, and dormitory-style student housing. The site is developed with approximately 2.5 acres of grass lawn, temporary sheds and storage containers, and a concrete pathway leading from Slack Street into the central campus instructional core. There are mature eucalyptus trees and shrubs at the south end of the field and several landscape variety trees along the western edge of the field.

Discussion of Checklist Answers

a. The project site is currently disturbed and does not support suitable habitat for special status species. Existing trees may provide nesting or migratory bird habitat, including the mature eucalyptus and landscape variety trees to be removed. In the event nesting birds are present, nests, birds, chicks, and eggs may be adversely affected or harmed by tree removal or grading construction activities. Standard mitigation is available to reduce potential impacts to less than significant (i.e., limiting tree removal to the non-nesting bird season (October through January) or completion of a nesting bird survey). In addition, mitigation identified above (AES-2) require that project plans are revised to save the two existing eucalyptus trees located between the I Field and Slack Street, which would reduce the potential for disturbance to nesting birds. Therefore, impacts are considered less than significant with mitigation.

b. There is no riparian habitat or other sensitive natural community located within the project site or surrounding areas. The nearest riparian habitat is located approximately 0.25 mile east of the project site, on in the foothills east of the existing track and Student Housing South project. Impacts would be less than significant.

c. There are no wetland features on or otherwise hydrologically connected to the site. Drainage at the site is via the existing altered and natural grade and via existing storm drain infrastructure. There are no impacts to wetlands associated with the project.

d. The site is within a heavily disturbed urban area. It does not provide quality habitat for native resident or migratory wildlife species, and lacks structure and connectivity required for use as a movement corridor. The proposed project would not substantially alter movement across the site, and impacts to wildlife movement or migration are considered less than significant.

e. The project would not conflict with University policies regarding biological resources. The University does not have an adopted tree preservation policy and the project would not have an adverse effect on nearby trees within the city limits. Master Plan policies which address biological resources generally call for the siting of new development proximate to or within existing developed areas, and avoidance of sensitive areas such as creeks. The project includes development of additional recreational facilities within an existing passive recreational field in proximity to similar existing sports facilities in the campus instructional core, and is therefore consistent with guidance provided in the Master Plan. Impacts are considered less than significant.

f. The project site is not within an area subject to a Habitat Conservation Plan (HCP) or Natural Community Conservation Planning (NCCP), or other local or regional conservation planning document. There is no impact.

Mitigation Measures

To ensure significant impacts to nesting birds during vegetation removal are avoided and minimized to less than significant, the following mitigation will be implemented:

BR-1 Vegetation removal shall be scheduled to occur outside of the nesting season (avoidance period would be September 1 to February 14) if possible, to avoid birds that may be nesting within areas of disturbance during or just prior to construction.

BR-2 Prior to construction, if construction activities are proposed to occur during the typical nesting season (which is February 15 to August 31) within 200 feet of potential nesting habitat, a nesting bird survey shall be conducted by qualified biologists in potential nesting habitat at least two weeks prior to construction to determine presence/absence of nesting birds within the project area. Work activities shall be avoided within 100 feet of active bird nests and 200 feet of active raptor nests until young birds have fledged and left the nest. Readily visible exclusion zones shall be established in areas where nests must be avoided. The University shall be contacted if any state or federally listed bird species are observed during surveys. The U.S Fish and Wildlife Service and California Department of Fish and Wildlife shall be contacted for additional guidance if nesting birds are observed within or near the boundaries of the project site. Nests, eggs, or young of birds covered by the Migratory Bird Treaty Act and California Fish and Game Code would not be moved or disturbed until the end of the nesting season or until young fledge, whichever is later, nor would adult birds be killed, injured, or harassed at any time.

BR-3 Vegetation removal in potential nesting habitats shall be monitored and documented by a qualified biological monitor(s) regardless of time of year.

BR-4 During construction, the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible. When practicable, invasive exotic plants in the project site will be removed and properly disposed.

Conclusion

The project site and surrounding areas do not support quality wildlife habitat or other sensitive biological resources. Proposed disturbance activities would be limited in nature and duration. Potential impacts on nesting birds would be mitigated with standard mitigation measures and impacts associated with development and operation of the project are considered less than significant with mitigation incorporated.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New Impact
V. CULTURAL RESOURCES				
Would the proposal:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?			X	
b. Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?		X		
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
d. Disturb any human remains, including those interred outside of formal cemeteries?			X	

Discussion of Checklist Answers

a. No historic-period structures or historic resources including prehistoric or historic archaeological sites exist on site. Additionally, the Cal Poly Master Plan and Final EIR does not identify any historic resources on the project site as shown on Exhibit 6.5 (Cal Poly 2001). Impacts would be less than significant.

b. The project area was historically occupied by the northernmost subdivision of the Obispeño Chumash, with the Salinan bordering to the north. However, the precise location of the boundary between the Chumashan-speaking Obispeño Chumash and their northern neighbors, the Hokan-speaking Playanos Salinan, is currently the subject of debate. The project site has been altered and developed with an existing recreational field and associated structures and facilities. There are no known or suspected archaeological resources within the project site based on documentation and records searches performed for the Cal Poly Master Plan and Final EIR (Cal Poly 2001). Onsite fill further reduces the potential for discovery of buried resources. Though unlikely, in the event of an inadvertent discovery, mitigation is available to ensure potential impacts are reduced to less than significant.

c. The geologic formation underlying the project site consists of Franciscan mélange (Fm) (Earth Systems Pacific 2013). It is rare to find fossils within Fm, as this formation is heavily deformed and metamorphosed in many locations, a process that destroys fossils; however, significant finds have been documented within this formation including trace fossils, mollusks, and marine reptiles. Implementation of the project is not anticipated to require deep grading to accommodate field construction, structure building pads, or foundations; however, construction of field lighting, goal posts, and other vertical elements could require deeper foundations. The presence of bedrock was identified at depths ranging between 6 to 18.5 feet at the proximate Student Housing South project location. Based on the presence of shallow bedrock proximate to the project site, bedrock potentially containing paleontological resources may be affected during construction of the facility. Therefore, based on the underlying geologic formations and potential for significant discovery in the Fm formation, mitigation is proposed to require a paleontological monitor in the event grading requires disturbance of bedrock. In the event of a finding, the resource would be properly documented and evaluated.

d. If human remains are unearthed, the University and contractor will comply with State Health and Safety Code Section 7050.5, which requires that no further disturbance shall occur until the County of San Luis Obispo Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the human remains are determined to be Native American, the County Coroner will notify the Native American Heritage

Commission within 24 hours, which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Impacts would be less than significant through compliance with existing state law.

Mitigation Measures

To ensure significant impacts related to the inadvertent disturbance of unknown subsurface resources are minimized to less than significant, the following mitigation should be implemented:

CR-1 In the event unknown archaeological resources are exposed or unearthed during project construction, all earth disturbing work within the vicinity of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find. If the archaeologist determines that the resource is an "historic resource" or "unique archaeological resource" as defined by California Environmental Quality Act Guidelines Section 15064.5 and avoidance is not feasible, further evaluation by the archaeologist shall occur. The archaeologist's recommendations for further evaluation may include a Phase II testing and evaluation program to assess the significance of the site. Resources found not to be significant will not require mitigation. Impacts to sites found to be significant shall be mitigated through implementation of a Phase III data recovery program. After the find has been appropriately mitigated, work in the area may resume. A Chumash representative shall monitor any mitigation work associated with prehistoric cultural material.

CR-2 If soil excavation associated with grading activities requires disturbance of bedrock formations, a qualified paleontologist will be retained to monitor construction activities in those areas. Should any vertebrate fossils or potentially significant finds (e.g., numerous well-preserved invertebrate or plant fossils) be encountered during work on the site, all activities in the immediate vicinity of the find shall cease until the qualified paleontologist evaluates the find for its scientific value. If deemed significant, the paleontological resource(s) shall be salvaged and deposited in an accredited and permanent scientific institution where they will be properly curated and preserved. If monitoring is required, the qualified paleontologist shall submit a monitoring report to the University following completion of all required monitoring activities.

Conclusion

Based on the disturbed condition of the site and absence of known cultural or paleontological resources, the proposed project is not expected to impact cultural or paleontological resources. Impacts associated with inadvertent disturbance of subsurface resources would be reduced to less than significant through implementation of identified mitigation. The University ~~should also~~ evaluated the project's potential effect on tribal cultural resources, consistent with Assembly Bill 52. Only one Native American tribe has provided notice to the University requesting consultation under AB 52. The University complied with AB 52 for the I Field project by sending a Notice of Opportunity to Consult to the Torres Martinez Desert Cahuilla Indians on February 7, 2017. The University did not receive any response from the Torres Martinez Desert Cahuilla Indians or any other request for consultation per AB 52. Based on the lack of sensitivity at the project site and limited nature of the project, impacts on tribal cultural resources are also expected to be less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact with Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
VI. GEOLOGY AND SOILS				
Would the project:				
a. Expose people or structure to potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	
i. Rupture of a known earthquake fault, as delineated in the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii. Strong seismic ground shaking?			X	
iii. Seismic-related ground failure, including liquefaction?			X	
iv. Landslides?			X	
b. Result in substantial soil erosion or loss of topsoil?			X	
c. Be located on a geologic unit or soil that is unstable, or that would become unstable because of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X

Background

The project site is located within the Santa Lucia Range of the Coast Ranges Geomorphic Province of California. The San Luis Obispo region is primarily underlain by Jurassic-era rocks of the Franciscan complex. The project site is located in a seismically active region that includes several active earthquake faults of local and regional significance.

Based on the Cal Poly Master Plan and Final EIR (Cal Poly 2001), the project site is not located in a geologically hazardous area. The topography of the site is flat to steeply sloping at the site boundaries, and the site is currently developed.

Discussion of Checklist Answers

a. The project site is located within a seismically active area of California. The project site is not identified on any Alquist-Priolo Earthquake Fault Zones maps (CDC 1990); however, the Los Osos Fault, located within approximately 4 miles of the project site, is identified under the Alquist-Priolo Earthquake Fault Zone Act and has been active within the last 11,000 years (City of San Luis Obispo 2014). The project site is proximate to several other faults in the central California region including the San Andreas,

Nacimiento, Rinconada, Cambria, West Huasna/Oceanic, and Edna faults among smaller, local faults (Cal Poly 2001).

The project proposes a recreational athletic field with limited support structures (storage building, filming towers) and does not propose habitable structures. Therefore, the risk of loss, injury, or death as a result of fault rupture, seismic ground shaking, and seismic-related ground shaking is minimized by the nature of the development proposed. All development would be consistent with the California Building Code and the CSU Seismic Policy, which mandates, in part, that all new structures must provide an acceptable level of earthquake safety for students, employees, and the public who occupy these buildings and facilities, to the extent feasible. Through implementation of existing codes and required design standards, impacts would be less than significant.

Based on County of San Luis Obispo data, the potential liquefaction hazard is low. The proposed facility would be subject to, and would be required to comply with, the Uniform Building Code which would ensure structural integrity of the proposed project would not be compromised due to liquefaction potential. Final engineering for all structural foundations would consider liquefaction potential in the project design. Therefore, impacts would be less than significant.

There is a documented landslide formation on the east side of campus. However, soils testing and geotechnical study conducted during evaluation of the Student Housing South project concluded that the toe of the landslide mass lies several hundred feet east of the Student Housing South project site. The risk of the proposed I Field development affecting the landslide is remote.

b. Underlying soils are considered to moderate to highly erodible; therefore, proposed grading activities have the potential to result in erosion and down-gradient sedimentation (NRCS 2016). Because over 1 acre of ground disturbance is proposed, the State Water Resources Control Board's (SWRCB's) General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ) requires Cal Poly to prepare a Storm Water Pollution Prevention Plan (SWPPP) for review and approval by the Central Coast Regional Water Quality Control Board (RWQCB). The SWPPP would include information related to the existing and proposed development, stormwater collection and discharge points, and general topography and drainage patterns across the site before and after construction. The SWPPP would include best management practices (BMPs) that would be implemented to prevent erosion and stormwater runoff and applicable monitoring programs to be implemented in the event there is a failure of BMPs.

c. Based on review of the Cal Poly Master Plan EIR and review of available soils and geologic information (NRCS 2016; County of San Luis Obispo 2016; Cal Poly 2014), there are no on-site geologic conditions or soil units with the potential for instability. The project would not require mass grading, and would not be located on steep slopes. The proposed facility would be subject to, and would be required to comply with, the Uniform Building Code which would ensure structural integrity of the proposed project would not be compromised due to geologic and soil conditions. Final foundation engineering would consider on-site geotechnical conditions in final engineering and project design. Therefore, impacts would be less than significant.

d. Expansive soils tend to swell with seasonal increases in soil moisture, and shrink during the dry season as soil moisture decreases. These changes can stress and damage slabs, flatwork, and foundations if not addressed. Measures typically recommended to address expansion include amendment of fill material and pre-moistening of subslab materials, use of deepened foundations and a layer of non-expansive material beneath slabs, thickened edges and a layer of non-expansive material beneath flatwork, among other measures. Assuming the underlying soils may be expansive, compliance with standard engineering practices would address this potential impact, and reduce it to less than significant.

e. No alternative wastewater disposal systems, such as septic systems, are proposed. There would be no impact.

Mitigation Measures

None required beyond compliance with existing regulations, codes, and standards.

Conclusion

The project is not located within uniquely unstable geologic units or soils. Impacts are considered less than significant based on compliance with existing regulations, codes, and standards, and through preparation and implementation of a SWPPP.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
VII. GREENHOUSE GAS EMISSIONS **Would the project:**				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Discussion of Checklist Answers

a. Greenhouse gas (GHG) emissions would be generated from construction, operation, and maintenance of the proposed project. Construction activities would result in GHG emissions from heavy construction equipment, truck traffic, and worker trips to and from the project site. Operational trips and routine maintenance activities would generate GHG emissions associated with player and visitor trips, truck traffic, and worker trips to and from the project site. A substantial increase in vehicle emissions is not anticipated due to the limited nature and duration of construction activities and the limited number of operational vehicle trips that would result from the project.

The SLOAPCD has adopted general screening criteria to determine the type and scope of projects requiring an air quality and GHG assessment. The screening criteria are based on the SLOAPCD's bright line threshold for annual GHG emissions in units of metric tons of carbon dioxide equivalent (MT CO2E) per year. Development of the proposed project would not generate significant GHG emissions that would result in a cumulatively considerable contribution to climate change impacts (refer to Table 2 below). The sum of the project's construction emissions is less than 1,150 metric tons per year; therefore, the project's greenhouse gas emissions levels would not exceed stated thresholds. Impacts would be less than significant.

Table 2. Comparison of Unmitigated CO2e Emission Impacts to SLOAPCD Significance Thresholds

	CO_2e MT/year [a]
Project Emissions (Amortized Construction and Operational)	157.6
GHG Bright-line Threshold [b]	1,150
CO_2e Emissions Exceed Threshold?	No

a CO2e emissions include emissions of CO2, CH4, N2O, HFC, CFC, and F6S.
b Emission thresholds taken from "CEQA Air Quality Handbook: A Guide for Assessing the Air Quality Impacts for Projects Subject to CEQA Review," SLO County APCD, April 2012.

b. The proposed project would not be subject to the City of San Luis Obispo Climate Action Plan or any other municipal policy related to the reduction of greenhouse gas emissions. In addition, the project's greenhouse gas emissions levels are within thresholds identified by the SLOAPCD. Impacts are considered less than significant.

Mitigation Measures

None anticipated.

Conclusion

The project's modeled greenhouse gas emissions are under stated thresholds, and the project would reduce trips within campus, which would reduce greenhouse gas emissions compared to existing operations. Impacts are considered less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS				
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	

Background

The Cal Poly San Luis Obispo Environmental Health and Safety department oversees health and safety procedures and programs on campus, including facility construction and operations. The Environmental Health and Safety department develops and implements programs to ensure the safe use, handling, and storage of hazardous materials, and appropriate and compliant disposal of hazardous wastes. The department oversees and implements employee training programs, procedures and policies, and compliance surveys to this end.

Discussion of Checklist Answers

a-c. The project will not create a substantial risk to people or the environment associated with the routine use, transport or disposal of hazardous waste. Relatively small amounts of commonly used hazardous substances, such as gasoline, diesel fuel, lubricating oil, grease, cleaning products, and solvents, would be used on site for construction and maintenance activities. These materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. No acutely hazardous materials would be used on site during project construction.

Upset and accident conditions which may release hazardous materials into the environment are most likely during the construction phase of the project. Construction equipment, if damaged, can release fuel, oil, lubricants and other materials into the environment and expose workers and the campus population. The campus requires contractors to prepare, maintain and implement management plans for upset and accident condition on-site, including protocols for stop work, spill containment, notification and remediation. These measures are considered sufficient to reduce risks associated with accidents. Impacts would be less than significant.

The project site is within 0.25-mile of a preschool and within the Cal Poly campus. No acutely hazardous materials aside from those used in standard construction would be used at the site and construction activities would be located approximately 500 feet or further from the preschool. Emissions associated with the project are limited to typical construction emissions and are within applicable SLOAPCD thresholds. Impacts would be less than significant.

d-f. The site is not within a known hazardous waste or materials site (Envirostor 2016; Geotracker 2016), an adopted airport land use plan, or within the vicinity of a public or private airport. There is no impact.

g-h. The project site is not located proximate to urban/wildland interface areas, and is surrounded by campus and urban development on all sides. Therefore, the risk of wildland fires is low. The proposed project would also comply with the local fire code and State Fire Marshal inspection and approval would ensure adequate emergency access is provided under proposed project design. Moreover, the proposed project, in the context of the overall campus, would be governed by the Cal Poly San Luis Obispo Campus Emergency Management Plan, which includes action response protocol in the event of a major fire. Impacts would be less than significant.

Mitigation Measures

None required beyond compliance with existing regulations.

Conclusion

Impacts associated with hazards and hazardous materials are considered less than significant. Temporary risks associated with construction and hazardous materials handling are addressed by existing laws and regulations and current University practice, which includes the requirement to maintain and implement spill response plans for all large construction projects. No long-term use, handling, or storage of hazardous materials would occur.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
IX. HYDROLOGY AND WATER QUALITY				
Would the project:				
a. Violate any water quality standards or waste discharge requirements?			X	
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or offsite?			X	
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?			X	
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
f. Otherwise substantially degrade water quality?			X	
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j. Inundation by seiche, tsunami, or mudflow?				X

Background

The topography of the site is flat to steeply sloping at the site boundaries. Existing stormwater percolates into the natural grass area and/or flows along natural and man-made contours to existing stormwater drainage infrastructure. There are no creeks or drainages near the site; the closest natural drainage is located approximately 0.2 mile east of the site across Grand Avenue. The drainage terminates into subterranean stormwater infrastructure on the east side of Grand Avenue. Erodibility of the soils underlying the site are moderate to high.

Discussion of Checklist Answers

a, c-f. The site is bordered by existing developed campus and urban infrastructure, including paved sidewalks and streets, and developed storm drainage infrastructure. During construction, particularly during initial site clearance and excavation, the project would pose short-term risks associated with erosion, sediment transport, and off-site flooding. Construction equipment on-site would pose risk of release of fuels, lubricants, and other contaminants. In addition, construction of the project would require approximately 2.5 acres of ground disturbance, and soils loosened during excavation and grading could degrade water quality if mobilized and transported off-site via water flow. Natural waterways are not at risk; impacts would occur in the storm drain system and on neighboring property.

Because the project would disturb more than 1 acre, incorporation of an SWPPP and implementation of appropriate best management practices (BMPs) would be required during project construction as part of the project's General Construction Activity Stormwater Permit issued by the Regional Water Quality Control Board. The SWPPP will identify which structural and nonstructural BMPs will be implemented, such as sandbag barriers, temporary desilting basins, gravel access roads, dust controls, and construction worker training. In addition, Cal Poly has developed a Water Quality Management Plan and a Storm Water Pollution Prevention Program for development on campus (Cal Poly 2005). The Water Quality Management Plan outlines best management practices (BMPs) for construction and operation, which would be applicable to the project.

Operation of the project is not considered a substantive risk to water quality standards. The preparation and implementation of a SWPPP and compliance with the University's Water Quality Management Plan and a Storm Water Pollution Prevention Program will reduce risks of water quality standard violations. Impacts are considered less than significant.

Stormwater flows at the site would increase due to construction of the artificial turf field, which would be permeable on the surface but underlain by an impervious fabric liner at a certain depth, thereby converting the field into an impervious surface. Site stormwater flows would continue to be managed on-site. ~~Project construction would not substantially alter the amount or extent of permeable surfaces or drainage patters across the site.~~ Storm flows would continue to flow across the field into existing and proposed storm drainage facilities within and surrounding the site. ~~The rate and volume of flows are not expected to substantially differ from existing conditions.~~ The University is required to comply with the State Water Resources Control Board Water Quality Order No. 2013-0001-DWQ, National Pollutant Discharge Elimination System General Permit No. Cas000004, Waste Discharge Requirements for Storm Water Discharges From Small Municipal Separate Storm Sewer Systems (2013 General Permit) as implemented by Cal Poly. Compliance with the 2013 General Permit would ensure impacts associated with increased stormwater flows would be less than significant. No mass grading resulting in major topographical changes are proposed. In addition to compliance with an approved SWPPP, development and implementation of a site specific drainage plan would be required to manage stormwater runoff from the project area. Impacts associated with changes in onsite drainage or stormwater flows would be less than significant.

The project will not otherwise substantially degrade water quality. The project contains no special uses which would pose a risk to water quality. Impacts are considered less than significant.

b. The University is served by Whale Rock Reservoir via the City's treatment plant. The project would require short-term construction water and limited operational demands, but would ultimately reduce long-term water demands by replacing approximately 2.5 acres of irrigated lawn with artificial turf. Therefore, water use required during construction and operation of the project would not deplete groundwater levels.

g-j. The project site is not within a 100-year flood zone. The project would not place housing within the 100-year floodplain or expose people or structures to risk of flooding. The project site is not at risk of inundation by seiche, tsunami, or mudflow.

Mitigation Measures

None anticipated beyond compliance with existing regulations and requirements.

Conclusion

The existing drainage patterns at the site would be generally maintained, as stormwater would percolate into the field and sheet flow to surrounding streets and storm drains. The site contains no natural drainage features and is not within a 100-year flood zone. No substantial change or increase in impervious surfaces or drainage patterns would occur. The project will also be subject to measures outlined in the SWPPP. Compliance with existing codes and regulations will be sufficient to ensure the project does not result in substantial sediment traveling off-site, or flooding off-site. Impacts are considered less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
X. LAND USE PLANNING				
Would the project:				
a. Physically divide an established community?				X
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

Discussion of Checklist Answers

a. The project site is located within the Cal Poly campus instructional core, in an area surrounded by similar campus sports and recreational facilities and uses. The project would consolidate recreational uses on campus and would not divide an existing community. No impact would occur.

b. The project site is designated as Recreation, Athletics, and Physical Education in the Cal Poly Master Plan and Final EIR (Cal Poly 2001). The Master Plan identified existing issues stemming from a lack of adequate turf field space for recreation and athletics, poor proximity to on-campus residents, and lack of sports maintenance support facilities, adequate seating, restrooms, and press facilities adjacent to field areas. The Master Plan included principles for construction of recreational facilities in close proximity to the population they are intended to serve and identified the importance of being able to get to and from facilities within 10 minutes. The location of recreation amenities adjacent to residential areas is also identified as critical to establish a complete living environment.

The Master Plan includes the following policies for development of the I Field and adjacent track and field site:

> "**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."

Development of the I Field into a practice field for Cal Poly Athletics and other intramural sports is consistent with the policies and principles of the Cal Poly Master Plan. Consistent with the Master Plan, the project would site additional recreational facilities in proximity to existing facilities and on-campus residential units, and would incorporate mitigation measures intended to avoid or minimize potentially significant impacts associated with development of the I Field, including measures to ensure nighttime lighting and noise impacts are avoided and reduced to less than significant. Therefore, the proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

c. There are no HCPs or NCCPs that cover the project site. There is no impact.

Mitigation Measures

None anticipated.

Conclusion

The project is consistent with adjacent existing uses, the Cal Poly Master Plan and Final EIR (Cal Poly 2001), and the Recreation, Athletics, and Physical Education land use designation. Impacts would be less than significant.

Issues	Potentially Significant New or Increased Impact	Less than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
XI. MINERAL RESOURCES				
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Discussion of Checklist Answers

a-b. There are no known mineral resources within the project site. No impact would occur.

Mitigation Measures

None required.

Conclusion

No impacts to known mineral resources would occur.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
XII. NOISE				
Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b. Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels?			X	
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

Background

Information in this section was developed with reference to the Noise Impact Assessment prepared for the project (Ambient Air Quality and Noise Consulting 2016). The Noise Impact Assessment has been included as Appendix D.

The closest noise-sensitive receptors are residential dwellings located to the south and west of the project site along Slack Street and Longview Lane. These residences are located within the City of San Luis Obispo. In addition, an on-campus student housing facility (Student Housing South) is currently under construction, approximately 400 feet east of the project site, within the northwestern quadrant of the Slack Street/Grand Avenue intersection.

The ambient noise levels in the project area are largely influenced by vehicle traffic on Slack Street and Longview Lane. To a lesser extent, construction activities, voices, aircraft overflights, and distant traffic on US Highway 101 also contribute to ambient noise conditions. For purposes of documenting and measuring ambient noise conditions, multiple noise measurement surveys were conducted in the project area. The noise measurement surveys were conducted between the hours of 6:00 a.m. and midnight on October 3, 2016 and November 7, 9-13,

2016 using a Larson Davis Type I sound level meter. The meter was calibrated prior to and upon completion of the noise measurement surveys. The hours during which noise measurement surveys were conducted were selected to coincide with the proposed hours of operation for the project.

Average-hourly noise levels on weekdays ranged from 53 to 60 dBA Leq, with the highest average-hourly noise levels generally occurring during the a.m. and p.m. peak-hours commute hours. Measured average-hourly noise levels were generally lower during the nighttime hours (e.g., 10:00 p.m. to midnight) ranging from 53 to 55 dBA Leq, Monday through Thursday, and from 54 to 57 dBA Leq on Friday. Measured average-hourly noise levels during the early morning weekend hours are generally lower than weekday noise levels due to decreased student activities and reduced vehicle traffic on area roadways. On Saturday, between the hours of 6:00 a.m. and midnight, measured average-hourly noise levels ranged from 46 to 54 dBA Leq. Measured noise levels obtained on Sunday, between these same hours, ranged from 45 to 55 dBA Leq.

Based on the measurements conducted, ambient noise levels during the early morning hours (e.g., 6:00 a.m. to 8:00 a.m.) were highest during the weekdays of Monday through Friday. Measured ambient noise levels during the nighttime hours of 10:00 p.m. and midnight were highest on Friday and Saturday. These measured increases in ambient noise levels were predominantly associated with increased student activity within the area and increased vehicle traffic along Slack Street and Longview Lane. Measured maximum instantaneous noise levels during all hours of the day generally range from approximately 63 to 85 dBA Lmax. Instantaneous noise levels are also largely associated with vehicles traveling along area roadways. Ambient noise measurement survey data is included in Appendix D.

Discussion of Checklist Answers

a. The existing Cal Poly Master Plan and Final EIR (2001) does not identify noise control standards or thresholds applicable to the proposed project. The City and County of San Luis Obispo's General Plan Noise Elements establish operational standards for siting of new land uses and establish noise performance standards for non-transportation noise sources in the city and county; however, Cal Poly is not subject to City or County noise standards and, based on the noise measurement surveys conducted for this project, ambient noise levels in areas adjacent to the project site within the City of San Luis Obispo currently exceed the City's noise standards.

General Policy. Section 141.3.2.1 of the Cal Poly "Campus Administrative Policies" states that:

> "Outdoor events and activities that involve amplified music or speech are limited to the hours of: 7:00 a.m. to 10:00 p.m., Monday through Sunday, and University scheduling protocols must be followed (see sections 144.4 and 141.3.2.2).
>
> Outdoor events and activities that do not require use of amplified sound (for speech or music) may be held between 7:00 a.m. and midnight, Monday through Sunday. Use of the University's scheduling protocols is encouraged, to facilitate coordination with other events and among potential campus service providers. Regardless of the time they are held, events and activities must be conducted in a manner consistent with Section 141.3.1 (General Limitations) and in conformity with any additional guidelines pertinent to a particular venue."

General Policy. Section 141.3.1 of the "Campus Administrative Policies" states that:

> "All campus events and activities shall be conducted consistent with Federal and State law, with existing University policies, with the orderly conduct of University business, with preservation of the campus learning environment, with the preservation of public safety, with maintenance of University property and with the free flow of pedestrian and vehicular traffic. Entrances to campus facilities shall not be obstructed. No individual or group shall abridge, halt or disrupt the right of others to present their views. In addition, plans for outdoor events and activities should address potential impacts on residential communities, on and off campus."

These policies generally relate to the University's approach to Freedom of Expression through on-campus events and activities. The stated policy objective is "to foster and sustain a forum for the free, civil and orderly exchange of ideas, values and opinions, recognizing that individuals grow and learn when confronted with differing views, alternative ways of thinking and conflicting values" (General Policy. Section 141.1).

Intercollegiate sporting events do not fall within the scope of this policy. Football practices currently start at 6:00 am and would not change under the proposed project. These practices are scheduled through the University's scheduling program, and would continue to be under the proposed project. Campus Administrative Policies related to Intercollegiate Athletics contain no restrictions on time or scheduling. Therefore, the proposed project would not expose people to noise levels that conflict with applicable standards, ordinances, or policies. However, the project would potentially increase ambient noise levels in the project vicinity. Therefore, this impact is considered potentially significant. Impacts associated with a temporary or permanent increase in ambient noise levels would be less than significant with mitigation incorporated (refer to response to c-d, below, for additional information).

b. The proposed project would not result in the installation of any stationary equipment or long-term operational activities that would generate ground vibration. As a result, ground-vibration impacts associated with the proposed project would be limited to short-term construction activities. As previously noted, the nearest residential land uses are located approximately 60 feet south of the project site, across Slack Street. Predicted vibration levels at these nearest offsite structures would not exceed the minimum recommended criteria for structural damage or human annoyance. As a result, this impact would be considered less than significant.

c-d. Existing ambient noise levels in the project area are predominantly associated with increased student activity within the area and increased vehicle traffic along Slack Street and Longview Lane. Ambient noise levels in adjacent residential areas within the City of San Luis Obispo currently exceed applicable City thresholds.

Construction-related Noise. Construction-related noise is a short-term, periodic, and temporary impact of the project. Earthmoving, materials handling, stationary equipment, and construction vehicles generate noise during clearing, excavation, grading, structure, and utility construction. Actual noise levels at proximate sensitive receptors will vary based on the type and volume of equipment present and operating on the site at any one time. During construction activity, noise would potentially impact or annoy sensitive land uses, including: residences south and west of I Field and faculty, staff, and students in proximity to the project area.

Construction noise will be temporary, restricted to daylight hours, and further conditioned by the application of Master Plan mitigation identified below. The project is not expected to require pile drivers, or other atypical equipment, which would increase the potential for substantial vibration or noise above typical levels. Impacts associated with construction noise are therefore considered less than significant with mitigation incorporated.

Operation-related Noise. Long-term operational noise sources associated with the project would include traffic-related noise and recreational noise.

Based on the traffic analysis prepared for the proposed project, the project would not result in a doubling of vehicle traffic along primarily affected roadways. As a result, the proposed project would not result in a significant increase in traffic noise levels (i.e., 3 dBA, or greater) along primarily affected roadways. Increases in traffic-related noise would be considered less than significant.

Existing and projected ambient noise levels are quantified in Appendix D based on each type of recreational event proposed at I Field. Predicted noise levels at the nearest existing residential property line associated with onsite recreational events would range from approximately 45 to 66 dBA Leq, with maximum intermittent noise levels of approximately 52 to 81 dBA Lmax. The highest predicted noise levels would be associated with the use of exterior PA systems during competitive events. Depending on

the type and size of the event conducted, predicted average-hourly noise levels at nearby residences would exceed ambient noise levels, particularly during the quieter nighttime hours (between 10:00 p.m. and midnight) and weekend early morning hours (e.g., 6:00 a.m. to 8:00 a.m.). Competitive events involving the use of amplified PA systems would exceed ambient noise levels on all days and during all proposed operational hours.

With the exception of competitive events involving the use of amplified PA systems, predicted noise levels at Student Housing South (currently under construction) located approximately 400 feet to the east would be largely masked by ambient noise levels. In addition, predicted maximum instantaneous noise levels associated with onsite recreational uses would not be projected to exceed ambient noise levels at nearby land uses and would, likewise, be largely masked by ambient noise conditions. Nonetheless, given that average-hourly recreational event noise levels would contribute to significant increases in ambient noise levels, this impact would be considered potentially significant.

Mitigation is identified that will ensure average-hourly recreational event noise levels would not contribute to a substantial increase in ambient noise levels above those currently existing, including limits on the recreational field's hours of operation and a prohibition on use of the amplified PA system. Impacts associated with a temporary or permanent increase in ambient noise levels would be less than significant with mitigation incorporated.

e-f. The project site is not within an airport land use plan area or within 2 miles of a public or private airport. No impact would occur.

Mitigation Measures

To ensure construction noise impacts are reduced to a level that is less than significant, measure NOI-1 is provided in accordance with the Cal Poly Master Plan and Final EIR (Cal Poly 2001):

NOI-1 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 ensure significant impacts related to the temporary or permanent substantial increase in ambient noise levels are minimized to less than significant, the following mitigation would also be implemented:

NOI-2 The following measures shall be implemented during project construction:

a. Noise-generating construction activities shall be limited to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday. Noise-generating construction activities shall be prohibited on Sundays and holidays.

b. Construction equipment should be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds should be closed during equipment operation.

c. Lay-down and vehicle staging areas shall be located at the furthest practical distance from nearby residential land uses.

d. Whenever possible, the noisiest construction activities and haul truck activities shall be scheduled during periods of the day (e.g., non-peak traffic hours) that would have the least impact or during summer sessions and other times when classes are not in session.

NOI-3 Onsite sports and recreational events shall be limited to the following hours:

a. All onsite recreational and intramural sporting events, not including Intercollegiate Athletics activities, shall be limited to between the hours of 7:00 a.m. and 10 p.m., Monday through Friday, and between the hours of 8:00 a.m. and 10:00 p.m. on weekends. All onsite Intercollegiate Athletics activities (i.e., football practices, soccer practices) shall be limited to between the hours of 6:00 a.m. and 10 p.m., Monday through Friday, and between the hours of 8:00 a.m. and 10:00 p.m. on weekends.

<u>Use of the field for the proposed Intercollegiate Athletics and recreational and intramural sports activities outside of the hours specified in this measure, including practice/event setup and closing activities, shall be prohibited. Any increase or extension of other existing uses of the field currently occurring (i.e., limited band practices), including any increase in the frequency or duration or type of events, shall be prohibited.</u>

NOI-4 The use of amplified PA/sound systems shall be prohibited.

Conclusion

The identified mitigation measure would limit construction noise and impose an hourly restriction on onsite recreational activities. Due to the project site's proximity to nearby residential land uses, these hourly limitations are more restrictive than the limitations established within Cal Poly's Campus Administrative Policies, General Policy, Section 141.3.2.1, which generally limit activities to between the hours of 7:00 a.m. and 12:00 a.m. In addition, the mitigation measure would prohibit the use of amplified PA/sound systems during all onsite activities and events. With implementation of the proposed mitigation measures, construction related noise impacts and

significant increases in ambient noise levels at nearby noise-sensitive land uses would be reduced to less than significant. All other potential noise impacts would be less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
XIII. POPULATION AND HOUSING				
Would the project result in:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

Discussion of Checklist Answers

a. The project will serve an existing student population, and will not result in extension of infrastructure to new locations. Therefore, the project will not induce population growth. Impacts are considered less than significant.

b-c. The project will not displace housing or people. There is no impact.

Mitigation Measures

None required.

Conclusion

Impacts to population and housing would be less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
XIV. PUBLIC SERVICES				
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?			X	

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
ii. Police protection?			X	
iii. Schools?				X
iv. Parks?				X
v. Other Public Facilities?				X

Discussion of Checklist Answers

a-i. The University contracts with the City Fire Department and CAL FIRE to provide fire and emergency response on campus. 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 above this elevation fall under the jurisdiction of CAL FIRE. The elevation of the project site does not exceed 450 feet in elevation; therefore, a fire occurring on the project site would be the primary responsibility of the City Fire Department. The project would be designed to meet or exceed applicable fire code requirements, including preparation and implementation of a Fire Safety Plan. No new or altered fire department facilities are anticipated as a result of this project; therefore, no environmental impacts associated with construction of new facilities would occur. Impacts are considered less than significant.

a-ii. The campus is served by University police. The University police may call upon City and County of San Luis Obispo law enforcement for backup as needed. The project would not alter enrollment; therefore, the total population served by University police would be unchanged. Proposed security features include locked gates and fencing to minimize the potential for illegal activity requiring police response. No new or physically altered police facilities are anticipated as a result of this project; therefore, no environmental impacts associated with construction of new facilities are expected. Impacts are considered less than significant.

a-iii. The project would not increase populations of school-age children, or otherwise increase potential demand for school facilities. There is no impact.

a-iv. The project would not increase student enrollment or population in the city, necessitating additional park space. There is no impact.

a-v. The project would not adversely impact other governmental facilities such as libraries or government functions. There is no impact.

Mitigation Measures

None required.

Conclusion

Impacts to public services would be less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
XV. RECREATION				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Discussion of Checklist Answers

a-b. Existing athletic, recreational, and open space areas are provided on campus for use by students and the campus community. The project would provide additional recreational facilities on the campus in closer proximity to the campus community. The project would not generate additional demand for recreational facilities in the project area, and would not increase use of local parks or recreational facilities or result in substantial physical deterioration of recreational facilities. The project would not result in construction of recreational facilities which may adversely affect the environment, except as identified and discussed in this Initial Study. The project would not increase campus enrollment and therefore would not result in additional impacts to existing campus recreational facilities. Impacts would be less than significant.

Mitigation Measures

None required.

Conclusion

Impacts to recreation would be less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
XVI. TRANSPORTATION/TRAFFIC **Would the proposal:**				
a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			X	
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			X	

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e. Result in inadequate emergency access?			X	
f. Result in inadequate parking capacity?			X	
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?			X	

Background

Trip generation information in this section was developed with reference to the Cal Poly I Field Trip Generation Estimates Memorandum prepared for the project (Central Coast Transportation Consulting 2016), which has been included as Appendix E.

The project would add traffic to transportation facilities operated by the California State University (CSU) system and the City of San Luis Obispo. Excerpted standards relevant to the proposed project and study locations are summarized below.

California State University. The CSU Transportation Impact Study Manual provides guidance to help determine when a Transportation Impact Study (TIS) is required. This determination is based on responses to the transportation/traffic checklist questions included in Appendix G of the CEQA Guidelines. No specific trip generation threshold is provided that would require a TIS. Instead the need for a TIS is determined based on conflicts with applicable plans, ordinances, programs or policies related to transportation.

City of San Luis Obispo. The City's Multimodal Transportation Impact Study Guidelines define when a TIS is required. Among other criteria, any project that would generate more than 100 peak hour automobile trips on City streets would have to prepare a TIS.

Discussion of Checklist Answers

a-b. Construction-related Traffic. Project construction would add trips to campus and City roadways in the project vicinity through the duration of construction activities, including haul trips, worker trips, material delivery trips, and heavy equipment trips. This minimal level of trip generation would not have an adverse effect on traffic operations or increase congestion on area roadways in the long-term. Therefore, potential impacts related to construction would be less than significant.

Operational Traffic. Field observations were conducted on Wednesday, November 9, 2016 to determine existing trips associated with a Cal Poly football practice, which is expected to be the largest traffic generator at the I Field. Approximately 120 people attend each practice, including coaches, staff, and players. Cal Poly Facilities staff estimates that approximately 40 percent of these attendees live on campus, and a significant portion remain on campus following practice to attend classes and other activities.

Field observations were conducted simultaneously at Mott Gym (where some players and coaches prepare for practice and then bike or drive to the Sports Complex) and the Sports Complex (where

practice occurs). Field observations indicated that a football practice generates approximately 59 trips to the Sports Complex before the beginning of practice and approximately 57 trips out of the Sports Complex at the end of practice. Of these trips in and out, approximately 17 come from and return to Mott Gym before and after practice. The largest peak hour trip generation occurs at the end of practice, when 57 vehicle trips leave the Sports Complex, including the 17 trips back to Mott Gym. The I Field is located adjacent to Mott Gym and the Grand Avenue Parking Structure; therefore, these 17 trips would be eliminated with development of the project, as players and coaches could easily walk to the practice field. Therefore, the project would generate 40 net new peak hour trips.

This level of trip generation is within City and Cal Poly thresholds and no further traffic analysis is required. The project would result in an overall decrease in campus trips due to the proximate location of I Field to the Grand Avenue Parking Structure, where students and coaches currently park to prepare at Mott Gym. Several city intersections surrounding Cal Poly currently operate at unacceptable levels (i.e., intersections at Foothill Boulevard/Santa Rosa Street, Walnut Street/Santa Rosa Street, Taft Street/California Boulevard, and the U.S. 101 northbound on- and off-ramps at California Boulevard) (Cal Poly 2014). The project would re-direct trips within and around campus, but would not substantially increase traffic at currently impacted intersections. Due to the low number of trips being generated by the project (which is less than the existing trips to the Sports Complex), no additional traffic study or evaluation is needed based on City and University standards. Therefore, traffic impacts would be less than significant.

c. The project would not alter air traffic patterns or increase air traffic levels. Proposed development would not pose a risk to regional air traffic. No impact would occur.

d-g. The project would redistribute and reduce existing trips within campus. No substantial change in roadway design or site access would occur that would create hazards or incompatible uses. Emergency access would be provided in compliance with State Fire Marshall regulations and no reduction in available parking would occur. Slack Street is identified as a Class III bikeway; no impacts to the bikeway are anticipated. There are no SLO Transit or RTA Transit facilities along Slack Street or in the immediate project vicinity. No impacts to these facilities would occur. Impacts would be less than significant.

Mitigation Measures

None required.

Conclusion

The project would reduce long-term operational trips within campus due to the better proximity to campus populations and available parking facilities. Impacts to transportation and traffic would be less than significant.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
XVII. UTILITIES AND SERVICE SYSTEMS				
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant New or Increased Impact	No New or Increased Impact
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could have significant environmental effects?			X	
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements necessary?			X	
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g. Comply with federal, state, and local statutes and regulations related to solid waste?			X	

Discussion of Checklist Answers

a,b,e. The proposed project does not include wastewater treatment facilities or connection to any existing sewer system; therefore, no impact would occur.

c. Aside from onsite stormwater management through modification of existing stormwater facilities, the project would not require or result in the construction of new storm water drainage facilities. Impacts would be less than significant.

d. The University obtains water from both surface and groundwater sources. Cal Poly owns 33.71% capacity in Whale Rock Reservoir, located east of the town of Cayucos. The 33.71% ownership translates into approximately 13,136 acre feet. The City, which also has ownership in the reservoir, has modeled safe annual yields (SAY) for water users. The SAY for Cal Poly's share was recently estimated at 1,306 afy in December 2013. Average total Cal Poly demand for the last 3 years on record is 1,071 afy. Agricultural and landscape irrigation demand is a significant portion of the total; average agricultural demand for the same period was 501 acre feet (47% of total) and annual water demand for irrigation averaged 280 acre feet (26%). Approximately 289 AFY (27%) was used for indoor or domestic purposes during that period. The current Cal Poly water surplus for Whale Rock Reservoir averages 235 AFY. When groundwater supplies are included, as discussed below, the current Cal Poly water surplus averages 482 AFY (Cal Poly 2014).

According to the University's *2015 Drought Response Plan* (Cal Poly 2015), Cal Poly has been an excellent steward of its water resources, having implemented hundreds of conservation measures over the years. Total usage since 2003 has remained nearly flat despite a 60% growth in building square footage and 100% growth of on-campus residency over the same period. Cal Poly still maintains nearly 6 years of supply in Whale Rock Reservoir. Water from Whale Rock Reservoir is treated at the Stenner Canyon water treatment facility; peak treatment capacity is 16 mgd. Water treated at the plant comes from Whale Rock Reservoir, the Nacimiento Water Project, or the Salinas Reservoir. Cal Poly is entitled to 1,000 AFY

in treatment capacity at the plant. Cal Poly's domestic demand from the plant has averaged approximatley 544 AFY in previous years (551 in 2010, 552 in 2011, and 529 in 2012), or 54.4% of its treatment capacity (Cal Poly 2014). Projects under construction which are not represented in the existing demand are as follows:

- Wine and Viticulture Center (22,000 square feet of production/lab/office space in planning) – consolidation of existing functions and (3) new staff
- Center for Science (completed in 2013) – (11) additional students, (0) additional staff
- Recreation Center (completed 2012) – minor increase in professional staff, mainly student staff
- Vista Grande and Culinary Support Center – demolition of existing Vista Grande and Sage Restaurant, reconstruction of new Vista Grande, expansion of existing storage facility to create a Culinary Support Center
- Gold Tree Solar Facility – an approximately 20-acre, two to five megawatt, photovoltaic solar energy facility

The proposed project would require construction water, including landscaping irrigation until plantings are established, and field irrigation to cool the artificial turf when necessary. Potable water for users is also proposed through installation of two drinking fountains. Operational demands would be met by existing water supply facilities at the project site. The existing infrastructure currently provides water to irrigate the natural grass field; therefore, the proposed project would result in a decrease in the total operational water demand over existing conditions. Total project demand, including existing and approved project demand, would not exceed Cal Poly's safe annual yield. Therefore, impacts to water supply are considered less than significant; there is adequate existing supply to meet project demand.

Based on the analysis above, implementation of the project would not result in any significant impacts related to water demand.

f-g. Cal Poly operates an integrated waste management program that includes source use reduction, recycling, composting of food waste, greenwaste, and manure, resale of scrap metal and surplus equipment, and zero waste event catering. Cal Poly contracts with San Luis Garbage for collection of solid waste and recycling. Recycling containers are provided to faculty, staff, and students by Facility Services, and collection is performed by Custodial Services and the campus Recycling Coordinator. Cal Poly has a 50% diversion goal for solid waste. The University has met or exceeded that goal since 2003, with almost 80% diversion achieved in 2010. Paper, cardboard, aluminum, glass and plastics are collected and sent to recycling facilities. Campus Dining sends food waste to a composting operation. The University also encourages recycling through its procurement policies: to the extent possible, all products must be recyclable or made from recycled materials.

The University also requires contractors to divert as much waste as possible during construction projects. Recent development projects on campus have achieved construction diversion rates as high at 97%. Solid waste which is not diverted by the University is transported to the Cold Canyon Landfill. The Landfill is located approximately 7 miles from San Luis Obispo. The landfill serves private entities and municipalities throughout San Luis Obispo County. The landfill has recently expanded and now operates near 50% of permitted capacity (250,000 tons per year [tpy] of a 500,000 tpy capacity) (Cal Poly 2014).

Solid waste and recyclable materials would be generated during site preparation, construction, and use and activities at the field. Waste generated during site preparation will include greenwaste. The University intends to reuse as much material as possible, including use on campus. The proposed project would be consistent with all state and local regulations regarding solid waste diversion, and at least 50% of the campus' solid waste is diverted to a licensed recycling facility, as noted above. Impacts would be less than significant. Maintaining the existing diversion rate would ensure compliance with Assembly Bill 75, which requires all large state facilities to divert at least 50% of solid waste from landfills. Therefore, a less-than-significant impact to solid waste policies and programs would occur.

Mitigation Measures

None required.

Conclusion

Impacts associated with utilities are considered less than significant; sufficient capacity exists to accommodate the minimal increased demand for services.

Issues	Potentially Significant New or Increased Impact	Less Than Significant New or Increased Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife species population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, and the effects of probable future projects)			X	
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Discussion of Checklist Answers

a. As described throughout this document, the project may degrade the quality of environment, including impacts to air quality, biological resources, cultural resources, noise, and visual resources. Mitigation provided in the document would reduce all impacts to a less than significant level. Based on implementation of mitigation, the project would not substantially reduce habitat or fish or wildlife populations or adversely impact historic or prehistoric resources.

b. Impacts of the project can be mitigated to a less than significant level. Impacts are largely confined to the project itself, and would not lead to cumulatively considerable impacts.

c. Impacts of the project can be mitigated to a less than significant level. The project will not result in environmental effects that will cause substantial adverse effects on human beings.

DETERMINATION

Pursuant to Sections 15152 and 15168 of the State CEQA Guidelines, this initial study has been prepared to evaluate the potential impacts of the proposed project.

On the basis of this initial evaluation:

____ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

__X__ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because of the mitigation measures described in the initial study. **A NEGATIVE DECLARATION** will be prepared.

____ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

____ I find that the proposed project **MAY** have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

____ I find that although the proposed project could have a significant effect on the environment, there **WILL NOT** be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.

_____ April 20, 2017

Name Date

CITATIONS

General

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APPENDIX A.
SCHEMATIC DESIGN SET

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CALIFORNIA POLYTECHNIC STATE UNIVERSITY
SAN LUIS OBISPO, CA
I FIELD
SCHEMATIC DRAWINGS

SHEET INDEX

NCE NORTH COAST ENGINEERING INC.
CIVIL ENGINEERING • LAND SURVEYING • PROJECT DEVELOPMENT
725 Creston Rd. – Suite B
Paso Robles, CA 93446
(805) 239–3127
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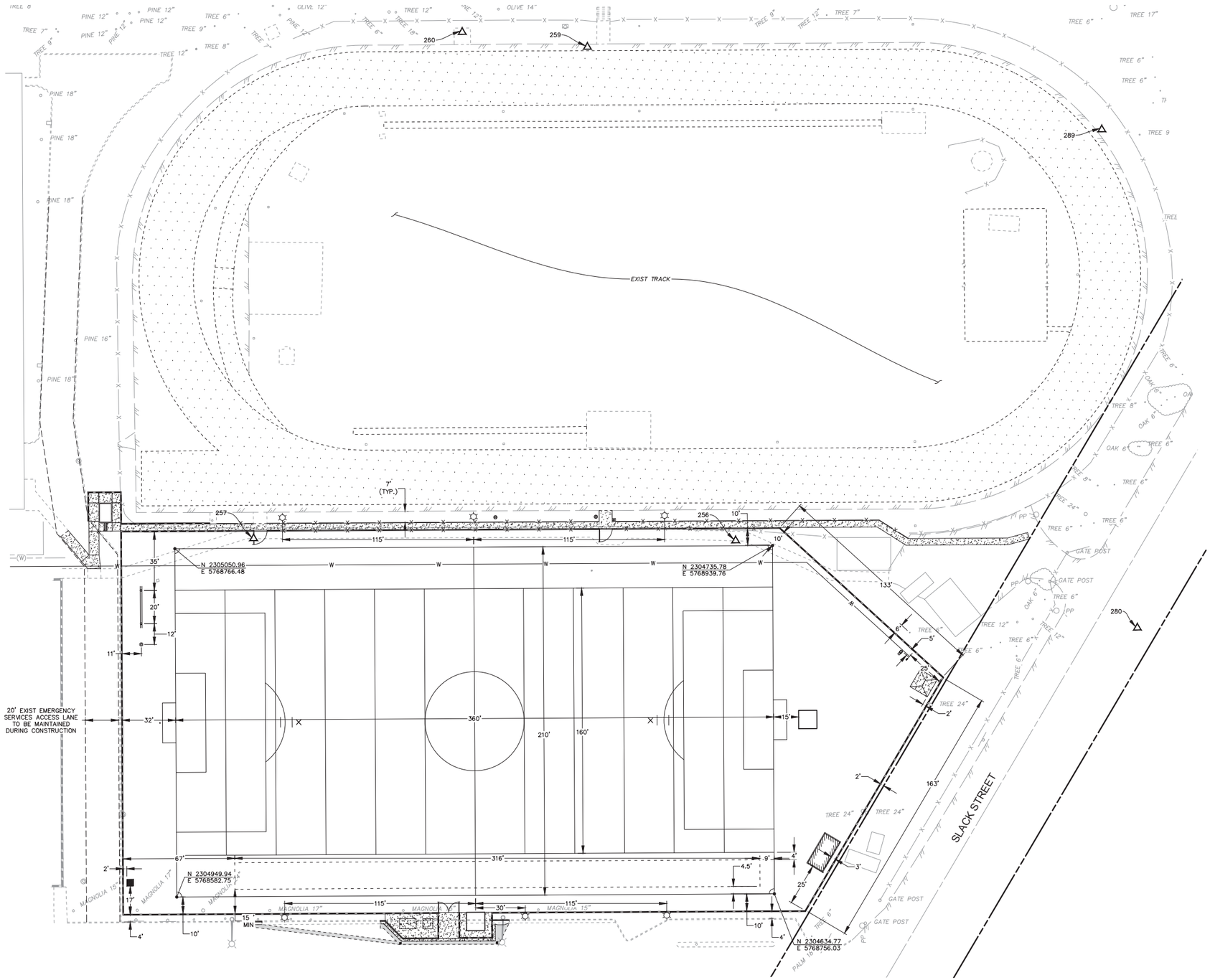
CAL POLY
SAN LUIS OBISPO

I FIELD
TITLE SHEET

SHEET
C0.0
C0.0 OF 14



BENCHMARK

ELEVATIONS HEREON ARE EXPRESSED IN U.S. SURVEY FEET AND ARE REFERENCED TO THE CITY OF SAN LUIS OBISPO BENCHMARK SYSTEM (NAVD 88)

THIS SURVEY IS TIED TO BENCHMARK #214, A LEAD AND TACK LOCATED AT THE SOUTHWEST CURB RETURN AT LONGVIEW AND HATHAWAY, HAVING A PUBLISHED ELEVATION OF 346.02.

CONTROL POINTS

△	NORTHING	EASTING	ELEVATION	DESCRIPTION
256	2304756.71	5768931.82	357.35	WPX
257	2305014.25	5768801.10	357.04	WPX
259	2304976.69	5769150.44	357.32	WPMN
260	2305047.45	5769122.56	356.97	WPX
280	2304519.16	5769001.04	365.08	WPX
289	2304680.99	5769254.44	357.08	WPS

NOTE:

BOUNDARY INFORMATION SHOWN HEREON IS BASED ON RECORD DATA ONLY. A FIELD SURVEY MAY INDICATE DIFFERENCES IN ACTUAL LOCATION(S).

0 15' 30' 60'

SCALE: 1"=30'

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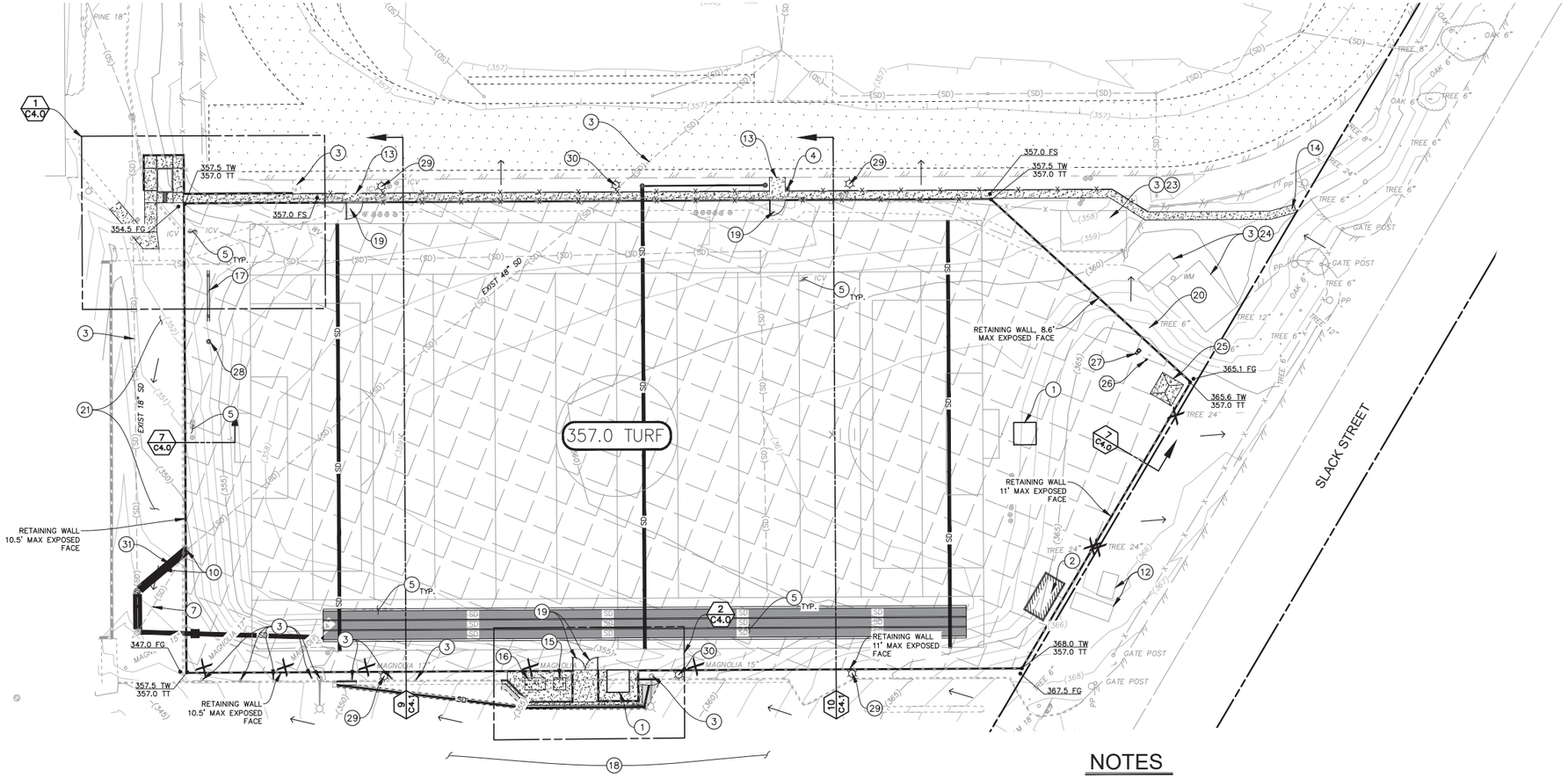
CAL POLY
SAN LUIS OBISPO

I FIELD

HORIZONTAL CONTROL PLAN

SHEET C1.0

C1.0 OF 14



LEGEND

AP	ANGLE POINT
CPP	CORRUGATED POLYETHYLENE PIPE
EG	EXISTING GRADE
EP	EDGE OF PAVEMENT
FG	FINISH GRADE
FS	FINISH SURFACE
GB	GRADE BREAK
INV	INVERT
JP	JOINT POLE
NTS	NOT TO SCALE
OC	ON CENTER
PVC	POLYVINYL CHLORIDE
PP	POWER POLE
R/W	RIGHT OF WAY
SC	SAWCUT
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SG	SUBGRADE
STD	STANDARD
TG	TOP OF GRATE
TT	TOP OF TURF
TW	TOP OF WALL
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
WM	WATER METER
WV	WATER VALVE

- XXX.X TURF — FINISHED TURF ELEVATION
- 800.00 — FINISH GRADE, PER PLAN
- (700.0) — EXISTING GRADE, PER PLAN
- 2.0% — DRAINAGE DIRECTION, PER PLAN
- (2.0%) — EXISTING DRAINAGE DIRECTION, PER PLAN
- 700 — FINISH GRADE CONTOUR
- (800) — EXISTING GRADE CONTOUR
- DRAINAGE DIRECETION
- S — EXISTING SANITARY SEWER MANHOLE
- D — EXISTING STORM DRAIN MANHOLE
- DI — EXISTING STORM DRAIN INLET/CATCH BASIN
- WM,MB,PGE,TEL — EXISTING METER, BOX VAULT OR PEDESTAL (SEE ABBREVIATIONS)
- WV — EXISTING WATER VALVE
- JP,TP,PP,MP — EXISTING POLE (SEE ABBREVIATIONS)
- FH — EXISTING FIRE HYDRANT
- (E) — EXISTING ELECTRICAL
- (SD) — EXISTING STORMDRAIN
- X — EXISTING FENCE
- RIGHT-OF-WAY
- PROPERTY LINE
- SAWCUT
- GB — GRADE BREAK
- X — FENCE PER LANDSCAPE ARCHITECT PLANS
- STREET LIGHTS
- REMOVE TREE
- STORM DRAIN MANHOLE
- OUTLET CONTROL STRUCTURE PER B / C3.0
- DRAIN INLET
- SD — STORM DRAIN, AS NOTED
- 4" ADS ADVANEDGE PIPE, OR APPROVED EQUAL
- RETAINING WALL
- EXIST TRACK
- CONCRETE
- HOT MIX ASPHALT
- SYNTHETIC TURF FIELD PER LANDSCAPE ARCHITECT PLANS
- PROPOSED BUILDING
- 2 / 5.0 — CONSTRUCT PER DETAIL 2, SHEET 5
- B — CONSTRUCT PER DETAIL B, "THIS" SHEET
- SEC. 1 / 6.0 — CONSTRUCT PER SECTION 1, SHEET 6

NOTES

1. FILM TOWER, PER 12 / C4.1
2. SHED, PER 13 / C4.1
3. PROTECT IN PLACE
4. RELOCATE EXIST BLUE PHONE
5. RELOCATE/REMOVE IRRIGATION VALVES AND PIPING PER LANDSCAPE ARCHITECT PLANS
6. REMOVE EXIST STORM DRAIN INLETS
7. REMOVE EXIST STORM DRAIN PIPE
8. RELOCATE EXIST ELECTRICAL BOX AND CONDUIT PER ELECTRICAL PLANS
9. RELOCATE EXIST WATER VALVE/METER PER LANDSCAPE ARCHITECT PLANS
10. REMOVE EXIST MANHOLE. EXTEND EXIST STORM DRAIN PIPE TO NEW MANHOLE PER PLAN. MATCH EXIST PIPE SLOPE
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17. SCOREBOARD PER ELECTRICAL PLANS
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21. RESTORE GRASS CELL STRUCTURES TO EXIST CONDITION
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23. EXIST BLEACHERS
24. EXIST BUILDING
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31. RESTORE EXISTING TURF AND PAVERS
32. CONNECT WATER LINE TO EXISTING POTABLE WATER LINE. SEE LANDSCAPE ARCHITECT PLANS FOR RECORD DRAWING

0 15' 30' 60'

SCALE: 1"=30'

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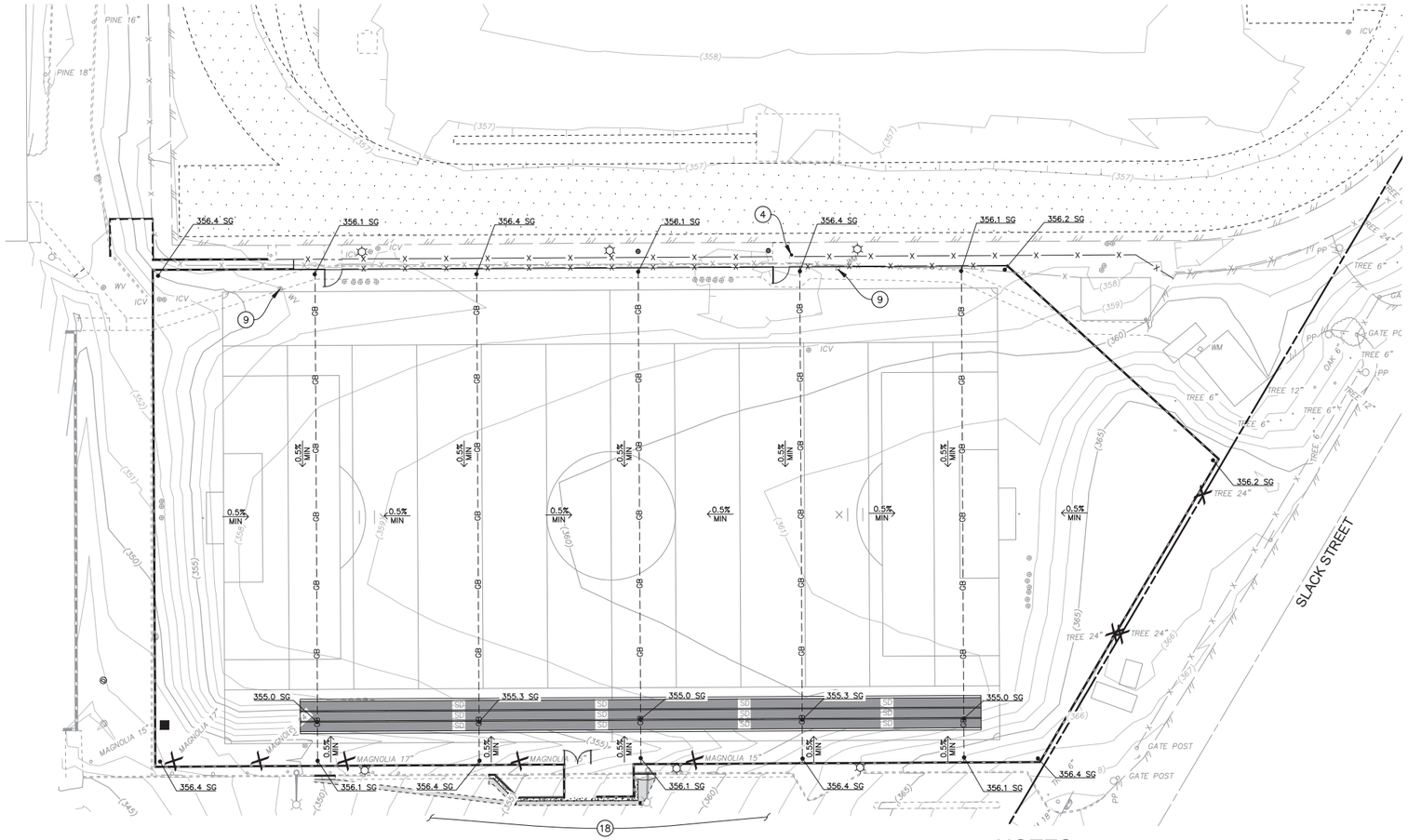
CAL POLY
SAN LUIS OBISPO

I FIELD

GRADING AND DRAINAGE

SHEET C2.0

C2.0 OF 14



LEGEND

AP	ANGLE POINT
CPP	CORRUGATED POLYETHYLENE PIPE
EG	EXISTING GRADE
EP	EDGE OF PAVEMENT
FG	FINISH GRADE
FS	FINISH SURFACE
GB	GRADE BREAK
INV	INVERT
JP	JOINT POLE
NTS	NOT TO SCALE
OC	ON CENTER
PVC	POLYVINYL CHLORIDE
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I FIELD
SUBGRADE GRADING

SHEET C2.1
C2.1 OF 14

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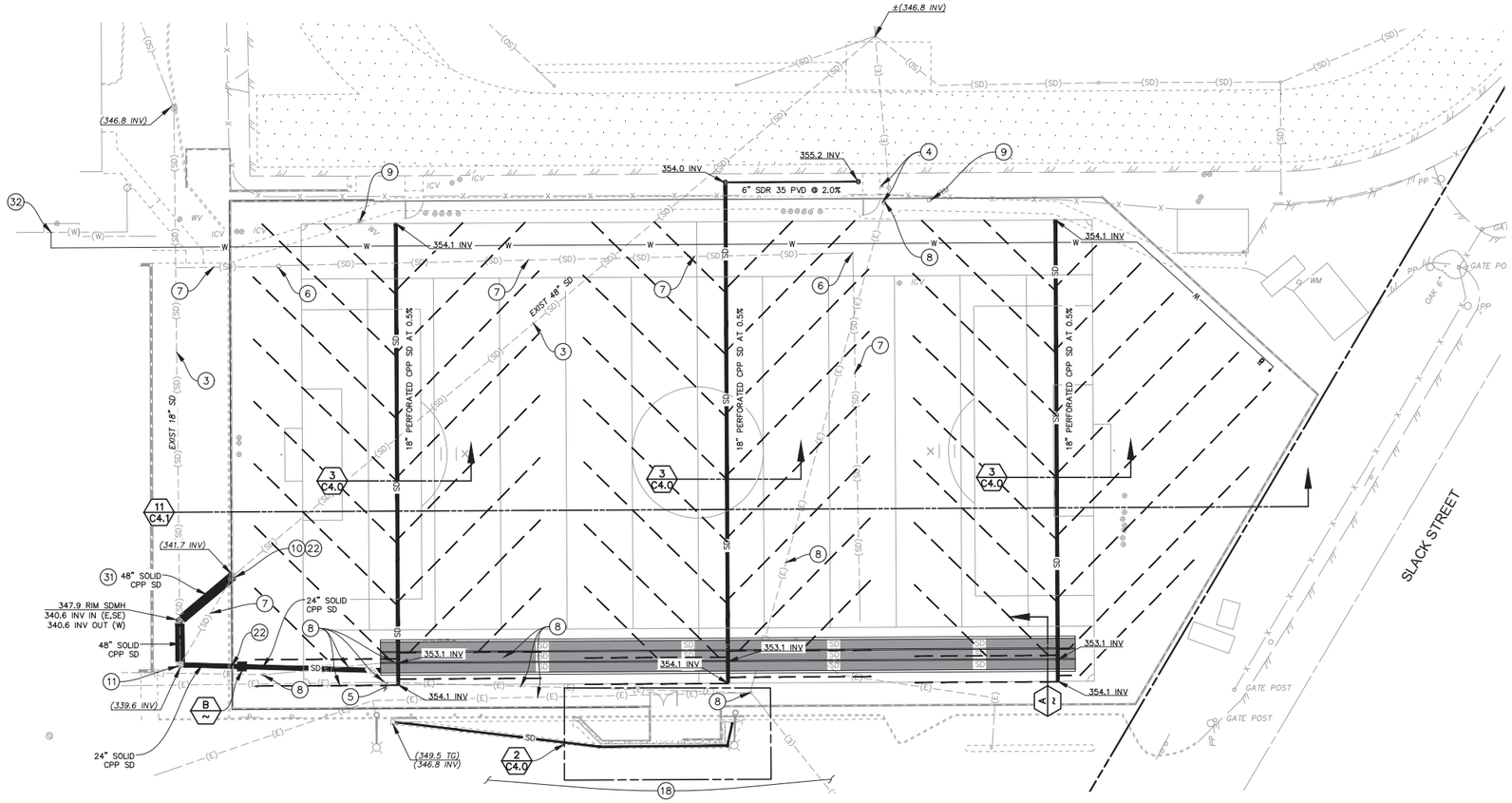
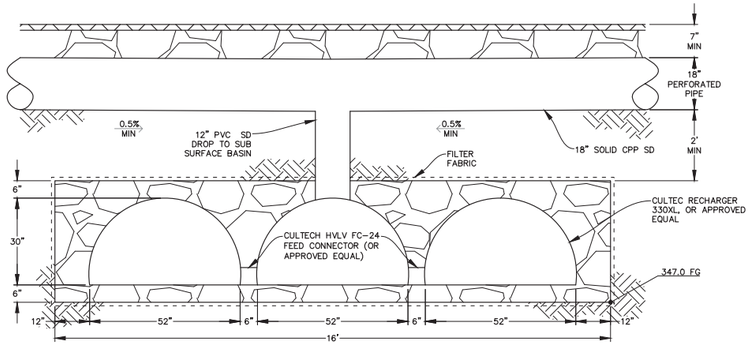
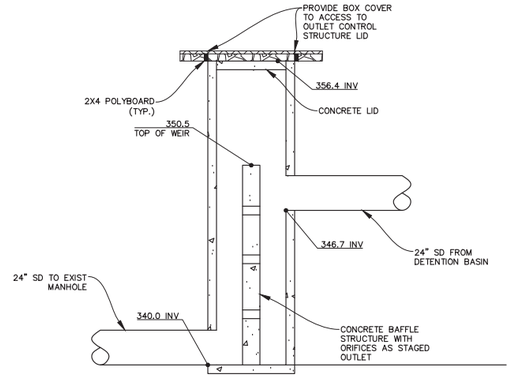




A DETENTION BASIN SECTION
SCALE: 1"= 2'



B OUTLET CONTROL STRUCTURE
SCALE: 1"= 4'

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NCE

0 15' 30' 60'

SCALE: 1"=30'

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CAL POLY
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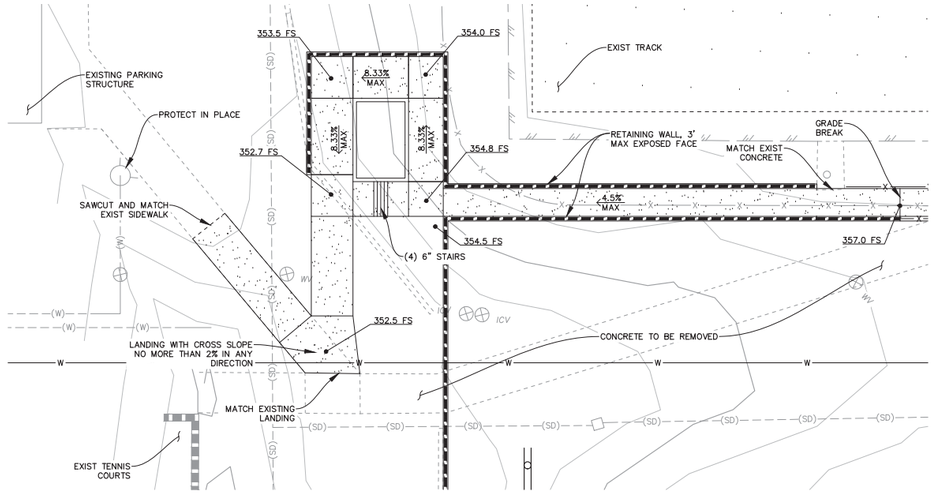
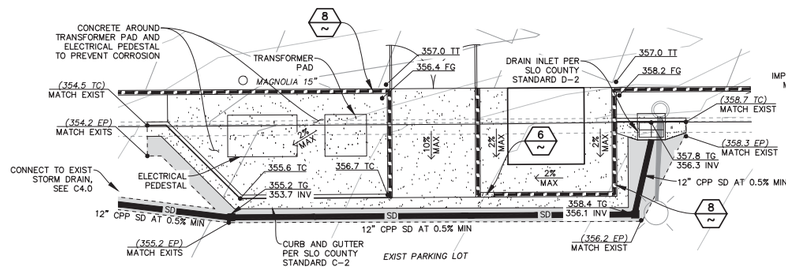
I FIELD
UNDERGROUND IMPROVEMENTS

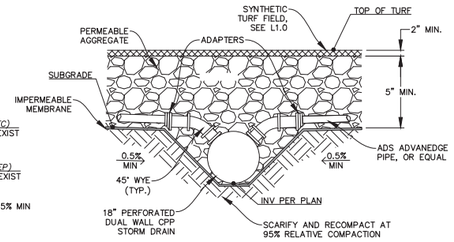
SHEET C3.0
C3.0 OF 14



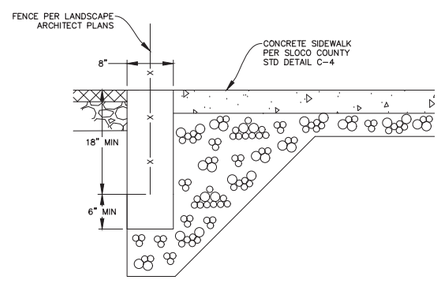
1 PEDESTRIAN RAMP
SCALE: 1"=10'



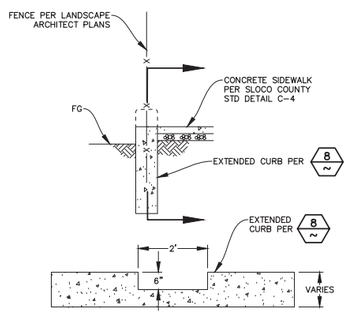
2 PROPOSED FILM TOWER
SCALE: 1"=10'



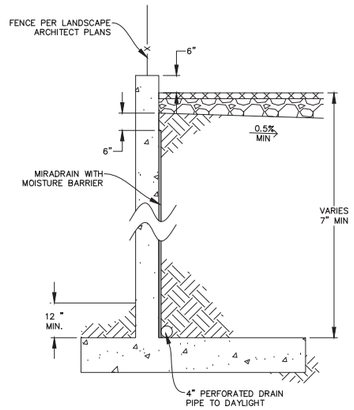
3 LATERAL PIPE CONNECTION
SCALE: 1"=2'

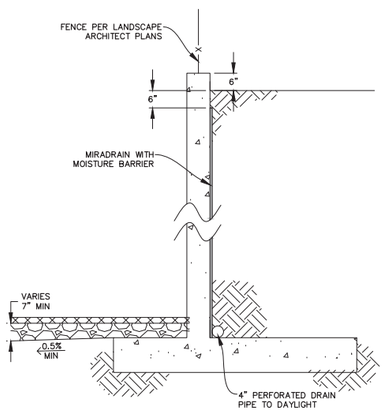


5 8" MOW CURB
SCALE: 1"=1'

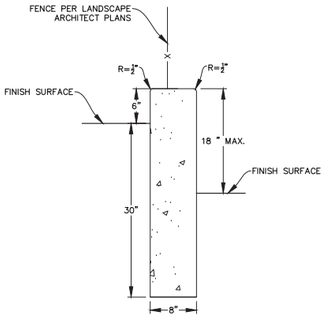


6 CURB CUT
NTS





7 RETAINING WALL SECTIONS
NTS



8 EXTENDED CURB
SCALE: 1"=1'

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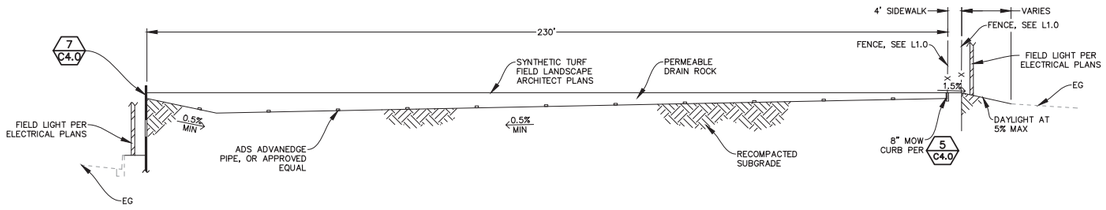
CAL POLY
SAN LUIS OBISPO

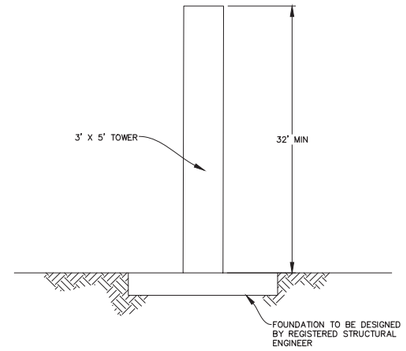
I FIELD
DETAILS

SHEET
C4.0
C4.0 OF 14



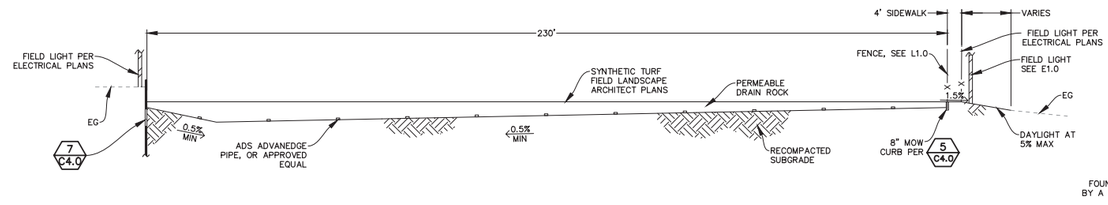
9 NORTH TURF FIELD SECTION

VERTICAL: 1" = 5'
HORIZONTAL: 1" = 20'



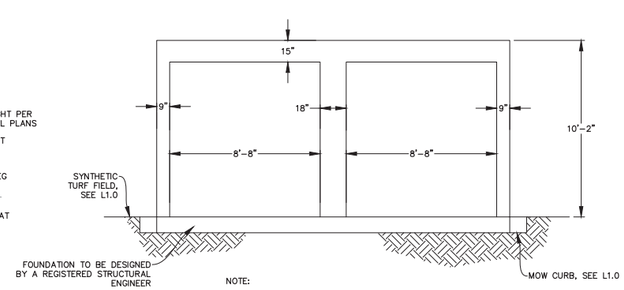
12 FILM TOWER

NTS



10 SOUTH TURF FIELD SECTION

VERTICAL: 1" = 5'
HORIZONTAL: 1" = 20'

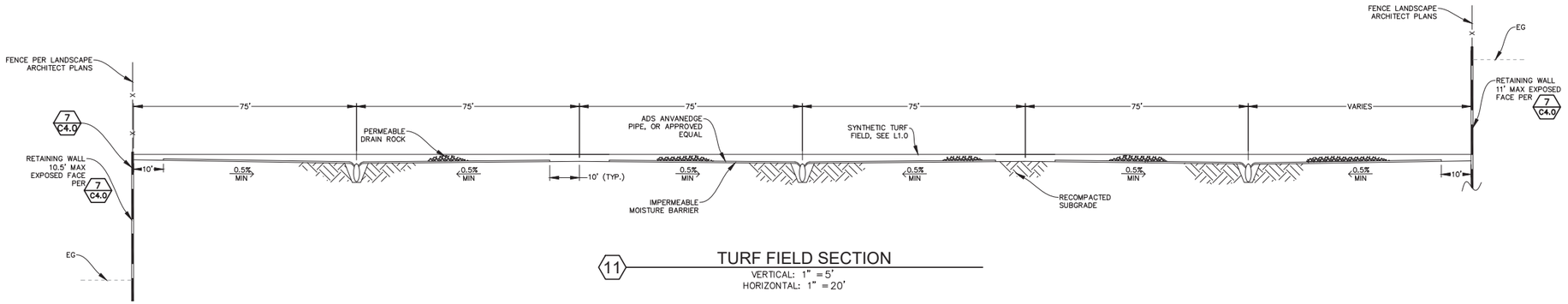


NOTE:

DBCI – DOUBLE DOOR PORTABLE BUILDING – PORT – 1020 – 2 –1010 – FF (OR APPROVED EQUAL)

13 SHED

NTS



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VERTICAL: 1" = 5'
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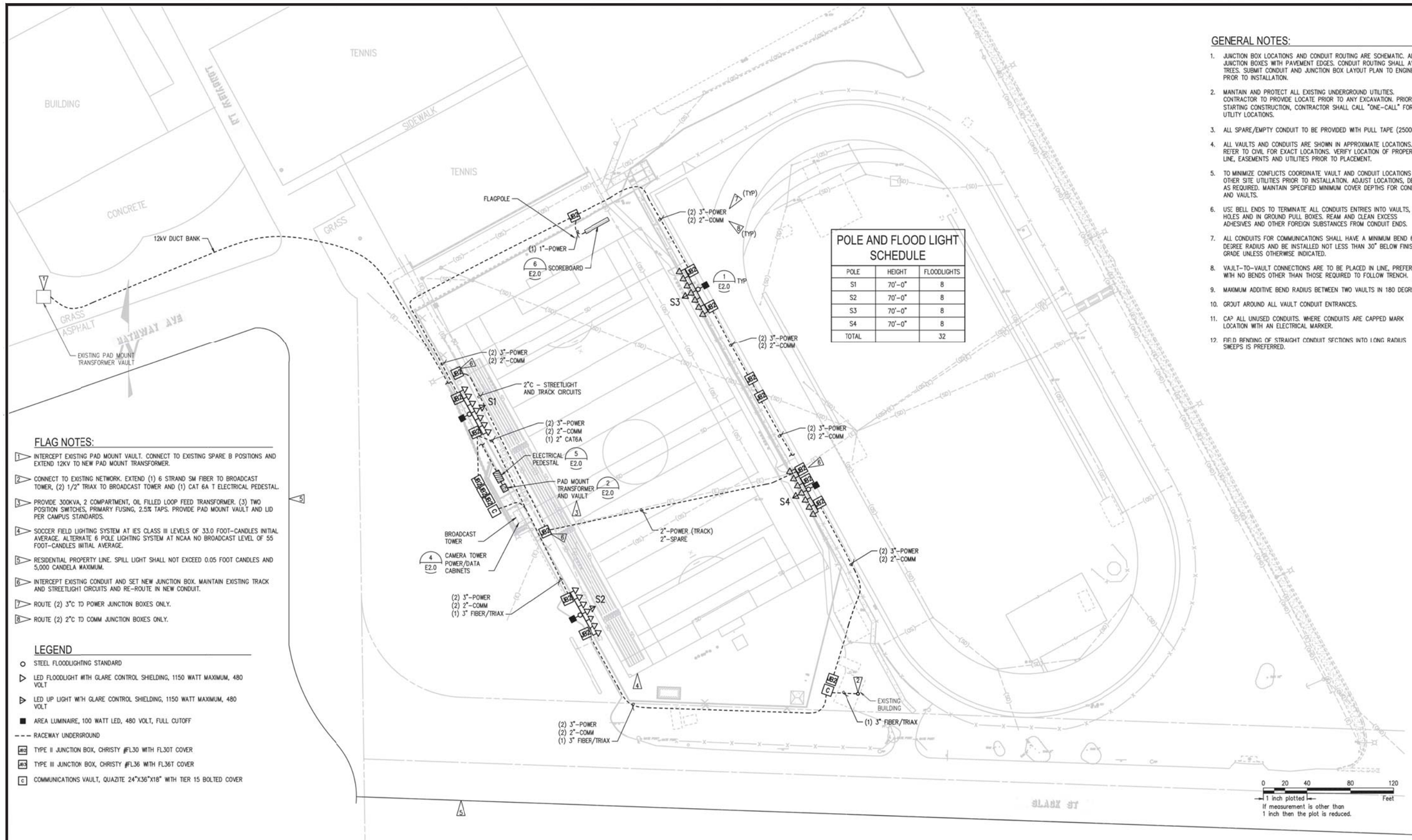
CAL POLY
SAN LUIS OBISPO

I FIELD
DETAILS

SHEET
C4.1
C4.1 OF 14



POLE AND FLOOD LIGHT SCHEDULE

POLE	HEIGHT	FLOODLIGHTS
S1	70'-0"	8
S2	70'-0"	8
S3	70'-0"	8
S4	70'-0"	8
TOTAL		32

GENERAL NOTES:

1. JUNCTION BOX LOCATIONS AND CONDUIT ROUTING ARE SCHEMATIC. ALIGN JUNCTION BOXES WITH PAVEMENT EDGES. CONDUIT ROUTING SHALL AVOID TREES. SUBMIT CONDUIT AND JUNCTION BOX LAYOUT PLAN TO ENGINEER PRIOR TO INSTALLATION.
2. MAINTAIN AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. CONTRACTOR TO PROVIDE LOCATE PRIOR TO ANY EXCAVATION. PRIOR TO STARTING CONSTRUCTION, CONTRACTOR SHALL CALL "ONE-CALL" FOR UTILITY LOCATIONS.
3. ALL SPARE/EMPTY CONDUIT TO BE PROVIDED WITH PULL TAPE (2500LB).
4. ALL VAULTS AND CONDUITS ARE SHOWN IN APPROXIMATE LOCATIONS. REFER TO CIVIL FOR EXACT LOCATIONS. VERIFY LOCATION OF PROPERTY LINE, EASEMENTS AND UTILITIES PRIOR TO PLACEMENT.
5. TO MINIMIZE CONFLICTS COORDINATE VAULT AND CONDUIT LOCATIONS WITH OTHER SITE UTILITIES PRIOR TO INSTALLATION. ADJUST LOCATIONS, DEPTHS AS REQUIRED. MAINTAIN SPECIFIED MINIMUM COVER DEPTHS FOR CONDUITS AND VAULTS.
6. USE BELL ENDS TO TERMINATE ALL CONDUITS ENTRIES INTO VAULTS, HAND HOLES AND IN GROUND PULL BOXES. REAM AND CLEAN EXCESS ADHESIVES AND OTHER FOREIGN SUBSTANCES FROM CONDUIT ENDS.
7. ALL CONDUITS FOR COMMUNICATIONS SHALL HAVE A MINIMUM BEND 60 DEGREE RADIUS AND BE INSTALLED NOT LESS THAN 30" BELOW FINISHED GRADE UNLESS OTHERWISE INDICATED.
8. VAULT-TO-VAULT CONNECTIONS ARE TO BE PLACED IN LINE, PREFERABLY WITH NO BENDS OTHER THAN THOSE REQUIRED TO FOLLOW TRENCH.
9. MAXIMUM ADDITIVE BEND RADIUS BETWEEN TWO VAULTS IN 180 DEGREES.
10. GROUT AROUND ALL VAULT CONDUIT ENTRANCES.
11. CAP ALL UNUSED CONDUITS. WHERE CONDUITS ARE CAPPED MARK LOCATION WITH AN ELECTRICAL MARKER.
12. FIELD BENDING OF STRAIGHT CONDUIT SECTIONS INTO LONG RADIUS SWEEPS IS PREFERRED.

FLAG NOTES:

1. INTERCEPT EXISTING PAD MOUNT VAULT. CONNECT TO EXISTING SPARE B POSITIONS AND EXTEND 12KV TO NEW PAD MOUNT TRANSFORMER.
2. CONNECT TO EXISTING NETWORK. EXTEND (1) 6 STRAND SM FIBER TO BROADCAST TOWER, (2) 1/2" TRIAX TO BROADCAST TOWER AND (1) CAT 6A T ELECTRICAL PEDESTAL.
3. PROVIDE 300KVA, 2 COMPARTMENT, OIL FILLED LOOP FEED TRANSFORMER. (3) TWO POSITION SWITCHES, PRIMARY FUSING, 2.5% TAPS. PROVIDE PAD MOUNT VAULT AND LID PER CAMPUS STANDARDS.
4. SOCCER FIELD LIGHTING SYSTEM AT IES CLASS III LEVELS OF 33.0 FOOT-CANDLES INITIAL AVERAGE. ALTERNATE 6 POLE LIGHTING SYSTEM AT NCAA NO BROADCAST LEVEL OF 55 FOOT-CANDLES INITIAL AVERAGE.
5. RESIDENTIAL PROPERTY LINE. SPILL LIGHT SHALL NOT EXCEED 0.05 FOOT CANDLES AND 5,000 CANDELA MAXIMUM.
6. INTERCEPT EXISTING CONDUIT AND SET NEW JUNCTION BOX. MAINTAIN EXISTING TRACK AND STREETLIGHT CIRCUITS AND RE-ROUTE IN NEW CONDUIT.
7. ROUTE (2) 3"C TO POWER JUNCTION BOXES ONLY.
8. ROUTE (2) 2"C TO COMM JUNCTION BOXES ONLY.

LEGEND

- STEEL FLOODLIGHTING STANDARD
- LED FLOODLIGHT WITH GLARE CONTROL SHIELDING, 1150 WATT MAXIMUM, 480 VOLT
- LED UP LIGHT WITH GLARE CONTROL SHIELDING, 1150 WATT MAXIMUM, 480 VOLT
- AREA LUMINAIRE, 100 WATT LED, 480 VOLT, FULL CUTOFF
- RACEWAY UNDERGROUND
- JB2 TYPE II JUNCTION BOX, CHRISTY #FL30 WITH FL30T COVER
- JB3 TYPE III JUNCTION BOX, CHRISTY #FL36 WITH FL36T COVER
- C COMMUNICATIONS VAULT, QUAZITE 24"X36"X18" WITH TIER 15 BOLTED COVER

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CAL POLY
SAN LUIS OBISPO

I FIELD

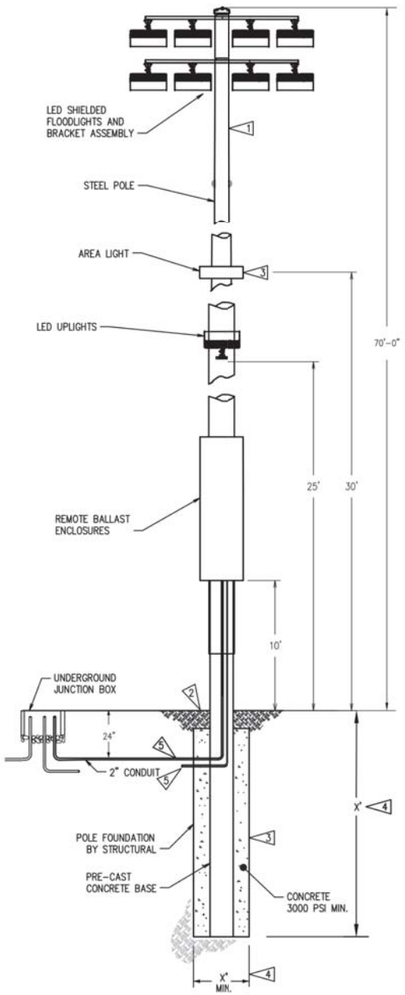
ELECTRICAL SITE PLAN

SHEET E1.0

E1.0 OF 14

FLAG NOTES:

1. SUPPLIER OF GALVANIZED STEEL POLE AND SCOREBCARD POSTS TO PROVIDE STRUCTURAL CALCULATIONS FROM A LICENSED STRUCTURAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA. CALCULATION TO INCLUDE WIND AND SEISMIC LOADS PER IBC LATEST EDITION. SUBMIT WITH MANUFACTURER SHOP DRAWINGS DURING SUBMITTAL PHASE OF PROJECT.
2. MATCH EXISTING GRADE.
3. COORDINATE LOCATION OF BRACKET WITH POLE MANUFACTURER.
4. POLE AND SCORBOARD FOUNDATION CALCULATIONS TO BE PROVIDED BY CONTRACTOR. CALCULATIONS TO BE PROVIDED BY A LICENSED STRUCTURAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA.
5. PROVIDE TWO 2" CONDUITS UP FLOODLIGHT POLE. EXTEND CONDUIT TO ADJACENT POWER AND DATA JUNCTION BOXES.
6. CAMPUS POWER METER (SQUARE D#PM820). CONNECT TO SCADA USING ETHERNET GATEWAY AND TCPIP.



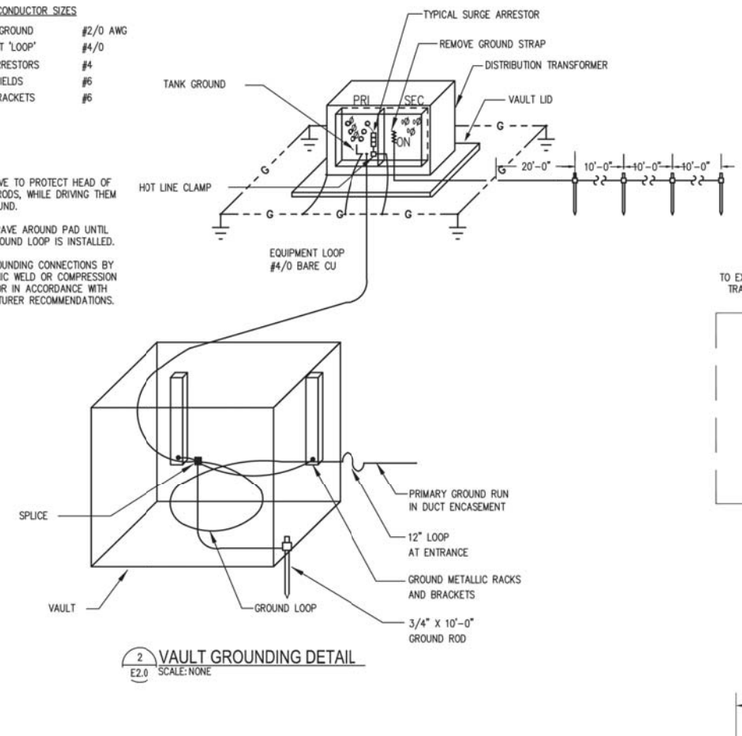
1 E2.0 STEEL POLE DETAIL - LED
SCALE: NONE

GROUND CONDUCTOR SIZES

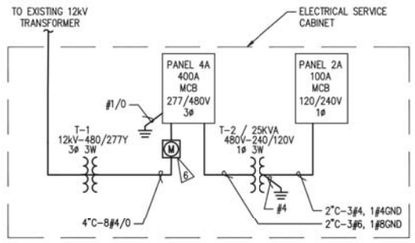
PRIMARY GROUND	#2/0 AWG
EQUIPMENT 'LOOP'	#4/0
SURGE ARRESTORS	#4
CABLE SHIELDS	#6
RACKS/BRACKETS	#6

NOTES:

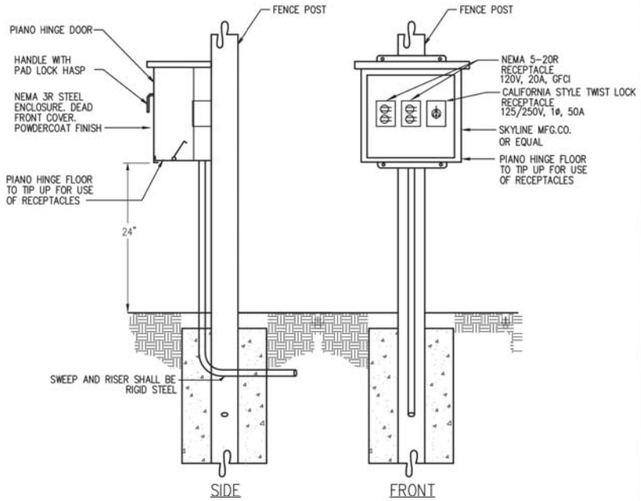
1. USE SLEEVE TO PROTECT HEAD OF GROUND RODS, WHILE DRIVING THEM INTO GROUND.
2. DO NOT PAVE AROUND PAD UNTIL AFTER GROUND LOOP IS INSTALLED.
3. MAKE GROUNDING CONNECTIONS BY EXOTHERMIC WELD OR COMPRESSION CONNECTOR IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.



2 E2.0 VAULT GROUNDING DETAIL
SCALE: NONE

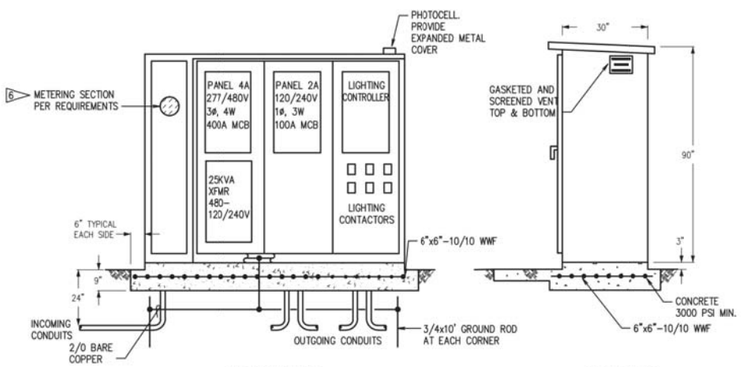


3 E2.0 FOOTBALL FIELD ONE-LINE DIAGRAM
SCALE: NONE

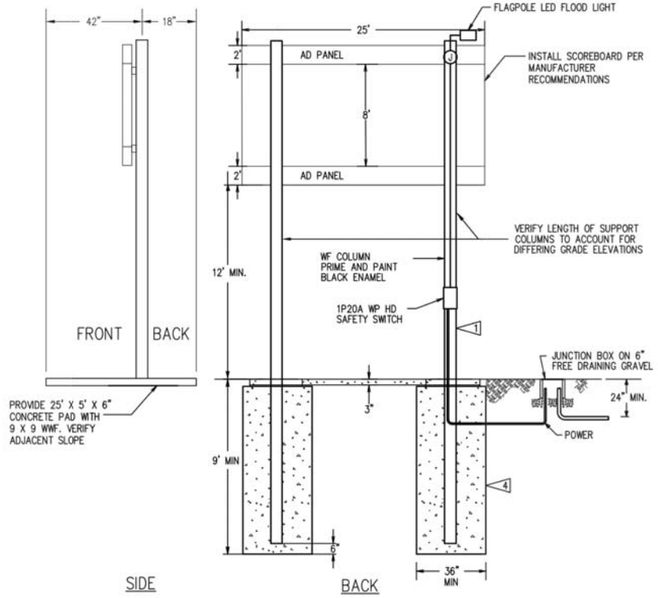


4 E2.0 BROADCAST TOWER POWER CABINET ELEVATION DETAIL
SCALE: NONE

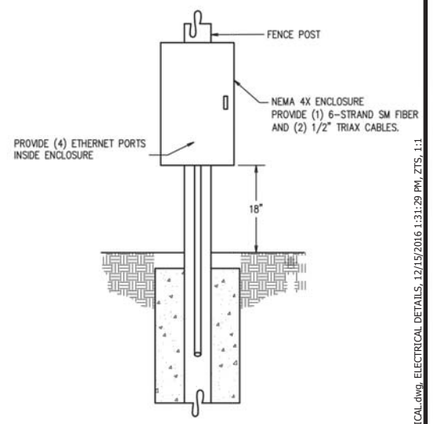
1 E2.0 STEEL POLE DETAIL - LED
SCALE: NONE



5 E2.0 FOOTBALL FIELD PEDESTAL DETAIL
SCALE: SPEAKER POLE DETAIL



6 E2.0 SCOREBOARD DETAIL
SCALE: NONE



7 E2.0 BROADCAST TOWER DATA CABINET ELEVATION DETAIL
SCALE: NONE

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CAL POLY
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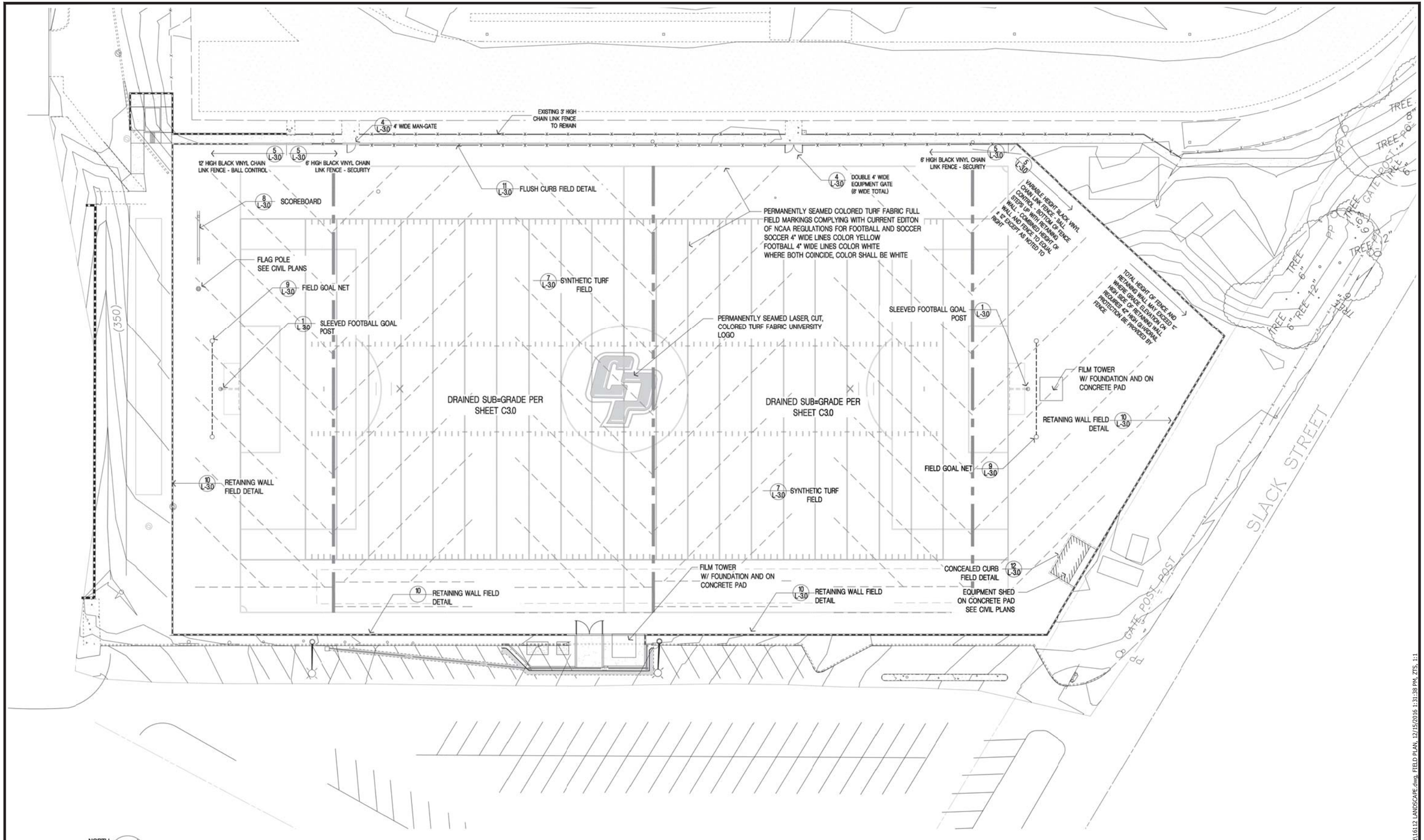
I FIELD
ELECTRICAL DETAILS

SHEET
E2.0
E2.0 OF 14



NORTH

SCALE: 1" = 20'-0"

0 10 20 40 60

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I FIELD

FIELD PLAN

SHEET L1.0

L1.0 OF 14

TREES AND VEGETATION PROTECT AND MAINTAIN DURING CONSTRUCTION

5"x7"x7' ERYTHRINA HUMEANA BOX, RELOCATE, MAINTAIN DURING CONSTRUCTION, AND REPLANT

25" EUCALYPTUS REMOVE

22"x24" EUCALYPTUS REMOVE

6" MAGNOLIA GRANDIFLORA RETAIN

30' WASHINGTONIA ROBUSTA RETAIN

6" MAGNOLIA GRANDIFLORA RETAIN

24" MAGNOLIA GRANDIFLORA REMOVE

17" MAGNOLIA GRANDIFLORA REMOVE

15" MAGNOLIA GRANDIFLORA REMOVE

15" MAGNOLIA GRANDIFLORA REMOVE

SLACK STREET

NORTH

SCALE: 1" = 20'-0"

0 10 20 40 60

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EXISTING TREE WORK

SHEET L2.1

L2.1 OF 14

IRRIGATION LEGEND

- 1" POTABLE WATER QUICK COUPLER VALVE BRASS BALL VALVE LINE SIZED
- 1" POTABLE WATER QUICK COUPLER VALVE FOR SYNTHETIC FIELD WASH DOWN IN STAINLESS STEEL QUICK COUPLER BOX (6 / L-3)
- BRASS GATE VALVE LINE SIZED
- PRESSURE MAINLINE (POTABLE WATER) PVC SCHD. 40 WHITE
- DRIPLINE REMOTE CONTROL VALVE W/ PRESSURE REGULATING DISC FILTER
- IRRIGATION CONTROL VALVE RELOCATED OR NEW AS REQUIRED FOR FIRE LANE TURF GRASS IRRIGATION
- NEW PLANTING AREA WITH NEW DRIPLINE IRRIGATION

PLANTING LEGEND

TREES
- LOPHOSTEMON CONFERTUS — BRISBANE BOX
- LYONOTHAMNUS FLORIBUNDUS ASPLENIFOLIUS — CATALINA IRONWOOD

TALL SHRUBS
- MYRTUS COMMUNIS — MYRTLE
- PITTOSPORUM 'SILVER SHEEN' — BRISBANE BOX
- PODOCARPUS HENKELII — LONG-LEAFED YELLOWWOOD

MASSING SHRUBS & GRASSES
- BACCHARIS PILULARIS 'PIGEON POINT' — DWARF COYOTE BUSH
- LEONOTIS LEONURUS — LIONS TAIL
- MUHLENBERGIA CAPILLARIS — PINK MUHLEY
- WESTRINGIA FRUTICOSA HYBRIDS — COAST ROSEMARY

GROUND COVERS
- CAREX DIVULSA (TUMULICOLA) — BEREKELY SEDGE
- MYOPORUM PARVIFOLIUM 'PUTAH CREEK'

EXISTING GRID REINFORCED NATURAL GRASS FIRE LANE TO REMAIN REWORK AND/OR REPLACE EXISTING IRRIGATION ROTOR HEADS, VALVE AND MAIN LINE

PROTECTED TREES AND VEGETATION

5"x7"x7" ERYTHRINA HUMEANA REPLANTED

6" MAGNOLIA GRANDIFLORA RETAINED

30" WASHINGTONIA ROBUSTA RETAINED

6" MAGNOLIA GRANDIFLORA RETAINED

EXISTING IRRIGATION CONTROLLER WITH STATION CAPACITY PREVIOUSLY USED FOR NATURAL GRASS FIELD SYSTEM - STATIONS AVAILABLE FOR NEW IRRIGATION CONTROL VAVLES +/- 100' NORTH - SEE EXISTING IRRIGATTION SYSTEM RECORD DRAWING FOR LOCATION

SLACK STREET

NORTH

SCALE: 1" = 20'-0"

0 10 20 40 60

IRRIGATION NOTES:

1. REMOVE ALL EXISTING IRRIGATION FROM FIELD AREA. RELOCATED EXISTING VALVES SERVING IRRIGATION TO REMAIN FOR AREAS BEYOND IMMEDIATE FIELD AREA
2. EXISTING BACKFLOW PREVENTER, 4" MAIN LINE AND FLOW SENSOR/MASTER VAVLE TO REMAIN
3. POINT OF CONNECTION FOR NEW FIELD AREA IRRIGATION SYSTEM

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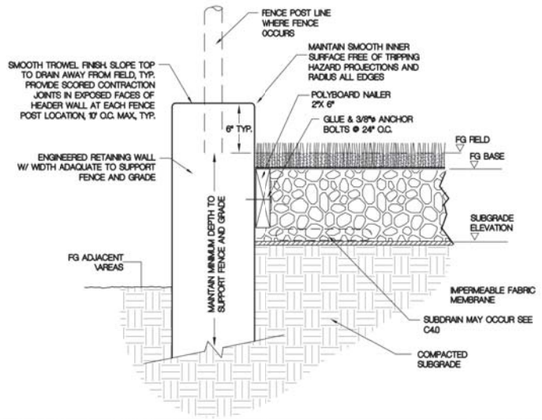
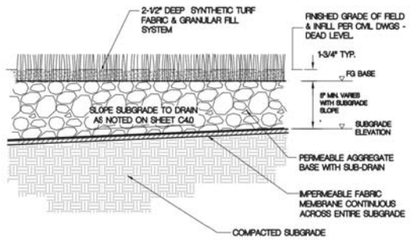
I FIELD
LANDSCAPE WORK

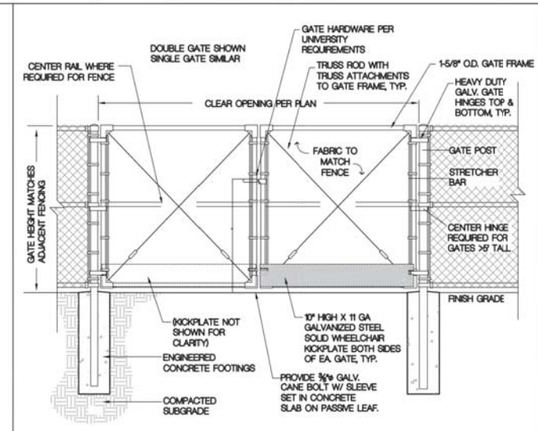
SHEET L2.2
L2.2 OF 14



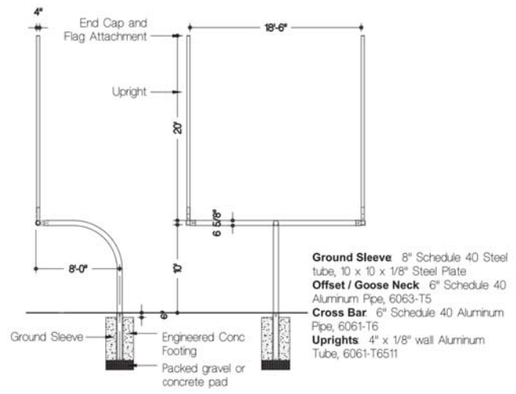
RETAINING WALL FIELD DETAIL 10



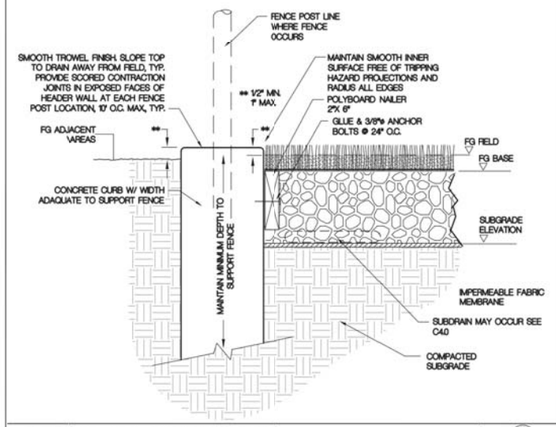
TYPICAL FIELD SECTION 7



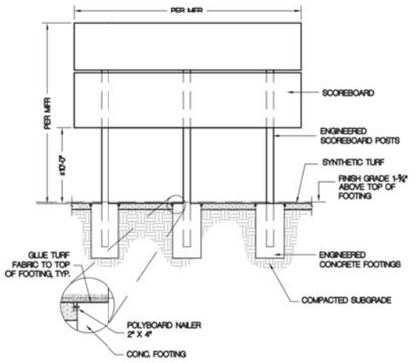
FIELD FENCE GATES 4



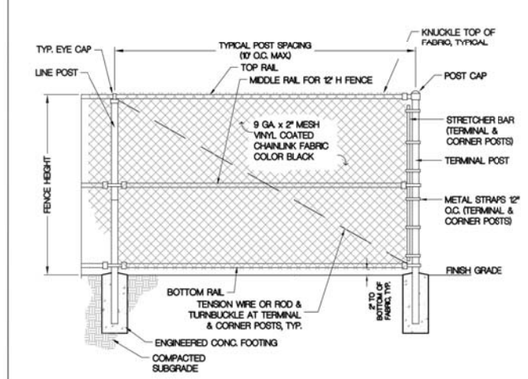
SLEEVED GOAL POSTS 1



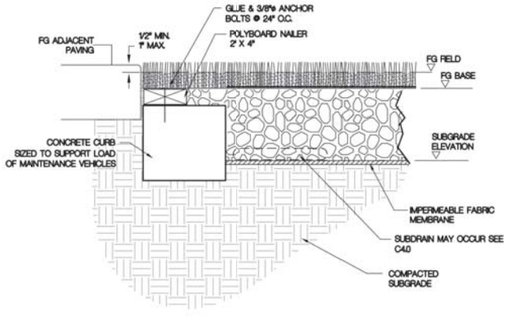
FIELD CURB FIELD DETAIL 11



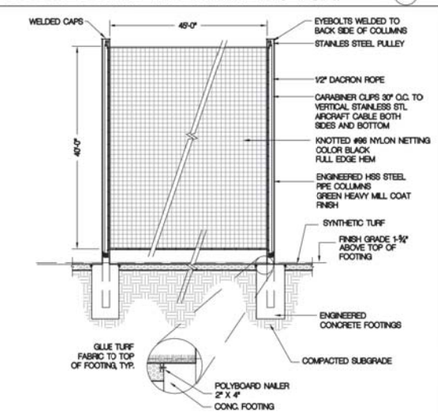
SCOREBOARD IN SYNTHETIC TURF 8



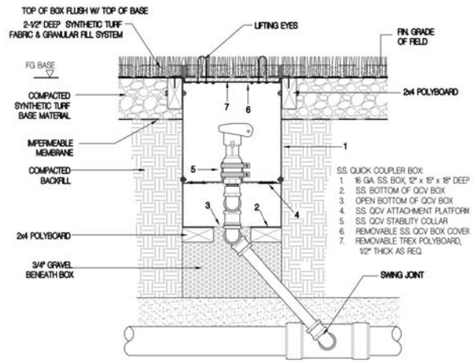
FIELD FENCE GATES 5



CONCEALED CURB FIELD DETAIL 12



FIELD GOAL NET 9



FIELD QUICK COUPLER 6

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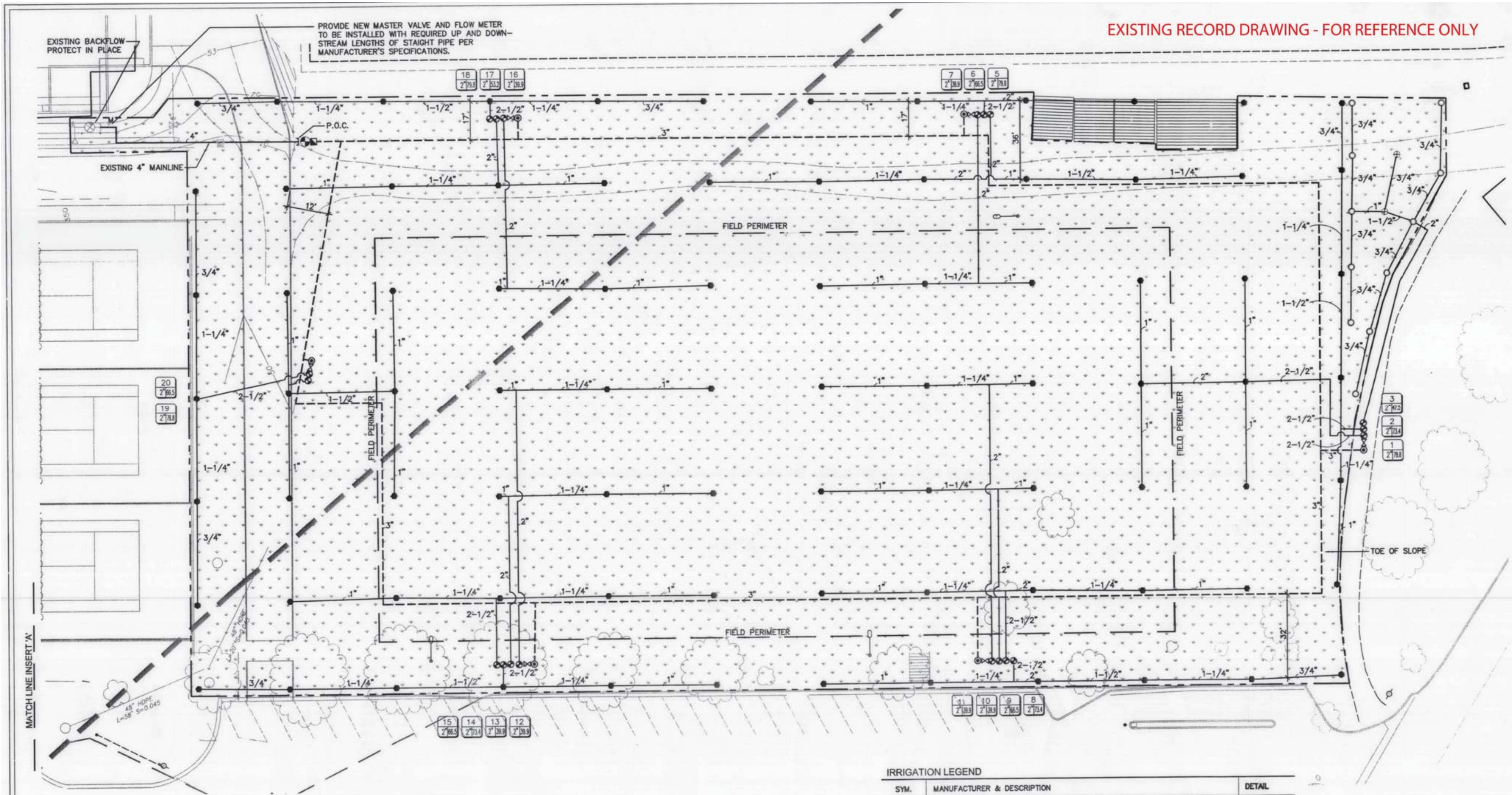
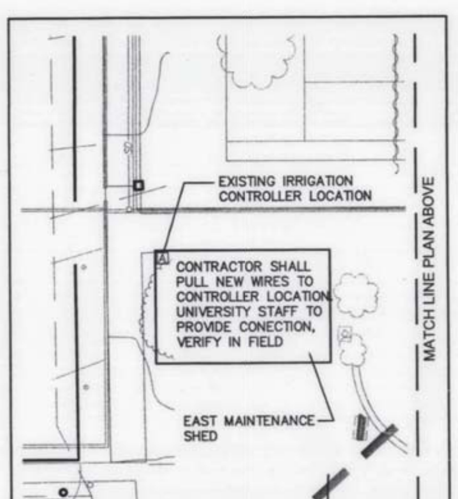
I FIELD
FIELD DETAILS

SHEET
L3.0
L3.0 OF 14

EXISTING RECORD DRAWING - FOR REFERENCE ONLY





INSERT 'A'

IRRIGATION NOTES

1. SEE SPECIAL & STANDARD SPECIFICATIONS FOR INSTRUCTIONS, APPLICATION, PROCEDURES AND OTHER INFORMATION ON THE INSTALLATION OF THE IRRIGATION SYSTEM.
2. IRRIGATION PLAN IS DIAGRAMATIC. FINAL LOCATION OF PIPING WILL BE DETERMINED AT THE TIME OF INSTALLATION. MAINLINE AND LATERALS SHALL BE PLACED IN THE SAME TRENCH WHEN POSSIBLE. ALL Q.C. VALVES ARE TO BE LOCATED 12" FROM SIDEWALKS, CURBS, ASPHALT & CONCRETE SURFACES.
3. ALL EQUIPMENT REQUIRED BUT NOT SPECIFIED ON THE DRAWING, TO COMPLETE THE WORK, SHALL BE PROVIDED BY THE IRRIGATION CONTRACTOR.
4. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND/OR SPECIFICATIONS.
5. TRENCH BACKFILL MATERIAL SHALL BE FREE OF ROCKS, GLASS, AND OTHER EXTRANEOUS MATERIALS. BACKFILL WILL BE COMPACTED TO 90% MAXIMUM DRY DENSITY.
6. IRRIGATION DESIGN IS BASED ON A MINIMUM 50 PSI STATIC WATER PRESSURE AT THE SPRAY HEAD. IF WATER PRESSURE IS LESS, CONTRACTOR IS TO CALL THE LANDSCAPE ARCHITECT BEFORE COMMENCING WITH THE WORK.
7. ALL VALVE CONTROL WIRE SHALL BE AWG 14 TYPE UF, 600 VOLT TEST, DIRECT BURIAL.
8. CONTROLLER POWER WIRE SHALL BE 120 VOLT WIRE AND PLACED IN 3/4" CONDUIT. POWER TO BE FROM ELECTRICAL PANEL. 120 VOLT SERVICE AND HOOK-UP TO THE CONTROLLER SHALL BE COMPLETED BY A LICENSED ELECTRICAL CONTRACTOR. THIS COST IS TO BE A PART OF THE LANDSCAPE CONTRACTOR'S BID.
9. CONNECT ALL DIRECT BURIAL WIRES USING 3M'S "DBY-DIRECT BURIAL SPLICE KITY"
10. CONTRACTOR SHALL PULL ONE (1) EXTRA WIRE AT EACH BANK OF REMOTE CONTROL VALVES OR MANIFOLD .
11. CONTRACTOR SHALL PROVIDE #10 COMMON WIRE TO ALL REMOTE CONTROL VALVES.
12. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED BY LOCAL CODES PRIOR TO BEGINNING WORK.
13. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING UNDERGROUND SERVICE ALERT (3) DAYS PRIOR TO BEGINNING WORK (800) 642-2444.
14. CONTRACTOR IS RESPONSIBLE FOR FINE GRADING AND REPAIR OF TURF EDGES PER SPECIFICATIONS.
15. CONTRACTOR SHALL PROVIDE:
TEN (10) HUNTER I-40 POP-UP ROTORS AND NOZZLES
PIPING, FITTINGS AND AT NO EXTRA COST, AND ONLY AT CITY ENGINEER OR AUTHORIZED REPRESENTATIVE DIRECTION TO ACCOMODATE UNFORSEEN JOB CONDITIONS. PROVIDED EQUIPMENT NOT USED SHALL BECOME CITY PROPERTY.
16. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PLANS AND SITE CONDITIONS PRIOR TO BEGINNING WORK. SHOULD CONFLICTING INFORMATION BE FOUND ON THE PLANS, THE CONTRACTOR SHALL NOTIFY CAL POLY FACILITY SERVICES BEFORE PROCEEDING WITH THE WORK IN QUESTION.
17. DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY AT NO EXPENSE TO THE OWNER.
18. CONTRACTOR SHALL AQUIRE A COPY OF THE IRRIGATION AS-BUILT PLANS FROM CAL POLY FACILITY SERVICES AND CONFIRM LOCATION OF ALL EXISTING EQUIPMENT, INCLUDING, BUT NOT LIMITED TO, HEADS, PIPE, VALVES, AND CONTROL WIRES.
19. FOR ALL POINTS OF CONNECTION (P.O.C.) CONTACT CAL POLY FACILITY SERVICES TO CONFIRM AND COORDINATE TIE IN LOCATION.
20. SPLICING OF 24 VOLT WIRES WILL NOT BE PERMITTED EXCEPT IN VALVE BOXES. LEAVE A 24" COIL OF EXCESS WIRE AT EACH SPLICE. LABEL ALL WIRES W/ WATERPROOF MARKERS AT ALL SPLICES AND VALVE MANIFOLDS.
21. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL MATERIAL APPEARING ON PLAN.
22. ALL EXISTING UTILITIES, WATER LINES AND FIRE HYDRANTS SHALL REMAIN CONNECTED AND IN FULL CONTINUOUS OPERATION DURING AND FOLLOWING ALL CONTRACT WORK EXCEPT AS SHOWN ON THIS SHEET.
23. ALL EXISTING EQUIPMENT NOT USED IN PROJECT SHALL BECOME PROPERTY OF CAL POLY FACILITY SERVICES.

IRRIGATION LEGEND

SYM.	MANUFACTURER & DESCRIPTION	DETAIL
◉	RAINBIRD 44 RC QUICK COUPLER VALVE	C/ L-1.1
	SUPERIOR - MODEL 950 REMOTE CONTROL VALVE	B/ L-1.1
M	SUPERIOR - MODEL 3100 NORMALLY OPEN MASTER VALVE	B/ L-1.1
	RAINMASTER - EVFM-P200 FLOW METER	
◎	TORO S700P-PC-1.5,3.0-FA	D/ L-1.1
⊕	TORO S700P-FC-6.0-FA	D/ L-1.1
	TORO MPR 15-Q,T,H,F	D/ L-1.1
●	HUNTER I-25-36S-13, HIGH SPEED POP-UP ROTOR	D/ L-1.1
●	HUNTER I-25-ADS-13, HIGH SPEED POP-UP ROTOR	D/ L-1.1
A	EXISTING RAINMASTER 48 STATION CONTROLLER CONNECT TO ANY (24) UNUSED STATIONS, VERIFY IN FIELD	
⋈	NIBCO T113 - CAST IRON RESILIENT WEDGE DOMESTIC GATE VALVE SIZE PER MAINLINE	E/ L-1.1
—	CLASS 315 PVC MAINLINE, SIZE PER PLAN - SOLVENT WELD	F/ L-1.1
—	CLASS 200 PVC LATERAL LINE, SIZE PER PLAN	F/ L-1.1

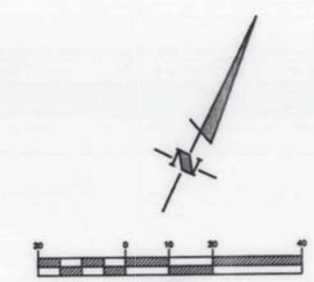
VALVE CALLOUT KEY

- CONTROLLER STATION NUMBER
- GALLONS PER MINUTE
- VALVE SIZE

PLANT LEGEND

HYDROSEED TURF

6 LBS. SELECT PERENIAL RYEGRASS AND 3 LBS. JACKPOT HYBRID BERMUDA (1-½LB. HULLED AND 1-½ LB. UNHULLED PER 1000 S.F., SEE SPECIFICATIONS. HYDROSEED WITHIN ALL AREAS OF NEW IRRIGATION. CONTRACTOR SHALL ALLOW FOR 3000 S.F. OF HYDROSEED TURF MIX FOR ANY UNFORSEEN CONDITIONS.



R R M D E S I G N G R O U P
AS-BUILT PLANS PREPARED UNDER THE SUPERVISION OF
GARY L. GLANDON L.A. #3791 — 3/1/02 DATE

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131 South Second Avenue, Oakdale, California 95361 209/847-1794

CAL POLY, S.L.O. TENNIS COURT

IRRIGATION/ PLANTING PLAN

NO.	REVISION	DATE

Design By GG — Checked By GG
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Date March 2, 2001
Job Number 1800032
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Landscaping L1.0 Tennis Court - Irrigation Planting Plan 2001-03-02

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APPENDIX B.
VISUAL IMPACT ASSESSMENT

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CAL POLY I FIELD IMPROVEMENTS PROJECT

VISUAL IMPACT ASSESSMENT

January 2017

PREPARED FOR

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Cal Poly I Field Improvements Project
Visual Impact Assessment

Prepared for

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Figures

1 INTRODUCTION

This study assesses visual impacts that may result from the proposed improvements to the natural grass field known as the Cal Poly I Field to serve as a practice facility for the Cal Poly Athletics Department and other campus sports and recreational activities. Cal Poly's I Field is located in the southeastern portion of campus, north of Slack Street between Grand Avenue and Longview Lane (refer to Figure 1). The purpose of this analysis is to determine if a change in the visual environment would occur, whether that change would be viewed as a positive or negative one, and the degree of any change relative to the existing setting. If the project has the potential to cause visual impacts, this study specifically defines those impacts.

This analysis focuses on the potential for the proposed project components to result in impacts on visual resources as seen from public locations and roadways. The baseline visual condition is analyzed, visual resources identified, and a baseline scenic character established. The analysis methodology evaluates the aggregate affect that the project may have on the overall visual character of the project site and surrounding landscape. If a change in character is identified, it is compared to viewers' expected sensitivity, and is reviewed for consistency with applicable University, city, and state planning policies. Levels of impact are determined according to California State University / California Environmental Quality Act (CEQA) definitions and guidelines.

2 PROJECT DESCRIPTION

Cal Poly and ASI propose to construct an artificial turf field at Cal Poly I Field to serve as a practice location for Cal Poly football, men's and women's soccer, intramural sports, and other student activities and tournaments. Cal Poly Athletics and ASI would partner financially to construct the project and would also share use of the field, most likely through development of a block schedule that outlines which partner has the right to use the field during particular days and times. Refer to Figures 2 through 4 for selected schematic plans of the project.

The practice field would be available for use all year long, but the most intensive uses would occur during Cal Poly's regular academic school year (i.e., the fall, winter, and spring terms lasting from mid-September through mid-June). During the school year, I Field would typically be used for football and soccer practices on Mondays through Fridays from 6:00 am to 3:00 pm. Football practices would be held throughout the NCAA football season, which generally runs August through December and March through April. Men's and women's soccer practices would be held throughout the school year, and the I Field may also be used for morning conditioning workouts during the summer term.

Intramural flag football and soccer events would be held at the field during the fall, winter, and spring academic terms, and would generally run from the second week of classes until the ninth week of classes in each term. In the future, it is possible that ASI could expand to include other intramural sports and additional intramural league events could eventually be held at the field. Intramural events would take place Thursdays through Sundays, and would be held back-to-back on the hour from 5:00 pm until the fields close at 12:00 am.

Other student events, such as kickball, whiffle ball, and ultimate Frisbee tournaments would be held on occasion throughout the year. These tournaments are held roughly three times per academic term and would generally consist of a 1- or 2-day-long event over the weekend (usually Friday evening to Saturday afternoon).

Figure 1. Project Location and Key Viewing Area Map

The project would include the following components and improvements:

- Site grading to achieve a level site that is 80 yards wide (between the surface parking lot to the west and the track to the east), and a minimum of 140 yards long (between Slack Street to the south and the tennis courts to the north). This may require expansion of the field area west into the surface parking lot (anticipated to be less than 10 feet). If the site cannot meet the desired dimensions, then Cal Poly and ASI would construct the field to be as wide and long as possible.

- Construction of a retaining wall along the northern, western, and southern portions of the field and placement of fill material to eliminate the current natural downward grass slope towards the tennis courts, with stairs up to the playing surface.

- Site grading and removal of cut material at the south end of the field to eliminate the current natural raised slope to the campus border at Slack Street.

- Construction of the playing field with an artificial turf (crumb rubber infill) type of playing surface. A Field Turf or similar type of product would be required.

- Permanent striping of the playing field for:
    - NCAA Football
    - NCAA Soccer
    - Intramural Flag Football

- Installation of two permanent NCAA Football field goal posts (sleeved for removal if necessary) and two 20-foot tall goal post nets to catch kicked footballs, at the north and south ends of the field.

- Installation of a scoreboard with football and soccer specific capabilities.

- Removal of two eucalyptus trees from the south end of the field and five landscape variety trees along the west side of the field near the parking lot.

- Construction of an 8-foot-tall fence along the southern boundary of the site adjacent to Slack Street and a 6-foot-tall fence along the remainder of the site perimeter (northern, eastern, and western sides of the field). Fencing along the eastern side of the site would be located along the existing concrete pathway leading into the campus instructional core. Site fencing would include three lockable gates large enough to accommodate service vehicle access. Green windscreen with Cal Poly logo branding would be added to all fencing (6-foot and 8-foot tall fencing) as well as the 20-foot tall goal post nets.

- Removal of the temporary sheds and storage containers located at the south end of the field.

- Placement of six light-emitting diode (LED) full cutoff light poles (three on each side of the field) to light for recreational purposes. Lights would be shrouded to minimize light pollution. Light poles would be 70-feet tall. A photometric design study prepared by the lighting manufacturer addressing both on-site and off-site lumination is provided (refer to Figures 5 through 9).

- Construction of a metal storage building on the south end of the field.

- Construction of two filming towers for video recording purposes at the east and north sides of the field, including the installation of any necessary electrical facilities to power the filming towers and necessary network connections for football filming needs. The filming towers would be

approximately 8 feet wide, 16 feet long, and 36 feet high. They would be permanently placed and would include an open platform at the top (no enclosed structure).

- Construction of an audio system for public address (PA) announcements, music, or crowd noise simulation.

- Installation of a watering system to cool the field down when needed and four hose bibs at the end of each side of the field.

- Installation of two drinking fountains, located on the east and west sides of the field.

3 THE PROJECT SETTING

Cal Poly is located northeast of the City of San Luis Obispo, approximately midway between San Francisco and Los Angeles on California's central coast. The university campus occupies over 6,000 acres. University lands include range land, agricultural areas and natural preserves, in addition to more developed areas. The more developed portion of campus is identified as the "campus instructional core" and includes academic, housing and administrative buildings, as well as agricultural support facilities. The campus instructional core is generally bound by Highland Drive on the north, California Boulevard on the west, Slack Street on the south, and foothills on the east.

Cal Poly's I Field is located in the southeastern portion of campus, north of Slack Street between Grand Avenue and Longview Lane. I Field currently consists of approximately 2.5 acres of natural grass lawn. There are temporary sheds and storage containers in the southern portion of the field and a concrete pathway extends along the eastern edge from Slack Street into the central campus instructional core. There are mature eucalyptus trees and shrubs at the south end of the field and several landscape variety trees along the western edge of the field. The project site is within the Recreation, Athletics, and Physical Education land use category of the 2001 Cal Poly Master Plan. Current uses of the field are generally limited to passive recreational uses and limited football and soccer practices.

The project site is generally surrounded by Slack Street and single-family residences within the City of San Luis Obispo to the south. Southeast of the project site the topography rises above the elevation of the project site and the southern portion of campus. West of the project an approximately 112-space surface parking lot and single-family residences within the City of San Luis Obispo border the campus. University tennis and swimming facilities and the Grand Avenue parking structure are located to the north; and track and field areas to the east. Just east of the track and field areas is Student Housing South, a freshman housing complex containing 1,475 beds of dormitory-style freshman housing within seven 3-to 5-story buildings and an adjacent four-level parking structure. Student Housing South is currently under construction and construction is estimated to be complete in the summer of 2018.

Figure 2. Project Schematic Plans

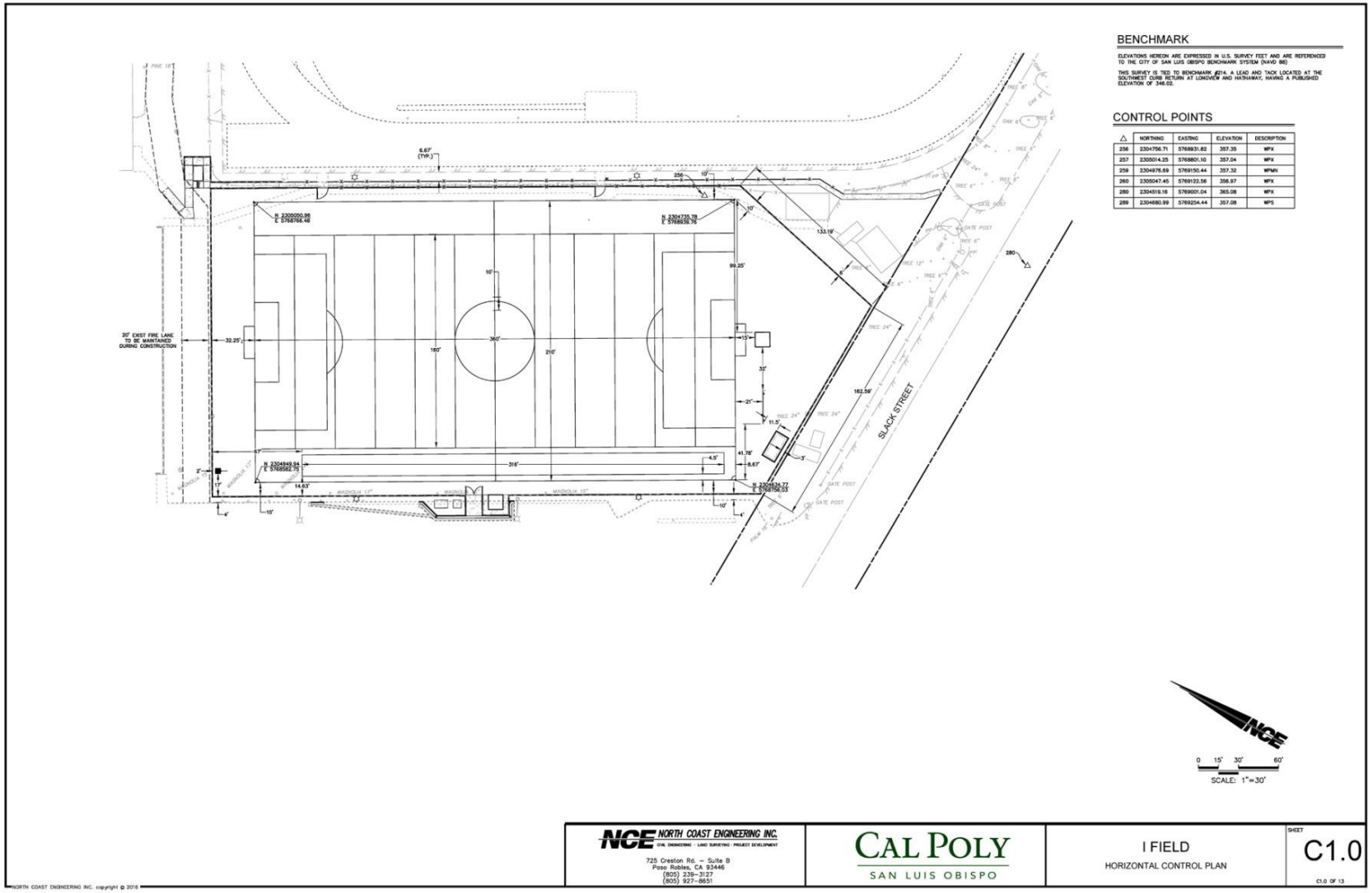


Figure 3. Project Schematic Plans

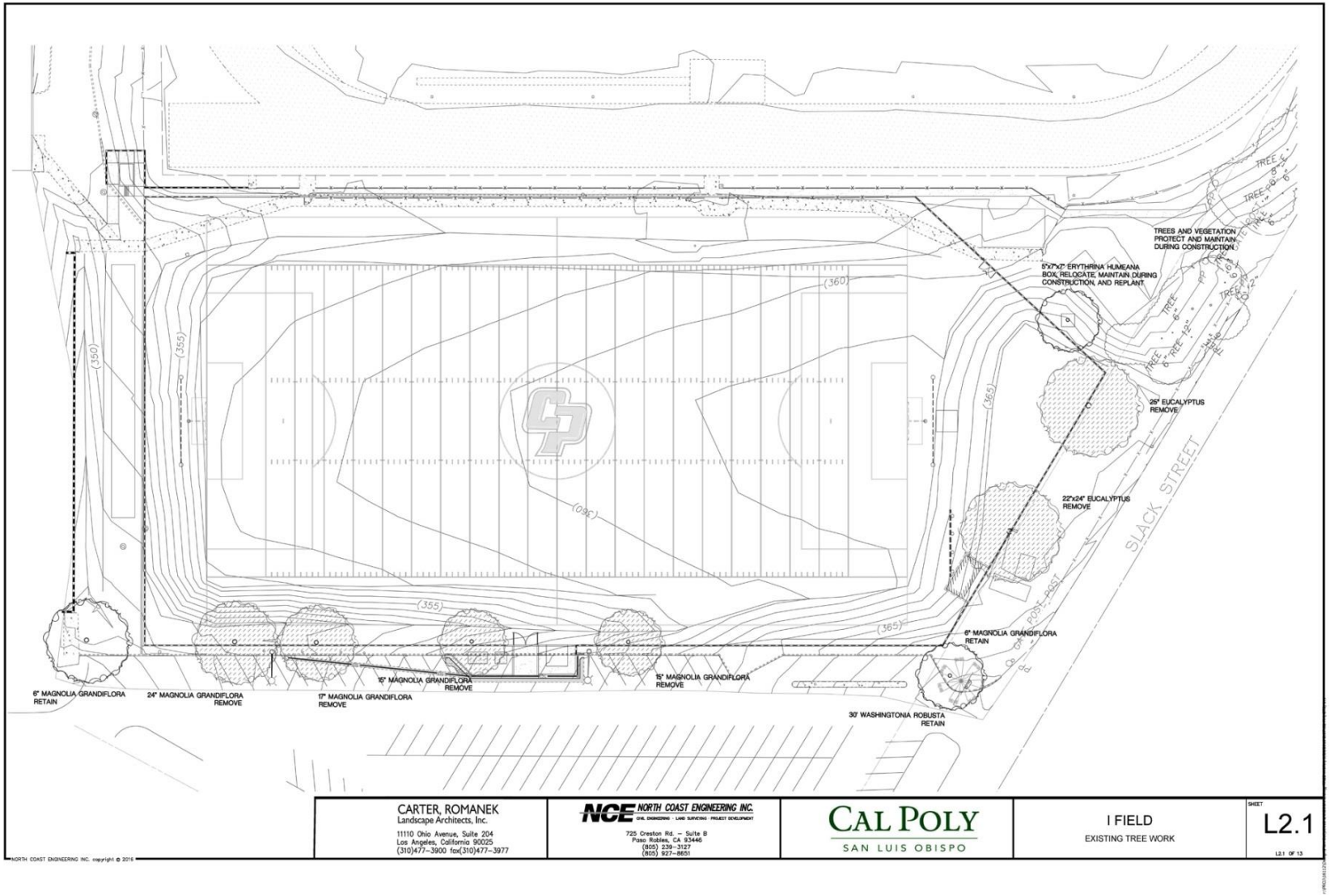
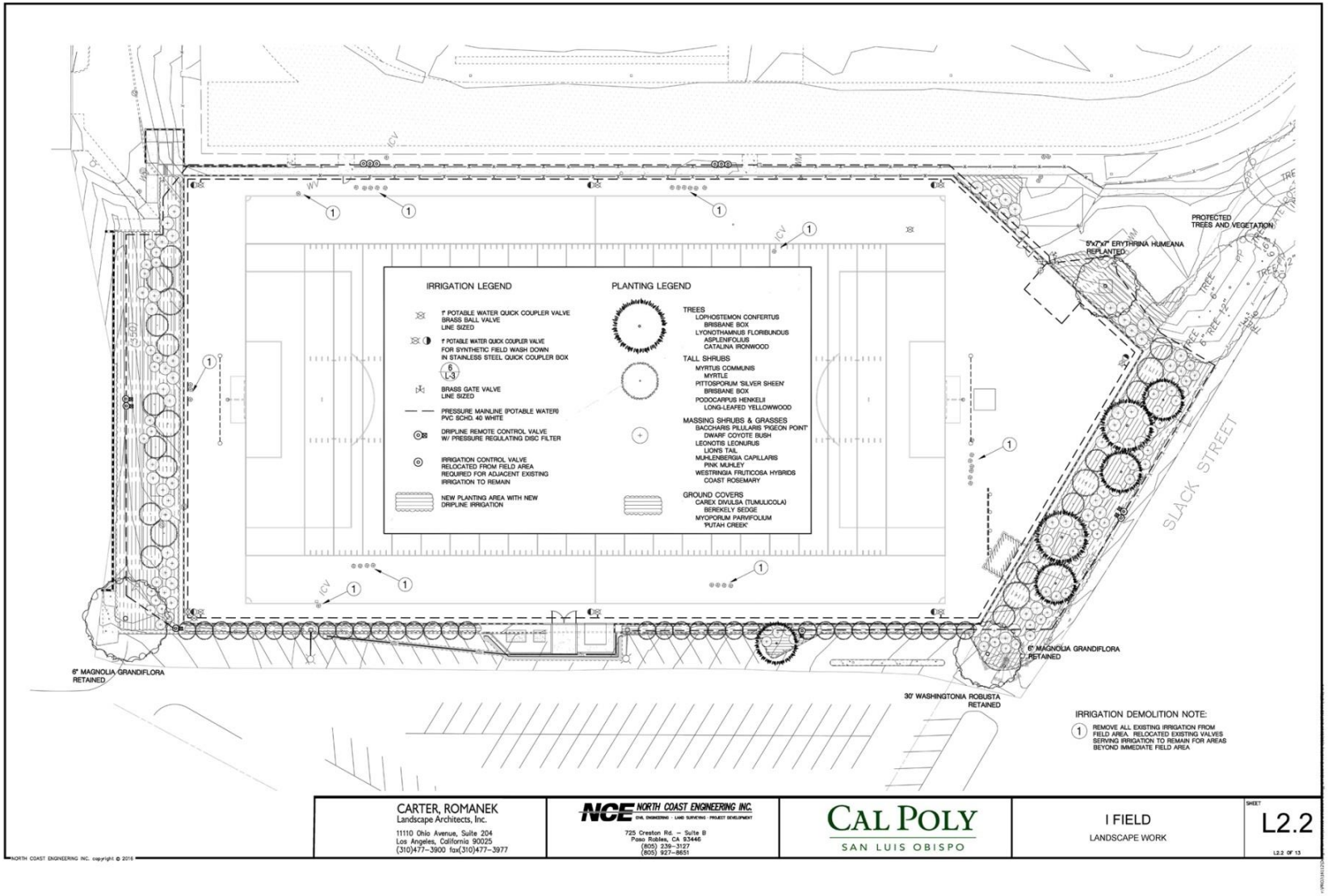


Figure 4. Project Schematic Plans



4 VISUAL ASSESSMENT METHODOLOGY

The findings of this study are based on multiple field visits conducted over several days, including review of the entire site as well as the surrounding area. Resource inventories were conducted both on foot and from moving vehicles, during the day and nighttime. Existing visual resources and site conditions were photographed and recorded. Assessment of project elements was based on plans and descriptions provided by Cal Poly. Planning documents and previous studies relevant to the surrounding area were referred to for gaining an understanding of community aesthetic values.

The project site was viewed from potential viewer group locations in the surrounding area. Representative viewpoints were identified for further analysis, based on dominance of the site within the view, duration of views, and expected sensitivity of the viewer group. Of those representative viewpoints, Key Viewing Areas (KVAs) were selected that best illustrate the visual changes that would occur as a result of the project (refer to Figure 1).

In order to establish the extent of potential project visibility, portable reference pylons and flags were positioned and moved throughout the project parcel. Reference flags established the correct scale and locations of the project elements, and also the extent of project visibility as it related to landform and other variables.

Photo-simulations were then prepared to quantify potential project visibility and to assess related visual effects. The project site was then field-reviewed to assist in determining possible mitigation measures. Images of the existing views as well as photo-simulations of the proposed project from the KVAs are shown in Figures 10, 11 and 12.

4.1 Photo-Simulations

Photographic images and simulations included in this report are important tools for understanding the estimated appearance of the proposed project. It is important to note, however, that photographs do not represent the same level of visual acuity and sensitivity to detail as the human eye. As a result, photo-simulations tend to understate the anticipated perception of impacts. Proposed landscaping shown in the photo-simulations is depicted at approximately 7 to 10 years after planting.

5 REGULATORY SETTING

The project is located within the jurisdiction of the California State University (CSU). The regulatory setting is defined in applicable planning policies, the Cal Poly Master Plan and EIR, and in the CSU California Environmental Quality Act (CEQA) Handbook. In addition the project is subject to the California Energy Code.

5.1 California State University Initial Study Checklist

Appendix B of the CSU CEQA Handbook requires that the following issues be considered in determining the level of project impacts, found in the CSU Initial Study Checklist:

Will the project:

a) Have a substantial adverse effect on a scenic vista?

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

In addition, the CSU CEQA Handbook recommends that good sources for impact threshold determination include federal, state, and local guidelines.

Following is a compilation of excerpts of Cal Poly visual policies and guidelines applicable to the project site.

5.2 Campus Land Use and Design Guidelines

CAL POLY MASTER PLAN PRINCIPLES SUMMARY

Land Use

2) Environmental suitability and sustainability: avoid sensitive areas; take advantage of environmental assets; direct development to areas with fewer regulatory and environmental constraints; enhance environmental areas; promote resource and energy efficient design.

3) Compatibility: be considerate of impacts on neighborhoods near campus.

Natural Environment

14) Aesthetics: Protect scenic resources and take advantage of them in new designs.

Public Facilities and Utilities

55) Invisibility: Conceal these kinds of uses from view to the extent possible unless some important academic function dictates otherwise.

5.3 Cal Poly Master Plan and Environmental Impact Report - 2001

5.3.1 Chapter 5 – Physical Plan Elements

BACKGROUND AND ISSUES

Issues

> *Impacts such as view obstruction, noise, light and odors caused by changes in land uses adjacent to, or visible from, nearby neighborhoods".*

Principles

> *"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 community building".*

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.

RECREATION, ATHLETICS AND PHYSICAL EDUCATION

Track and Field Area

This facility is proposed to remain unlighted in its current location in the southeast corner of campus. Immediately to the west of the Track a new practice field for a variety of sports will be developed (I-Field Area).

Environmental Consequences

A new practice field in this location (I-Field Area) 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.

NATURAL ENVIRONMENT

Background and Issues

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 serpentine rock formations.

PUBLIC FACILITIES AND UTILITIES

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.

5.3.2 Chapter 6 - Environmental Impact Report

AESTHETICS

The following discussion identifies the visual impacts associated with implementation of the proposed Master Plan.

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.

Summary of Impacts and Mitigation Measures (EIR Table 6.1.)

Impact (Significance)

Lighting and glare from implementation of the Master Plan are considered significant, but mitigable (Class II).

Mitigation

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).

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.

5.4 California Energy Code – 2010 – California Code of Regulations Title 24 Chapter 6

5.4.1 Section 132 – Outdoor Lighting Controls and Equipment

(b) Luminaire cutoff requirements.

All outdoor luminaires that use lamps rated greater than 175 watts in hardscape areas including parking lots, building entrances, sales and nonsales canopies, and all outdoor sales areas shall be designated Cutoff for light distribution. To comply with this requirement the luminaire shall be rated Cutoff in a photometric test report that includes any tilt or other nonlevel mounting condition of the installed luminaire. Cutoff is a luminaire light distribution classification where the candela per 1000 lamp lumens does not numerically exceed 25 at or above a vertical angle of 90 degrees above nadir, and 100 at or above a vertical angle of 80 degrees above nadir. Nadir is in the direction of straight down, as would be indicated by a plumb line. Ninety degrees above nadir is horizontal. Eighty degrees above nadir is 10 degrees below horizontal.

6 VIEWER SENSITIVITY

Sensitivity to change in the visual environment varies with the viewer's activities and expectations. In determining the viewer sensitivity level for purposes of assessing visual impacts associated with the project, the number of viewers as well as exposure, duration and dominance of views were also considered. In addition, sensitivity regarding aesthetic and visual quality issues is reflected in the following local planning and regulatory excerpts:

6.1 Applicable City of San Luis Obispo Visual Policies

6.1.1 San Luis Obispo General Plan - Conservation and Open Space Element

Chapter 9 - Views

Outdoor Lighting.(9.2.3)

Outdoor lighting shall avoid: operating at unnecessary locations, levels, and times; spillage to areas not needing or wanting illumination; glare (intense line-of-site contrast); and frequencies (colors) that interfere with astronomical viewing.

6.1.2 San Luis Obispo Zoning Regulations – Title 17

Chapter 17.23 – Night Sky Preservation

To establish outdoor lighting regulations that encourage lighting practices and systems that will:

A. Permit reasonable uses of outdoor lighting for nighttime safety, utility, security and enjoyment while preserving the ambience of night;

B. Curtail and reverse any degradation of the nighttime visual environment and the night sky;

C. Minimize glare and obtrusive light by limiting outdoor lighting that is misdirected, excessive, or unnecessary;

D. Help protect the natural environment from the damaging effects of night lighting;

E. Meet the minimum requirements of the California Code of Regulations for Outdoor Lighting and Signs (Title 24, Chapter 6).

Chapter 17.23.040 – Operational Standards

Outdoor lighting shall be designed, installed and maintained to prevent nighttime sky light pollution, preserve and enhance visibility of stars and use energy efficiently by lighting only those areas or objects necessary for safety and security. All outdoor lighting shall conform to the following regulations:

A. Outdoor lighting shall be directed downward and away from adjacent properties and public rights-of-way.

D. The maximum light intensity on a nonresidential site, except auto sales lots and sports fields, shall not exceed a maintained value of 10 foot-candles, when measured at finished grade.

F. The maximum light intensity on a sports field shall not exceed a maintained value of 50 foot-candles, when measured three feet above grade. Baseball field lighting and lighting for other recreational uses may be increased to a maintained value of 100 foot-candles with approval of the Community Development Director.

G. Outdoor lighting shall be completely turned off or significantly dimmed at the close of business hours unless lighting is essential for security or safety (e.g. illumination of parking areas and plazas).

H. Outdoor lighting shall not blink, flash, or rotate.

I. Outdoor flood light projection above the horizontal plane is prohibited, unless exempted by Section 17.23.080.

K. Outdoor sports fields shall not be illuminated after 11:00 p.m. except to conclude a scheduled recreational or sporting event in progress prior to 11:00 p.m.

Chapter 17.23.050 New Development Standards.

In addition to required operational standards, new development projects shall incorporate the following regulations:

A. Outdoor lighting fixtures, including lighting for outdoor recreational facilities, shall be cutoff fixtures designed and installed so that no emitted light will break a horizontal plane passing through the lowest point of the fixture. Cutoff fixtures must be installed using a horizontal lamp position. Lighting fixtures should be of a design that complements building design and landscaping, and may require architectural review.

B. Outdoor lighting shall be fully shielded or recessed.

C. Lighting fixtures shall be appropriate in height, intensity, and scale to the use they are serving. Parking lot lights shall not exceed a height of 21 feet, and wall-mounted lights shall not exceed a height of 15 feet, from the adjacent grade to the bottom of the fixture.

7 PROJECT VISIBILITY

The project would be visible from several public viewpoints in the surrounding area including Highway 1, the UPRR tracks, and dedicated open space and recreation trails as described below.

7.1 Visibility of the Project Site from the Surrounding Community

The project would be seen to varying degrees from the surrounding residential neighborhoods. These neighborhoods include areas primarily south and southwest of campus. Topography, residential development, and mature vegetation limit much of the views to the project site from the surrounding area. Portions of the project would be visible from sections of nearby public roadways and their associated residences, including but not limited to Slack Street, Longview Lane, Albert Drive, and Hathaway Street. Of these local roadways the project would be most readily seen from segments of Slack Street and Longview Lane, which both front the project site. Currently, the project site includes mature trees and shrubs along its Slack Street perimeter, and various ornamental trees throughout the adjacent parking lot and along Longview Lane.

The local topography causes portions of the adjacent residential neighborhood to the south to be somewhat elevated above the campus and the project site. As a result, some of these areas can have broader views of the surrounding landscape. The surrounding hills are also often part of the overall viewshed from these locations. Views of the Santa Lucia foothills are most pronounced from these viewpoints. Because of the mature trees and landscaping throughout these established neighborhoods, views of the campus and the project site are often filtered or blocked. As seen from the public roads servicing these neighborhoods, the residences themselves often preclude views to the campus and the project site. Where visible, views from these neighborhoods show the project site in the context of the greater campus development. The viewshed from these elevated areas typically include the Performing Arts Center, the Grand Avenue parking structure, the Recreation Center, student housing along Grand Avenue, and portions of the existing track and field area and the I-Field project site.

Views of the project from closer viewpoints in the surrounding neighborhood would primarily include the screened perimeter fencing, film towers, scoreboard, goal posts and field lighting poles. The field surface itself would have little to no visibility from the surrounding area. From more distant viewpoints in the surrounding area, the upper portions of the field lighting poles would be the only visible elements of the project.

7.2 Visibility of the Project Site from Within Campus

From within the campus itself, project visibility would generally be limited to viewpoints in the southern-most portion of the campus, in the vicinity of the project. The size of existing buildings and density of development including the Performing Arts Center, Recreation Center, and other related structures north of the project site would preclude much of the project visibility from the campus core. The project would be most visible from campus viewpoints at the parking lot adjacent to the project, the track and field area, the tennis courts and swim center, and the student housing along Grand Avenue currently under construction.

Campus views of the project within the immediate vicinity would include the screened perimeter fencing, film towers, scoreboard, goal posts and field lighting poles. The field surface itself would have little visibility from the surrounding area, except from the upper levels of the parking structure and the new student housing. From more distant viewpoints in the surrounding areas of campus, the upper portions of the field lighting poles would be the only visible elements of the project.

8 VISUAL IMPACT ANALYSIS

The project is proposed on a sensitive site in terms of its proximity to off-campus residential neighborhoods to the south and west. The City of San Luis Obispo and neighborhood citizen groups have over the years demonstrated a concern regarding the relationship between the University and the adjacent residential areas, and in particular regarding projects at the campus/community interface such as this. At the same time, the Cal Poly Land Use Guidelines define basic land use principles including, "compatibility between adjacent uses, proximity among related uses, and community building", and to be "considerate of impacts on neighborhoods near campus".

8.1 The Project's Effect on Scenic Vistas

If the project would significantly degrade the scenic landscape as viewed from public roads, or in particular designated Scenic Roadways, or from other public areas, this would be considered a potentially significant impact on the scenic vista. For the purpose of this study, scenic vistas are considered to be views which are either defined as such by the University or the City of San Luis Obispo, and/or are expansive views of a highly valued landscape for the benefit of the general public. Scenic vistas seen from the project area and the vicinity include views of the Morros to the west and northwest, and views of the Santa Lucia foothills

to the east and northeast. According to the City of San Luis Obispo General Plan Conservation and Open Space and Circulation Elements, the nearest designated scenic roadway to the project is a short section of Grand Avenue near Slack Street. Because of intervening vegetation and development, the project would not be seen or have an effect on views from that or any other section of scenic roadway.

Scenic vistas from the surrounding neighborhoods and associated public roadways also include the Morros, Santa Lucia foothills, and from certain elevated locations, the community of San Luis Obispo. As seen from the neighborhoods south of the project, the project would not be in the foreground views of the Morros and would not affect the scenic vista. From these neighborhood viewpoints the Morros are oriented further to the west, and the project would be northeast of that viewing direction.

From viewpoints south and southwest of the project, views to the Santa Lucia foothills to the north and northeast are currently partially obscured by mature trees along Slack Street and Longview Lane, and by existing campus development along Grand Avenue. As seen from these locations, the project's proposed removal of two existing large eucalyptus trees along Slack Street would somewhat open-up views to the background hillsides to the north and northeast (refer to Figures 10 and 11). The project however proposes to replant trees and other vegetation between the I-Field and Slack Street, which would over time reduce views to the hills again. It is expected that the new landscaping would take approximately fifteen to twenty years to mature in size and substantially block views of the distant hills. In the meantime the project would place six 70-foot light poles into the fore and mid-ground view of the hillside backdrop. The removal of the large eucalyptus trees would open up views through the site to the hillsides. This would result in a net increase in views to the Santa Lucia foothills from viewing locations south and southwest of the project for approximately 15 to 20 years, until the proposed landscape vegetation grew to mature heights. However, the view would be slightly degraded due the newly-intervening light poles. The visual profiles of the light poles would be narrow and would occupy a very small portion of the scenic vista, but they would cause a minor interruption of the natural backdrop, and would extend above the primary ridgeline as seen from some locations.

Both on and off-campus views of the project from the west and northwest would be less affected by the proposed tree removal along Slack Street (refer to Figure 13). From these locations, the lowest portions of the Santa Lucia foothills are partially obscured by campus and community vegetation and development, and the upper portions of the hills are generally visible. From these off-campus west and northwest views the project would add elements such as retaining walls, fencing, and towers into the lower portions of the existing views. Since these lower portions of the hills are already somewhat blocked, these elements would have little to no effect on the Santa Lucia foothills scenic vista. The proposed field lighting poles would however extend upward into the fore and mid-ground of the hillside view. As with viewpoints to the south, the visual profiles of the light poles would occupy only a small portion of the scenic vista. However they would cause a minor interruption of the upper hillside view, and would be seen silhouetting above the primary ridgeline.

Views from within the campus east of the project would be affected in various ways. At viewpoints from the adjacent track facility, because of the close proximity and elevation, project elements would block the lower and middle portions of Bishop Peak. The proposed field light poles would extend up and be seen in view of the upper portions of the hillside. As seen from other campus viewpoints to the east, such as the Performing Arts plaza, parking structure and student housing, the majority of the project elements would be lower in elevation and not affect scenic views. The field lights would extend into the lower portions of the distant views as seen from these viewing locations. Because of their narrowness, the poles would have only a minimal effect on scenic views.

Impact 1 The project would construct several vertical elements which would be seen from the surrounding area but would not interfere with views. Of these elements, six 70-foot

tall field lighting poles would be seen in the mid-ground view of background hills from certain viewpoints, including portions of Slack Street and Longview Lane. However because of the narrow profiles of the light poles, they would occupy only a very small portion of the viewshed and would not distract from the overall visual quality, resulting in a less-than significant effect on the scenic vista (CEQA Class III). Accordingly, no mitigation would be necessary.

8.2 The Project's Effect on Specific Scenic Resources as seen from the State Scenic Highway

This CEQA threshold does not apply because the project is not within the view corridor of any officially designated state scenic highway.

8.3 The Project's Effect on the Existing Visual Character and Quality of the Site and its Surroundings

Project related actions would be considered to have a significant impact on the visual character of the setting if they altered the area in a way that substantially changed, detracted from, or degraded the visual quality as seen from moderately sensitive public viewpoints in the area and was inconsistent with defined policies regarding visual character. The degree to which proposed change reflects documented community values and meets users' and other viewers' aesthetic expectations is the basis for determining levels of significance. Visual contrast may be used as a measure of the potential impact that the project may have on the visual character of the site.

The visual context of the project site is mostly influenced by the uses and buildings of University development. Although bordered to the south, southeast and southwest by predominantly residential neighborhoods, the project location is clearly within the campus boundary. Accordingly, viewer expectations related to the project site would consider campus-style development appropriate, including scale, usage, and patterns consistent with the rest of the University. The project would maintain the current recreational use of the site. This recreational use would be intensified, and the degree of associated development would increase, however these changes would be in keeping with the density of recreational uses seen in the surrounding athletic facilities in this portion of the campus. The proposed elements of the project including fencing, lights, goal posts, filming towers, nets, and perimeter landscaping would all be considered consistent with the visual character of the site and its surroundings.

Impact 2 **The project proposes a recreational use on an existing recreational site, adjacent to an area of campus that currently has multiple highly visible recreational facilities. Although the project would intensify the use, it would remain consistent with the visual character of the site and surroundings. From the surrounding community the project would also be seen as a logical use for site, and an expected campus function and visual condition. As a result the project would result in no adverse alteration of visual character for the site and its surroundings (CEQA Class III), and no mitigation would be necessary.**

8.4 Project Light or Glare Affecting Day or Nighttime Views in the Area

The project would result in a significant impact if it subjects public viewing locations to a substantial amount of point-source lighting visibility at night, or if project illumination results in a noticeable spillover

effect into the nighttime sky, increasing the ambient light over the region. The height and placement of lighting, source of illumination, and fixture types combined with viewer locations, adjacent reflective elements, and atmospheric conditions can affect the degree of change to nighttime views. If the project results in direct visibility of a substantial number of lighting sources, or allows a substantial amount of light to project toward the sky, significant impacts on nighttime views and aesthetic character would result.

The project is part of an institutional/suburban environment with a moderate amount of existing ambient light and visible point-source lighting. The project site itself currently generates no lighting, although the immediate area includes parking lot lighting, street lights along Slack Street, Longview Lane, Grand Avenue, Albert Drive and other surrounding roads. The Performing Arts Center, sporting venues, and existing parking structure all contribute to the existing nighttime lighting level. For safety reasons the campus is lit at night and produces a moderate amount of ambient nighttime lighting visible from the surroundings. Residential lighting can also be seen throughout the area.

The project proposes six 70-foot tall field lights with six LED light fixtures mounted at the top of each pole. The project description and plans describe the lighting as utilizing full cut-off light shielding. The associated photometric diagrams provided by the lighting manufacturer (Refer to Figures 5 through 9) indicate that the proposed field lighting would result in no spillover (measured in horizontal foot-candles, see Figures 6 and 7), or glare (measured in candelas[1], see Figures 8 and 9) into the surrounding residential properties. The diagrams do however show a minor to moderate amount of glare onto an approximately 250-foot section of the westbound lane of Slack Street directly adjacent to the project. The orange area shown in the Figure 9 diagram indicates a range of between 5,000 to 50,000 candelas would affect Slack Street. This relatively small area which encroaches onto Slack Street would be in the lower end of this 5,000 to 50,000 candela range as evidenced by its close proximity to the yellow, lower-candela area shown in the diagram. Glare in the lower end of the orange area (approximately 10,000 candelas) would be visually similar to an automobile low beam headlight. The yellow and green areas beyond the orange area shown in the diagram indicates that the glare drops off quickly and becomes minimal, approximately equivalent to a 100w incandescent light bulb before reaching the residences along Slack Street.

The proposed removal of two existing eucalyptus trees along the southern perimeter of the project site adjacent to Slack Street would contribute to the visibility of the sports field lighting. These mature trees are approximately 75-feet tall and their removal would open-up views to the light arrays at the tops of the poles. The five replacement trees proposed by the project for that area would take several decades to reach heights approaching that of the existing trees. One of the proposed tree species, lophostemon confertus (Brisbane box) would never obtain those heights.

According to the information provided by the University, potential impacts caused by lighting and glare would be minimal. However given the high degree of sensitivity to light pollution indicated in the University Masterplan Guidelines as well as City of San Luis Obispo General Plan and Zoning Ordinances, any deviation from the lighting manufacturer's data or inadvertent residual light trespass could result in substantial lighting impacts to the surrounding area.

Impact 3 **Because of the project's proximity to public viewpoints and residential areas, combined with the 70-foot height of the field lighting poles, the project has the potential to cast a substantial new source of light and glare into the surrounding area, resulting in potentially significant direct long-term impacts to nighttime views.**

[1] The candela is the International System of Units (SI) base unit of luminous intensity. The candela is the luminous intensity, in a given direction, of a source that emits monochromatic radiation of frequency 540 × 1012 hertz and that has a radiant intensity in that direction of 1/683 watt per steradian. A common candle emits light with a luminous intensity of roughly one candela.

MM-1 *Prior to project approval, an evaluation of the lighting manufacturer's lighting data (See figure 5) shall be conducted for the purpose of confirming that no light trespass would occur beyond the campus boundary and that no point-source light would be visible from beyond the campus boundary. The Report shall be prepared by a qualified engineer who is not a prospective vendor or manufacturer of the lighting system to be used on the project. The lighting evaluation shall include the following at a minimum:*

a. *If off-campus light trespass or point-source visibility is identified in the Lighting Evaluation Report, specific recommendations shall be identified to eliminate such trespass and/or visibility. Recommendations may include but not be limited to: repositioning lights, lowering heights, increasing sizes of cut-off shields, altering types of luminaires or wattage, or modifying operational procedures.*

b. *The University shall implement the recommendations made by the Lighting Evaluation Report.*

MM-2 *Prior to project construction, the project plans shall be revised to save the existing eucalyptus trees located between the I-Field and Slack Street upon confirmation by a certified arborist that retaining the trees would not pose a safety hazard. A certified arborist shall evaluate the trees to determine whether or not they can be feasibly and safely retained onsite. If retaining any of the trees is determined to be possible, the certified arborist shall provide written recommendations to confirm that no impacts would occur to the trees to be retained or their root zones as a result of project construction and operation. All recommendations of the certified arborist shall be incorporated into the project plans and implemented by the University prior to construction of the retaining wall.*

Residual Impacts

Implementation of these measures would minimize potential glare and lighting trespass impacts as seen from the off-campus surrounding area. As a result, visual impacts based on new source of light or glare would be considered significant but mitigable (CEQA, Class II).

Figure 5. Manufacturer's Lighting Data – Project Summary

Cal Poly San Luis Obispo Soccer

San Luis Obispo, CA

Lighting System

Pole / Fixture Summary

Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Group
S1, S3-S4, S6	70'	70'	6	LED-TLC 1150	6.90 kW	A
		25'	1	LED-TLC 1150	1.15 kW	A
S2, S5	70'	70'	7	LED-TLC 1150	8.05 kW	A
		25'	1	LED-TLC 1150	1.15 kW	A
6			***44***		***50.60 kW***	

Group Summary

Group	Description	Avg Load	Max Load	Fixture Qty
A	Soccer/Football	50.6 kW	50.6 kW	44

Fixture Type Summary

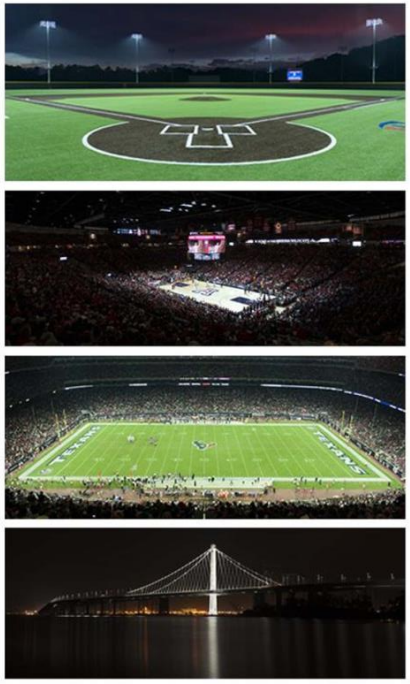
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
LED-TLC 1150	LED 5700K - 75 CRI	1150W	121,000	>51,000	>51,000	>51,000	44

Light Level Summary

Calculation Grid Summary

Grid Name	Calculation Metric	Illumination				Groups	Fixture Qty
		Ave	Min	Max	Max/Min		
Blanket Grid	Horizontal	4.62	0	62	0.00	A	44
Football 15'x15'	Horizontal Illuminance	52.3	38	61	1.61	A	44
Football	Horizontal Illuminance	53.5	46	60	1.30	A	44
Soccer 15'x15'	Horizontal Illuminance	51.8	36	61	1.71	A	44
Soccer	Horizontal Illuminance	53.5	46	60	1.30	A	44
Spill @ Street	Horizontal	0	0	0	0.00	A	44
Spill @ Street	Max Candela (by Fixture)	4.97	0	60.4	0.00	A	44
Spill @ Street	Max Vertical Illuminance Metric	0	0	0	0.00	A	44

From Hometown to Professional



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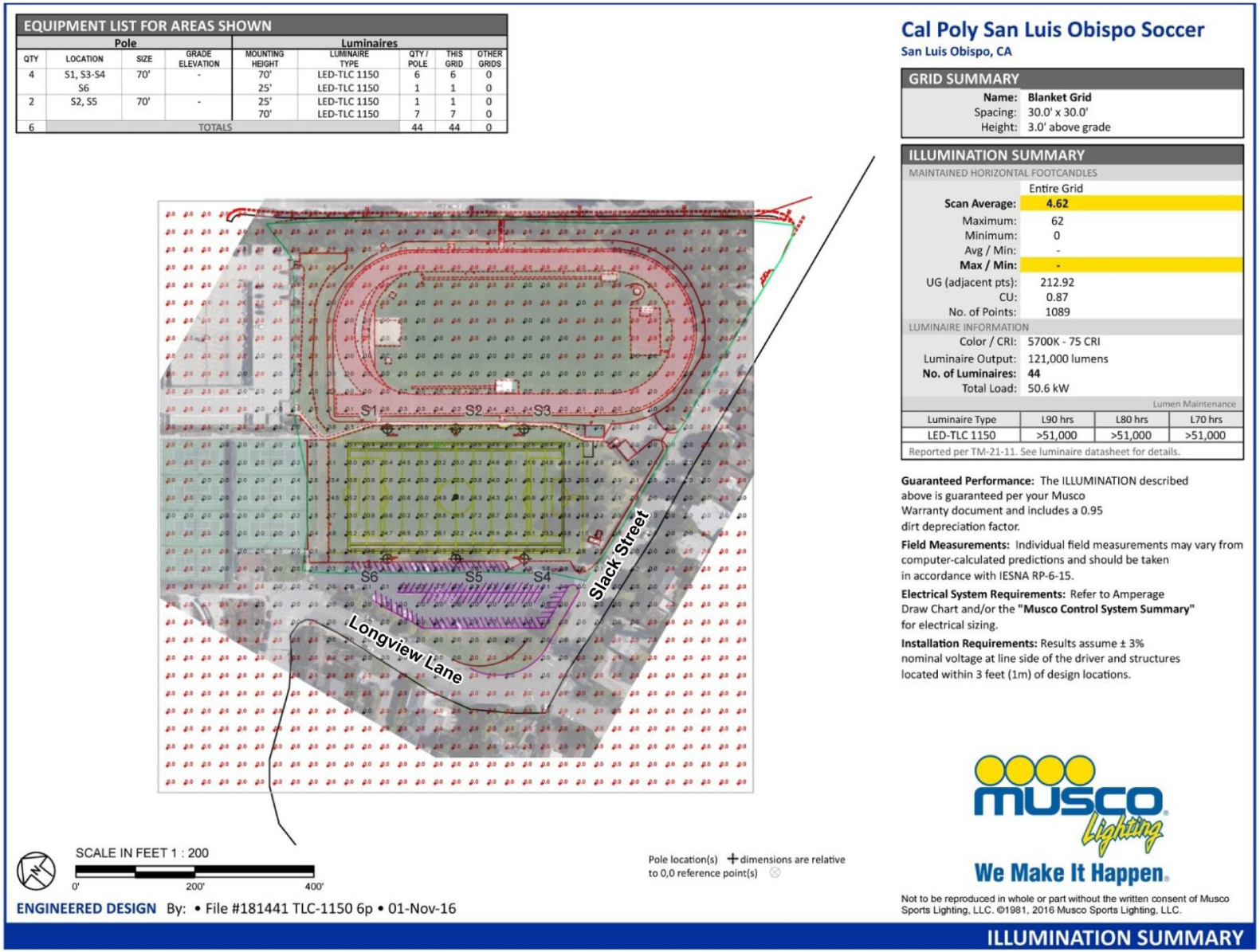
PROJECT SUMMARY

Figure 6. Manufacturer's Lighting Data – Illumination Summary



EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	S1, S3-S4	70'	-	70'	LED-TLC 1150	6	6	0
	S6			25'	LED-TLC 1150	1	1	0
2	S2, S5	70'	-	25'	LED-TLC 1150	1	1	0
				70'	LED-TLC 1150	7	7	0
6	TOTALS					44	44	0

SCALE IN FEET 1 : 200
0' 200' 400'

Pole location(s) + dimensions are relative to 0,0 reference point(s)

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San Luis Obispo, CA

GRID SUMMARY

Name:	**Blanket Grid**
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	**4.62**
Maximum:	62
Minimum:	0
Avg / Min:	-
Max / Min:	**-**
UG (adjacent pts):	212.92
CU:	0.87
No. of Points:	1089

LUMINAIRE INFORMATION

Color / CRI:	5700K - 75 CRI
Luminaire Output:	121,000 lumens
No. of Luminaires:	**44**
Total Load:	50.6 kW

Lumen Maintenance

Luminaire Type	L90 hrs	L80 hrs	L70 hrs
LED-TLC 1150	>51,000	>51,000	>51,000

Reported per TM-21-11. See luminaire datasheet for details.

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

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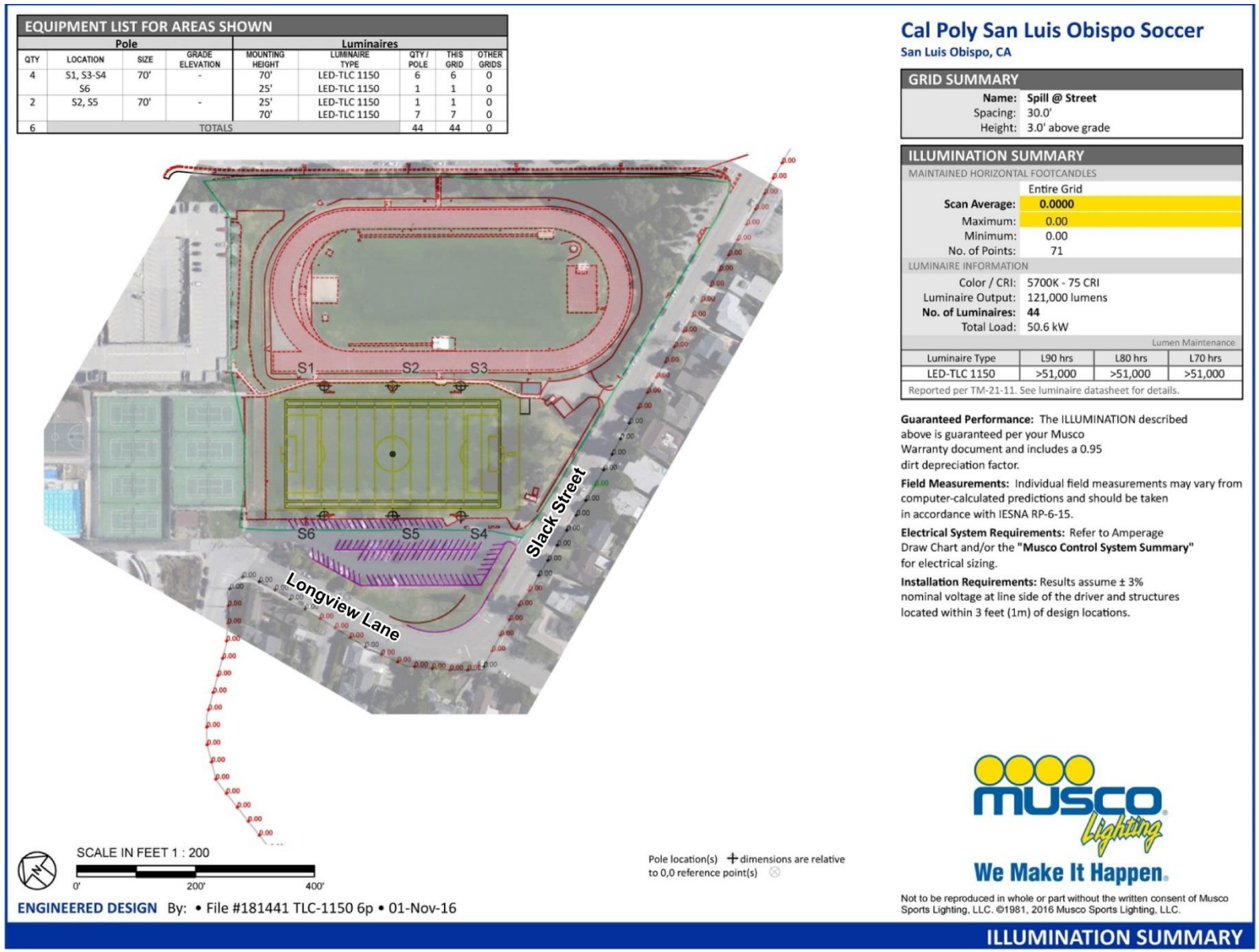
ILLUMINATION SUMMARY

Figure 7. Manufacturer's Lighting Data – Illumination Summary



EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	S1, S3-S4	70'	-	70'	LED-TLC 1150	6	6	0
	S6			25'	LED-TLC 1150	1	1	0
2	S2, S5	70'	-	25'	LED-TLC 1150	1	1	0
				70'	LED-TLC 1150	7	7	0
6	TOTALS					44	44	0

Cal Poly San Luis Obispo Soccer
San Luis Obispo, CA

GRID SUMMARY

Name:	**Spill @ Street**
Spacing:	30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	**0.0000**
Maximum:	0.00
Minimum:	0.00
No. of Points:	71

LUMINAIRE INFORMATION

Color / CRI:	5700K - 75 CRI
Luminaire Output:	121,000 lumens
No. of Luminaires:	**44**
Total Load:	50.6 kW

Lumen Maintenance

Luminaire Type	L90 hrs	L80 hrs	L70 hrs
LED-TLC 1150	>51,000	>51,000	>51,000

Reported per TM-21-11. See luminaire datasheet for details.

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

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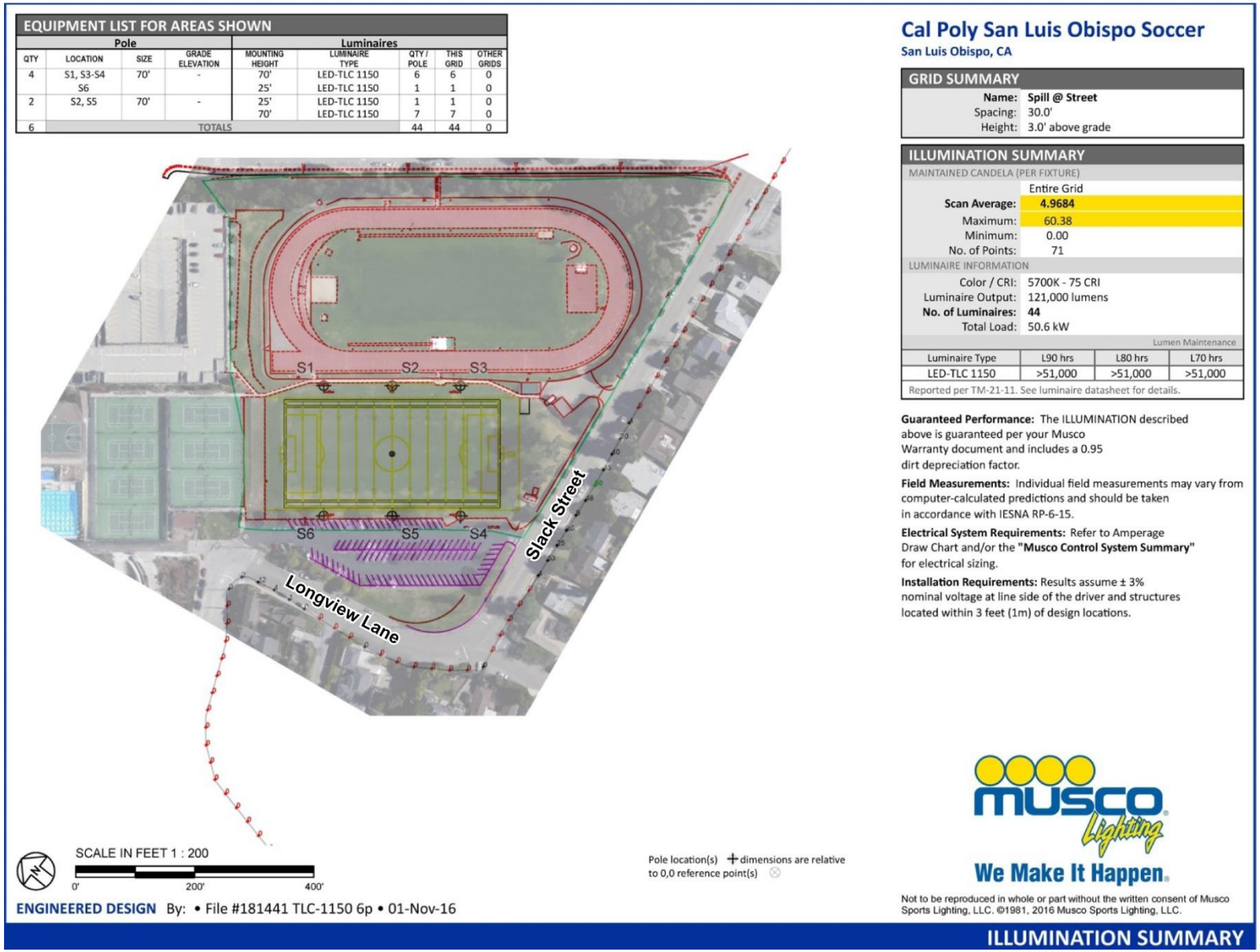
ILLUMINATION SUMMARY

Figure 8. Manufacturer's Lighting Data – Illumination Summary



EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	S1, S3-S4	70'	-	70'	LED-TLC 1150	6	6	0
	S6			25'	LED-TLC 1150	1	1	0
2	S2, S5	70'	-	25'	LED-TLC 1150	1	1	0
				70'	LED-TLC 1150	7	7	0
6	TOTALS					44	44	0

SCALE IN FEET 1 : 200
0' 200' 400'

ENGINEERED DESIGN By: • File #181441 TLC-1150 6p • 01-Nov-16

Pole location(s) + dimensions are relative to 0,0 reference point(s)

Cal Poly San Luis Obispo Soccer

San Luis Obispo, CA

GRID SUMMARY

Name:	**Spill @ Street**
Spacing:	30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED CANDELA (PER FIXTURE)

	Entire Grid
Scan Average:	4.9684
Maximum:	60.38
Minimum:	0.00
No. of Points:	71

LUMINAIRE INFORMATION

Color / CRI:	5700K - 75 CRI
Luminaire Output:	121,000 lumens
No. of Luminaires:	**44**
Total Load:	50.6 kW

Lumen Maintenance

Luminaire Type	L90 hrs	L80 hrs	L70 hrs
LED-TLC 1150	>51,000	>51,000	>51,000

Reported per TM-21-11. See luminaire datasheet for details.

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

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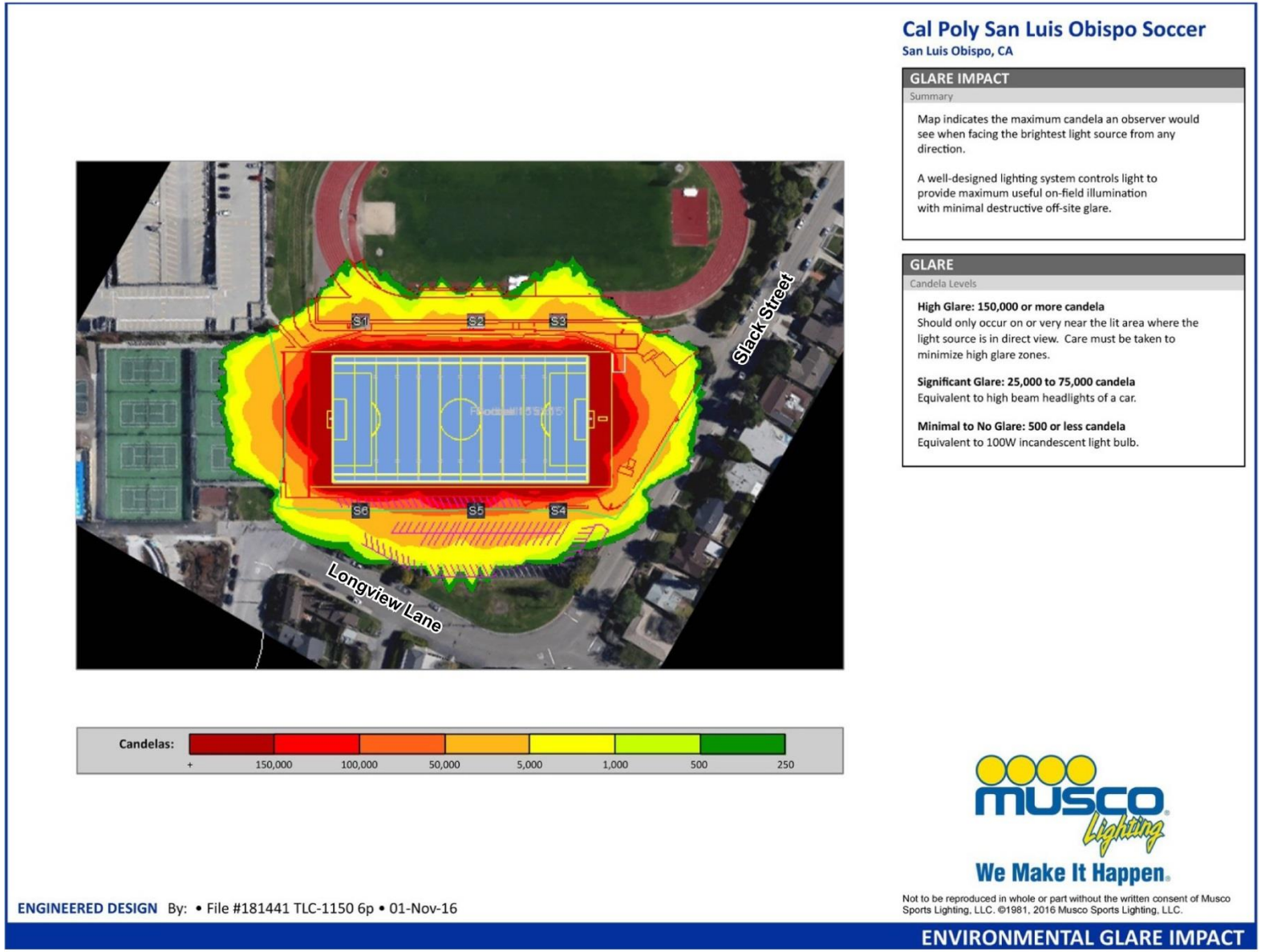
ILLUMINATION SUMMARY

Figure 9. Manufacturer's Lighting Data – Environmental Glare Impact



8.5 Cumulative Impacts

The discussion of cumulative impacts relates to the potential for the project to contribute to an aggregate change in visual quality from the surrounding public viewing areas, taking into consideration existing as well as proposed development. The University has undergone a certain amount of visual change within the last several years due to new projects and redevelopment within the campus instructional core. The student housing currently being constructed east of the project will substantially contribute to the built-character of the project vicinity. Visual changes to the neighborhoods surrounding the project are mostly the result of new residential infill development and remodels. As existing residential structures age, new houses and reconstruction are expected to continue.

The project would be consistent with the development patterns on campus and the project site, and would not be an unexpected visual feature. Although the proposed intensification of recreational use would contribute to the built environment, it would be considered in-fill and consistent with the visual character of the campus. During the nighttime hours, if off-campus light trespass occurs, the project would be substantially noticeable and would contribute to a cumulative reduction in visual quality.

Impact 5 **The project has the potential to increase light pollution in the area, and when experienced in conjunction with other development in the area such as the student housing currently under construct to the east, would result in potentially significant cumulative adverse visual impacts.**

Implementation of mitigation measure MM-1 and MM-2 would reduce potentially cumulative impacts.

Residual Impacts

Implementation of the measures MM-1 and MM-2 identified in this study would result in cumulative visual impacts to be considered significant but mitigable (CEQA, Class II).

Figure 10. Key Viewing Area 1 – Existing View and Photo-Simulation of the Proposed Project

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Figure 11. Key Viewing Area 2 – Existing View and Photo-Simulation of the Proposed Project

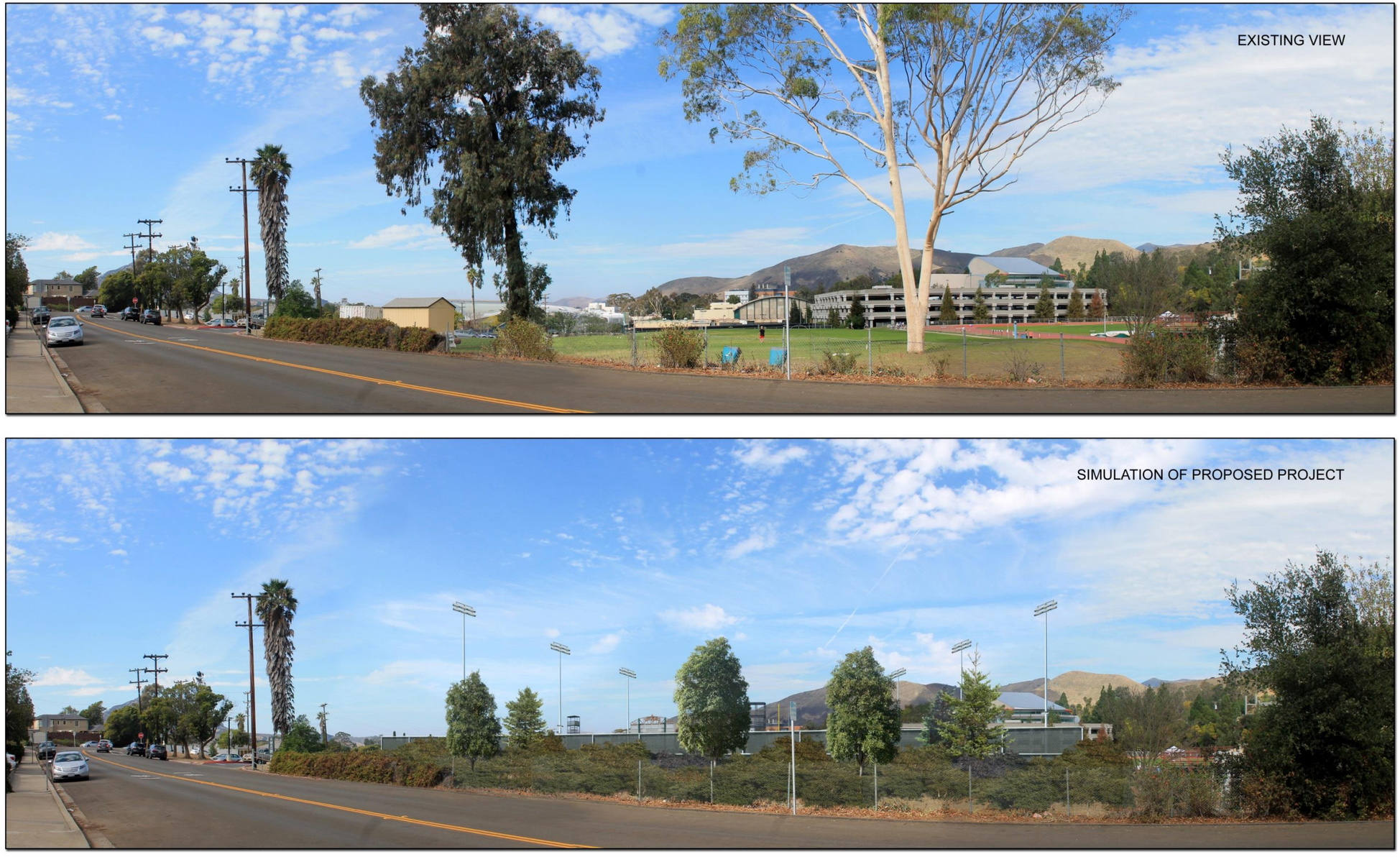

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Figure 12. Key Viewing Area 3 – Existing View and Photo-Simulation of the Proposed Project

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9 REFERENCES

City of San Luis Obispo. 2014. *City of San Luis Obispo General Plan, Chapter 2 – Circulation Element*.

———. 2014. *City of San Luis Obispo General Plan, Chapter 6 – Conservation and Open Space Element*.

California State University. [undated]. *The California State University CEQA Handbook*.

California State University. 2010. *Cal Poly San Luis Obispo Campus Land Use and Design Guidelines*.

———. 2001. *Cal Poly Master Plan and Environmental Impact Report*.

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APPENDIX C.
AIR QUALITY MODELING RESULTS

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CONSTRUCTION ACTIVITY	MAX DAILY EMISSIONS (UNMITIGATED LBS/DAY)								
	ROG	NOX	ROG+NOX	CO	SO2	FUG PM10	EXH PH10	TOT PM10	PM2.5
CONSTRUCTION STAGING & MATERIAL IMPORT									
ONSITE	1.3	13.3	14.6	6.6	0.0	0.0	0.8	0.8	0.7
OFFSITE	0.3	2.0	2.3	2.6	0.0	0.4	0.0	0.5	0.1
TOTAL	1.6	15.3	16.9	9.2	0.0	0.4	0.8	1.3	0.8
ORGANIC MATERIAL REMOVAL									
ONSITE	2.1	23.7	25.8	8.6	0.0	6.6	1.1	7.7	4.4
OFFSITE	2.2	58.8	61.0	14.7	0.1	2.6	0.6	3.2	1.3
TOTAL	4.3	82.5	86.8	23.3	0.1	9.2	1.7	10.9	5.7
INFRASTRUCTURE & RETAINING WALLS									
ONSITE	1.6	10.5	12.1	8.9	0.0	0.0	0.8	0.8	0.7
OFFSITE	0.2	1.8	2.0	1.3	0.0	0.2	0.0	0.2	0.1
TOTAL	1.8	12.3	14.1	10.2	0.0	0.2	0.8	1.0	0.8
DRAINAGE ROCK IMPORT & INSTALL									
ONSITE	1.4	13.7	15.1	10.6	0.0	0.0	1.0	1.0	0.9
OFFSITE	1.0	24.6	25.6	6.6	0.1	1.2	0.2	1.4	0.6
TOTAL	2.4	38.3	40.7	17.2	0.1	1.2	1.2	2.4	1.5
SYNTHETIC TURF INSTALL									
ONSITE	1.8	18.6	20.4	10.6	0.0	0.0	1.1	1.1	1.0
OFFSITE	0.2	1.8	2.0	1.3	0.0	0.2	0.0	0.2	0.1
TOTAL	2.0	20.4	22.4	11.9	0.0	0.2	1.1	1.3	1.1
LANDSCAPING & FINISHING									
ONSITE	0.7	6.7	7.4	4.9	0.0	0.0	0.5	0.5	0.5
OFFSITE	0.1	1.8	1.9	1.0	0.0	0.1	0.0	0.2	0.1
TOTAL	0.8	8.5	9.3	5.9	0.0	0.1	0.5	0.7	0.6
SLOAPCD THRESHOLDS			137			None	7		
EXCEEDS THRESHOLDS?			NO				NO		

CONSTRUCTION ACTIVITY	MAX ANNUAL EMISSIONS (UNMITIGATED TONS/YEAR)									
	ROG	NOX	ROG+NOX	CO	SO2	FUG PM10	EXH PM10	TOT PM10	PM2.5	CO2E
CONSTRUCTION STAGING & MATERIAL IMPORT										
ONSITE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
OFFSITE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9
ORGANIC MATERIAL REMOVAL										
ONSITE	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	8.3
OFFSITE	0.0	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	58.1
TOTAL	0.0	0.4	0.4	0.1	0.0	0.0	0.0	0.1	0.0	66.4
INFRASTRUCTURE & RETAINING WALLS										
ONSITE	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	22.9
OFFSITE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7
TOTAL	0.0	0.3	0.3	0.2	0.0	0.0	0.0	0.0	0.0	30.6
DRAINAGE ROCK IMPORT & INSTALL										
ONSITE	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	6.8
OFFSITE	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	24.7
TOTAL	0.0	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	31.5
SYNTHETIC TURF INSTALL										
ONSITE	0.0	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	13.2
OFFSITE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9
TOTAL	0.0	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	16.1
LANDSCAPING & FINISHING										
ONSITE	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	5.8
OFFSITE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3
TOTAL	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	9.1
TOTAL ANNUAL (MAX QUARTERLY)	0.1	1.1	1.2	0.6	0.0	0.1	0.04	0.1	0.1	157.6
SLOAPCD TIER 1 THRESHOLDS:			2.5			2.5	0.13			
EXCEEDS THRESHOLDS?			NO			NO	NO			

Notes: *Totals may not sum due to rounding.*

Maximum quarterly emissions assumes all activities would occur within one quarter. Actual construction schedule is estimated to occur over an approximate 4-month period.

CalPoly I Field

San Luis Obispo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	2.00	Acre	2.00	87,120.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Off-road Equipment Mitigation - 61% CE for watering; T3 offroad equipment

Construction Phase - Staging: 5 days; Organic Mat Removal: 10 days; Infrastructure/Retaining Walls: 40 days; Drainage Rock Install: 10 days; Syn Turf Install: 15 days; Finish/Landscaping: 20 days

Off-road Equipment -

Off-road Equipment - Represents Drainage Rock Import/Install: 2 forklifts, 2 tractors, 1 excavator

Off-road Equipment - Represents Initial staging: 3 forklifts, 1 crane

Off-road Equipment - Represents Organic Material Removal: 1 dozer, 1 grader, 1 roller compactor

Off-road Equipment - Represents Infrastructure and retaining wall install: 1 forklift, 1 tractor, 1 genset, 1 welder, 1 mixer

Off-road Equipment - Represents Synthetic Turf Install: 2 forklifts, 1 grader, 1 tractor, 1 genset

Off-road Equipment - Represents Final Landscaping: 2 forklifts, 1 tractor

Grading - 14625cy exported, 6100cy imported

Demolition - zero

Trips and VMT - Worker/vendor based on model defaults; truck haul assumes 20cy truck haul capacity. Mileage based on model defaults.

Vehicle Trips - Operational emissions not included.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	4.00	10.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	200.00	5.00
tblConstructionPhase	PhaseEndDate	10/16/2017	3/17/2017
tblConstructionPhase	PhaseEndDate	1/9/2017	1/20/2017
tblConstructionPhase	PhaseEndDate	1/3/2017	1/6/2017
tblConstructionPhase	PhaseStartDate	1/10/2017	1/22/2017

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tblConstructionPhase	PhaseStartDate	1/4/2017	1/8/2017
tblGrading	MaterialExported	0.00	14,625.00
tblGrading	MaterialImported	0.00	6,100.00
tblOffRoadEquipment	LoadFactor	0.41	0.41
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00

tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	HaulingTripNumber	1,446.00	1,462.00
tblTripsAndVMT	HaulingTripNumber	603.00	610.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0950	1.1318	0.5741	1.6800e-003	0.0590	0.0454	0.1044	0.0240	0.0428	0.0669	0.0000	157.0139	157.0139	0.0197	0.0000	157.5059
Maximum	**0.0950**	**1.1318**	**0.5741**	**1.6800e-003**	**0.0590**	**0.0454**	**0.1044**	**0.0240**	**0.0428**	**0.0669**	**0.0000**	**157.0139**	**157.0139**	**0.0197**	**0.0000**	**157.5059**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0380	0.8320	0.5815	1.6800e-003	0.0390	0.0257	0.0646	0.0137	0.0254	0.0392	0.0000	157.0139	157.0139	0.0197	0.0000	157.5058
Maximum	**0.0380**	**0.8320**	**0.5815**	**1.6800e-003**	**0.0390**	**0.0257**	**0.0646**	**0.0137**	**0.0254**	**0.0392**	**0.0000**	**157.0139**	**157.0139**	**0.0197**	**0.0000**	**157.5058**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**59.95**	**26.49**	**-1.29**	**0.00**	**33.89**	**43.50**	**38.08**	**42.77**	**40.60**	**41.39**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2017	3-31-2017	0.9030	0.6762
2	4-1-2017	6-30-2017	0.2505	0.1391
		Highest	0.9030	0.6762

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.2000e-004	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	7.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0345	0.0000	0.0345	2.0400e-003	0.0000	0.0855
Water						0.0000	0.0000		0.0000	0.0000	0.0000	2.4263	2.4263	1.1000e-004	2.0000e-005	2.4358
Total	**8.2000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0345**	**2.4264**	**2.4609**	**2.1500e-003**	**2.0000e-005**	**2.5214**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.2000e-004	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	7.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0345	0.0000	0.0345	2.0400e-003	0.0000	0.0855
Water						0.0000	0.0000		0.0000	0.0000	0.0000	2.4263	2.4263	1.1000e-004	2.0000e-005	2.4358
Total	**8.2000e-004**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0345**	**2.4264**	**2.4609**	**2.1500e-003**	**2.0000e-005**	**2.5214**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2017	1/6/2017	5	5	Staging
2	Grading	Grading	1/8/2017	1/20/2017	5	10	Org Mat Removal
3	Demolition	Demolition	1/22/2017	3/17/2017	5	40	Infra & Ret Walls
4	Site Preparation	Site Preparation	3/19/2017	3/31/2017	5	10	Drainage Rock Import
5	Paving	Paving	4/2/2017	4/21/2017	5	15	Syn Turf Install
6	Architectural Coatings	Architectural Coating	4/23/2017	5/19/2017	5	20	Landscaping

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Cranes	0	8.00	231	0.29
Building Construction	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Graders	1	8.00	187	0.41
Demolition	Forklifts	1	7.00	89	0.20
Building Construction	Scrapers	0	8.00	367	0.48
Paving	Cranes	0	8.00	231	0.29

Architectural Coatings	Cranes	0	8.00	231	0.29
Building Construction	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Demolition	Generator Sets	1	8.00	84	0.74
Paving	Forklifts	2	8.00	89	0.20
Architectural Coatings	Forklifts	2	8.00	89	0.20
Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Paving	Generator Sets	1	8.00	84	0.74
Architectural Coatings	Generator Sets	0	8.00	84	0.74
Grading	Scrapers	0	8.00	367	0.48
Building Construction	Welders	0	8.00	46	0.45
Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Scrapers	0	8.00	367	0.48
Demolition	Welders	1	8.00	46	0.45
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coatings	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Concrete/Industrial Saws	0	8.00	81	0.73
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Rubber Tired Dozers	0	8.00	247	0.40
Paving	Welders	0	8.00	46	0.45
Architectural Coatings	Welders	0	8.00	46	0.45
Architectural Coatings	Air Compressors	0	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	8.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38

Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rollers	1	8.00	80	0.38
Demolition	Cement and Mortar Mixers	1	8.00	9	0.56
Site Preparation	Forklifts	2	8.00	89	0.20
Site Preparation	Excavators	1	8.00	158	0.38
Paving	Graders	1	8.00	187	0.41

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	14.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	37.00	14.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	14.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coatings	3	7.00	14.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	13.00	0.00	610.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	1,462.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2400e-003	0.0334	0.0164	3.0000e-005		2.0100e-003	2.0100e-003		1.8500e-003	1.8500e-003	0.0000	2.4013	2.4013	7.4000e-004	0.0000	2.4197
Total	**3.2400e-003**	**0.0334**	**0.0164**	**3.0000e-005**		**2.0100e-003**	**2.0100e-003**		**1.8500e-003**	**1.8500e-003**	**0.0000**	**2.4013**	**2.4013**	**7.4000e-004**	**0.0000**	**2.4197**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2000e-004	4.4400e-003	1.5900e-003	1.0000e-005	1.6000e-004	5.0000e-005	2.1000e-004	5.0000e-005	5.0000e-005	9.0000e-005	0.0000	0.6752	0.6752	5.0000e-005	0.0000	0.6764
Worker	5.7000e-004	5.5000e-004	4.7900e-003	1.0000e-005	8.9000e-004	1.0000e-005	9.0000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.8141	0.8141	4.0000e-005	0.0000	0.8151
Total	**7.9000e-004**	**4.9900e-003**	**6.3800e-003**	**2.0000e-005**	**1.0500e-003**	**6.0000e-005**	**1.1100e-003**	**2.9000e-004**	**6.0000e-005**	**3.3000e-004**	**0.0000**	**1.4893**	**1.4893**	**9.0000e-005**	**0.0000**	**1.4914**

3.2 Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.4000e-004	0.0133	0.0164	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.4013	2.4013	7.4000e-004	0.0000	2.4197
Total	**6.4000e-004**	**0.0133**	**0.0164**	**3.0000e-005**		**7.1000e-004**	**7.1000e-004**		**7.1000e-004**	**7.1000e-004**	**0.0000**	**2.4013**	**2.4013**	**7.4000e-004**	**0.0000**	**2.4197**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2000e-004	4.4400e-003	1.5900e-003	1.0000e-005	1.6000e-004	5.0000e-005	2.1000e-004	5.0000e-005	5.0000e-005	9.0000e-005	0.0000	0.6752	0.6752	5.0000e-005	0.0000	0.6764
Worker	5.7000e-004	5.5000e-004	4.7900e-003	1.0000e-005	8.9000e-004	1.0000e-005	9.0000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.8141	0.8141	4.0000e-005	0.0000	0.8151
Total	**7.9000e-004**	**4.9900e-003**	**6.3800e-003**	**2.0000e-005**	**1.0500e-003**	**6.0000e-005**	**1.1100e-003**	**2.9000e-004**	**6.0000e-005**	**3.3000e-004**	**0.0000**	**1.4893**	**1.4893**	**9.0000e-005**	**0.0000**	**1.4914**

3.3 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0328	0.0000	0.0328	0.0168	0.0000	0.0168	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0104	0.1187	0.0429	9.0000e-005		5.5400e-003	5.5400e-003		5.1000e-003	5.1000e-003	0.0000	8.2707	8.2707	2.5300e-003	0.0000	8.3341
Total	**0.0104**	**0.1187**	**0.0429**	**9.0000e-005**	**0.0328**	**5.5400e-003**	**0.0383**	**0.0168**	**5.1000e-003**	**0.0219**	**0.0000**	**8.2707**	**8.2707**	**2.5300e-003**	**0.0000**	**8.3341**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0104	0.2971	0.0690	5.9000e-004	0.0125	2.8200e-003	0.0153	3.4200e-003	2.7000e-003	6.1200e-003	0.0000	57.6254	57.6254	3.2500e-003	0.0000	57.7067
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	2.4000e-004	2.0700e-003	0.0000	3.9000e-004	0.0000	3.9000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3521	0.3521	2.0000e-005	0.0000	0.3525
Total	**0.0107**	**0.2974**	**0.0710**	**5.9000e-004**	**0.0128**	**2.8200e-003**	**0.0157**	**3.5200e-003**	**2.7000e-003**	**6.2200e-003**	**0.0000**	**57.9774**	**57.9774**	**3.2700e-003**	**0.0000**	**58.0591**

3.3 Grading - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0128	0.0000	0.0128	6.5700e-003	0.0000	6.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1800e-003	0.0432	0.0502	9.0000e-005		1.8800e-003	1.8800e-003		1.8800e-003	1.8800e-003	0.0000	8.2707	8.2707	2.5300e-003	0.0000	8.3341
Total	**2.1800e-003**	**0.0432**	**0.0502**	**9.0000e-005**	**0.0128**	**1.8800e-003**	**0.0147**	**6.5700e-003**	**1.8800e-003**	**8.4500e-003**	**0.0000**	**8.2707**	**8.2707**	**2.5300e-003**	**0.0000**	**8.3341**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0104	0.2971	0.0690	5.9000e-004	0.0125	2.8200e-003	0.0153	3.4200e-003	2.7000e-003	6.1200e-003	0.0000	57.6254	57.6254	3.2500e-003	0.0000	57.7067
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	2.4000e-004	2.0700e-003	0.0000	3.9000e-004	0.0000	3.9000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.3521	0.3521	2.0000e-005	0.0000	0.3525
Total	**0.0107**	**0.2974**	**0.0710**	**5.9000e-004**	**0.0128**	**2.8200e-003**	**0.0157**	**3.5200e-003**	**2.7000e-003**	**6.2200e-003**	**0.0000**	**57.9774**	**57.9774**	**3.2700e-003**	**0.0000**	**58.0591**

3.4 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0310	0.2091	0.1777	2.7000e-004		0.0149	0.0149		0.0144	0.0144	0.0000	22.7967	22.7967	3.9100e-003	0.0000	22.8945
Total	**0.0310**	**0.2091**	**0.1777**	**2.7000e-004**	**0.0000**	**0.0149**	**0.0149**	**0.0000**	**0.0144**	**0.0144**	**0.0000**	**22.7967**	**22.7967**	**3.9100e-003**	**0.0000**	**22.8945**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7300e-003	0.0355	0.0127	6.0000e-005	1.2700e-003	3.9000e-004	1.6600e-003	3.7000e-004	3.7000e-004	7.4000e-004	0.0000	5.4014	5.4014	3.8000e-004	0.0000	5.4108
Worker	1.5900e-003	1.5500e-003	0.0135	3.0000e-005	2.5000e-003	2.0000e-005	2.5200e-003	6.7000e-004	2.0000e-005	6.8000e-004	0.0000	2.2884	2.2884	1.1000e-004	0.0000	2.2910
Total	**3.3200e-003**	**0.0371**	**0.0262**	**9.0000e-005**	**3.7700e-003**	**4.1000e-004**	**4.1800e-003**	**1.0400e-003**	**3.9000e-004**	**1.4200e-003**	**0.0000**	**7.6898**	**7.6898**	**4.9000e-004**	**0.0000**	**7.7018**

3.4 Demolition - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5500e-003	0.1350	0.1665	2.7000e-004		9.1300e-003	9.1300e-003		9.1300e-003	9.1300e-003	0.0000	22.7966	22.7966	3.9100e-003	0.0000	22.8944
Total	**6.5500e-003**	**0.1350**	**0.1665**	**2.7000e-004**	**0.0000**	**9.1300e-003**	**9.1300e-003**	**0.0000**	**9.1300e-003**	**9.1300e-003**	**0.0000**	**22.7966**	**22.7966**	**3.9100e-003**	**0.0000**	**22.8944**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.7300e-003	0.0355	0.0127	6.0000e-005	1.2700e-003	3.9000e-004	1.6600e-003	3.7000e-004	3.7000e-004	7.4000e-004	0.0000	5.4014	5.4014	3.8000e-004	0.0000	5.4108
Worker	1.5900e-003	1.5500e-003	0.0135	3.0000e-005	2.5000e-003	2.0000e-005	2.5200e-003	6.7000e-004	2.0000e-005	6.8000e-004	0.0000	2.2884	2.2884	1.1000e-004	0.0000	2.2910
Total	**3.3200e-003**	**0.0371**	**0.0262**	**9.0000e-005**	**3.7700e-003**	**4.1000e-004**	**4.1800e-003**	**1.0400e-003**	**3.9000e-004**	**1.4200e-003**	**0.0000**	**7.6898**	**7.6898**	**4.9000e-004**	**0.0000**	**7.7018**

3.5 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.0400e-003	0.0683	0.0531	7.0000e-005		4.7600e-003	4.7600e-003		4.3800e-003	4.3800e-003	0.0000	6.6993	6.6993	2.0500e-003	0.0000	6.7506
Total	**7.0400e-003**	**0.0683**	**0.0531**	**7.0000e-005**	**0.0000**	**4.7600e-003**	**4.7600e-003**	**0.0000**	**4.3800e-003**	**4.3800e-003**	**0.0000**	**6.6993**	**6.6993**	**2.0500e-003**	**0.0000**	**6.7506**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.3500e-003	0.1240	0.0288	2.5000e-004	5.1900e-003	1.1800e-003	6.3700e-003	1.4300e-003	1.1300e-003	2.5500e-003	0.0000	24.0434	24.0434	1.3600e-003	0.0000	24.0773
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	3.9000e-004	3.3700e-003	1.0000e-005	6.3000e-004	0.0000	6.3000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5721	0.5721	3.0000e-005	0.0000	0.5728
Total	**4.7500e-003**	**0.1244**	**0.0321**	**2.6000e-004**	**5.8200e-003**	**1.1800e-003**	**7.0000e-003**	**1.6000e-003**	**1.1300e-003**	**2.7200e-003**	**0.0000**	**24.6155**	**24.6155**	**1.3900e-003**	**0.0000**	**24.6501**

3.5 Site Preparation - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7700e-003	0.0382	0.0546	7.0000e-005		2.4100e-003	2.4100e-003		2.4100e-003	2.4100e-003	0.0000	6.6993	6.6993	2.0500e-003	0.0000	6.7506
Total	**1.7700e-003**	**0.0382**	**0.0546**	**7.0000e-005**	**0.0000**	**2.4100e-003**	**2.4100e-003**	**0.0000**	**2.4100e-003**	**2.4100e-003**	**0.0000**	**6.6993**	**6.6993**	**2.0500e-003**	**0.0000**	**6.7506**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.3500e-003	0.1240	0.0288	2.5000e-004	5.1900e-003	1.1800e-003	6.3700e-003	1.4300e-003	1.1300e-003	2.5500e-003	0.0000	24.0434	24.0434	1.3600e-003	0.0000	24.0773
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-004	3.9000e-004	3.3700e-003	1.0000e-005	6.3000e-004	0.0000	6.3000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.5721	0.5721	3.0000e-005	0.0000	0.5728
Total	**4.7500e-003**	**0.1244**	**0.0321**	**2.6000e-004**	**5.8200e-003**	**1.1800e-003**	**7.0000e-003**	**1.6000e-003**	**1.1300e-003**	**2.7200e-003**	**0.0000**	**24.6155**	**24.6155**	**1.3900e-003**	**0.0000**	**24.6501**

3.6 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0138	0.1396	0.0796	1.5000e-004		8.0500e-003	8.0500e-003		7.5900e-003	7.5900e-003	0.0000	13.1513	13.1513	3.0700e-003	0.0000	13.2281
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0138**	**0.1396**	**0.0796**	**1.5000e-004**		**8.0500e-003**	**8.0500e-003**		**7.5900e-003**	**7.5900e-003**	**0.0000**	**13.1513**	**13.1513**	**3.0700e-003**	**0.0000**	**13.2281**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5000e-004	0.0133	4.7600e-003	2.0000e-005	4.8000e-004	1.4000e-004	6.2000e-004	1.4000e-004	1.4000e-004	2.8000e-004	0.0000	2.0255	2.0255	1.4000e-004	0.0000	2.0291
Worker	6.0000e-004	5.8000e-004	5.0500e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8581	0.8581	4.0000e-005	0.0000	0.8591
Total	**1.2500e-003**	**0.0139**	**9.8100e-003**	**3.0000e-005**	**1.4200e-003**	**1.5000e-004**	**1.5700e-003**	**3.9000e-004**	**1.5000e-004**	**5.4000e-004**	**0.0000**	**2.8837**	**2.8837**	**1.8000e-004**	**0.0000**	**2.8882**

3.6 Paving - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.3300e-003	0.0719	0.0917	1.5000e-004		4.2800e-003	4.2800e-003		4.2800e-003	4.2800e-003	0.0000	13.1512	13.1512	3.0700e-003	0.0000	13.2281
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.3300e-003**	**0.0719**	**0.0917**	**1.5000e-004**		**4.2800e-003**	**4.2800e-003**		**4.2800e-003**	**4.2800e-003**	**0.0000**	**13.1512**	**13.1512**	**3.0700e-003**	**0.0000**	**13.2281**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5000e-004	0.0133	4.7600e-003	2.0000e-005	4.8000e-004	1.4000e-004	6.2000e-004	1.4000e-004	1.4000e-004	2.8000e-004	0.0000	2.0255	2.0255	1.4000e-004	0.0000	2.0291
Worker	6.0000e-004	5.8000e-004	5.0500e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8581	0.8581	4.0000e-005	0.0000	0.8591
Total	**1.2500e-003**	**0.0139**	**9.8100e-003**	**3.0000e-005**	**1.4200e-003**	**1.5000e-004**	**1.5700e-003**	**3.9000e-004**	**1.5000e-004**	**5.4000e-004**	**0.0000**	**2.8837**	**2.8837**	**1.8000e-004**	**0.0000**	**2.8882**

3.7 Architectural Coatings - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.3900e-003	0.0670	0.0489	6.0000e-005		5.3000e-003	5.3000e-003		4.8800e-003	4.8800e-003	0.0000	5.7223	5.7223	1.7500e-003	0.0000	5.7661
Total	**7.3900e-003**	**0.0670**	**0.0489**	**6.0000e-005**		**5.3000e-003**	**5.3000e-003**		**4.8800e-003**	**4.8800e-003**	**0.0000**	**5.7223**	**5.7223**	**1.7500e-003**	**0.0000**	**5.7661**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.7000e-004	0.0178	6.3400e-003	3.0000e-005	6.4000e-004	1.9000e-004	8.3000e-004	1.8000e-004	1.8000e-004	3.7000e-004	0.0000	2.7007	2.7007	1.9000e-004	0.0000	2.7054
Worker	4.3000e-004	4.2000e-004	3.6300e-003	1.0000e-005	6.7000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.6161	0.6161	3.0000e-005	0.0000	0.6168
Total	**1.3000e-003**	**0.0182**	**9.9700e-003**	**4.0000e-005**	**1.3100e-003**	**1.9000e-004**	**1.5100e-003**	**3.6000e-004**	**1.8000e-004**	**5.5000e-004**	**0.0000**	**3.3168**	**3.3168**	**2.2000e-004**	**0.0000**	**3.3222**

3.7 Architectural Coatings - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.5100e-003	0.0346	0.0467	6.0000e-005		2.4200e-003	2.4200e-003		2.4200e-003	2.4200e-003	0.0000	5.7223	5.7223	1.7500e-003	0.0000	5.7661
Total	**1.5100e-003**	**0.0346**	**0.0467**	**6.0000e-005**		**2.4200e-003**	**2.4200e-003**		**2.4200e-003**	**2.4200e-003**	**0.0000**	**5.7223**	**5.7223**	**1.7500e-003**	**0.0000**	**5.7661**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.7000e-004	0.0178	6.3400e-003	3.0000e-005	6.4000e-004	1.9000e-004	8.3000e-004	1.8000e-004	1.8000e-004	3.7000e-004	0.0000	2.7007	2.7007	1.9000e-004	0.0000	2.7054
Worker	4.3000e-004	4.2000e-004	3.6300e-003	1.0000e-005	6.7000e-004	0.0000	6.8000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.6161	0.6161	3.0000e-005	0.0000	0.6168
Total	**1.3000e-003**	**0.0182**	**9.9700e-003**	**4.0000e-005**	**1.3100e-003**	**1.9000e-004**	**1.5100e-003**	**3.6000e-004**	**1.8000e-004**	**5.5000e-004**	**0.0000**	**3.3168**	**3.3168**	**2.2000e-004**	**0.0000**	**3.3222**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.549382	0.034064	0.198767	0.132360	0.033447	0.007872	0.013134	0.018943	0.002404	0.001320	0.005630	0.000825	0.001852

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.2000e-004	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	7.0000e-005
Unmitigated	8.2000e-004	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	7.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	8.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	7.0000e-005
Total	**8.2000e-004**	**0.0000**	**3.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0000**	**7.0000e-005**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	8.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	3.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	7.0000e-005
Total	**8.2000e-004**	**0.0000**	**3.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0000**	**7.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.4263	1.1000e-004	2.0000e-005	2.4358
Unmitigated	2.4263	1.1000e-004	2.0000e-005	2.4358

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.38296	2.4263	1.1000e-004	2.0000e-005	2.4358
Total		**2.4263**	**1.1000e-004**	**2.0000e-005**	**2.4358**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 2.38296	2.4263	1.1000e-004	2.0000e-005	2.4358
Total		**2.4263**	**1.1000e-004**	**2.0000e-005**	**2.4358**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0345	2.0400e-003	0.0000	0.0855
Unmitigated	0.0345	2.0400e-003	0.0000	0.0855

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.17	0.0345	2.0400e-003	0.0000	0.0855
Total		**0.0345**	**2.0400e-003**	**0.0000**	**0.0855**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.17	0.0345	2.0400e-003	0.0000	0.0855
Total		**0.0345**	**2.0400e-003**	**0.0000**	**0.0855**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly I Field

San Luis Obispo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	2.00	Acre	2.00	87,120.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Off-road Equipment Mitigation - 61% CE for watering; T3 offroad equipment

Construction Phase - Staging: 5 days; Organic Mat Removal: 10 days; Infrastructure/Retaining Walls: 40 days; Drainage Rock Install: 10 days; Syn Turf Install: 15 days; Finish/Landscaping: 20 days

Off-road Equipment -

Off-road Equipment - Represents Drainage Rock Import/Install: 2 forklifts, 2 tractors, 1 excavator

Off-road Equipment - Represents Initial staging: 3 forklifts, 1 crane

Off-road Equipment - Represents Organic Material Removal: 1 dozer, 1 grader, 1 roller compactor

Off-road Equipment - Represents Infrastructure and retaining wall install: 1 forklift, 1 tractor, 1 genset, 1 welder, 1 mixer

Off-road Equipment - Represents Synthetic Turf Install: 2 forklifts, 1 grader, 1 tractor, 1 genset

Off-road Equipment - Represents Final Landscaping: 2 forklifts, 1 tractor

Grading - 14625cy exported, 6100cy imported

Demolition - zero

Trips and VMT - Worker/vendor based on model defaults; truck haul assumes 20cy truck haul capacity. Mileage based on model defaults.

Vehicle Trips - Operational emissions not included.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

CalPoly I Field - San Luis Obispo County, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	4.00	10.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	200.00	5.00
tblConstructionPhase	PhaseEndDate	10/16/2017	3/17/2017
tblConstructionPhase	PhaseEndDate	1/9/2017	1/20/2017
tblConstructionPhase	PhaseEndDate	1/3/2017	1/6/2017
tblConstructionPhase	PhaseStartDate	1/10/2017	1/22/2017

CalPoly I Field - San Luis Obispo County, Winter

tblConstructionPhase	PhaseStartDate	1/4/2017	1/8/2017
tblGrading	MaterialExported	0.00	14,625.00
tblGrading	MaterialImported	0.00	6,100.00
tblOffRoadEquipment	LoadFactor	0.41	0.41
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00

tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	HaulingTripNumber	1,446.00	1,462.00
tblTripsAndVMT	HaulingTripNumber	603.00	610.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.2448	82.5070	23.2447	0.1363	9.1796	1.6776	10.8571	4.0863	1.5643	5.6505	0.0000	14,509.1121	14,509.1121	1.2923	0.0000	14,541.4203
Maximum	**4.2448**	**82.5070**	**23.2447**	**0.1363**	**9.1796**	**1.6776**	**10.8571**	**4.0863**	**1.5643**	**5.6505**	**0.0000**	**14,509.1121**	**14,509.1121**	**1.2923**	**0.0000**	**14,541.4203**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	2.6028	67.4170	24.6979	0.1363	5.1826	0.9447	6.1273	2.0321	0.9201	2.9521	0.0000	14,509.1121	14,509.1121	1.2923	0.0000	14,541.4203
Maximum	**2.6028**	**67.4170**	**24.6979**	**0.1363**	**5.1826**	**0.9447**	**6.1273**	**2.0321**	**0.9201**	**2.9521**	**0.0000**	**14,509.1121**	**14,509.1121**	**1.2923**	**0.0000**	**14,541.4203**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**38.68**	**18.29**	**-6.25**	**0.00**	**43.54**	**43.69**	**43.56**	**50.27**	**41.18**	**47.75**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.5100e-003	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**4.5100e-003**	**0.0000**	**2.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**	**0.0000**	**4.7000e-004**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.5100e-003	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**4.5100e-003**	**0.0000**	**2.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**	**0.0000**	**4.7000e-004**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2017	1/6/2017	5	5	Staging
2	Grading	Grading	1/8/2017	1/20/2017	5	10	Org Mat Removal
3	Demolition	Demolition	1/22/2017	3/17/2017	5	40	Infra & Ret Walls
4	Site Preparation	Site Preparation	3/19/2017	3/31/2017	5	10	Drainage Rock Import
5	Paving	Paving	4/2/2017	4/21/2017	5	15	Syn Turf Install
6	Architectural Coatings	Architectural Coating	4/23/2017	5/19/2017	5	20	Landscaping

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Cranes	0	8.00	231	0.29
Building Construction	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Generator Sets	0	8.00	84	0.74

Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Graders	1	8.00	187	0.41
Demolition	Forklifts	1	7.00	89	0.20
Building Construction	Scrapers	0	8.00	367	0.48
Paving	Cranes	0	8.00	231	0.29
Architectural Coatings	Cranes	0	8.00	231	0.29
Building Construction	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Demolition	Generator Sets	1	8.00	84	0.74
Paving	Forklifts	2	8.00	89	0.20
Architectural Coatings	Forklifts	2	8.00	89	0.20
Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Paving	Generator Sets	1	8.00	84	0.74
Architectural Coatings	Generator Sets	0	8.00	84	0.74
Grading	Scrapers	0	8.00	367	0.48
Building Construction	Welders	0	8.00	46	0.45
Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Scrapers	0	8.00	367	0.48
Demolition	Welders	1	8.00	46	0.45
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coatings	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Concrete/Industrial Saws	0	8.00	81	0.73
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Rubber Tired Dozers	0	8.00	247	0.40
Paving	Welders	0	8.00	46	0.45
Architectural Coatings	Welders	0	8.00	46	0.45

Architectural Coatings	Air Compressors	0	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	8.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rollers	1	8.00	80	0.38
Demolition	Cement and Mortar Mixers	1	8.00	9	0.56
Site Preparation	Forklifts	2	8.00	89	0.20
Site Preparation	Excavators	1	8.00	158	0.38
Paving	Graders	1	8.00	187	0.41

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	14.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	37.00	14.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	14.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coatings	3	7.00	14.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	13.00	0.00	610.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	1,462.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2952	13.3424	6.5646	0.0103		0.8026	0.8026		0.7384	0.7384		1,058.7731	1,058.7731	0.3244		1,066.8832
Total	**1.2952**	**13.3424**	**6.5646**	**0.0103**		**0.8026**	**0.8026**		**0.7384**	**0.7384**		**1,058.7731**	**1,058.7731**	**0.3244**		**1,066.8832**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0889	1.7526	0.6672	2.7700e-003	0.0650	0.0195	0.0845	0.0187	0.0187	0.0374		292.9580	292.9580	0.0215		293.4949
Worker	0.2508	0.2243	1.9374	3.5900e-003	0.3658	2.6300e-003	0.3684	0.0970	2.4400e-003	0.0995		356.0820	356.0820	0.0166		356.4968
Total	**0.3398**	**1.9769**	**2.6047**	**6.3600e-003**	**0.4307**	**0.0222**	**0.4529**	**0.1157**	**0.0211**	**0.1368**		**649.0400**	**649.0400**	**0.0381**		**649.9917**

3.2 Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2548	5.3217	6.5566	0.0103		0.2848	0.2848		0.2848	0.2848	0.0000	1,058.7731	1,058.7731	0.3244		1,066.8832
Total	**0.2548**	**5.3217**	**6.5566**	**0.0103**		**0.2848**	**0.2848**		**0.2848**	**0.2848**	**0.0000**	**1,058.7731**	**1,058.7731**	**0.3244**		**1,066.8832**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0889	1.7526	0.6672	2.7700e-003	0.0650	0.0195	0.0845	0.0187	0.0187	0.0374		292.9580	292.9580	0.0215		293.4949
Worker	0.2508	0.2243	1.9374	3.5900e-003	0.3658	2.6300e-003	0.3684	0.0970	2.4400e-003	0.0995		356.0820	356.0820	0.0166		356.4968
Total	**0.3398**	**1.9769**	**2.6047**	**6.3600e-003**	**0.4307**	**0.0222**	**0.4529**	**0.1157**	**0.0211**	**0.1368**		**649.0400**	**649.0400**	**0.0381**		**649.9917**

3.3 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.0777	23.7389	8.5770	0.0178		1.1081	1.1081		1.0195	1.0195		1,823.3825	1,823.3825	0.5587		1,837.3495
Total	**2.0777**	**23.7389**	**8.5770**	**0.0178**	**6.5523**	**1.1081**	**7.6605**	**3.3675**	**1.0195**	**4.3870**		**1,823.3825**	**1,823.3825**	**0.5587**		**1,837.3495**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1128	58.7196	14.2488	0.1177	2.5481	0.5689	3.1170	0.6978	0.5442	1.2420		12,608.7389	12,608.7389	0.7301		12,626.9905
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0542	0.0485	0.4189	7.8000e-004	0.0791	5.7000e-004	0.0797	0.0210	5.3000e-004	0.0215		76.9907	76.9907	3.5900e-003		77.0804
Total	**2.1671**	**58.7681**	**14.6677**	**0.1184**	**2.6272**	**0.5694**	**3.1966**	**0.7188**	**0.5448**	**1.2635**		**12,685.7296**	**12,685.7296**	**0.7337**		**12,704.0708**

3.3 Grading - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	0.4357	8.6489	10.0302	0.0178		0.3753	0.3753		0.3753	0.3753	0.0000	1,823.3825	1,823.3825	0.5587		1,837.3495
Total	**0.4357**	**8.6489**	**10.0302**	**0.0178**	**2.5554**	**0.3753**	**2.9307**	**1.3133**	**0.3753**	**1.6886**	**0.0000**	**1,823.3825**	**1,823.3825**	**0.5587**		**1,837.3495**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1128	58.7196	14.2488	0.1177	2.5481	0.5689	3.1170	0.6978	0.5442	1.2420		12,608.7389	12,608.7389	0.7301		12,626.9905
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0542	0.0485	0.4189	7.8000e-004	0.0791	5.7000e-004	0.0797	0.0210	5.3000e-004	0.0215		76.9907	76.9907	3.5900e-003		77.0804
Total	**2.1671**	**58.7681**	**14.6677**	**0.1184**	**2.6272**	**0.5694**	**3.1966**	**0.7188**	**0.5448**	**1.2635**		**12,685.7296**	**12,685.7296**	**0.7337**		**12,704.0708**

3.4 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.5519	10.4544	8.8829	0.0135		0.7464	0.7464		0.7221	0.7221		1,256.4502	1,256.4502	0.2156		1,261.8405
Total	**1.5519**	**10.4544**	**8.8829**	**0.0135**	**0.0000**	**0.7464**	**0.7464**	**0.0000**	**0.7221**	**0.7221**		**1,256.4502**	**1,256.4502**	**0.2156**		**1,261.8405**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0889	1.7526	0.6672	2.7700e-003	0.0650	0.0195	0.0845	0.0187	0.0187	0.0374		292.9580	292.9580	0.0215		293.4949
Worker	0.0881	0.0788	0.6807	1.2600e-003	0.1285	9.3000e-004	0.1295	0.0341	8.6000e-004	0.0349		125.1099	125.1099	5.8300e-003		125.2556
Total	**0.1771**	**1.8314**	**1.3480**	**4.0300e-003**	**0.1935**	**0.0205**	**0.2139**	**0.0528**	**0.0195**	**0.0723**		**418.0679**	**418.0679**	**0.0273**		**418.7506**

3.4 Demolition - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.3274	6.7477	8.3261	0.0135		0.4566	0.4566		0.4566	0.4566	0.0000	1,256.4502	1,256.4502	0.2156		1,261.8405
Total	**0.3274**	**6.7477**	**8.3261**	**0.0135**	**0.0000**	**0.4566**	**0.4566**	**0.0000**	**0.4566**	**0.4566**	**0.0000**	**1,256.4502**	**1,256.4502**	**0.2156**		**1,261.8405**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0889	1.7526	0.6672	2.7700e-003	0.0650	0.0195	0.0845	0.0187	0.0187	0.0374		292.9580	292.9580	0.0215		293.4949
Worker	0.0881	0.0788	0.6807	1.2600e-003	0.1285	9.3000e-004	0.1295	0.0341	8.6000e-004	0.0349		125.1099	125.1099	5.8300e-003		125.2556
Total	**0.1771**	**1.8314**	**1.3480**	**4.0300e-003**	**0.1935**	**0.0205**	**0.2139**	**0.0528**	**0.0195**	**0.0723**		**418.0679**	**418.0679**	**0.0273**		**418.7506**

3.5 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.4087	13.6582	10.6225	0.0144		0.9520	0.9520		0.8758	0.8758		1,476.9367	1,476.9367	0.4525		1,488.2500
Total	**1.4087**	**13.6582**	**10.6225**	**0.0144**	**0.0000**	**0.9520**	**0.9520**	**0.0000**	**0.8758**	**0.8758**		**1,476.9367**	**1,476.9367**	**0.4525**		**1,488.2500**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8815	24.5000	5.9451	0.0491	1.0632	0.2374	1.3005	0.2911	0.2271	0.5182		5,260.8281	5,260.8281	0.3046		5,268.4434
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0881	0.0788	0.6807	1.2600e-003	0.1285	9.3000e-004	0.1295	0.0341	8.6000e-004	0.0349		125.1099	125.1099	5.8300e-003		125.2556
Total	**0.9697**	**24.5788**	**6.6258**	**0.0504**	**1.1917**	**0.2383**	**1.4300**	**0.3252**	**0.2279**	**0.5532**		**5,385.9380**	**5,385.9380**	**0.3104**		**5,393.6990**

3.5 Site Preparation - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.3543	7.6459	10.9253	0.0144		0.4822	0.4822		0.4822	0.4822	0.0000	1,476.9367	1,476.9367	0.4525		1,488.2500
Total	**0.3543**	**7.6459**	**10.9253**	**0.0144**	**0.0000**	**0.4822**	**0.4822**	**0.0000**	**0.4822**	**0.4822**	**0.0000**	**1,476.9367**	**1,476.9367**	**0.4525**		**1,488.2500**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8815	24.5000	5.9451	0.0491	1.0632	0.2374	1.3005	0.2911	0.2271	0.5182		5,260.8281	5,260.8281	0.3046		5,268.4434
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0881	0.0788	0.6807	1.2600e-003	0.1285	9.3000e-004	0.1295	0.0341	8.6000e-004	0.0349		125.1099	125.1099	5.8300e-003		125.2556
Total	**0.9697**	**24.5788**	**6.6258**	**0.0504**	**1.1917**	**0.2383**	**1.4300**	**0.3252**	**0.2279**	**0.5532**		**5,385.9380**	**5,385.9380**	**0.3104**		**5,393.6990**

3.6 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8427	18.6081	10.6188	0.0194		1.0735	1.0735		1.0117	1.0117		1,932.9041	1,932.9041	0.4518		1,944.1984
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8427**	**18.6081**	**10.6188**	**0.0194**		**1.0735**	**1.0735**		**1.0117**	**1.0117**		**1,932.9041**	**1,932.9041**	**0.4518**		**1,944.1984**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0889	1.7526	0.6672	2.7700e-003	0.0650	0.0195	0.0845	0.0187	0.0187	0.0374		292.9580	292.9580	0.0215		293.4949
Worker	0.0881	0.0788	0.6807	1.2600e-003	0.1285	9.3000e-004	0.1295	0.0341	8.6000e-004	0.0349		125.1099	125.1099	5.8300e-003		125.2556
Total	**0.1771**	**1.8314**	**1.3480**	**4.0300e-003**	**0.1935**	**0.0205**	**0.2139**	**0.0528**	**0.0195**	**0.0723**		**418.0679**	**418.0679**	**0.0273**		**418.7506**

3.6 Paving - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4446	9.5859	12.2262	0.0194		0.5712	0.5712		0.5712	0.5712	0.0000	1,932.9041	1,932.9041	0.4518		1,944.1984
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4446**	**9.5859**	**12.2262**	**0.0194**		**0.5712**	**0.5712**		**0.5712**	**0.5712**	**0.0000**	**1,932.9041**	**1,932.9041**	**0.4518**		**1,944.1984**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0889	1.7526	0.6672	2.7700e-003	0.0650	0.0195	0.0845	0.0187	0.0187	0.0374		292.9580	292.9580	0.0215		293.4949
Worker	0.0881	0.0788	0.6807	1.2600e-003	0.1285	9.3000e-004	0.1295	0.0341	8.6000e-004	0.0349		125.1099	125.1099	5.8300e-003		125.2556
Total	**0.1771**	**1.8314**	**1.3480**	**4.0300e-003**	**0.1935**	**0.0205**	**0.2139**	**0.0528**	**0.0195**	**0.0723**		**418.0679**	**418.0679**	**0.0273**		**418.7506**

3.7 Architectural Coatings - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7387	6.6967	4.8921	6.1600e-003		0.5303	0.5303		0.4879	0.4879		630.7745	630.7745	0.1933		635.6062
Total	**0.7387**	**6.6967**	**4.8921**	**6.1600e-003**		**0.5303**	**0.5303**		**0.4879**	**0.4879**		**630.7745**	**630.7745**	**0.1933**		**635.6062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0889	1.7526	0.6672	2.7700e-003	0.0650	0.0195	0.0845	0.0187	0.0187	0.0374		292.9580	292.9580	0.0215		293.4949
Worker	0.0475	0.0424	0.3665	6.8000e-004	0.0692	5.0000e-004	0.0697	0.0184	4.6000e-004	0.0188		67.3669	67.3669	3.1400e-003		67.4453
Total	**0.1364**	**1.7951**	**1.0338**	**3.4500e-003**	**0.1342**	**0.0200**	**0.1542**	**0.0371**	**0.0191**	**0.0562**		**360.3248**	**360.3248**	**0.0246**		**360.9403**

3.7 Architectural Coatings - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1513	3.4548	4.6652	6.1600e-003		0.2421	0.2421		0.2421	0.2421	0.0000	630.7745	630.7745	0.1933		635.6062
Total	**0.1513**	**3.4548**	**4.6652**	**6.1600e-003**		**0.2421**	**0.2421**		**0.2421**	**0.2421**	**0.0000**	**630.7745**	**630.7745**	**0.1933**		**635.6062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0889	1.7526	0.6672	2.7700e-003	0.0650	0.0195	0.0845	0.0187	0.0187	0.0374		292.9580	292.9580	0.0215		293.4949
Worker	0.0475	0.0424	0.3665	6.8000e-004	0.0692	5.0000e-004	0.0697	0.0184	4.6000e-004	0.0188		67.3669	67.3669	3.1400e-003		67.4453
Total	**0.1364**	**1.7951**	**1.0338**	**3.4500e-003**	**0.1342**	**0.0200**	**0.1542**	**0.0371**	**0.0191**	**0.0562**		**360.3248**	**360.3248**	**0.0246**		**360.9403**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.549382	0.034064	0.198767	0.132360	0.033447	0.007872	0.013134	0.018943	0.002404	0.001320	0.005630	0.000825	0.001852

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.5100e-003	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Unmitigated	4.5100e-003	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4900e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	**4.5100e-003**	**0.0000**	**2.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**		**4.7000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4900e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	**4.5100e-003**	**0.0000**	**2.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**		**4.7000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalPoly I Field

San Luis Obispo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	2.00	Acre	2.00	87,120.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Off-road Equipment Mitigation - 61% CE for watering; T3 offroad equipment

Construction Phase - Staging: 5 days; Organic Mat Removal: 10 days; Infrastructure/Retaining Walls: 40 days; Drainage Rock Install: 10 days; Syn Turf Install: 15 days; Finish/Landscaping: 20 days

Off-road Equipment -

Off-road Equipment - Represents Drainage Rock Import/Install: 2 forklifts, 2 tractors, 1 excavator

Off-road Equipment - Represents Initial staging: 3 forklifts, 1 crane

Off-road Equipment - Represents Organic Material Removal: 1 dozer, 1 grader, 1 roller compactor

Off-road Equipment - Represents Infrastructure and retaining wall install: 1 forklift, 1 tractor, 1 genset, 1 welder, 1 mixer

Off-road Equipment - Represents Synthetic Turf Install: 2 forklifts, 1 grader, 1 tractor, 1 genset

Off-road Equipment - Represents Final Landscaping: 2 forklifts, 1 tractor

Grading - 14625cy exported, 6100cy imported

Demolition - zero

Trips and VMT - Worker/vendor based on model defaults; truck haul assumes 20cy truck haul capacity. Mileage based on model defaults.

Vehicle Trips - Operational emissions not included.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

CalPoly I Field - San Luis Obispo County, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	4.00	10.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	200.00	5.00
tblConstructionPhase	PhaseEndDate	10/16/2017	3/17/2017
tblConstructionPhase	PhaseEndDate	1/9/2017	1/20/2017
tblConstructionPhase	PhaseEndDate	1/3/2017	1/6/2017
tblConstructionPhase	PhaseStartDate	1/10/2017	1/22/2017

CalPoly I Field - San Luis Obispo County, Summer

tblConstructionPhase	PhaseStartDate	1/4/2017	1/8/2017
tblGrading	MaterialExported	0.00	14,625.00
tblGrading	MaterialImported	0.00	6,100.00
tblOffRoadEquipment	LoadFactor	0.41	0.41
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00

tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblTripsAndVMT	HaulingTripNumber	1,446.00	1,462.00
tblTripsAndVMT	HaulingTripNumber	603.00	610.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.1895	81.9452	22.4068	0.1378	9.1796	1.6693	10.8489	4.0863	1.5564	5.6426	0.0000	14,677.4919	14,677.4919	1.2676	0.0000	14,709.1822
Maximum	**4.1895**	**81.9452**	**22.4068**	**0.1378**	**9.1796**	**1.6693**	**10.8489**	**4.0863**	**1.5564**	**5.6426**	**0.0000**	**14,677.4919**	**14,677.4919**	**1.2676**	**0.0000**	**14,709.1822**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	2.5475	66.8552	23.8600	0.1378	5.1826	0.9365	6.1191	2.0321	0.9122	2.9443	0.0000	14,677.4919	14,677.4919	1.2676	0.0000	14,709.1822
Maximum	**2.5475**	**66.8552**	**23.8600**	**0.1378**	**5.1826**	**0.9365**	**6.1191**	**2.0321**	**0.9122**	**2.9443**	**0.0000**	**14,677.4919**	**14,677.4919**	**1.2676**	**0.0000**	**14,709.1822**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**39.19**	**18.41**	**-6.49**	**0.00**	**43.54**	**43.90**	**43.60**	**50.27**	**41.39**	**47.82**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.5100e-003	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**4.5100e-003**	**0.0000**	**2.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**	**0.0000**	**4.7000e-004**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.5100e-003	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**4.5100e-003**	**0.0000**	**2.1000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**	**0.0000**	**4.7000e-004**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2017	1/6/2017	5	5	Staging
2	Grading	Grading	1/8/2017	1/20/2017	5	10	Org Mat Removal
3	Demolition	Demolition	1/22/2017	3/17/2017	5	40	Infra & Ret Walls
4	Site Preparation	Site Preparation	3/19/2017	3/31/2017	5	10	Drainage Rock Import
5	Paving	Paving	4/2/2017	4/21/2017	5	15	Syn Turf Install
6	Architectural Coatings	Architectural Coating	4/23/2017	5/19/2017	5	20	Landscaping

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Cranes	0	8.00	231	0.29
Building Construction	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Generator Sets	0	8.00	84	0.74

Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Graders	1	8.00	187	0.41
Demolition	Forklifts	1	7.00	89	0.20
Building Construction	Scrapers	0	8.00	367	0.48
Paving	Cranes	0	8.00	231	0.29
Architectural Coatings	Cranes	0	8.00	231	0.29
Building Construction	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Demolition	Generator Sets	1	8.00	84	0.74
Paving	Forklifts	2	8.00	89	0.20
Architectural Coatings	Forklifts	2	8.00	89	0.20
Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Paving	Generator Sets	1	8.00	84	0.74
Architectural Coatings	Generator Sets	0	8.00	84	0.74
Grading	Scrapers	0	8.00	367	0.48
Building Construction	Welders	0	8.00	46	0.45
Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Scrapers	0	8.00	367	0.48
Demolition	Welders	1	8.00	46	0.45
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coatings	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Concrete/Industrial Saws	0	8.00	81	0.73
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Rubber Tired Dozers	0	8.00	247	0.40
Paving	Welders	0	8.00	46	0.45
Architectural Coatings	Welders	0	8.00	46	0.45

Architectural Coatings	Air Compressors	0	6.00	78	0.48
Paving	Cement and Mortar Mixers	0	8.00	9	0.56
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rollers	1	8.00	80	0.38
Demolition	Cement and Mortar Mixers	1	8.00	9	0.56
Site Preparation	Forklifts	2	8.00	89	0.20
Site Preparation	Excavators	1	8.00	158	0.38
Paving	Graders	1	8.00	187	0.41

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	14.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	4	37.00	14.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	14.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coatings	3	7.00	14.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	13.00	0.00	610.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	1,462.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2952	13.3424	6.5646	0.0103		0.8026	0.8026		0.7384	0.7384		1,058.7731	1,058.7731	0.3244		1,066.8832
Total	**1.2952**	**13.3424**	**6.5646**	**0.0103**		**0.8026**	**0.8026**		**0.7384**	**0.7384**		**1,058.7731**	**1,058.7731**	**0.3244**		**1,066.8832**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0846	1.7548	0.5977	2.8400e-003	0.0650	0.0191	0.0840	0.0187	0.0182	0.0370		301.1455	301.1455	0.0201		301.6481
Worker	0.2207	0.1978	1.9529	3.7600e-003	0.3658	2.6300e-003	0.3684	0.0970	2.4400e-003	0.0995		373.4747	373.4747	0.0169		373.8971
Total	**0.3054**	**1.9526**	**2.5506**	**6.6000e-003**	**0.4307**	**0.0217**	**0.4524**	**0.1157**	**0.0207**	**0.1364**		**674.6202**	**674.6202**	**0.0370**		**675.5452**

3.2 Building Construction - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2548	5.3217	6.5566	0.0103		0.2848	0.2848		0.2848	0.2848	0.0000	1,058.7731	1,058.7731	0.3244		1,066.8832
Total	**0.2548**	**5.3217**	**6.5566**	**0.0103**		**0.2848**	**0.2848**		**0.2848**	**0.2848**	**0.0000**	**1,058.7731**	**1,058.7731**	**0.3244**		**1,066.8832**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0846	1.7548	0.5977	2.8400e-003	0.0650	0.0191	0.0840	0.0187	0.0182	0.0370		301.1455	301.1455	0.0201		301.6481
Worker	0.2207	0.1978	1.9529	3.7600e-003	0.3658	2.6300e-003	0.3684	0.0970	2.4400e-003	0.0995		373.4747	373.4747	0.0169		373.8971
Total	**0.3054**	**1.9526**	**2.5506**	**6.6000e-003**	**0.4307**	**0.0217**	**0.4524**	**0.1157**	**0.0207**	**0.1364**		**674.6202**	**674.6202**	**0.0370**		**675.5452**

3.3 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.0777	23.7389	8.5770	0.0178		1.1081	1.1081		1.0195	1.0195		1,823.3825	1,823.3825	0.5587		1,837.3495
Total	**2.0777**	**23.7389**	**8.5770**	**0.0178**	**6.5523**	**1.1081**	**7.6605**	**3.3675**	**1.0195**	**4.3870**		**1,823.3825**	**1,823.3825**	**0.5587**		**1,837.3495**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0641	58.1634	13.4076	0.1192	2.5481	0.5606	3.1088	0.6978	0.5364	1.2342		12,773.3581	12,773.3581	0.7053		12,790.9901
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0428	0.4223	8.1000e-004	0.0791	5.7000e-004	0.0797	0.0210	5.3000e-004	0.0215		80.7513	80.7513	3.6500e-003		80.8426
Total	**2.1118**	**58.2062**	**13.8298**	**0.1200**	**2.6272**	**0.5612**	**3.1884**	**0.7188**	**0.5369**	**1.2557**		**12,854.1094**	**12,854.1094**	**0.7089**		**12,871.8327**

3.3 Grading - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	0.4357	8.6489	10.0302	0.0178		0.3753	0.3753		0.3753	0.3753	0.0000	1,823.3825	1,823.3825	0.5587		1,837.3495
Total	**0.4357**	**8.6489**	**10.0302**	**0.0178**	**2.5554**	**0.3753**	**2.9307**	**1.3133**	**0.3753**	**1.6886**	**0.0000**	**1,823.3825**	**1,823.3825**	**0.5587**		**1,837.3495**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0641	58.1634	13.4076	0.1192	2.5481	0.5606	3.1088	0.6978	0.5364	1.2342		12,773.3581	12,773.3581	0.7053		12,790.9901
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0477	0.0428	0.4223	8.1000e-004	0.0791	5.7000e-004	0.0797	0.0210	5.3000e-004	0.0215		80.7513	80.7513	3.6500e-003		80.8426
Total	**2.1118**	**58.2062**	**13.8298**	**0.1200**	**2.6272**	**0.5612**	**3.1884**	**0.7188**	**0.5369**	**1.2557**		**12,854.1094**	**12,854.1094**	**0.7089**		**12,871.8327**

3.4 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.5519	10.4544	8.8829	0.0135		0.7464	0.7464		0.7221	0.7221		1,256.4502	1,256.4502	0.2156		1,261.8405
Total	**1.5519**	**10.4544**	**8.8829**	**0.0135**	**0.0000**	**0.7464**	**0.7464**	**0.0000**	**0.7221**	**0.7221**		**1,256.4502**	**1,256.4502**	**0.2156**		**1,261.8405**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0846	1.7548	0.5977	2.8400e-003	0.0650	0.0191	0.0840	0.0187	0.0182	0.0370		301.1455	301.1455	0.0201		301.6481
Worker	0.0776	0.0695	0.6862	1.3200e-003	0.1285	9.3000e-004	0.1295	0.0341	8.6000e-004	0.0349		131.2209	131.2209	5.9400e-003		131.3693
Total	**0.1622**	**1.8243**	**1.2839**	**4.1600e-003**	**0.1935**	**0.0200**	**0.2135**	**0.0528**	**0.0191**	**0.0719**		**432.3663**	**432.3663**	**0.0260**		**433.0173**

3.4 Demolition - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.3274	6.7477	8.3261	0.0135		0.4566	0.4566		0.4566	0.4566	0.0000	1,256.4502	1,256.4502	0.2156		1,261.8405
Total	**0.3274**	**6.7477**	**8.3261**	**0.0135**	**0.0000**	**0.4566**	**0.4566**	**0.0000**	**0.4566**	**0.4566**	**0.0000**	**1,256.4502**	**1,256.4502**	**0.2156**		**1,261.8405**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0846	1.7548	0.5977	2.8400e-003	0.0650	0.0191	0.0840	0.0187	0.0182	0.0370		301.1455	301.1455	0.0201		301.6481
Worker	0.0776	0.0695	0.6862	1.3200e-003	0.1285	9.3000e-004	0.1295	0.0341	8.6000e-004	0.0349		131.2209	131.2209	5.9400e-003		131.3693
Total	**0.1622**	**1.8243**	**1.2839**	**4.1600e-003**	**0.1935**	**0.0200**	**0.2135**	**0.0528**	**0.0191**	**0.0719**		**432.3663**	**432.3663**	**0.0260**		**433.0173**

3.5 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.4087	13.6582	10.6225	0.0144		0.9520	0.9520		0.8758	0.8758		1,476.9367	1,476.9367	0.4525		1,488.2500
Total	**1.4087**	**13.6582**	**10.6225**	**0.0144**	**0.0000**	**0.9520**	**0.9520**	**0.0000**	**0.8758**	**0.8758**		**1,476.9367**	**1,476.9367**	**0.4525**		**1,488.2500**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8612	24.2679	5.5941	0.0497	1.0632	0.2339	1.2971	0.2911	0.2238	0.5149		5,329.5133	5,329.5133	0.2943		5,336.8700
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0776	0.0695	0.6862	1.3200e-003	0.1285	9.3000e-004	0.1295	0.0341	8.6000e-004	0.0349		131.2209	131.2209	5.9400e-003		131.3693
Total	**0.9388**	**24.3374**	**6.2803**	**0.0511**	**1.1917**	**0.2348**	**1.4265**	**0.3252**	**0.2247**	**0.5499**		**5,460.7342**	**5,460.7342**	**0.3002**		**5,468.2393**

3.5 Site Preparation - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.3543	7.6459	10.9253	0.0144		0.4822	0.4822		0.4822	0.4822	0.0000	1,476.9367	1,476.9367	0.4525		1,488.2500
Total	**0.3543**	**7.6459**	**10.9253**	**0.0144**	**0.0000**	**0.4822**	**0.4822**	**0.0000**	**0.4822**	**0.4822**	**0.0000**	**1,476.9367**	**1,476.9367**	**0.4525**		**1,488.2500**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8612	24.2679	5.5941	0.0497	1.0632	0.2339	1.2971	0.2911	0.2238	0.5149		5,329.5133	5,329.5133	0.2943		5,336.8700
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0776	0.0695	0.6862	1.3200e-003	0.1285	9.3000e-004	0.1295	0.0341	8.6000e-004	0.0349		131.2209	131.2209	5.9400e-003		131.3693
Total	**0.9388**	**24.3374**	**6.2803**	**0.0511**	**1.1917**	**0.2348**	**1.4265**	**0.3252**	**0.2247**	**0.5499**		**5,460.7342**	**5,460.7342**	**0.3002**		**5,468.2393**

3.6 Paving - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8427	18.6081	10.6188	0.0194		1.0735	1.0735		1.0117	1.0117		1,932.9041	1,932.9041	0.4518		1,944.1984
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8427**	**18.6081**	**10.6188**	**0.0194**		**1.0735**	**1.0735**		**1.0117**	**1.0117**		**1,932.9041**	**1,932.9041**	**0.4518**		**1,944.1984**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0846	1.7548	0.5977	2.8400e-003	0.0650	0.0191	0.0840	0.0187	0.0182	0.0370		301.1455	301.1455	0.0201		301.6481
Worker	0.0776	0.0695	0.6862	1.3200e-003	0.1285	9.3000e-004	0.1295	0.0341	8.6000e-004	0.0349		131.2209	131.2209	5.9400e-003		131.3693
Total	**0.1622**	**1.8243**	**1.2839**	**4.1600e-003**	**0.1935**	**0.0200**	**0.2135**	**0.0528**	**0.0191**	**0.0719**		**432.3663**	**432.3663**	**0.0260**		**433.0173**

3.6 Paving - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4446	9.5859	12.2262	0.0194		0.5712	0.5712		0.5712	0.5712	0.0000	1,932.9041	1,932.9041	0.4518		1,944.1984
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4446**	**9.5859**	**12.2262**	**0.0194**		**0.5712**	**0.5712**		**0.5712**	**0.5712**	**0.0000**	**1,932.9041**	**1,932.9041**	**0.4518**		**1,944.1984**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0846	1.7548	0.5977	2.8400e-003	0.0650	0.0191	0.0840	0.0187	0.0182	0.0370		301.1455	301.1455	0.0201		301.6481
Worker	0.0776	0.0695	0.6862	1.3200e-003	0.1285	9.3000e-004	0.1295	0.0341	8.6000e-004	0.0349		131.2209	131.2209	5.9400e-003		131.3693
Total	**0.1622**	**1.8243**	**1.2839**	**4.1600e-003**	**0.1935**	**0.0200**	**0.2135**	**0.0528**	**0.0191**	**0.0719**		**432.3663**	**432.3663**	**0.0260**		**433.0173**

3.7 Architectural Coatings - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7387	6.6967	4.8921	6.1600e-003		0.5303	0.5303		0.4879	0.4879		630.7745	630.7745	0.1933		635.6062
Total	**0.7387**	**6.6967**	**4.8921**	**6.1600e-003**		**0.5303**	**0.5303**		**0.4879**	**0.4879**		**630.7745**	**630.7745**	**0.1933**		**635.6062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0846	1.7548	0.5977	2.8400e-003	0.0650	0.0191	0.0840	0.0187	0.0182	0.0370		301.1455	301.1455	0.0201		301.6481
Worker	0.0418	0.0374	0.3695	7.1000e-004	0.0692	5.0000e-004	0.0697	0.0184	4.6000e-004	0.0188		70.6574	70.6574	3.2000e-003		70.7373
Total	**0.1264**	**1.7922**	**0.9672**	**3.5500e-003**	**0.1342**	**0.0196**	**0.1537**	**0.0371**	**0.0187**	**0.0558**		**371.8029**	**371.8029**	**0.0233**		**372.3854**

3.7 Architectural Coatings - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1513	3.4548	4.6652	6.1600e-003		0.2421	0.2421		0.2421	0.2421	0.0000	630.7745	630.7745	0.1933		635.6062
Total	**0.1513**	**3.4548**	**4.6652**	**6.1600e-003**		**0.2421**	**0.2421**		**0.2421**	**0.2421**	**0.0000**	**630.7745**	**630.7745**	**0.1933**		**635.6062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0846	1.7548	0.5977	2.8400e-003	0.0650	0.0191	0.0840	0.0187	0.0182	0.0370		301.1455	301.1455	0.0201		301.6481
Worker	0.0418	0.0374	0.3695	7.1000e-004	0.0692	5.0000e-004	0.0697	0.0184	4.6000e-004	0.0188		70.6574	70.6574	3.2000e-003		70.7373
Total	**0.1264**	**1.7922**	**0.9672**	**3.5500e-003**	**0.1342**	**0.0196**	**0.1537**	**0.0371**	**0.0187**	**0.0558**		**371.8029**	**371.8029**	**0.0233**		**372.3854**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.549382	0.034064	0.198767	0.132360	0.033447	0.007872	0.013134	0.018943	0.002404	0.001320	0.005630	0.000825	0.001852

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.5100e-003	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Unmitigated	4.5100e-003	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4900e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	**4.5100e-003**	**0.0000**	**2.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**		**4.7000e-004**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.4900e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.0000e-005	0.0000	2.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		4.4000e-004	4.4000e-004	0.0000		4.7000e-004
Total	**4.5100e-003**	**0.0000**	**2.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**4.4000e-004**	**4.4000e-004**	**0.0000**		**4.7000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX D.
NOISE IMPACT ASSESSMENT

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NOISE IMPACT ASSESSMENT

FOR THE PROPOSED

CAL POLY I FIELD IMPROVEMENTS PROJECT
SAN LUIS OBISPO, CA

DECEMBER 2016

PREPARED FOR:
SWCA ENVIRONMENTAL CONSULTANTS
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INTRODUCTION

This report describes the existing noise environment in the project vicinity and identifies potential noise impacts associated with development of the proposed project. Noise-reduction measures have been identified, where necessary, to reduce noise-related impacts.

PROPOSED PROJECT OVERVIEW

California Polytechnic State University, San Luis Obispo (The University or Cal Poly), in association with Associated Students Incorporated (ASI), proposes improvements to the natural grass field north of Slack Street (known as the Cal Poly I Field) to serve as a practice facility for the Cal Poly Athletics Department (Cal Poly Athletics) and other campus sports and recreational activities. Cal Poly's I Field is located in the southeastern portion of campus, north of Slack Street between Grand Avenue and Longview Lane. The project site is generally surrounded by Slack Street and single-family residences within the City of San Luis Obispo to the south; an approximately 112-space surface parking lot (Lot G-2) and single-family residences within the City of San Luis Obispo to the west. The Student Housing South facility is currently under construction, located approximately 400 feet east of the project site (SWCA 2016). The project location is depicted in Figure 1 and Figure 2.

The practice field would be available for use all year long, but the most intensive uses would occur during Cal Poly's regular academic school year (i.e., the fall, winter, and spring terms lasting from mid-September through mid-June). During the school year, I Field would typically be used for football and soccer practices on Mondays through Fridays from 6:00 am to 3:00 pm. Football practices would be held throughout the NCAA football season, which generally runs August through December and March through April. Men's and women's soccer practices would be held throughout the school year, and the I Field may also be used for morning conditioning workouts during the summer term. Although unlikely, if Cal Poly had the opportunity to host an NCAA post season soccer game, the practice field would be an optional location for that event (SWCA 2016).

Intramural flag football and soccer events would be held at the field during the fall, winter, and spring academic terms, and would generally run from the second week of classes until the ninth week of classes in each term. In the future, it is possible that ASI could expand to include other intramural sports and additional intramural league events could eventually be held at the field. Intramural events would take place Thursdays through Sundays, and would be held back-to-back on the hour from 5:00 pm until the fields close at 12:00 am. Other student events, such as kickball, whiffle ball, and ultimate Frisbee tournaments would be held on occasion throughout the year. These tournaments are held roughly three times per academic term and would generally consist of a 1- or 2-day-long event over the weekend (usually Friday evening to Saturday afternoon). Construction of an audio system for public address (PA) announcements, music, or crowd noise simulation is also proposed (SWCA 2016).

ACOUSTIC FUNDAMENTALS

Noise is generally defined as sound that is loud, disagreeable, or unexpected. Sound, as described in more detail below, is mechanical energy transmitted in the form of a wave because of a disturbance or vibration.

AMPLITUDE

Amplitude is the difference between ambient air pressure and the peak pressure of the sound wave. Amplitude is measured in decibels (dB) on a logarithmic scale. For example, a 65-dB source of sound, such as a truck, when joined by another 65 dB source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by 3 dB). Amplitude is interpreted by the ear as corresponding to different degrees of loudness. Laboratory measurements correlate a 10 dB increase in amplitude with a perceived doubling of loudness and establish a 3-dB change in amplitude as the minimum audible difference perceptible to the average person.

Figure 1
Project Site Map Overview

Image Source: SWCA 2016

Figure 2
Project Site Location & Nearby Land Uses

Image Source: SWCA 2016; San Luis Obispo County 2011

FREQUENCY

Frequency is the number of fluctuations of the pressure wave per second. The unit of frequency is the Hertz (Hz). One Hz equals one cycle per second. The human ear is not equally sensitive to sound of different frequencies. Sound waves below 16 Hz or above 20,000 Hz cannot be heard at all, and the ear is more sensitive to sound in the higher portion of this range than in the lower. To approximate this sensitivity, environmental sound is usually measured in A-weighted decibels (dBA). On this scale, the normal range of human hearing extends from about 10 dBA to about 140 dBA. Common community noise sources and noise levels are depicted in Figure 3.

ADDITION OF DECIBELS

Because decibels are logarithmic units, sound levels cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dB higher than one source under the same conditions. For example, if one automobile produces a sound level of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dB; rather, they would combine to produce 73 dB. Under the decibel scale, three sources of equal loudness together would produce an increase of 5 dB.

SOUND PROPAGATION & ATTENUATION

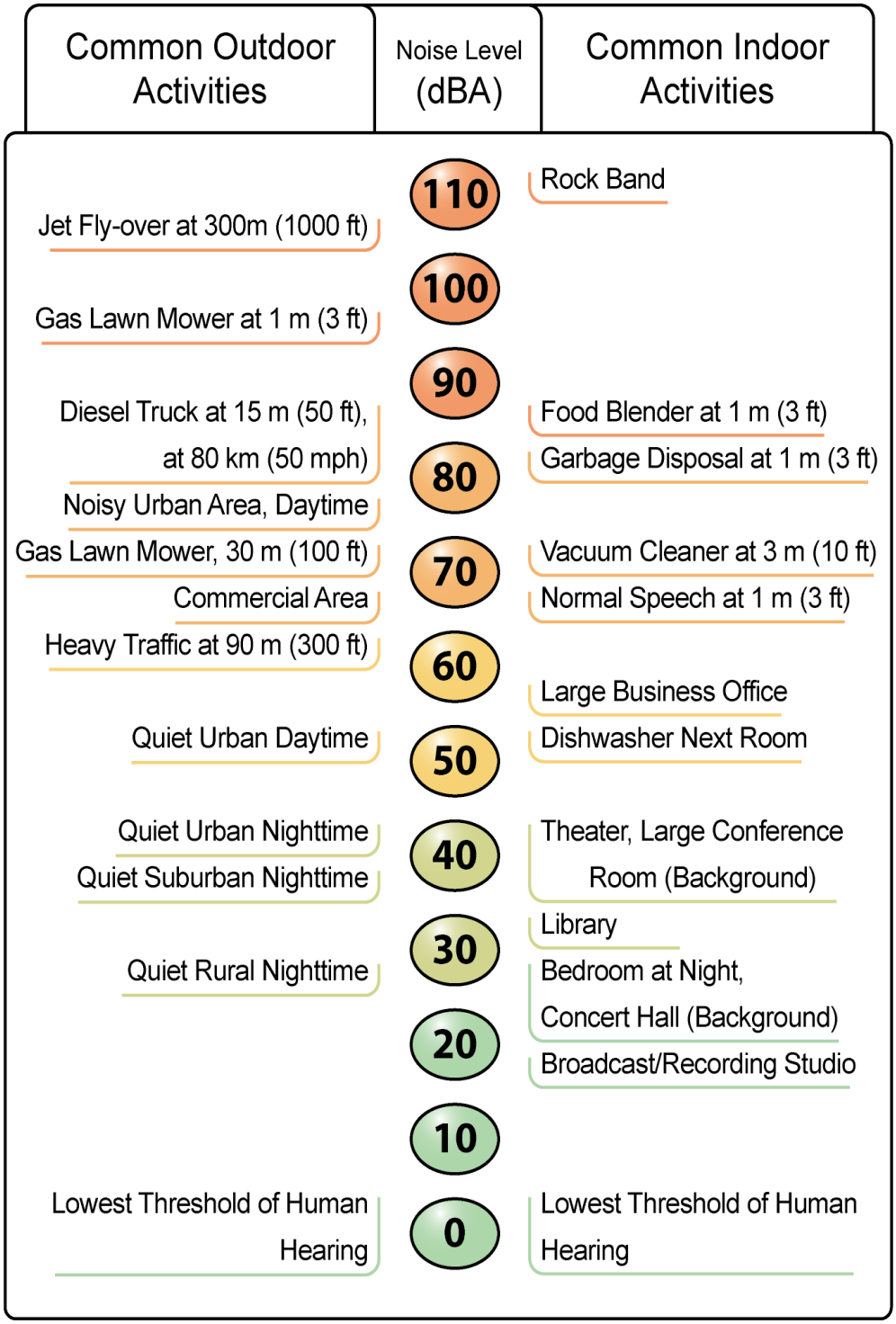
Geometric Spreading

Sound from a localized source (i.e., a point source) propagates uniformly outward in a spherical pattern. The sound level decreases (attenuates) at a rate of approximately 6 decibels for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path, and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately 3 decibels for each doubling of distance from a line source, depending on ground surface characteristics. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receiver, such as a parking lot or body of water,), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between a line source and the receiver, such as soft dirt, grass, or scattered bushes and trees), an excess ground-attenuation value of 1.5 decibels per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation for soft surfaces results in an overall attenuation rate of 4.5 decibels per doubling of distance from a line source.

Shielding by Natural or Human-Made Features

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and dense woods) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver will typically result in an approximate 5 dB of noise reduction. Taller barriers provide increased noise reduction.

Figure 3
Typical Community Noise Levels



Source: Caltrans 2012

NOISE DESCRIPTORS

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the sound-pressure level in that range. In general, people are most sensitive to the frequency range of 1,000–8,000 Hz, and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies, which is referred to as the "A-weighted" sound level (expressed in units of dBA). The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgments correlate well with the A-weighted noise scale. Other weighting networks have been devised to address high noise levels or other special problems (e.g., B-, C-, and D-scales), but these scales are rarely used in conjunction with environmental noise.

The intensity of environmental noise fluctuates over time, and several descriptors of time-averaged noise levels are typically used. For the evaluation of environmental noise, the most commonly used descriptors are L_{eq}, L_{dn}, and CNEL. The energy-equivalent noise level, L_{eq}, is a measure of the average energy content (intensity) of noise over any given period. Many communities use 24-hour descriptors of noise levels to regulate noise. The day-night average noise level, L_{dn}, is the 24-hour average of the noise intensity, with a 10-dBA "penalty" added for nighttime noise (10 p.m. to 7 a.m.) to account for the greater sensitivity to noise during this period. CNEL, the community equivalent noise level, is similar to L_{dn} but adds an additional 5-dBA penalty for evening noise (7 p.m. to 10 p.m.) Common noise descriptors are summarized in Table 1.

Table 1
Common Acoustical Terms and Descriptors

Descriptor	Definition
Decibel (dB)	A unit-less measure of sound on a logarithmic scale, which indicates the squared ratio of sound pressure amplitude to referenced sound pressure amplitude. The reference pressure is 20 micro-pascals.
A-Weighted Decibel (dBA)	An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
Energy Equivalent Noise Level (L_{eq})	The energy mean (average) noise level. The instantaneous noise levels during a specific period of time in dBA are converted to relative energy values. From the sum of the relative energy values, an average energy value (in dBA) is calculated.
Minimum Noise Level (Lmin)	The minimum instantaneous noise level during a specific period of time.
Maximum Noise Level (L_{max})	The maximum instantaneous noise level during a specific period of time.
Day-Night Average Noise Level (DNL or L_{dn})	The 24-hour Leq with a 10 dBA "penalty" for noise events that occur during the noise-sensitive hours between 10:00 p.m. and 7:00 a.m. In other words, 10 dBA is "added" to noise events that occur in the nighttime hours to account for increases sensitivity to noise during these hours.
Community Noise Equivalent Level (CNEL)	The CNEL is similar to the Ldn described above, but with an additional 5 dBA "penalty" added to noise events that occur between the hours of 7:00 p.m. to 10:00 p.m. The calculated CNEL is typically approximately 0.5 dBA higher than the calculated Ldn.

HUMAN RESPONSE TO NOISE

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels. When community noise interferes with human activities or contributes to stress, public annoyance with the noise source increases. The acceptability of noise and the threat to public well-being are the basis for land use planning policies preventing exposure to excessive community noise levels.
Unfortunately, there is no completely satisfactory way to measure the subjective effects of noise or of the corresponding reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance and habituation to noise over differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted: the so-called "ambient" environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged. Regarding increases in A-weighted noise levels, knowledge of the following relationships will be helpful in understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived by humans;
- Outside of the laboratory, a 3-dB change is considered a just-perceivable difference;
- A change in level of at least 5 dB is required before any noticeable change in community response would be expected. An increase of 5 dB is typically considered substantial;
- A 10-dB change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

AFFECTED ENVIRONMENT

NOISE–SENSITIVE RECEPTORS

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are also considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

The nearest noise-sensitive land uses include residential dwellings, the nearest of which are located to the south and west of the project site along Slack Street and Longview Lane. These nearest residences are located within the City of San Luis Obispo. In addition, an on-campus student housing facility is currently under construction, approximately 400 feet east of the project site, within the northwestern quadrant of the Slack Street/Grand Avenue intersection. Nearby noise-sensitive land uses are depicted in Figures 1 and 2.

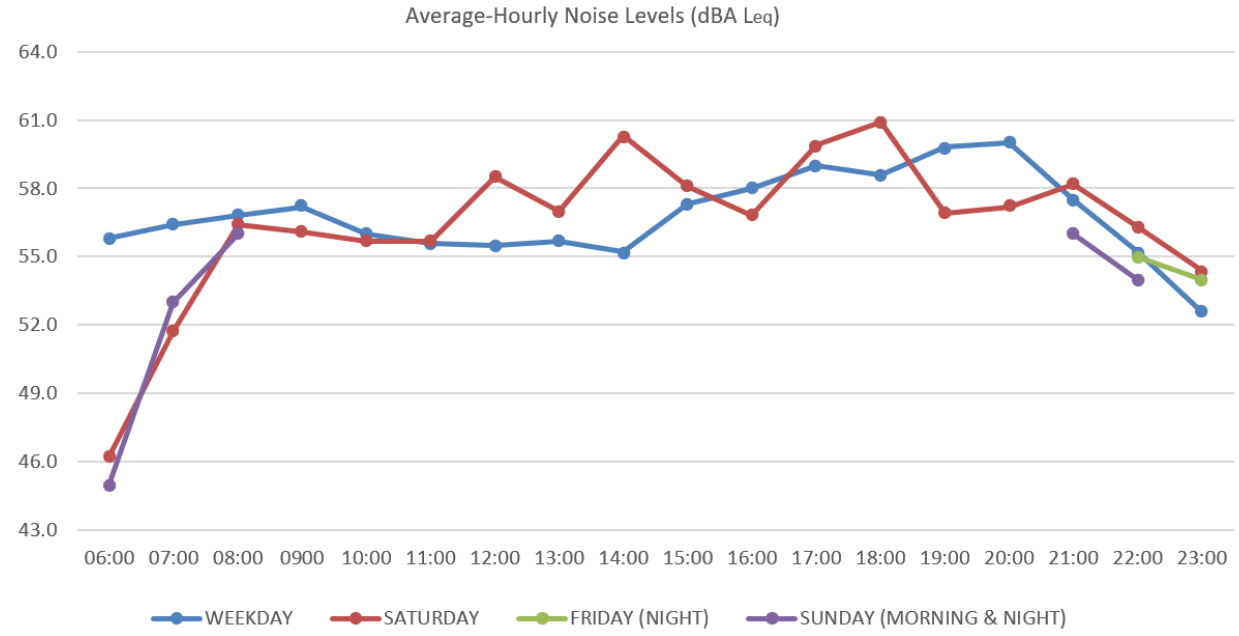
AMBIENT NOISE ENVIRONMENT

The ambient noise levels in the project area are largely influenced by vehicle traffic on Slack Street and Longview Lane. To a lesser extent, construction activities, voices, aircraft overflights, and distant traffic on US Highway 101 also contribute to ambient noise conditions. For purposes of documenting and measuring ambient noise conditions, multiple noise measurement surveys were conducted in the project area. The noise measurement surveys were conducted between the hours of 6:00 a.m. and midnight on October 3,

2016 and November 7, 9-13, 2016 using a Larson Davis Type I sound level meter. The meter was calibrated prior to and upon completion of the noise measurement surveys. The hours during which noise measurement surveys were conducted were selected to coincide with the proposed hours of operation for the project. Measured ambient noise levels are summarized Table 2. Noise measurement locations are depicted in Figure 2. Ambient noise measurement survey data is included in Appendix A.

Table 2
Summary of Measured Ambient Noise Levels

Hour of Day	Measured Noise Levels (dBA)	
	Average-Hourly (L_{eq})	Highest Instantaneous (L_{max})
Weekdays		
0600-0700	56	81
0700-0800	56	81
0800-1900	56-60	82
1900-2200	58-62	85
2200-2300	55-56	78
2300-2400	53	71
Saturday		
0600-0700	46	67
0700-0800	52	72
0800-1900	56-61	83
1900-2200	57-58	83
2200-2300	56	80
2300-2400	54	75
Friday Evening		
2200-2300	55-57	79
2300-2400	54	81
Sunday		
0600-0700	45	68
0700-0800	53	80
0800-0900	56	79
2200-2300	54	73



Based on noise measurement data conducted on October 3, 2016 and November 7, 9-13, 2016.
Graph depicts lowest average-hourly noise levels. Refer to Appendix A for noise monitoring data.

Average-hourly noise levels on weekdays ranged from 53 to 60 dBA L_{eq}, with the highest average-hourly noise levels generally occurring during the a.m. and p.m. peak-hours commute hours. Measured average-hourly noise levels were generally lower during the nighttime hours (e.g., 10:00 p.m. to midnight) ranging from 53 to 55 dBA L_{eq}, Monday through Thursday, and from 54 to 57 dBA L_{eq} on Friday. Measured average-hourly noise levels during the early morning weekend hours are generally lower than weekday noise levels due to decreased student activities and reduced vehicle traffic on area roadways. On Saturday, between the hours of 6:00 a.m. and midnight, measured average-hourly noise levels ranged from 46 to 54 dBA L_{eq}. Measured noise levels obtained on Sunday, between these same hours, ranged from 45 to 55 dBA L_{eq}.

Based on the measurements conducted, ambient noise levels during the early morning hours (e.g., 6:00 a.m. to 8:00 a.m.) were highest during the weekdays of Monday through Friday. Measured ambient noise levels during the nighttime hours of 10:00 p.m. and midnight were highest on Friday and Saturday. These measured increases in ambient noise levels were predominantly associated with increased student activity within the area and increased vehicle traffic along Slack Street and Longview Lane. Measured maximum instantaneous noise levels during all hours of the day generally range from approximately 63 to 85 dBA L_{max}. Instantaneous noise levels are also largely associated with vehicles traveling along area roadways.

REGULATORY FRAMEWORK

NOISE

Cal Poly Campus Administrative Policies

General Policy. Section 141.3.2.1 of the "Campus Administrative Policies" states that:

> *Outdoor events and activities that involve amplified music or speech are limited to the hours of: 7:00 a.m. to 10:00 p.m., Monday through Sunday, and University scheduling protocols must be followed (see sections 144.4 and 141.3.2.2)*
>
> *Outdoor events and activities that do not require use of amplified sound (for speech or music) may be held between 7:00 a.m. and midnight, Monday through Sunday. Use of the University's scheduling protocols is encouraged, to facilitate coordination with other events and among potential campus service providers. Regardless of the time they are held, events and activities must be conducted in a manner consistent with Section 141.3.1 (General Limitations) and in conformity with any additional guidelines pertinent to a particular venue.*

General Policy. Section 141.3.1 of the "Campus Administrative Policies" states that:

> *"All campus events and activities shall be conducted consistent with Federal and State law, with existing University policies, with the orderly conduct of University business, with preservation of the campus learning environment, with the preservation of public safety, with maintenance of University property and with the free flow of pedestrian and vehicular traffic. Entrances to campus facilities shall not be obstructed. No individual or group shall abridge, halt or disrupt the right of others to present their views. In addition, plans for outdoor events and activities should address potential impacts on residential communities, on and off*
> *campus. [emphasis added]"*

City of San Luis Obispo General Plan

The City's General Plan Noise Element sets noise exposure standards for the determination of land use compatibility for new noise-sensitive land uses and establishes performance standards for new non-transportation noise sources. With regard to new non-transportation noise sources, the City's average-hourly noise standards are 50 dBA L_{eq} during the daytime hours (7 a.m. to 10 p.m.) and 45 dBA L_{eq} during the nighttime hours (10 p.m. to 7 a.m.) Instantaneous noise level standards are 70 dBA L_{max} during the daytime hours and 65 dBA L_{max} during the nighttime hours. Impulsive noise sources, such as gunfire and hammering, are limited to 65 dBA L_{max} during the daytime hours and 60 dBA L_{max} during the nighttime hours. The City's General Plan noise standards for non-transportation noise sources are summarized in Table 3 (City

of San Luis Obispo 1996). It is important to note that Cal Poly is not subject to the City's noise standards. The City's noise standards are, however, included for informational purposes.

Table 3
City of San Luis Obispo General Plan
Maximum Noise Exposure for Noise-Sensitive Uses Due to Stationary Noise Sources

Duration	Day (7 a.m. to 10 p.m.)	Night (10 p.m. to 7 a.m.)
Hourly (dBA L_{eq}) [1,2]	50	45
Maximum (dBA L_{max}) [1,2]	70	65
Impulsive (dBA L_{max}) [1,3]	65	60

1. As determined at the property line of the receiver. When determining effectiveness of noise mitigation measures, the standards may; be applied on the receptor side of noise barriers or other property-line noise mitigation measures.
2. Sound level measurements shall be made with slow meter response.
3. Sound level measurements shall be made with fast meter response.

Source: City of San Luis Obispo 1996

City of San Luis Obispo Municipal Code

The City's Noise Control Ordinance is contained in Municipal Code, Chapter 9.12. Section 9.12.050 and specifies noise standards for various categories of land use. The City's municipal code standards apply to existing noise sources. For residential land uses, exterior average-hourly noise levels are limited to 55 dBA during the daytime hours and 50 dBA during the nighttime hours. The ordinance also limits construction and demolition activities that would result in a noise disturbance to nearby land uses to between the hours of 7:00 a.m. and 7:00 p.m.., Monday through Saturday. Noise-generating construction and demolition activities are prohibited on Sundays and holidays. The ordinance further states that, where technically and economically feasible, construction activities shall not exceed specified standards. For areas consisting of single-family residential, maximum construction-generated noise levels should be limited to 75 dBA during the daytime hours (7:00 a.m. to 7:00 p.m.) and 60 dBA during the nighttime hours (7:00 p.m. to 7:00 a.m.) Various noise sources, including emergency warning devices, agricultural activities, and outdoor activities (e.g., public dances, shows and sporting events) for which a permit or license has been issued by the City, are exempt from the City's noise ordinance standards (City of San Luis Obispo 2015). It is important to note that Cal Poly is not subject to the City's noise standards.

County of San Luis Obispo Code of Ordinances

The County of San Luis Obispo Land Use Ordinances (*Titles 22 and 23)* establish noise standards for the operation of stationary noise sources. The purpose of these standards is to protect residents from the adverse effects of excessive or objectionable noise. Each of the noise level standards shall be reduced by five dB to account for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noise events (e.g., pile driving). Examples of tonal noise sources include rotary fans, compressors, transformers, and piston driven engines. The County's noise standards for stationary noise sources are summarized in Table 4.

Table 4
County of San Luis Obispo County Exterior Noise Exposure Standards for Stationary Noise Sources

Category	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly Average (dBA L_{eq})	50	45
Maximum Level (dBA L_{max})	70	65

1. *As determined at the property line of the receiving land use.*
2. *In the event that the measured ambient noise level exceeds the applicable exterior noise level standard, the applicable standard shall be adjusted so as to equal the ambient noise level plus one dB.*
3. *Applies only where the receiving land use operates or is occupied during nighttime hours.*
4. *Each of the exterior noise level standards shall be reduced by five dB to account for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noise events.*

It is important to note, however, that activities conducted in public or private school grounds, including school athletic and entertainment events, are exempt from the above referenced standards. In addition, noise generated by construction activities are also exempt, provided such activities are limited to 7:00 a.m. to 9:00 p.m. on weekdays, or between 8:00 a.m. and 5:00 p.m. on weekends. It is also important to note that Cal Poly is not subject to the County's noise standards. The County's noise standards have been included for informational purposes.

GROUND−BORNE VIBRATION

Various criteria have been established to assist in the evaluation of vibration impacts. For instance, the California Department of Transportation (Caltrans) has developed vibration criteria based on potential structural damage risks and human annoyance. Caltrans-recommended criteria for the evaluation of ground-borne vibration levels, with regard to structural damage and human annoyance, are summarized in Table 5 and Table 6, respectively. The criteria differentiate between transient and continuous/frequent sources. Transient sources of ground-borne vibration include intermittent events, such as blasting; whereas, continuous and frequent events would include the operations of equipment, including construction equipment and vehicle traffic on roadways (Caltrans 2002, 2004).

Table 5
Damage Potential to Buildings at Various Ground-borne Vibration Levels

Structure and Condition	Vibration Level (in/sec ppv)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely Fragile Historic Buildings, Ruins, Ancient Monuments	0.12	0.08
Fragile Buildings	0.2	0.1
Historic and Some Old Buildings	0.5	0.25
Older Residential Structures	0.5	0.3
New Residential Structures	1.0	0.5
Modern Industrial/Commercial Buildings	2.0	0.5
Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment. Source: Caltrans 2002, 2004		

Table 6
Annoyance Potential to People at Various Ground-borne Vibration Levels

Human Response	Vibration Level (in/sec ppv)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely Perceptible	0.04	0.01
Distinctly Perceptible	0.25	0.04
Strongly Perceptible	0.9	0.10
Severe	2.0	0.4
Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment. Source: Caltrans 2002, 2004		

The ground-borne vibration criteria recommended by Caltrans for evaluation of potential structural damage is based on building classifications, which take into account the age and condition of the building. For residential structures and newer buildings, Caltrans considers a minimum peak-particle velocity (ppv) threshold of 0.5 inches per second (in/sec) for transient sources and 0.3 in/sec for continuous/frequent sources to be sufficient to protect against building damage. With the exception of fragile buildings, ruins, and ancient monuments, continuous ground-borne vibration levels below approximately 0.2 in/sec ppv are unlikely to cause structural damage. In terms of human annoyance,

continuous vibrations in excess of 0.04 in/sec ppv and transient sources in excess of 0.25 in/sec ppv are identified by Caltrans as being "distinctly perceptible". Within buildings, short periods of ground vibration in excess of 0.2 in/sec ppv are generally considered to result in increased levels of annoyance (Caltrans 2002, 2004).

IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

Criteria for determining the significance of noise impacts were developed based on information contained in the California Environmental Quality Act Guidelines (CEQA Guidelines, Appendix G). According to the guidelines, a project may have a significant effect on the environment if it would result in the following conditions:

a) Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or of applicable standards of other agencies;

b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;

e) For a project located within an airport land use plan area or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project expose people residing or working in the project area to excessive noise levels;

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Construction Noise Levels

As previously noted, Cal Poly is not subject to the City or County noise standards. However, in the absence of applicable noise standards for construction activities, the limitations identified in the City's noise control ordinance have been relied upon for determination of impact significance. Accordingly, construction-generated noise levels would be considered significant if maximum noise levels at the nearest residential land uses would exceed 75 dBA during the daytime hours (e.g., 7:00 a.m. to 7:00 p.m.) or 60 dBA during the nighttime hours (e.g., 7:00 p.m. to 7:00 a.m.)

Ground-borne Vibration Levels

Ground-borne vibration levels would be considered to have a potentially significant impact if resultant vibration levels at the nearest structures would exceed 0.3 in/sec ppv for structural damage and 0.2 in/sec ppv for annoyance to building occupants, based on Caltrans-recommended thresholds (refer to Tables 5 and 6).

On-site Operational Noise Levels

Based on the noise measurement surveys conducted for this project, ambient noise levels in the project area currently exceed the City and County noise standards for non-transportation noise sources. It is important to reiterate that Cal Poly is not subject to the City or County noise standards. In instances when measured ambient noise levels exceed noise standards for non-transportation noise sources, the noise standard is typically considered equivalent to the ambient noise level. Based on principals of noise decibel addition, predicted average-hourly operational noise levels when added to an equivalent ambient noise level would result in an increase of 3 dB. As previously noted, increases of 3 dB in ambient noise levels is

typically considered the minimum level audible to the human ear. For this reason, noise-generated by onsite recreational uses would be considered to have a potentially significant impact if resultant noise levels at the nearest residential land uses would equal or exceed measured ambient noise levels (in dBA L_{eq} and L_{max}). To be conservative, the minimum ambient noise levels obtained during the noise measurement surveys were applied taking into account daily and hourly variations. Ambient noise levels are summarized in Table 2.

Traffic Noise Levels

Traffic noise levels were calculated using the Federal Highway Administration (FHWA) roadway noise prediction model (FHWA-RD-77-108) based on California vehicle reference noise levels and traffic data obtained from the traffic analysis prepared for this project. The project's contribution to traffic noise levels along area roadways was determined by comparing the predicted noise levels with and without project-generated traffic. A significant increase in ambient noise levels would be defined as an increase of 5 dBA, or greater, within areas where the existing noise level is 60 dBA CNEL/L_{dn}, or less. Between 60 and 65 dBA CNEL/L_{dn}, a significant increase is defined as an increase of 3 dBA, or greater. In areas where existing noise levels exceed 65 dBA CNEL/L_{dn} a significant increase is defined as an increase of 1.5 dBA, or greater

Exposure to Aircraft Noise Levels

The proposed project would not result in increased exposure of sensitive land uses to aircraft noise, nor would the proposed project interfere with airport operations. As a result, evaluation of long-term exposure to aircraft noise is not discussed further in this report.

METHODOLOGY

Construction Noise Levels

Construction-generated noise levels were calculated based on measured noise levels for typical off-road equipment derived from the Federal Highway Administration's Roadway Construction Noise Model. Noise levels were quantified for each of the major construction phases/activities based on estimated equipment use provided by the project engineer. To be conservative, predicted noise levels at the nearest residential land use were quantified assuming all equipment would operate simultaneously over a one-hour period. No reductions for shielding provided by intervening structures or terrain were applied.

Ground-borne Vibration Levels

Ground-borne vibration levels associated with the proposed project would be primarily associated with construction activities. Construction vibration levels were calculated based on vibration levels typically associated with off-road equipment, derived from the Federal Transit Administration and the California Department of Transportation (FTA 2006, Caltrans 2004).

On-site Operational Noise Levels

Operational noise levels associated with the proposed onsite recreational uses were quantified based on representative noise levels obtained from similar land uses. Average-hourly (in dBA L_{eq}) and maximum instantaneous (in dBA L_{max}) noise levels for each of the major onsite events were quantified using the *SoundPlan* computer model. *SoundPlan* is a sophisticated computer model capable of predicting noise levels taking into account variations in site terrain and elevations, as well as, the effects of intervening structures. Operational noise levels were quantified for football and soccer practice events, and competitive events (e.g., soccer tournaments) with and without the use of an amplified PA system. Operational noise levels were also quantified for the initial setup and closing of events, which typically involve the use of motorized equipment, such as carts and aerial lifts. Reference noise levels for these events were based on noise measurement data for similar events. Reference noise levels for the events evaluated are summarized in Table 7.

Traffic Noise Levels

Traffic noise levels were quantified using the FHWA highway traffic noise prediction model (FHWA-RD-77-108) utilizing California Vehicle Noise (Calveno) reference emission levels. Traffic noise levels were quantified for existing and future conditions, with and without project implementation, based on traffic data derived from the traffic analysis prepared for this project.

Table 7
Summary of Reference Noise Levels for Recreational Events

Event	Noise Level (dBA) at 100 feet from Source Center	
	L_{eq}	L_{max}
Football Practice[1]	62	84
Soccer Practice[2]	55	73
Competitive Event without PA System[3]	65	85
Competitive Event with PA System[4]	75	90
Practice/Event Setup & Closing[1]	64	84

1. *Based on noise measurement surveys conducted at CalPoly Upper Fields Sports Complex on April 29, 2016. Based on noise levels of 64.2 dBA L_{eq} and 83.9 dBA L_{max} during setup, including the use of motorized carts and aerial lifts, Practice noise levels average 61.5 dBA L_{eq} and 81.8 dBA L_{max}. To be conservative, an instantaneous noise level of 84 dBA L_{max} was assumed for practice events.*
2. *Based on representative noise levels for soccer practice event without spectator crowds. Average-hourly noise levels typically range from 50-55 dBA L_{eq}, without the use of amplified PA systems. To be conservative, an average-hourly noise level of 55 dBA L_{eq} was assumed.*
3. *Based on representative noise levels for competitive soccer events. Average-hourly noise levels typically range from 60-65 dBA L_{eq}, without the use of amplified PA systems. To be conservative, an average-hourly noise level of 65 dBA L_{eq} was assumed.*
4. *Maximum instantaneous noise levels were based on file data for amplified PA system operations. Noise levels associated with PA systems can vary, depending largely on the size of the spectator crowd. To be clearly audible, amplified PA system are typically set to levels that are approximately 5-10 dBA above average-hourly event/crowd noise levels. To be conservative, average-hourly noise levels were assumed to be 10 dB higher than representative noise levels for competitive events not using an amplified sound system.*

IMPACT DISCUSSION AND MITIGATION MEASURES

Impact Noise-A ***Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or of applicable standards of other agencies?***

The existing *Cal Poly Master Plan & Environmental Impact Report* (2001) does not identify noise control standards or measures applicable to the proposed project. As previously discussed, the *City of San Luis Obispo's General Plan Noise Element* establishes operational standards for siting of new land uses and establishes noise performance standards for non-transportation noise sources (City of San Luis Obispo 1996). However, based on the noise measurement surveys conducted for this project, ambient noise levels in the project area currently exceed the City's noise standards. In instances when measured ambient noise levels exceed recommended noise standards for non-transportation noise sources, the noise standard is typically considered equivalent to the ambient noise level. As discussed in Impact Noise-C, implementation of the proposed project would result in increases in ambient noise levels that could exceed ambient noise levels. As a result, this impact is considered *potentially significant*. Refer to Impact Noise-C for additional discussion of noise impacts and recommended mitigation measures.

Impact Noise-B ***Would the project result in exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?***

The proposed project would not result in the installation of any stationary equipment or long-term operational activities that would generate ground vibration. As a result, ground-vibration impacts associated with the proposed project would be limited to short-term construction activities. Ground-borne vibration levels associated with representative construction equipment are summarized in Table 8. Ground vibration generated by construction equipment would not be projected to exceed approximately 0.08 inches per second ppv at 25 feet. As previously noted, the nearest residential land uses are located

approximately 60 feet south of the project site, across Slack Street. Predicted vibration levels at these nearest offsite structures would not exceed the minimum recommended criteria for structural damage and human annoyance (0.3 and 0.2 in/sec ppv, respectively). As a result, this impact would be considered ***less than significant***.

Table 8
Representative Vibration Source Levels for Construction Equipment

Equipment	Peak Particle Velocity at 25 Feet (In/Sec)
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozers/Tractors	0.003
Hoe Ram	0.089
Large Bulldozer	0.089
Source: FTA 2006, Caltrans 2004	

Impact Noise-C ***Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?***

Long-term increases in ambient noise levels would be largely associated with onsite recreational activities, as well as, increases in vehicle traffic along nearby roadways. Operational noise levels associated with these sources are discussed in greater detail, as follows:

Recreational Activities

The nearest noise-sensitive land uses consist of residential dwellings. The nearest residences are located south of the project site, along Slack Street, and west of the project site, along Longview Lane. Predicted recreational event noise levels at the nearest existing residential dwelling (refer to Table 9) were compared to measured weekday, Saturday, and Sunday ambient noise conditions (refer to Table 2) for determination of impact significance. Hours of the day during which recreational noise levels would contribute to a significant increase in ambient noise levels are summarized in Table 10. Predicted average-hourly and maximum instantaneous noise levels at the nearest residential land uses and predicted noise contours for representative onsite recreational activities are depicted in Figures 4 through 18.

As depicted in Table 9, predicted noise levels at the nearest existing residential property line associated with onsite recreational events would range from approximately 45 to 66 dBA L_{eq}, with maximum intermittent noise levels of approximately 52 to 81 dBA L_{max}. The highest predicted noise levels would be associated with the use of exterior PA systems during competitive events. As depicted in Table 10 and depending on the event conducted, predicted average-hourly noise levels at nearby residences would exceed ambient noise levels, particularly during the quieter nighttime hours (between 10:00 p.m. and midnight), as well as, during the early morning hours (e.g., 6:00 a.m. to 8:00 a.m.) on weekends. Competitive events involving the use of amplified PA systems would exceed ambient noise levels on all days and during all proposed operational hours. With the exception of competitive events involving the use of amplified PA systems, predicted noise levels at the student housing facility (currently under construction) located approximately 400 feet to the east would be largely masked by ambient noise levels. In addition, predicted maximum instantaneous noise levels associated with onsite recreational uses would not be projected to exceed ambient noise levels at nearby land uses and would, likewise, be largely masked by ambient noise conditions. Nonetheless, given that average-hourly recreational event noise levels would contribute to significant increases in ambient noise levels, this impact would be considered ***potentially significant***.

Table 9
Summary of Predicted Recreational Event Noise Levels at the Nearest Residential Property Line

Event/Activity	Noise Level (dBA)	
	L_{eq}	L_{max}
Practice/Event Setup & Closing[1]	54	63
Football Practice[1]	52	63
Soccer Practice[2]	45	52
Competitive Event without PA System[3]	55	75
Competitive Event with PA System[4]	66	81

1. *Based on noise measurement surveys conducted at CalPoly Upper Fields Sports Complex on April 29, 2016. Based on noise levels of 64.2 dBA L_{eq} and 83.9 dBA L_{max} during setup, including the use of motorized carts and aerial lifts, Practice noise levels average 61.5 dBA L_{eq} and 81.8 dBA L_{max}. To be conservative, an instantaneous noise level of 84 dBA L_{max} was assumed for practice events.*
2. *Based on representative noise levels for soccer practice event without spectator crowds. Average-hourly noise levels typically range from 50-55 dBA L_{eq}, without the use of amplified PA systems. To be conservative, an average-hourly noise level of 55 dBA L_{eq} was assumed.*
3. *Based on representative noise levels for competitive soccer events. Average-hourly noise levels typically range from 60-65 dBA L_{eq}, without the use of amplified PA systems. To be conservative, an average-hourly noise level of 65 dBA L_{eq} was assumed.*
4. *Maximum instantaneous noise levels were based on file data for amplified PA system operations. Noise levels associated with PA systems can vary, depending largely on the size of the spectator crowd. To be clearly audible, amplified PA system are typically set to levels that are approximately 5-10 dBA above average-hourly event/crowd noise levels. To be conservative, average-hourly noise levels were assumed to be 10 dB higher than representative noise levels for competitive events not using an amplified sound system.*

Mitigation Measure Noise-1: Onsite recreational events shall be limited to the following hours:

a. Recreational events shall be limited to between the hours of 6:00 a.m. and 10 p.m., Monday through Friday, and between the hours of 8:00 a.m. and 10:00 p.m. on weekends.

b. The use of amplified PA/sound systems shall be prohibited.

Significance After Mitigation

Mitigation Measures Noise-1,a would impose hourly restriction on onsite recreational activities. In addition, Mitigation Measure 1,b would prohibit the use of amplified PA/sound systems during all onsite activities and events. With implementation of the proposed mitigation measures, significant increases in ambient noise levels at nearby noise-sensitive land uses would be considered ***less than significant.***

Vehicular Traffic

Implementation of the proposed project would result in increased traffic volumes on some area roadways. The increase in traffic volumes resulting from implementation of the proposed project would, therefore, contribute to predicted increases in traffic noise levels. Assuming that there would be no substantial changes in roadway vehicle operational conditions (e.g., vehicle speeds) a doubling of roadway traffic volumes would be required to achieve a 3 dBA in average-daily traffic noise levels (in CNEL/L_{dn}). As noted earlier in this report, a 3 dBA change in noise levels is the minimum audible difference perceptible to the average person.

Based on the traffic analysis prepared for the proposed project, the project would not result in a doubling of vehicle traffic along primarily affected roadways. As a result, the proposed project would not result in a significant increase in traffic noise levels (i.e., 3 dBA, or greater) along primarily affected roadways. This impact would be considered ***less than significant***.

Table 10
Summary of Recreational Event Noise Impacts
in Comparison to Ambient Noise Levels without Mitigation

Hour of Day	Predicted Average-Hourly Noise Levels Equal or Exceed Ambient Noise Levels?				
	Practice/Event Setup & Closing	Football Practice	Soccer Practice	Competitive Event without PA System	Competitive Event with PA System
Weekday (Monday-Thursday)					
0600-0700	No	No	No	No	**Yes**
0700-0800	No	No	No	No	**Yes**
0800-1900	No	No	No	No	**Yes**
1900-2200	No	No	No	No	**Yes**
2200-2300	No	No	No	**Yes**	**Yes**
2300-2400	**Yes**	No	No	**Yes**	**Yes**
Weekday (Friday)					
0600-0700	No	No	No	No	**Yes**
0700-0800	No	No	No	No	**Yes**
0800-1900	No	No	No	No	**Yes**
1900-2200	No	No	No	No	**Yes**
2200-2300	No	No	No	**Yes**	**Yes**
2300-2400	**Yes**	No	No	**Yes**	**Yes**
Saturday					
0600-0700	**Yes**	**Yes**	No	**Yes**	**Yes**
0700-0800	**Yes**	**Yes**	No	**Yes**	**Yes**
0800-1900	No	No	No	No	**Yes**
1900-2200	No	No	No	No	**Yes**
2200-2300	No	No	No	No	**Yes**
2300-2400	**Yes**	No	No	**Yes**	**Yes**
Sunday					
0600-0700	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
0700-0800	**Yes**	**Yes**	No	**Yes**	**Yes**
0800-1900	No	No	No	No	**Yes**
1900-2200	No	No	No	No	**Yes**
2200-2300	**Yes**	No	No	**Yes**	**Yes**
2300-2400	**Yes**	No	No	**Yes**	**Yes**

Notes:
In comparison to measured ambient average-hourly noise levels (refer to Table 2 and Appendix A).
Predicted maximum instantaneous noise levels associated with proposed recreational uses would not be projected to exceed ambient noise levels.

Figure 4
Predicted Noise Levels at Nearby Residential Land Uses
Practice/Event Setup & Closing

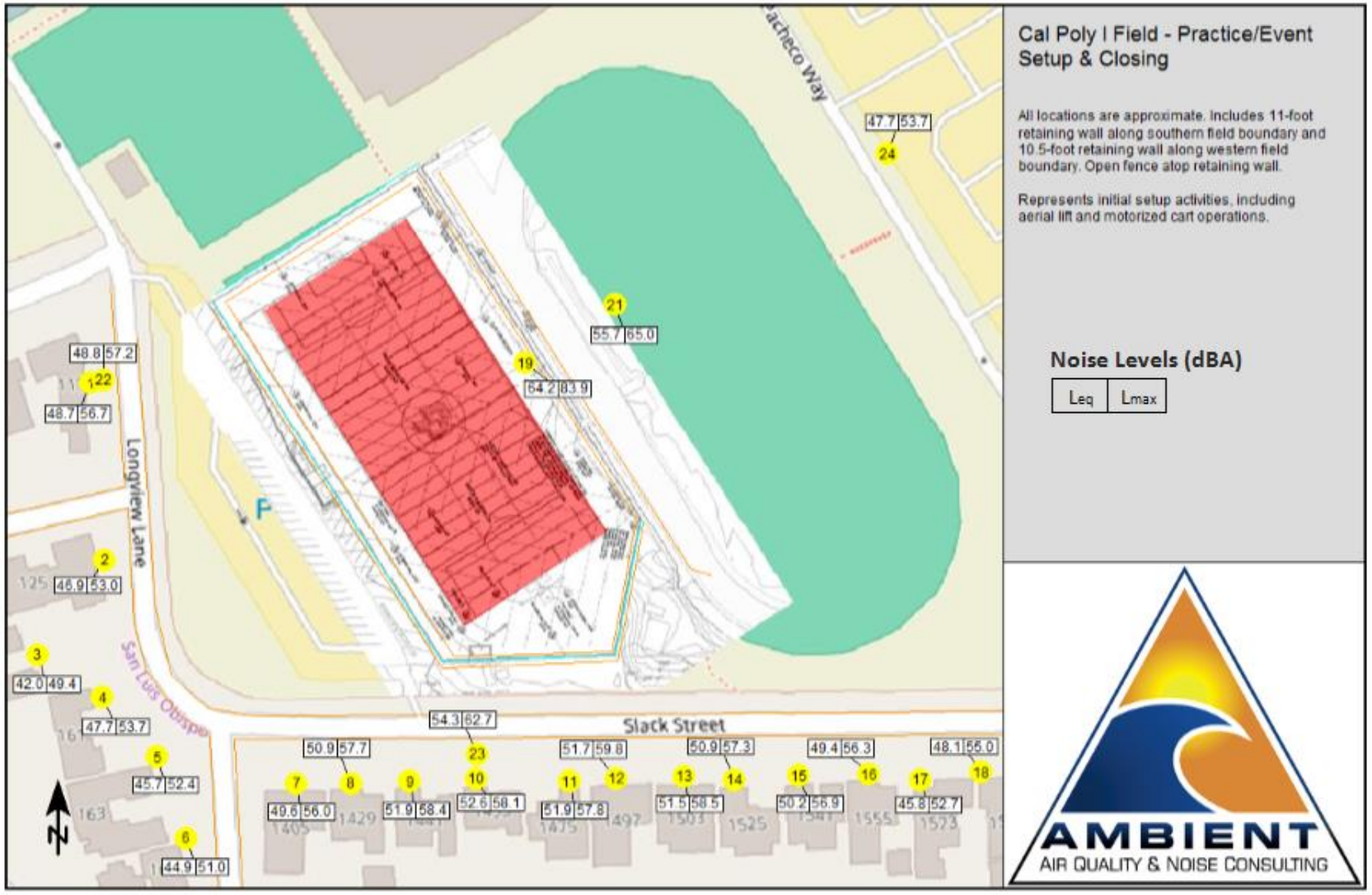


Image Source: San Luis Obispo County 2016, NCE 2016

Figure 5
Predicted Average-Hourly Noise Contours
Practice/Event Setup & Closing

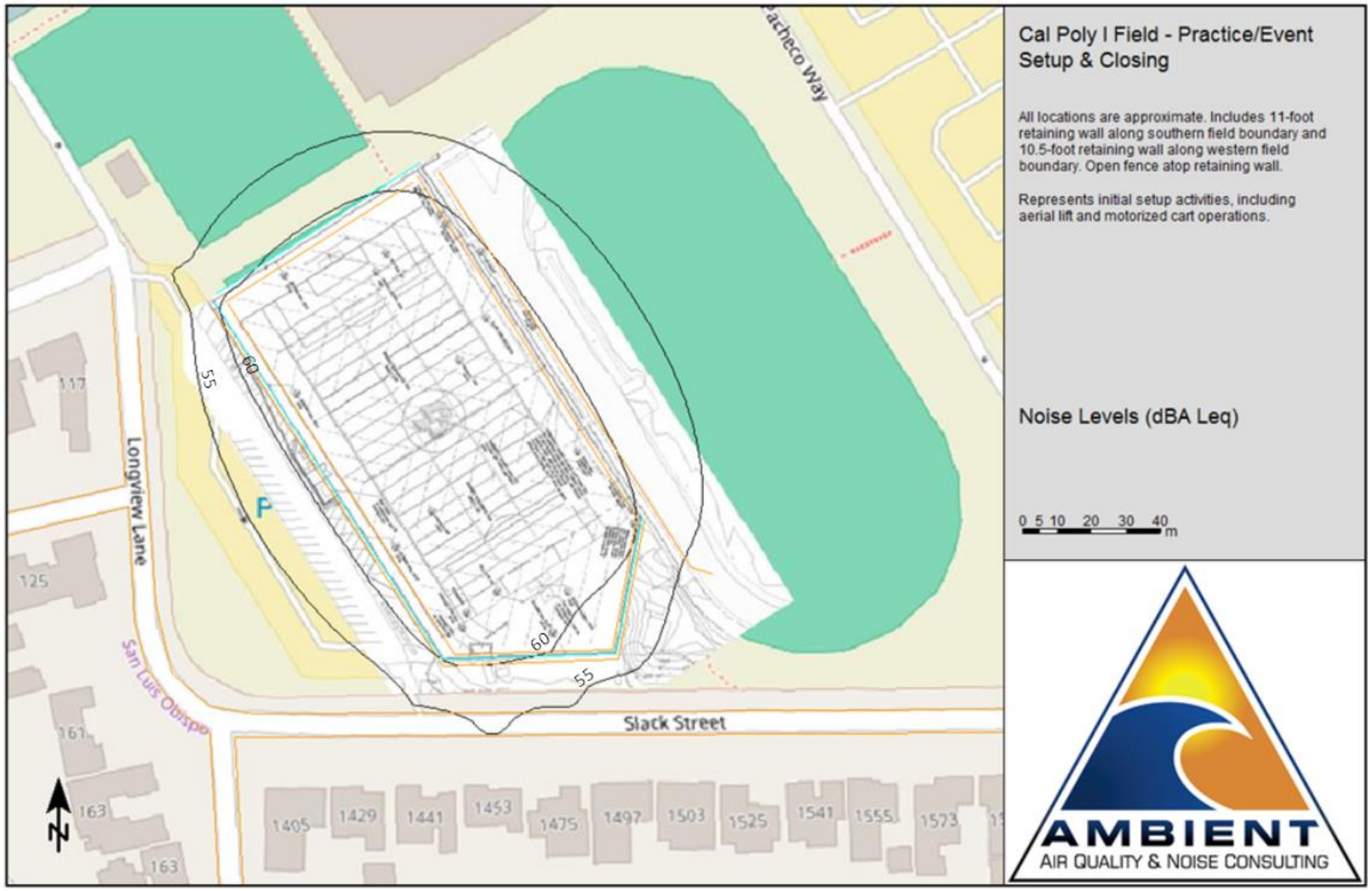


Image Source: San Luis Obispo County 2016, NCE 2016

Figure 6
Predicted Maximum Instantaneous Noise Contours
Practice/Event Setup & Closing

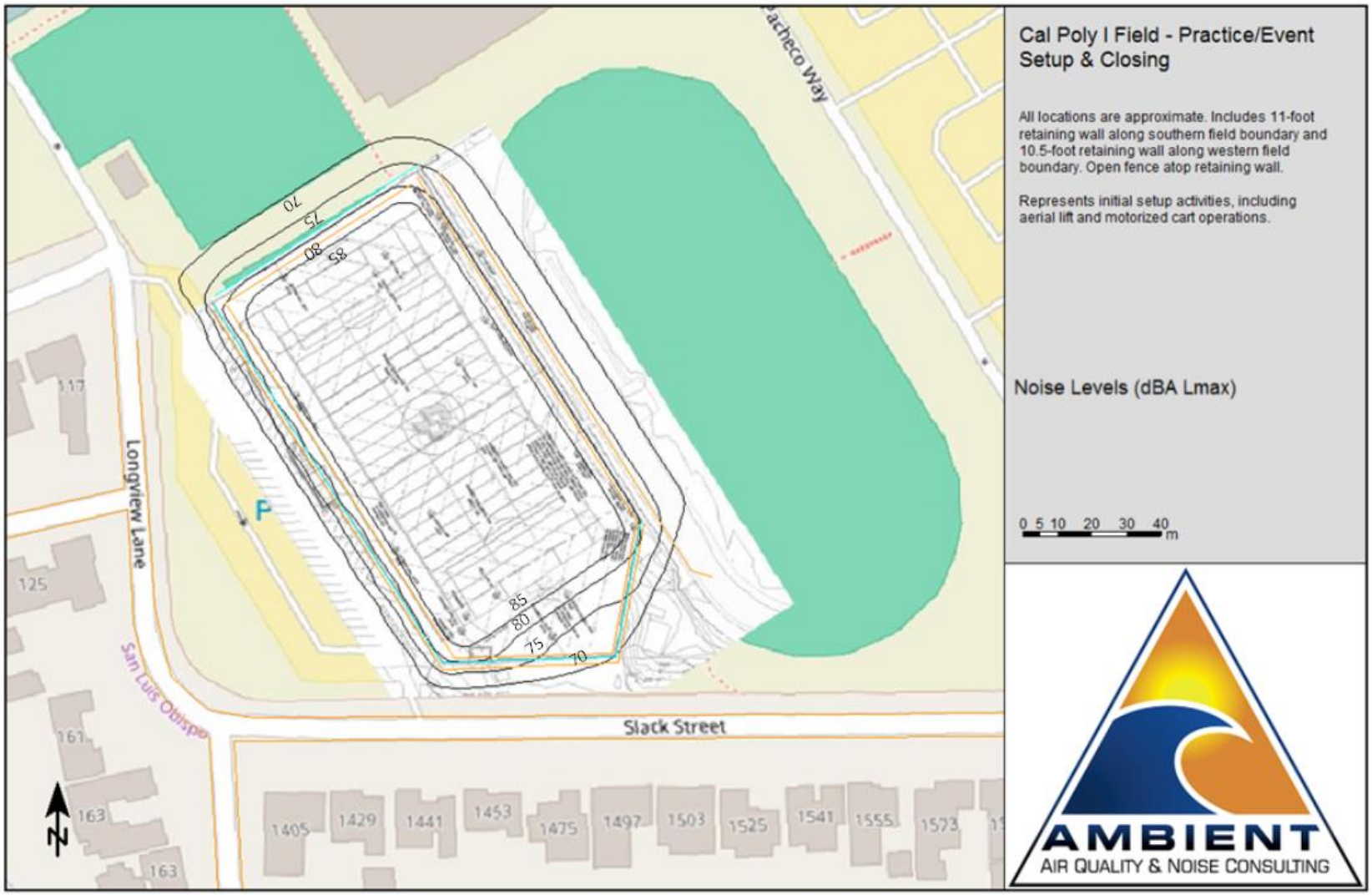


Image Source: San Luis Obispo County 2016, NCE 2016

Figure 7
Predicted Noise Levels at Nearby Residential Land Uses
Football Practice

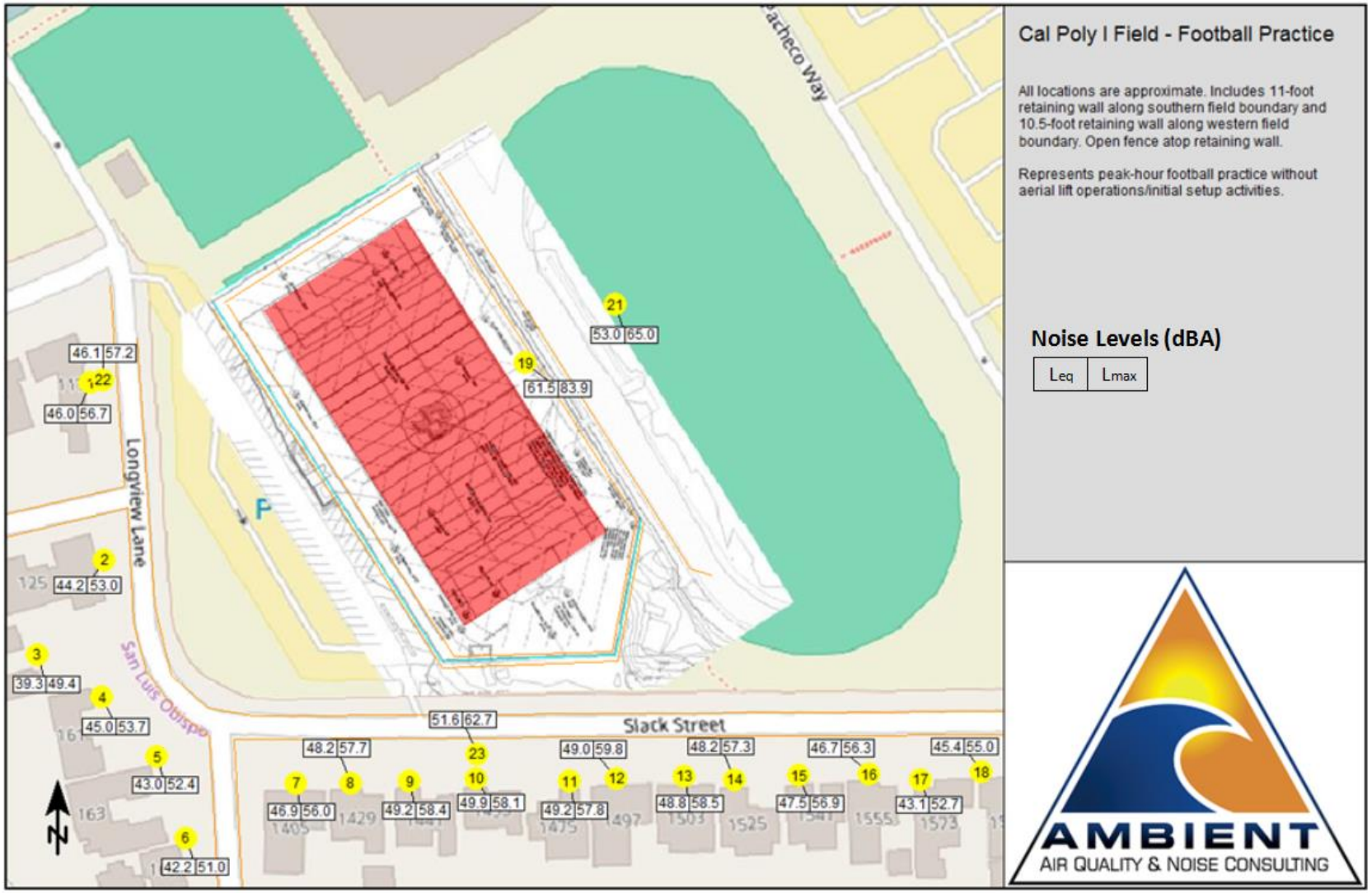


Image Source: San Luis Obispo County 2016, NCE 2016

Figure 8
Predicted Average-Hourly Noise Contours
Football Practice

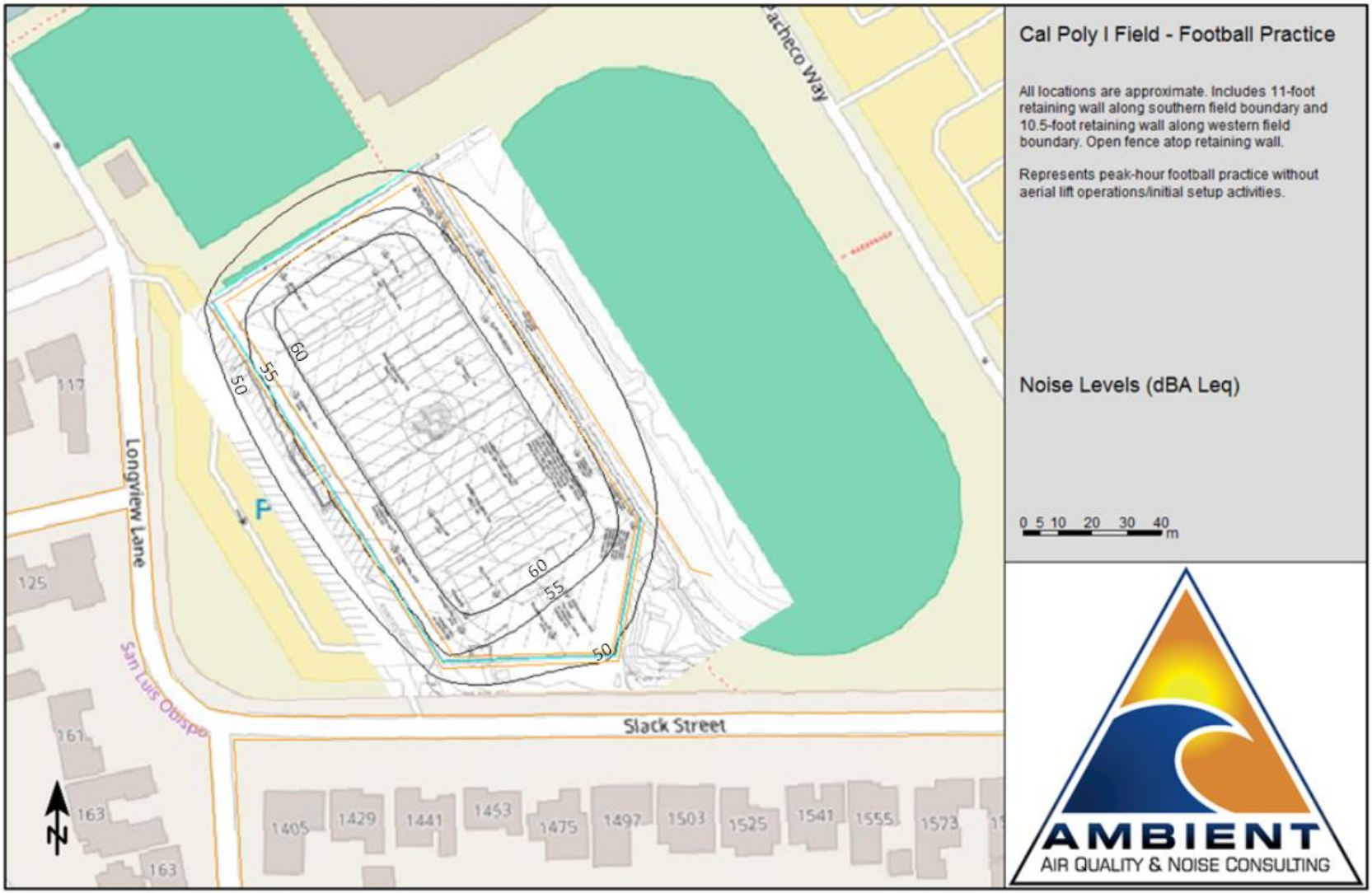


Image Source: San Luis Obispo County 2016, NCE 2016

Figure 9
Predicted Maximum Instantaneous Noise Contours
Football Practice

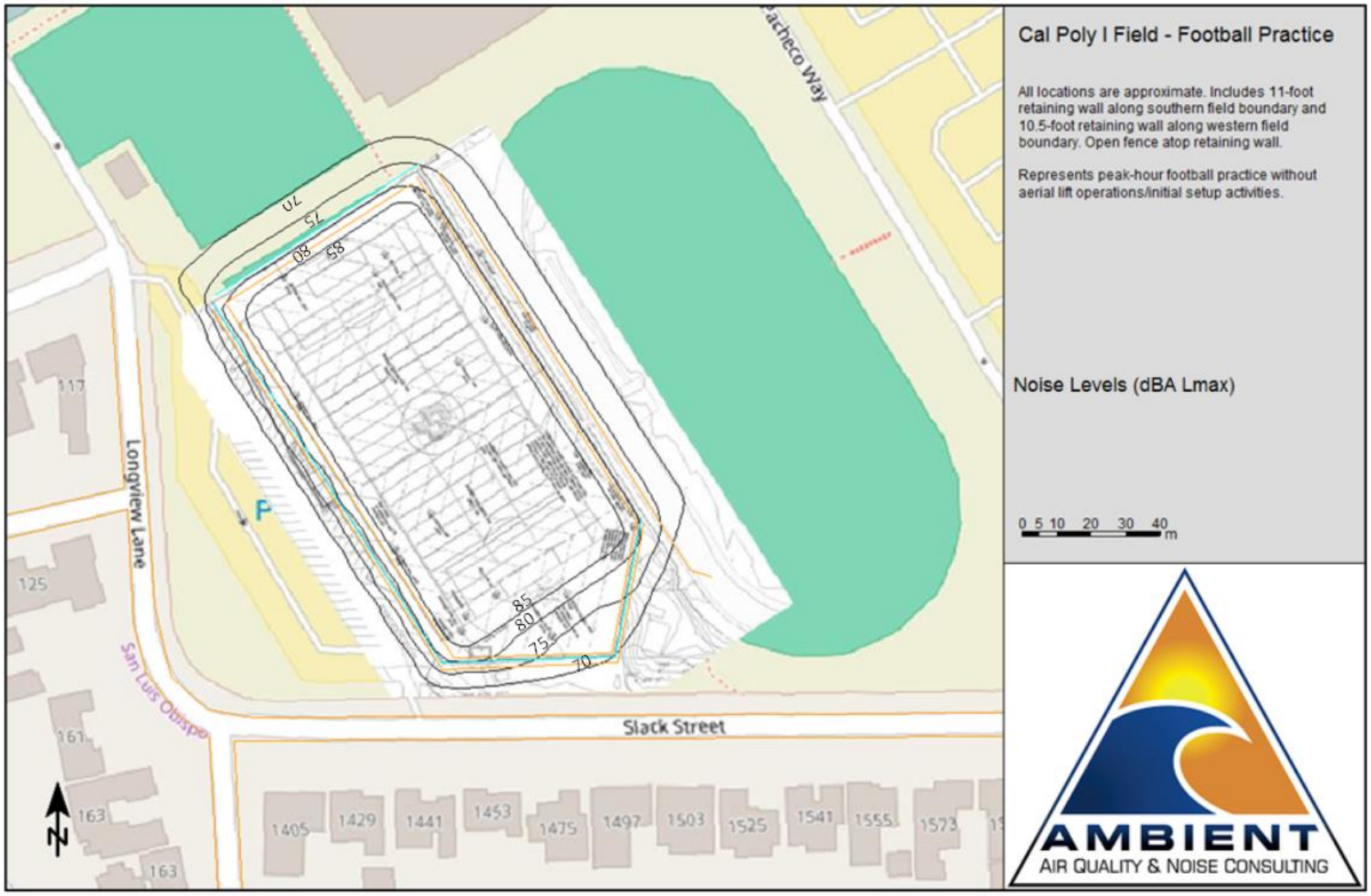


Image Source: San Luis Obispo County 2016, NCE 2016

Figure 10
Predicted Noise Levels at Nearby Residential Land Uses
Soccer Practice

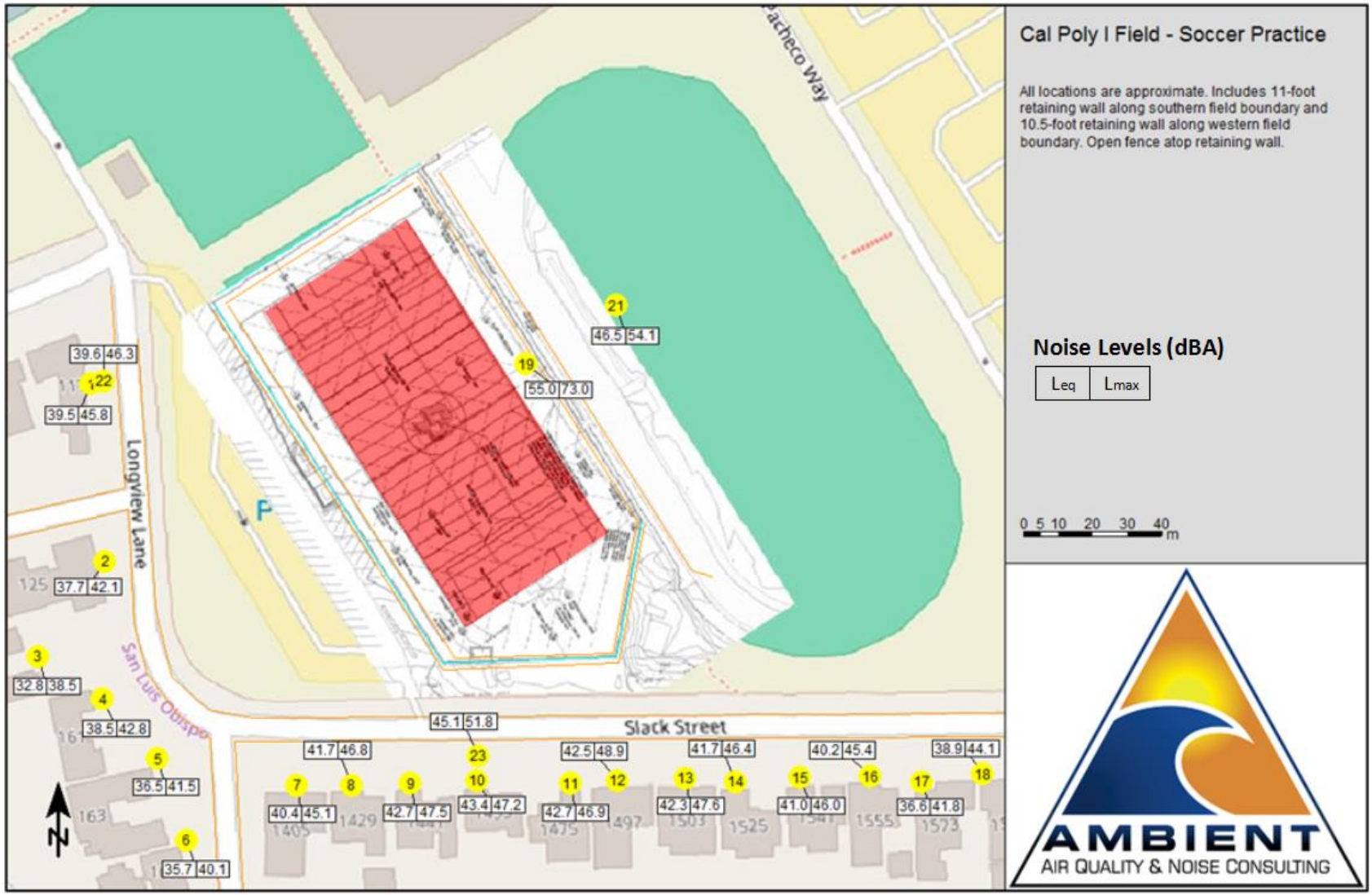


Image Source: San Luis Obispo County 2016, NCE 2016

Figure 11
Predicted Average-Hourly Noise Contours
Soccer Practice

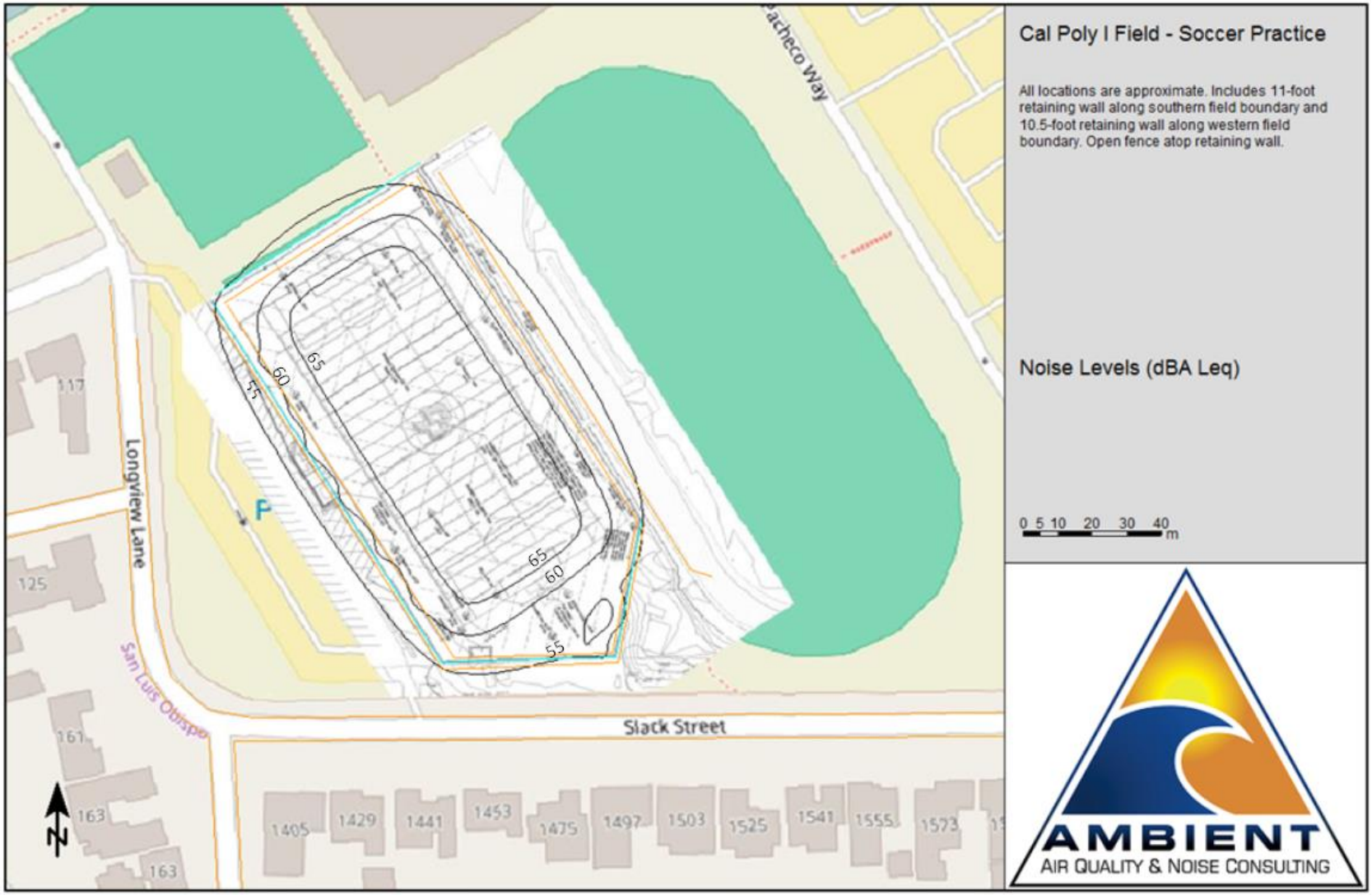


Image Source: San Luis Obispo County 2016, NCE 2016

Figure 12
Predicted Maximum Instantaneous Noise Contours
Soccer Practice

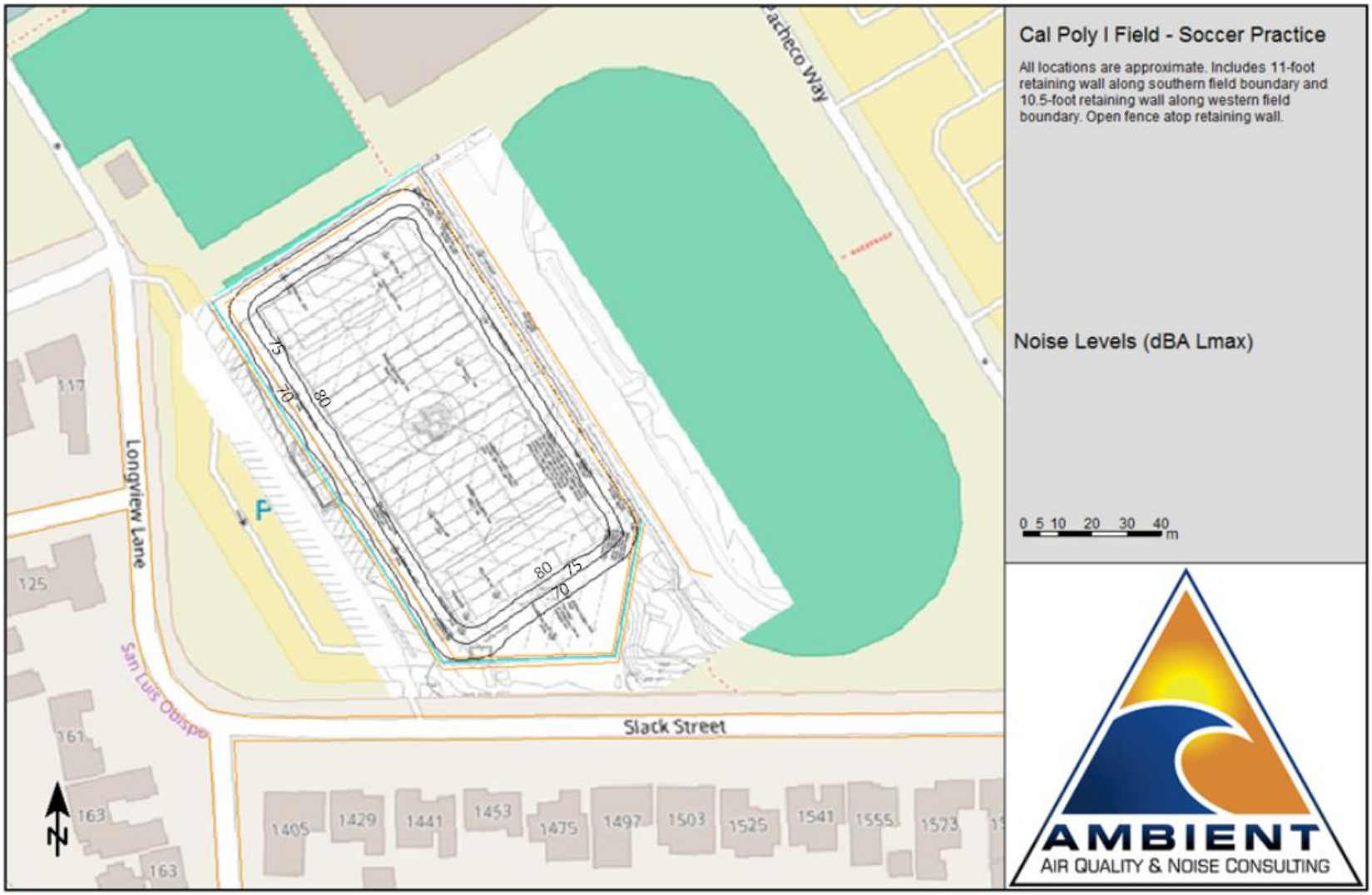


Image Source: San Luis Obispo County 2016, NCE 2016

Figure 13
Predicted Noise Levels at Nearby Residential Land Uses
Competitive Event without PA System

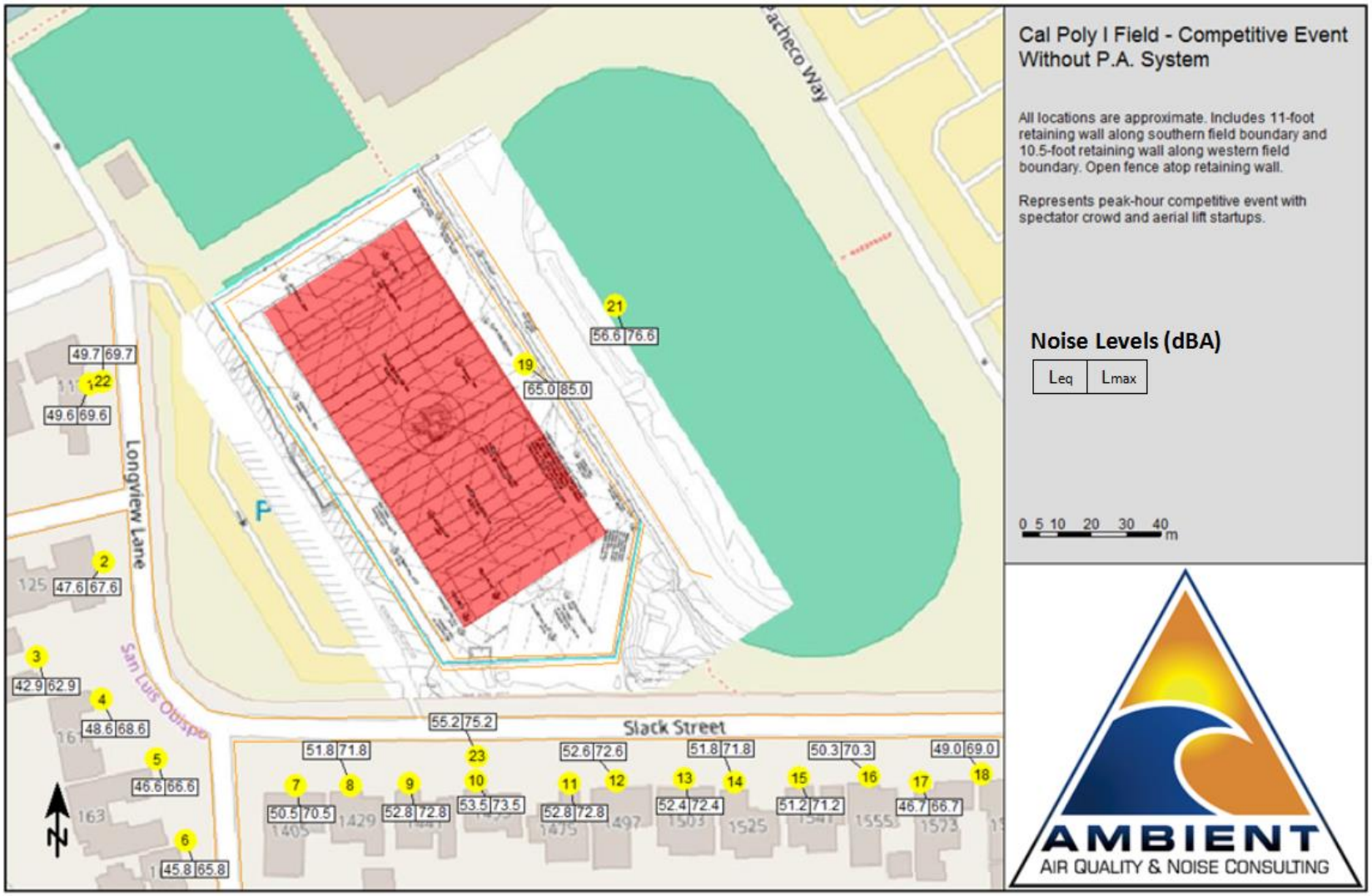


Image Source: San Luis Obispo County 2016, NCE 2016

Figure 14
Predicted Average-Hourly Noise Contours
Competitive Event without PA System

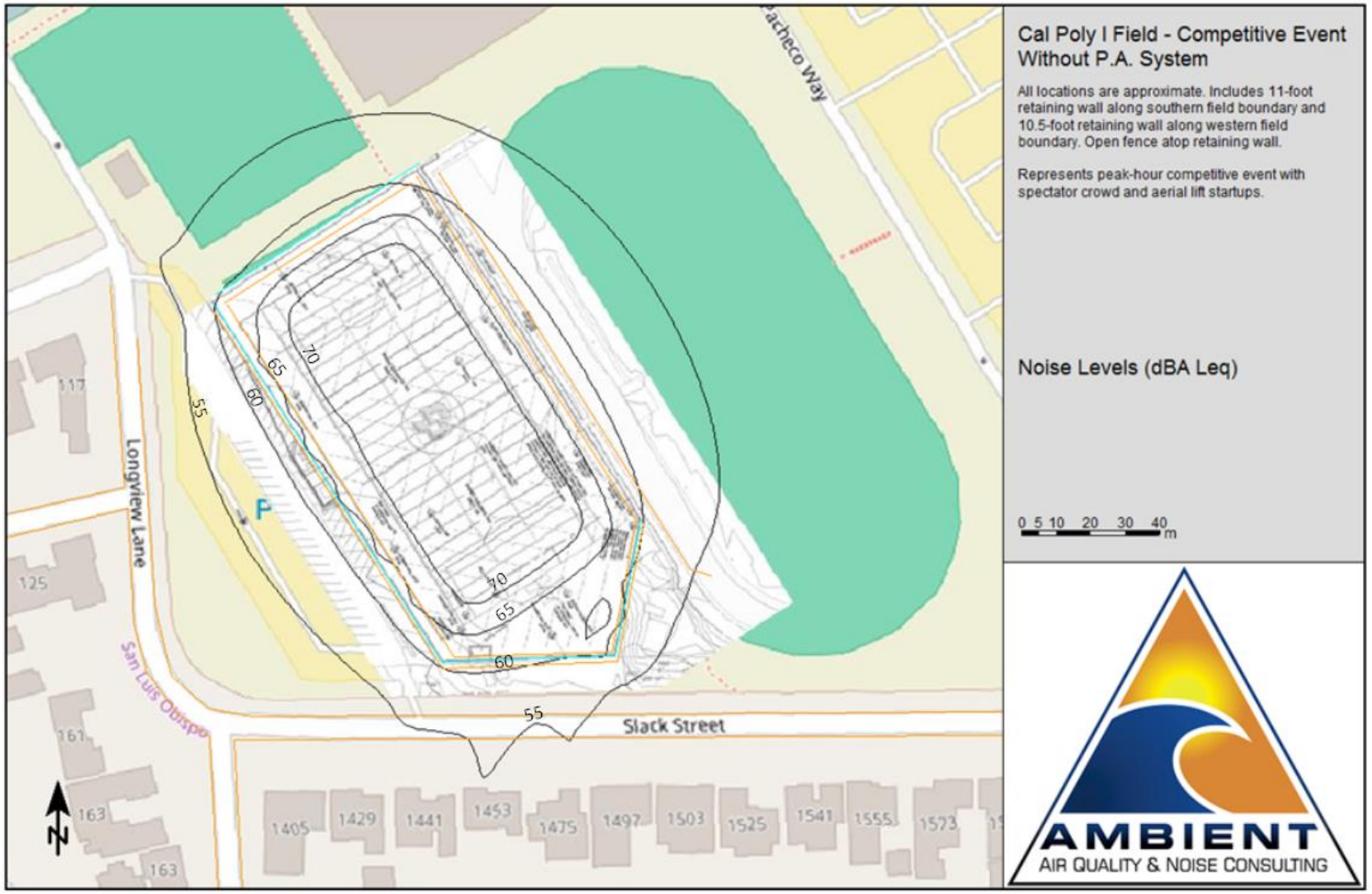


Image Source: San Luis Obispo County 2016, NCE 2016

Figure 15
Predicted Maximum Instantaneous Noise Contours
Competitive Event without PA System

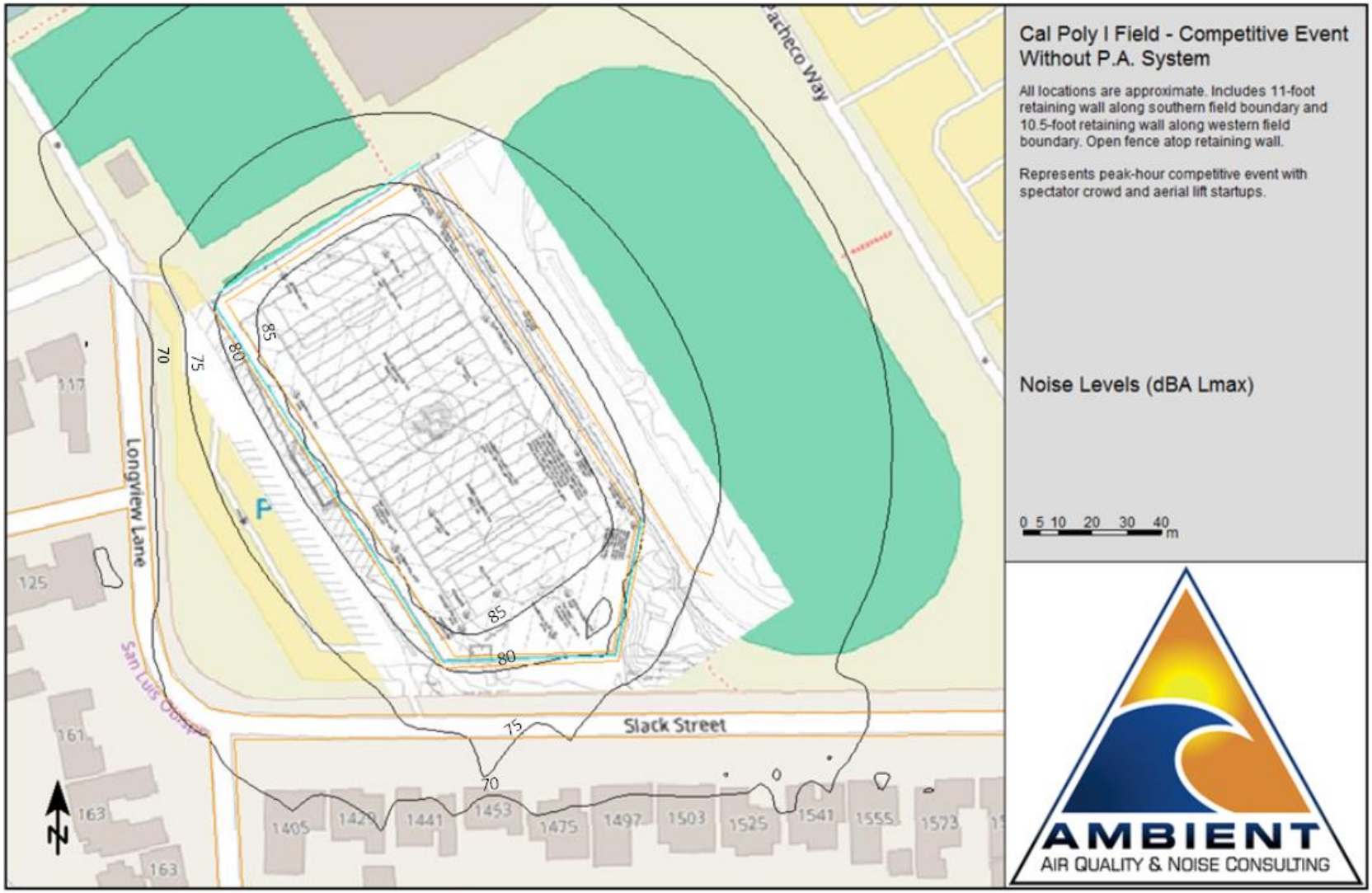


Image Source: San Luis Obispo County 2016, NCE 2016

Figure 16
Predicted Noise Levels at Nearby Residential Land Uses
Competitive Event with PA System

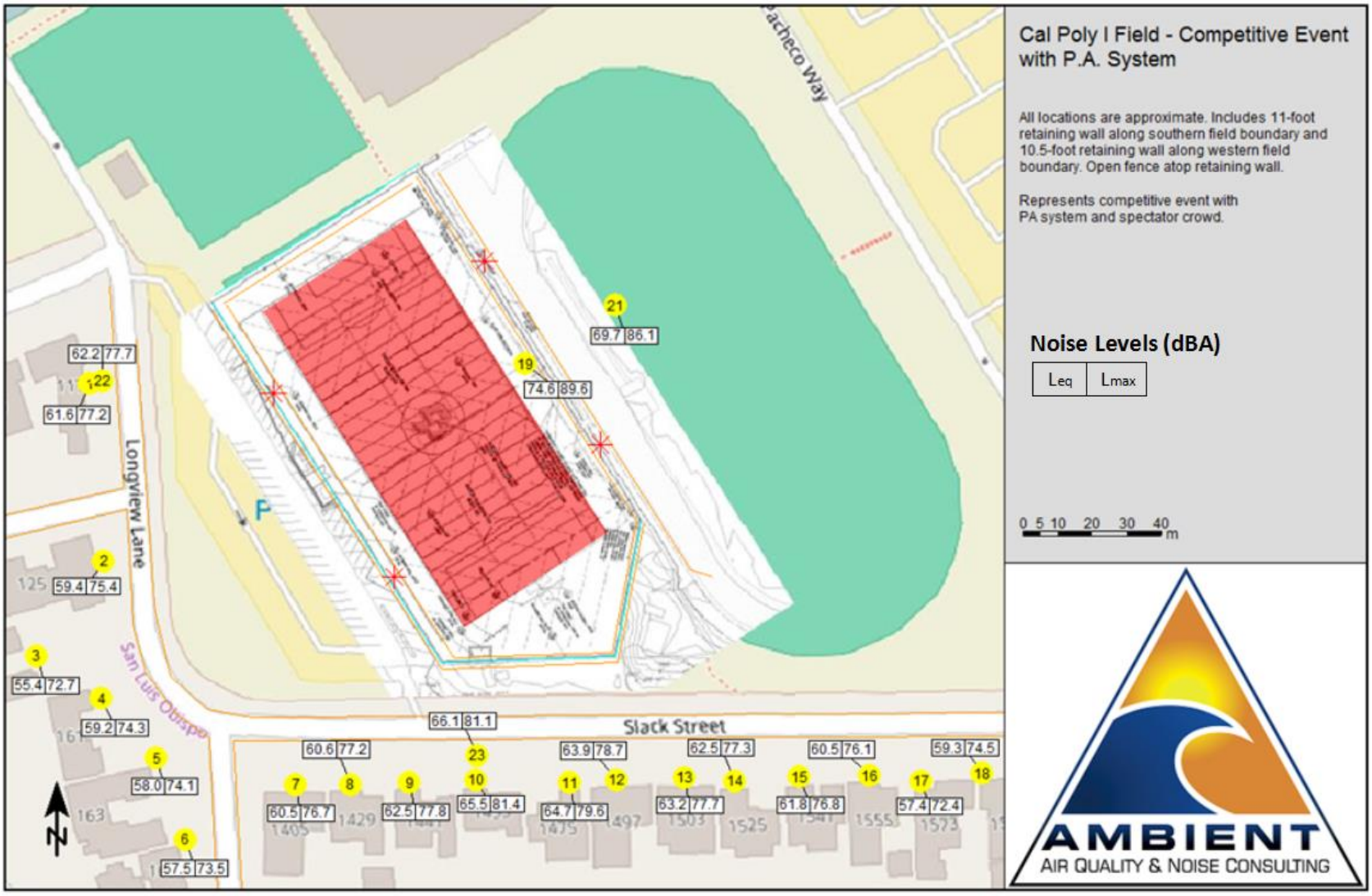


Image Source: San Luis Obispo County 2016, NCE 2016

Figure 17
Predicted Average-Hourly Noise Contours
Competitive Event with PA System

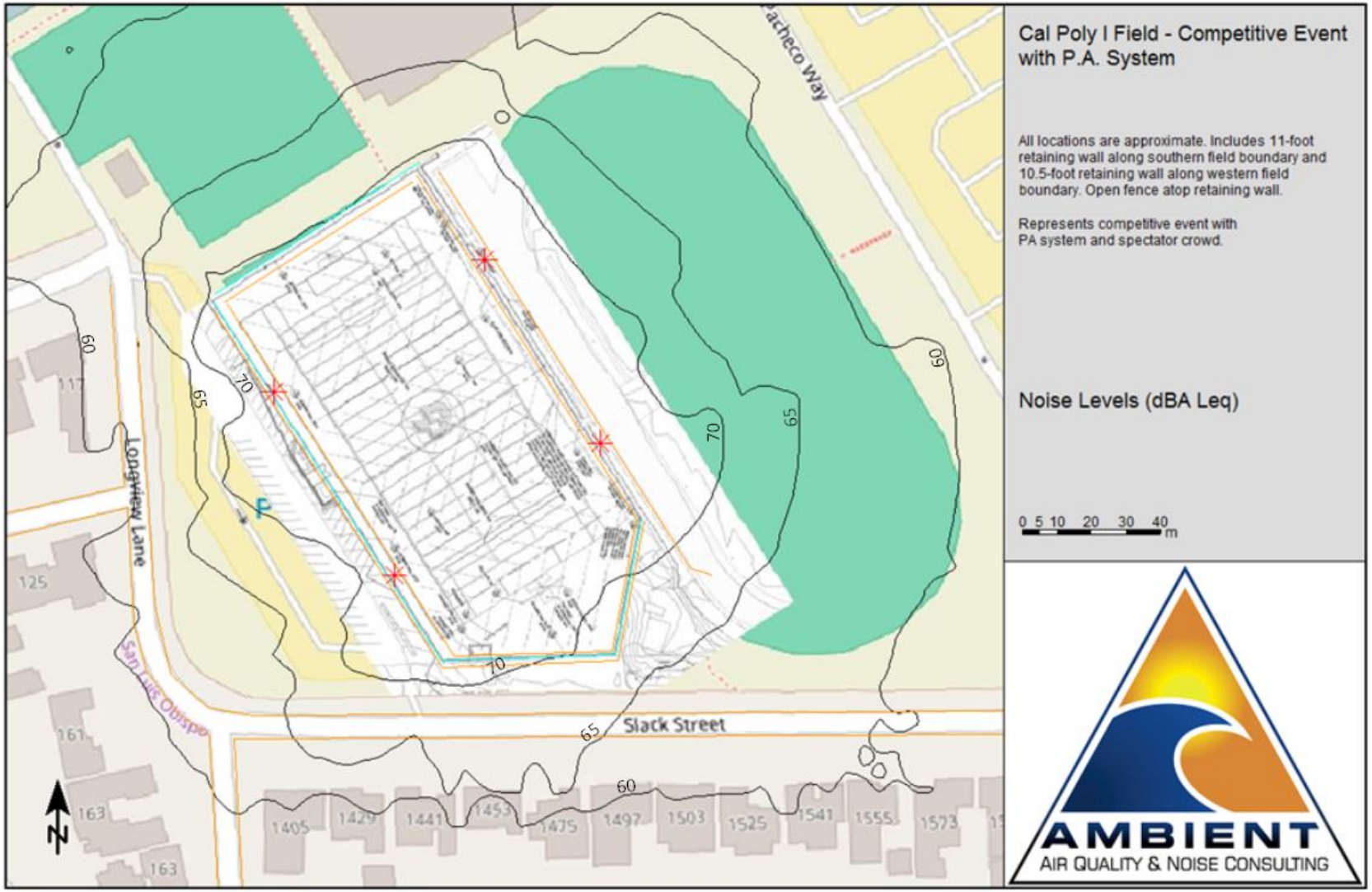


Image Source: San Luis Obispo County 2016, NCE 2016

Figure 18
Predicted Maximum Instantaneous Noise Contours
Competitive Event with PA System

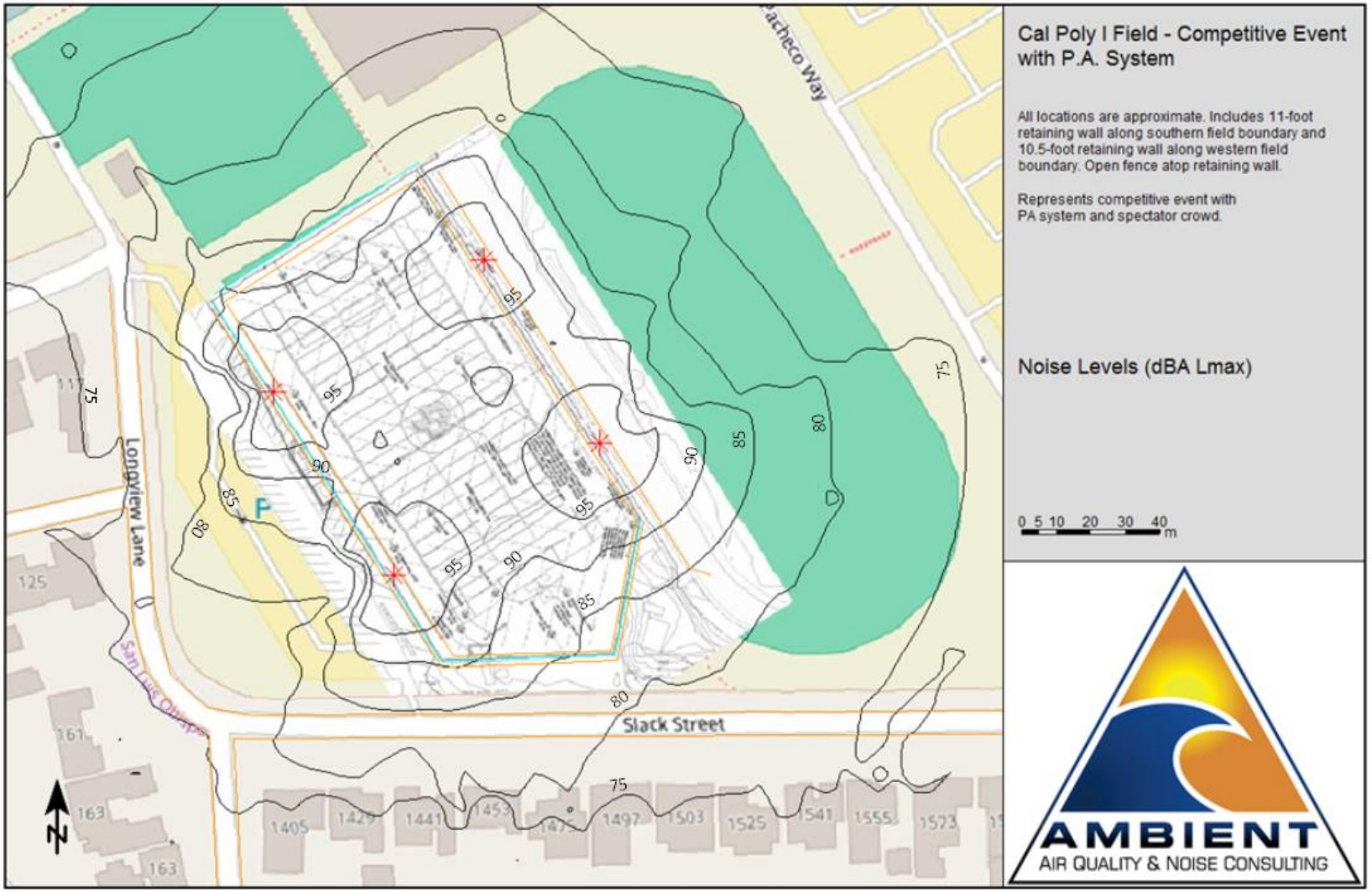


Image Sources: San Luis Obispo County 2016, NCE 2016

Impact Noise-D ***Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?***

Construction noise typically occurs intermittently and varies depending upon the nature or phase of construction (e.g., land clearing, grading, excavation, and paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Noise levels associated with individual construction equipment that is anticipated to be required for construction of the proposed project are summarized in Table 11.

Table 11
Typical Construction Equipment Noise Levels

Equipment	Typical Noise Level (dBA) at 50 feet	
	L_{max}	L_{eq}
Backhoe	78	74
Compactor	83	76
Concrete Mixer	79	75
Crane, Mobile	81	73
Dozer	82	78
Excavator	81	77
Forklift	83	79
Generator	81	78
Grader	85	81
Loader	79	75
Roller	80	73
Welder	74	70
Sources: FTA 2006		

Construction-generated noise levels associated with the proposed project were quantified based on the noise levels identified in Table 10 and estimated equipment usage anticipated to be required for each of the major construction phases. Predicted noise levels at the nearest residential land uses associated with major construction phases are summarized in Table 12. As depicted, intermittent noise levels at the nearest residences could reach levels of up to approximately 71 dBA L_{max}. Depending on the activities conducted and equipment used, average-hourly noise levels at the nearest residences would range from approximately 69 to 71 dBA L_{eq}. Haul trucks required for the delivery of construction materials would also result in short-term detectable increases in traffic noise levels along nearby roadways.

Construction-generated noise levels would not be anticipated to exceed the instantaneous daytime noise standard of 75 dBA L_{max}. However, in the event that construction activities were to occur during the nighttime hours, resultant noise levels at the property line of the nearest residences would exceed the noise standard of 60 dBA L_{max}. Furthermore, with regard to residential land uses, increases in ambient noise levels during the more noise-sensitive evening and nighttime hours (i.e., 7:00 p.m. to 7:00 a.m.) could also result in increased levels of annoyance and potential sleep disruption for building occupants. As a result, this impact is considered ***potentially significant***.

Table 12
Predicted Construction Noise Levels at the Nearest Residential Land Uses

Equipment	Noise Level (dBA)[1]	
	L_{max}	L_{eq}
Construction Staging/Material Import[2]	69	71
Organic Material Removal[3]	69	71
Grading[4]	71	71
Infrastructure/Retaining Walls[5]	69	70
Drainage Rock Import & Distribution[6]	70	71
Synthetic Turf Installation[7]	71	72
Finish/Landscaping[8]	69	69

1. *Based on a distance of 250 feet from source center to the nearest residential land use. To be conservative, predicted noise levels assume all off-road equipment (as noted below) would operate simultaneously.*
2. *Based on equipment use estimates provided by the project engineer. Assumes the use of 3 forklifts/skid steers, 1 crane.*
3. *Based on equipment use estimates provided by the project engineer. Assumes the use of 1 dozer,1 grader, 1 tractor.*
4. *Based on equipment use estimates provided by the project engineer. Assumes the use of 1 dozer,1 grader, 1 roller, 3 compactors.*
5. *Based on equipment use estimates provided by the project engineer. Assumes the use of 1 forklift/skid steer, 1 tractor, 1 generator, 1 welder, 1 mixer.*
6. *Based on equipment use estimates provided by the project engineer. Assumes the use of 2 forklifts/skid steers, 2 tractors, 1 excavator.*
7. *Based on equipment use estimates provided by the project engineer. Assumes the use of 2 forklifts/skid steers, 1 tractor, 1 grader, 1 generator.*
8. *Based on equipment use estimates provided by the project engineer. Assumes the use of 2 forklifts/skid steers, 1 tractor.*

Mitigation Measure Noise-2a: Implement the University's standard construction noise management requirements. Measures include, but are not limited to, the following:

1. 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 dB at 50 feet as measured under the noisiest operating conditions. For all other equipment, noise levels shall not exceed 85 dB at 50 feet.
2. 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.
3. 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.
4. Scheduling: schedule noisy operations 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.
5. Do not play radios, tape recorders, televisions, and other similar items at construction site.
6. 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.
7. 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. The University 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. The University reserves the right to stop noisy work at any time when said work disrupts classes.

Mitigation Measure Noise-2b: In addition to the standard measures noted above, the following additional measures shall be implemented:

1. Noise-generating construction activities shall be limited to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday. Noise-generating construction activities shall be prohibited on Sundays and holidays.
2. Construction equipment should be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds should be closed during equipment operation.
3. Lay-down and vehicle staging areas shall be located at the furthest practical distance from nearby residential land uses.
4. Whenever possible, the noisiest construction activities and haul truck activities shall be scheduled during periods of the day (e.g., non-peak traffic hours) that would have the least impact or during summer sessions and other times when classes are not in session.

Significance After Mitigation

With implementation of Mitigation Measure Noise-2, construction activities would be limited to the less noise-sensitive daytime hours of between 7:00 a.m. to 7:00 p.m., Monday through Saturday. Noise-generating construction activities would also be prohibited on Sundays and holidays. These hourly restrictions would minimize noise-related disturbances to occupants of nearby residential land uses. Additional measures have also been incorporated to further reduce construction-generated noise levels. With mitigation, this impact would be considered ***less than significant***.

REFERENCES

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_____. June 2004. *Transportation and Construction-Induced Vibration Guidance Manual.*

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North Coast Engineering (NCE). 2016. *California Polytechnic State University San Luis Obispo, CA I Field Schematic Drawings*.

SWCA Environmental Consultants. April-December 2016. Email correspondence with Kurt Legleiter, Principal, AMBIENT Air Quality & Noise Consulting.

APPENDIX A

Noise Monitoring Survey Reports

NOISE MONITORING SURVEY

DATE:	29-Apr-16
PROJECT:	Noise Monitoring at CalPoly Football Practice

NOISE MONITORING LOCATION: CalPoly, Upper Fields Sports Complex, San Luis Obispo, CA

Monitoring Location: Edge of Field, 50 yard line.
Notes: Not to scale. All locations are approximate.
Image Source: Google Maps 2016.

MET CONDITIONS: TEMP: 50-52 F. HUMIDITY: 89 % WIND SPEED: 0-3 MPH SKY: Light fog GROUND: Dry

NOISE MONITORING EQUIPMENT: LARSON DAVIS MODEL 820, TYPE I SLM

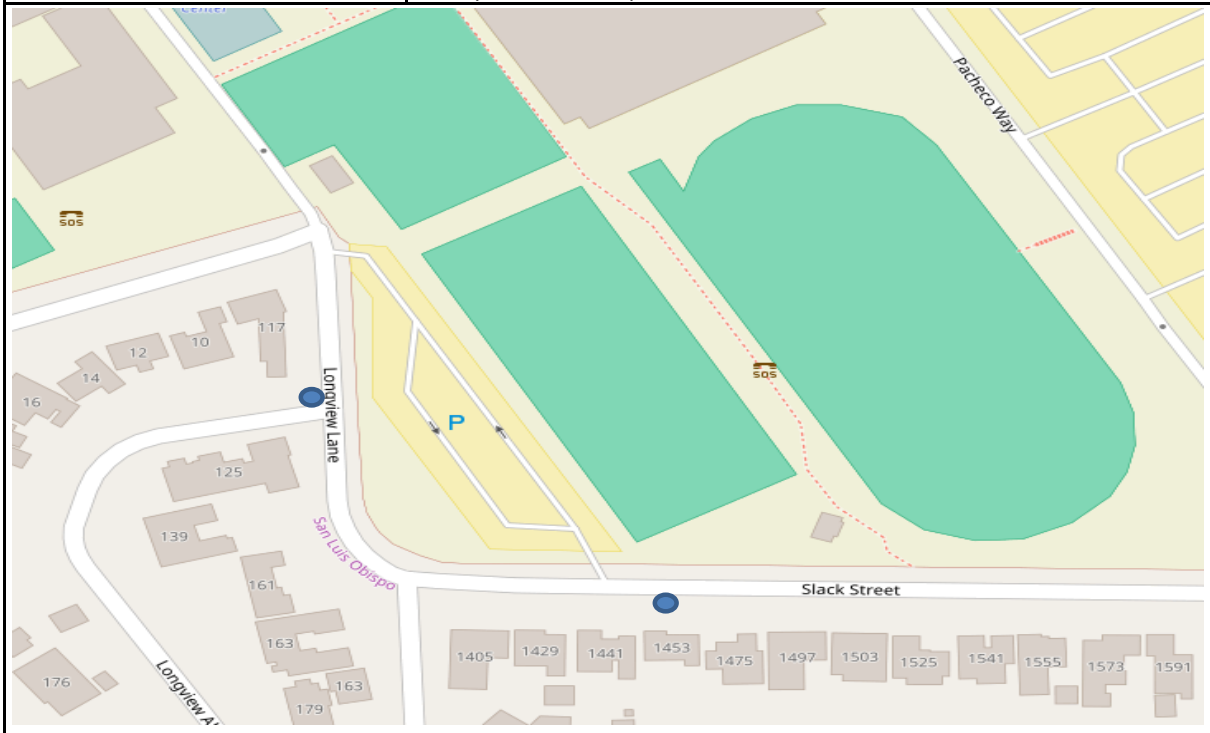
CALIBRATED PRIOR TO AND UPON COMPLETION OF MEASUREMENTS: YES

MONITORING PERIOD	PRIMARY NOISE SOURCES	NOISE LEVEL					
		LEQ	LMAX	L5	L10	L33	L50
0630-0700	Voices, Motorized Carts, Aerial Lift Startups, Yelling, Whistles	64.2	83.9	67.4	65.4	60	57.1
	Aerial Lift at 10 feet		82.3				
	Whisle Blowing at ~100 feet		69.9				
	Motorized cart at 10 feet		73.4				
	Yelling at feet		83.9				
0700-0715	Voices, Yelling, Whistles.	58.3	74.1	63.3	61.2	56.5	55
0715-0730	Voices, Yelling, Whistles.	62.6	75.4	68.4	66.5	61.4	58.6
0730-0745	Voices, Yelling, Whistles.	62.8	79.6	68.9	66.7	61.2	58.4
0745-0800	Voices, Yelling, Whistles.	62.4	79.6	68.5	66.2	60.7	58.1
0800-0815	Voices, Yelling, Whistles.	63.8	81.8	69.6	67	61.2	58.5

NOTES: Practice average-hourly noise level: 61.5 Leq at 100' from field center. (Setup: 64.2 Leq)

NOISE MONITORING SURVEY

DATE:	3-Oct-16
PROJECT:	"I" Field
NOISE MONITORING LOCATION	CalPoly, San Luis Obispo, CA



Not to Scale

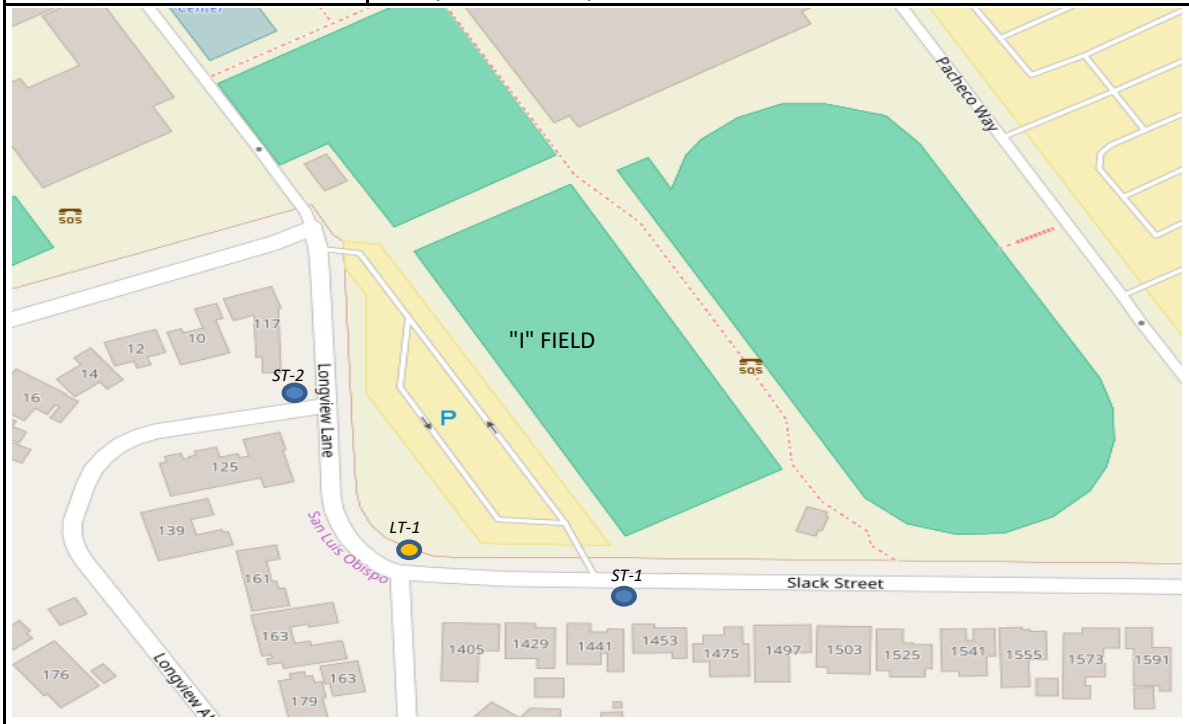
MET CONDITIONS:	TEMP: 70 F. HUMIDITY: 51 % WIND SPEED: 0-4 MPH SKY: Clear GROUND: Dry
NOISE MONITORING EQUIPMENT:	LARSON DAVIS MODEL 820, TYPE I SLM
CALIBRATED PRIOR TO AND UPON COMPLETION OF MEASUREMENTS:	YES

MONITORING PERIOD	LOCATION	SOURCES	NOISE LEVEL					
			LEQ	LMAX	L10	L33	L50	L90
1620-1635	Slack Street	Traffic & Voices Primary. Const. in Distance/Background	57.9	76.3	62.5	57.2	50.5	46.1
1600-1610	Longview Lane	As above	58.1	78.2	59.8	55.2	52.8	48.1
1815-1825	Slack Street	Traffic & Voices Primary.	58.3	79.4	62.2	56.9	50.3	45.6
1830-1835	Longview Lane	Traffic & Voices Primary.	59.4	85.1	59.7	55.1	52.1	45.4

NOTES:

NOISE MONITORING SURVEY

PROJECT:	CalPoly "I" Field Improvement Project
DATE:	Nov 7, 9, 10, 2016 (Weekdays)
NOISE MONITORING LOCATION	CalPoly, San Luis Obispo, CA



MET CONDITIONS:

11/7/2016	TEMP: 60-85 F. HUMIDITY: 30-60 % WIND SPEED: 0-7 MPH SKY: Clear-PC GROUND: Dry
11/9/2016	TEMP: 56-60F. HUMIDITY: 80% WIND SPEED: 0-1MPH SKY: Clear =PC GROUND: Dry
11/10/2016	TEMP: 53-55F. HUMIDITY: 80% WIND SPEED: 0-1MPH SKY: Clear =PC GROUND: Dry

NOISE MONITORING EQUIPMENT: LARSON DAVIS MODEL 820, TYPE I SLM

CALIBRATED PRIOR TO AND UPON COMPLETION OF MEASUREMENTS: YES WINDSCREEN USED? YES

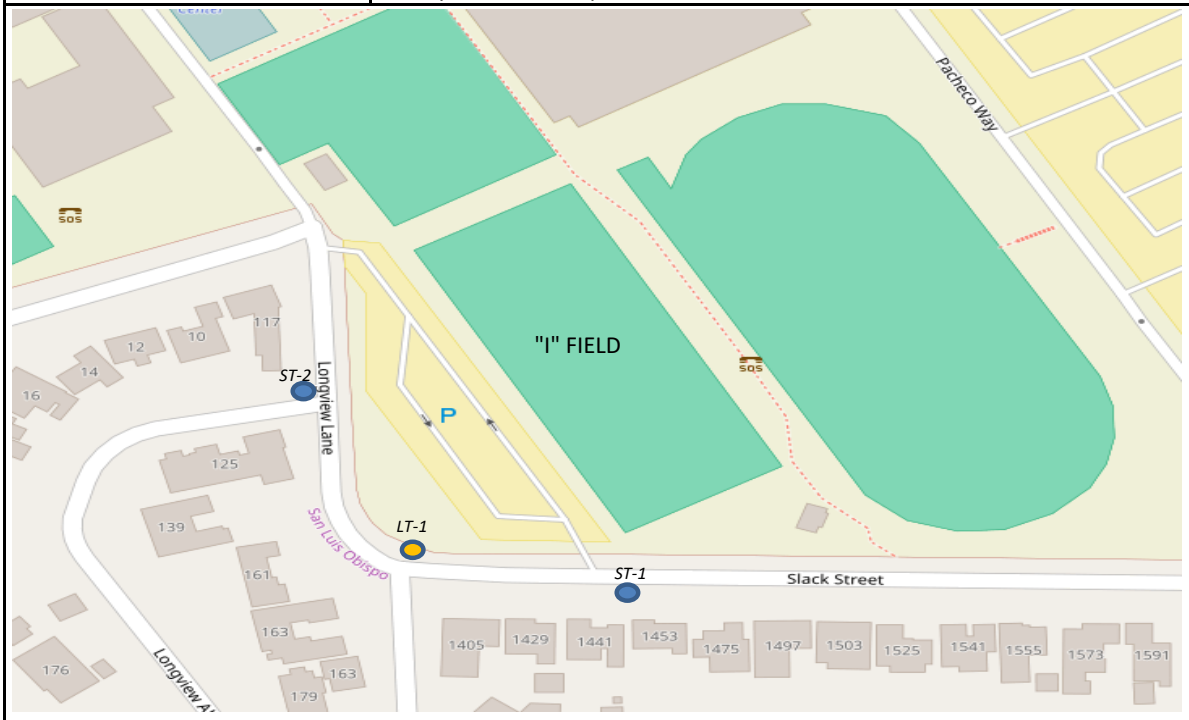
MONITORING PERIOD	LOCATION	SOURCES	NOISE LEVEL					
			LEQ	LMAX	L10	L33	L50	L90
11/7/2016 0600-0700	LT-1.	Traffic & voices	55.8	80.8	55.3	50.3	49.1	46.3
11/7/2016 0700-0800	LT-1.	Traffic & voices of Individuals. Hammering/Backup beepers/equipment in distance/background.	58.9 (56.4)	80.6	59.8	56.2	54.6	51.1
11/7/2016 0800-0850	LT-1.	As above	59.3 (56.8)	79.4	58.6	55	53.5	49.9
11/7/2016 0850-0900	LT-1.	Traffic & voices of Individuals. Hammering/Backup beepers/equipment in distance/background. Car horns alarm sounding intermittent. Occassional aircraft overflight.	60.6 (58.4)	79.7	60.7	57.3	55.3	52.2
11/7/2016 0900-1000	LT-1.	As above	59.4 (57.2)	80.6	59.9	56.4	54.5	51.3

11/7/2016 1000-1100	LT-1.	As above	58.2 (56.0)	80.2	59.1	55.7	53.8	50.5
11/7/2016 1100-1200	LT-1.	As above	57.8 (55.6)	77	59.6	54.5	52.6	48.5
11/7/2016 1200-1230	LT-1.	As above. No construction detectable.	56.5	76.3	58.4	53.2	52.1	47.3
11/7/2016 1240-1300	LT-1.	Traffic & voices of Individuals along roadway and at track Hammering/Backup beepers/equipment in distance/background. Soccer practice on I Field indiscernible. Car horns alarm sounding intermittent. Occassional aircraft overflight.(Const: +2dB Leq)	58.4 (56.2)	74.6	58.7	54.8	53.1	48.7
11/7/2016 1310-1400	LT-1.	As above, No soccer practice.	58.9 (56.7)	80	58.7	54.8	53	48.1
11/7/2016 1400-1415	LT-1.	As above (Const: +2dB Leq)	58.5 (56.3)	68.4	60.6	56.8	55.1	51.6
11/7/2016 1420-1500	LT-1.	As above	58.4 (56.2)	72.8	60.6	56.2	54.2	49.8
11/7/2016 1530-1600	LT-1.	Traffic Primary. Occassional voices and hammering in distance/background. No backup beepers/const equipment detectable. Car horns alarm sounding intermittent. Train horn in distance. Occassional aircraft overflight.	57.3	73.7	60.5	55.5	52.7	48.1
11/7/2016 1600-1700	LT-1.	As above	58	78.6	60.3	55.5	53.1	48.5
11/7/2016 1700-1800	LT-1.	As above	59	79.3	60.1	55.5	53	46.8
11/7/2016 1800-1900	LT-1.	As above	58.6	81.8	59.8	55.7	53.3	47.1
11/7/2016 1900-2000	LT-1.	Traffic primary. Voices, tennis, opening/closing car doors, car starts intermittent/background.	59.8	85.4	60.1	55.6	52.3	45.8
11/7/2016 2015-2100	LT-1.	Traffic primary. Voices, tennis, opening/closing car doors, car starts intermittent/background.	60	83.8	59.3	53.2	49.6	43.5
11/7/2016 2100-2200	LT-1.	Traffic primary. Voices, tennis, opening/closing car doors, car starts intermittent/background.	57.5	78.4	59.2	54.8	52.6	46
11/7/2016 2250-2300	LT-1.	Traffic primary. Voices, opening/closing car doors, car starts intermittent/background	55.6	76.6	56.7	52.4	50.1	43.5
11/9/2016 2230-2300	LT-1.	Traffic primary. Voices, opening/closing car doors, car starts intermittent/background	55.2	75.7	56.4	52.1	49.8	43.1
11/7/2016 2300-2310	LT-1.	Traffic primary. Voices, opening/closing car doors, car starts intermittent/background	53.2	71.1	56.9	51.1	48.4	43.2
11/9/2016 2300-2320	LT-1.	Traffic primary. Voices, opening/closing car doors, car starts intermittent/background	52.6	69.3	55.7	50.2	47.2	42.1
11/7/2016 0920-0930	ST-1	Traffic, voices, construction	57.7 (55.5)	68.3	61.3	57.5	54.8	50
11/7/2016 1525-1535	ST-1	Vehicle traffic, voices	56.3	63.4	60.3	56.7	53.8	44.8
11/7/2016 1950-1945	ST-1	Traffic primary, voices, tennis distant/background	58.5	81.5	59.6	55.4	53	46.9
11/9/2016 2200-2210	ST-1	Traffic primary. Voices intermittent.	56.1	75.3	57	53.2	50.8	44.2
11/7/2016 2000-2010	ST-2	Traffic primary, voices, tennis distant/background	61.6	80.2	61.5	58.3	56.1	52.9
11/7/2016 1155-1205	ST-2	Traffic, voices, construction	59.3 (57.1)	69.8	63.8	58.6	55.2	48
11/7/2016 1410-1420	ST-2	Traffic, voices, construction	58.8 (56.6)	75.6	60.8	53.1	51.2	47.1
11/9/2016 2145-2155	ST-2	Traffic primary. Voices intermittent.	58.1	77.8	59.8	55.4	53	46.4

NOTES: (Without construction contribution) where/when applicable.Calculated construction contribution 2.2 dB.

NOISE MONITORING SURVEY

PROJECT:	CalPoly "I" Field Improvement Project
DATE:	11/12/2016 (Saturday)
NOISE MONITORING LOCATION	CalPoly, San Luis Obispo, CA



MET CONDITIONS:	
11/12/2016	TEMP: 55-80 F. HUMIDITY: 35-75 % WIND SPEED: 0-5 MPH SKY: Clear-PC GROUND: Dry
NOISE MONITORING EQUIPMENT:	LARSON DAVIS MODEL 820, TYPE I SLM
CALIBRATED PRIOR TO AND UPON COMPLETION OF MEASUREMENTS:	YES WINDSCREEN USED? YES

MONITORING PERIOD	LOCATION	SOURCES	NOISE LEVEL					
			LEQ	LMAX	L10	L33	L50	L90
0600-0700	LT-1	Roadway traffic primary	46.2	66.7	46.7	42.5	41.6	40
0700-0800	LT-1	Roadway taffic primary. Occassional voices, aircraft overflight, vehicles in parking lot.	51.7	71.6	55.1	48.6	45.3	42
0800-0900	LT-1	Roadway taffic primary. Occassional voices, vehicles in parking lot.	56.4	80.3	57.7	51.5	48.3	43.3
0900-1000	LT-1	As above	56.1	75.6	58.8	52.3	48.3	43.2
1000-1030	LT-1	As above	55.7	73.1	59.3	54.3	50.8	42.7
1100-1130	LT-1	As above	55.7	76.5	58.5	52.2	47.8	40.7
1230-1300	LT-1	As above	58.5	80.8	59.7	54.3	51.3	44.1
1300-1330	LT-1	Roadway taffic primary. Occassional voices, vehicles in parking lot., music in distance	57	76.7	59.6	54.1	50.8	42.7
1430-1500	LT-1	As above	60.3	78.9	62.5	59.7	56.3	45
1500-1530	LT-1	Roadway taffic primary. Occassional voices, vehicles in parking lot.	58.1	79.2	59.8	54.8	52	45.8
1630-1700	LT-1	Roadway taffic primary. Occassional voices, aircraft overflight, vehicles in parking lot.	56.8	75.4	59.5	54.7	52.3	47.2
1700-1800	LT-1	As above	59.9	78.9	61.5	56.5	54	46

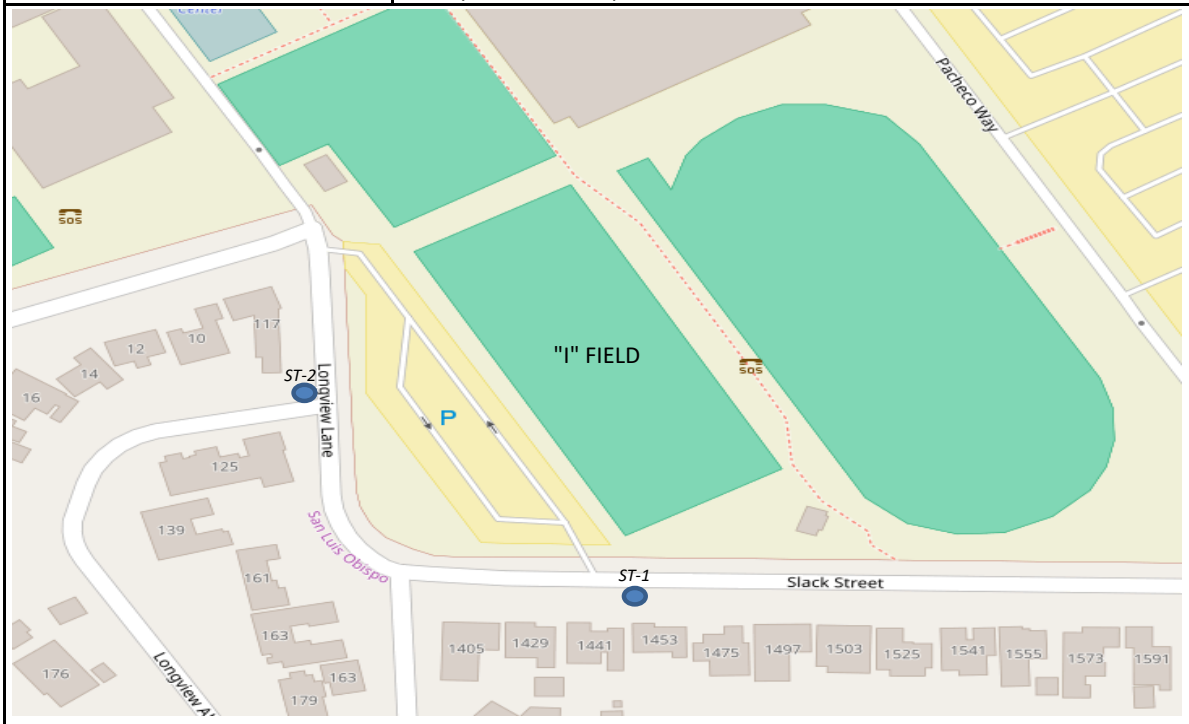
11/12/2016 (Saturday)

1800-1900	LT-1	Roadway taffic primary. Occassional voices, vehicles in parking lot, drums in distance (3-4 minutes)	60.9	83.1	61.3	56.5	53.8	46.7
1900-1950	LT-1	Roadway taffic primary. Occassional voices, vehicles in parking lot.	56.9	78.6	60.1	54.8	52	46.2
2015-2100	LT-1	Roadway taffic primary. Occassional voices, vehicles in parking lot, drums in distance (3-4 minutes)	57.2	75.9	59.8	54.6	51.3	43.1
2100-2200	LT-1	As above, Occassional people shouting, music in passing cars	58.2	82.6	59.6	54.3	51	44.5
2215-2230	LT-1	As above.	56.3	79.6	56.3	50.1	47.4	42.2
2300-2315	LT-1	As above.	54.4	75.3	56.2	50.8	47.6	41.4
0810-0820	ST-1	Traffic & voices primary	57.6	75.7	59.7	50.3	47.8	40.8
0938-0948	ST-1	Traffic primary. Occassional voices	58.1	77.3	61.1	54.2	49.8	40.2
1600-1610	ST-1	Traffic & voices primary	57.2	76.3	59.9	54.3	51	43
0830-0840	ST-2	Traffic primary. Occassional voices	55.8	69.8	59.7	49.8	46.9	43.7
1620-1630	ST-2	Traffic primary. Occassional voices	57.8	78.2	59.4	54.1	50.8	43.6
2240-2250	ST-2	Traffic primary. Occassional voices	56.2	77.5	57.6	52.5	49.3	42.1

NOTES: (Without construction contribution) where/when applicable.Calculated construction contribution 2.2 dB.

NOISE MONITORING SURVEY

PROJECT:	CalPoly "I" Field Improvement Project	
DATE:	11/13/2016	(Sunday)
NOISE MONITORING LOCATION	CalPoly, San Luis Obispo, CA	

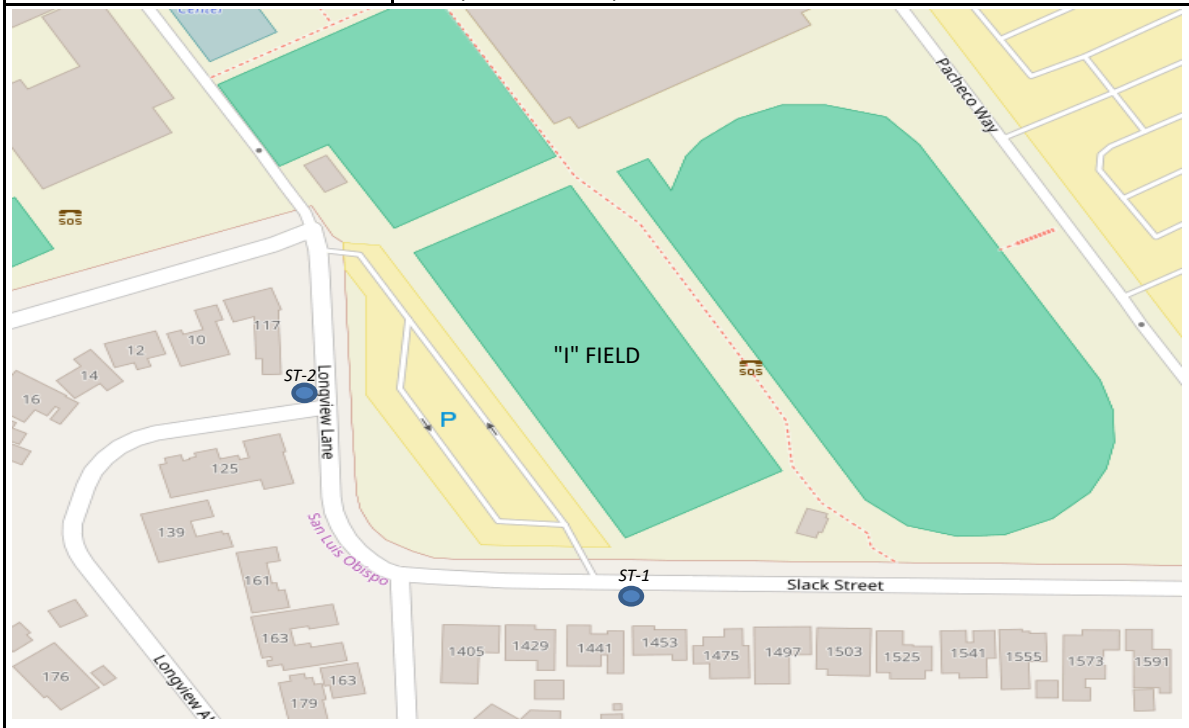


MET CONDITIONS:			
11/13/2016	TEMP: 50F. HUMIDITY: 85 % WIND SPEED: 0-3 MPH SKY: Clear-PC GROUND: Dry		
NOISE MONITORING EQUIPMENT:	LARSON DAVIS MODEL 820, TYPE I SLM		
CALIBRATED PRIOR TO AND UPON COMPLETION OF MEASUREMENTS:	YES	WINDSCREEN USED?	YES

MONITORING PERIOD	LOCATION	SOURCES	NOISE LEVEL					
			LEQ	LMAX	L10	L33	L50	L90
0610-0620	ST-1	Vehicle traffic on roadways primary. Distant traffic in background	45.1	68.2	45.3	41.5	40.3	39.2
0720-0800	ST-1	Vehicle traffic on roadways and parking lot primary. Distant traffic in background	52.6	80.2	54.5	48.9	45.5	41.3
0800-0840	ST-1	Vehicle traffic on roadways and parking lot primary. Occassional voices. Tennis in background.	55.6	79.2	57.4	52.8	50.5	43.8
0812-0824	ST-2	Vehicle traffic on roadways and parking lot primary. Occassional voices.	55.5	68.8	61.3	49	45.6	42.1
2230-2235	ST-2	Vehicle traffic on roadways and parking lot primary. Occassional voices.	54.3	72.6	57.8	52.3	49.5	44.4

NOISE MONITORING SURVEY

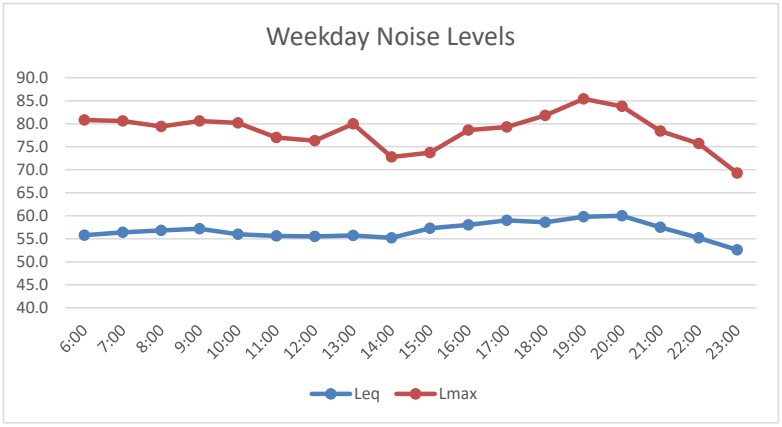
PROJECT:	CalPoly "I" Field Improvement Project	
DATE:	11/13/2016	(Friday)
NOISE MONITORING LOCATION	CalPoly, San Luis Obispo, CA	

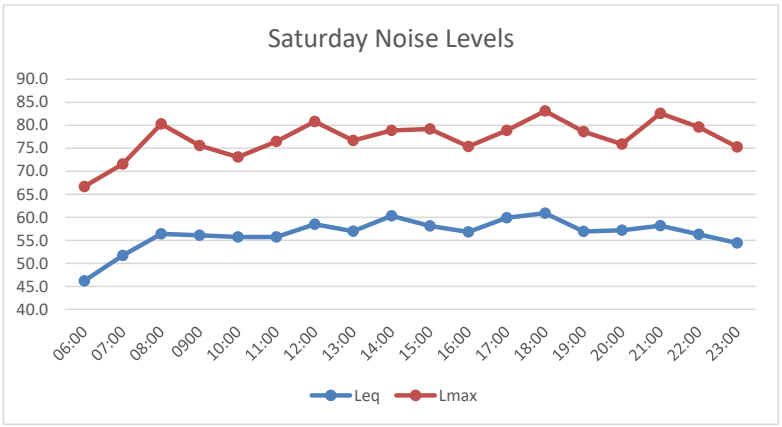


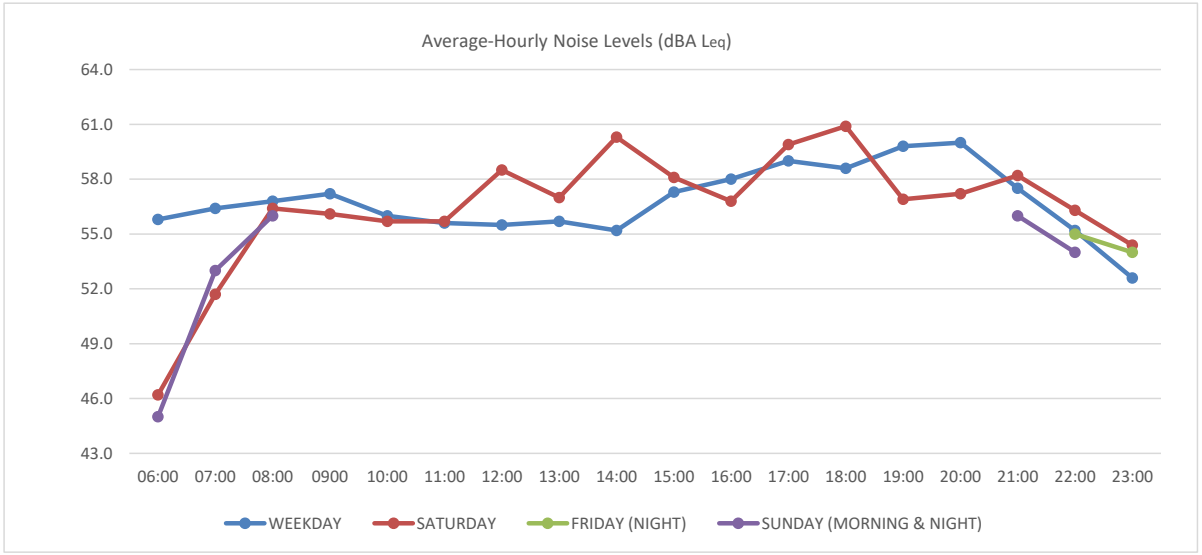
MET CONDITIONS:								
11/11/2016	TEMP: 50F. HUMIDITY: 85 % WIND SPEED: 0-3 MPH SKY: Clear-PC GROUND: Dry							
NOISE MONITORING EQUIPMENT:	LARSON DAVIS MODEL 820, TYPE I SLM							
CALIBRATED PRIOR TO AND UPON COMPLETION OF MEASUREMENTS:	YES		WINDSCREEN USED?	YES				

MONITORING PERIOD	LOCATION	SOURCES	NOISE LEVEL					
			LEQ	LMAX	L10	L33	L50	L90
2215-2225	ST-1	Vehicle traffic, voices, shouting, music.	54.8	75.5	55.5	50.5	47.2	40.5
2235-2245	ST-2	Vehicle traffic, voices, shouting, music.	56.9	79.2	56.9	50.5	48.1	42.7
2255-2305	ST-2	Vehicle traffic, voices, shouting, music.	54.4	73.6	55.3	50.1	46.8	40.2

WEEKDAY		
Hour	Leq	Lmax
6:00	55.8	80.8
7:00	56.4	80.6
8:00	56.8	79.4
9:00	57.2	80.6
10:00	56.0	80.2
11:00	55.6	77.0
12:00	55.5	76.3
13:00	55.7	80.0
14:00	55.2	72.8
15:00	57.3	73.7
16:00	58.0	78.6
17:00	59.0	79.3
18:00	58.6	81.8
19:00	59.8	85.4
20:00	60.0	83.8
21:00	57.5	78.4
22:00	55.2	75.7
23:00	52.6	69.3
SATURDAY		
Hour	Leq	Lmax
06:00	46.2	66.7
07:00	51.7	71.6
08:00	56.4	80.3
0900	56.1	75.6
10:00	55.7	73.1
11:00	55.7	76.5
12:00	58.5	80.8
13:00	57.0	76.7
14:00	60.3	78.9
15:00	58.1	79.2
16:00	56.8	75.4
17:00	59.9	78.9
18:00	60.9	83.1
19:00	56.9	78.6
20:00	57.2	75.9
21:00	58.2	82.6
22:00	56.3	79.6
23:00	54.4	75.3







APPENDIX E.
TRIP GENERATION ESTIMATES MEMORANDUM

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Central Coast Transportation Consulting
Traffic Engineering & Transportation Planning

MEMORANDUM

Date: December 16, 2016

To: Emily Creel, SWCA Environmental Consultants

From: Joe Fernandez and Travis Low, CCTC

Subject: Cal Poly I Field Trip Generation Estimates

This memorandum summarizes our estimates of trip generation resulting from the proposed redevelopment of the I Field on the Cal Poly San Luis Obispo campus.

BACKGROUND

I Field is located on Slack Street adjacent to the tennis courts and track. The project consists of redeveloping the site with new sports fields for football team practice and intramural sports games. These activities currently occur on the north side of campus at the sports complex.

This study estimates the number of peak hour trips generated by the new field to determine whether the project warrants further study under California State University (CSU) and City of San Luis Obispo transportation impact study guidelines. The purpose of this analysis is to inform the Initial Study underway for the project.

REGULATORY SETTING

The project would add traffic to transportation facilities operated by the California State University (CSU) system and the City of San Luis Obispo. Excerpted standards relevant to the proposed project and study locations are summarized below.

California State University

The CSU *Transportation Impact Study Manual* provides guidance to help determine when a Transportation Impact Study (TIS) is required. This determination is based on responses to the transportation/traffic checklist questions included in Appendix G of the CEQA Guidelines. No specific trip generation threshold is provided that would require a TIS. Instead the need for a TIS is determined based on conflicts with applicable plans, ordinances, programs or policies related to transportation.

City of San Luis Obispo

The City's *Multimodal Transportation Impact Study Guidelines* define when a TIS is required. Among other criteria, any project that would generate more than 100 peak hour automobile trips on City streets would have to prepare a TIS.

TRIP GENERATION

Trip generation for the site was developed using information contained in the project description and observations of existing practice activities. Football practices and intramural tournaments are the largest events planned on the site, and are expected to be the largest traffic generators. Operational characteristics of these events are described below.

Football Practices

Football practices typically occur from 6:00 AM to 8:30 AM. Approximately 120 people attend each practice, including coaches, staff, and team members. Cal Poly Facilities staff estimates that approximately 40 percent of these attendees live on campus, and a significant portion remain on campus following practice to attend classes and other activities. Some of the players currently prepare for practice at Mott Gym, then walk or drive to the practice field. These players would continue to prepare at Mott Gym, then would walk to I-field, so their trips to campus would not be changed by the relocation of practice.

Data Collection Approach: Field observations were conducted on Wednesday, November 9, 2016. Observations were conducted simultaneously at Mott Gym (where some players and coaches prepare before practice) and at the Sports Complex (where practice occurs). Approximately 100 players and coaches were present during the observed practice. The observations are described below and are summarized in Table 1.

- 51 players and coaches departed Mott Gym before practice began. Two players rode bicycles to the Sports Complex, and the remainder drove 15 vehicles to the Sports Complex.
- 39 vehicles and 14 bicycles arrived at the Sports Complex parking lot between 6:00-7:00 AM. This includes the 15 vehicles from Mott Gym. Ten vehicles arrived between 7:00-8:00 AM.
- 47 vehicles and 14 bicycles departed the Sports Complex parking lot between 8:00-9:00 AM. Of these, 14 vehicles returned to Mott Gym.

Table 1 summarizes the field observations.

Table 1: Observed Football Practice Vehicle Trips

	Vehicle Trips	
Time	In	Out
6:00 - 7:00 AM Practice Start	39	0
7:00 - 8:00 AM Practice	10	0
8:00 - 9:00 AM Practice End	0	47
Total	49	47

The largest peak hour trip generation occurs at the end of practice, when 47 vehicle trips leave the Sports Complex. Of these trips, 14 return to Mott Gym.

Typical Practice Trip Estimation: Table 2 summarizes the estimate for typical peak hour trips to occur at the end of practice between 8:00 AM and 9:00 AM, generating 47 vehicle trips. While roughly 100 people were observed during practice, a 120-person practice is typical based on information provided by Cal Poly Facilities staff. Therefore, the observed vehicle trips were multiplied by a factor of 1.2 to estimate typical practice peak hour trips when 120 persons are present. A typical practice peak hour is estimated to generate a maximum of 57 vehicle trips.

Table 2: Typical Peak Hour Trips	
Estimated Peak Hour	**Vehicle Trips**
Observed 8:00 - 9:00 AM Trips	47
Typical Practice Factor	1.2
Typical Trip Estimate	57
Estimated Trips to Mott Gym[1]	17
Net New Peak Hour Trips	**40**

1. Trips to Mott Gym would not change when practice shifts to I-field. These trips would continue to drive to Mott Gym but players would then walk to I-field.

Of these trips, approximately 17 would return to Mott Gym. Therefore, 40 net new vehicle trips would be generated by the project during a football practice.

Intramural Events

I-field would also host intramural flag football and soccer events, which typically take place on Thursdays through Sundays from 5:00 PM to 12:00 AM. Intramural tournaments are typically held two to three times a quarter. There are typically fewer than 40 participants, referees, and staff on the field at any time during intramural events. Cal Poly Facilities staff estimates that at least 50 percent of players and staff attending intramural events live on campus.

Intramural events would therefore generate fewer peak hour trips than football practices, and would occur less frequently.

CONCLUSIONS

The project is expected to generate a maximum of 40 peak hour vehicle trips under typical conditions. These trips currently go to the Sports Complex and would shift to I-field. This level of peak hour trips does not trigger the need for additional study based on CSU and City of San Luis Obispo standards.

APPENDIX F.
MITIGATION MONITORING AND REPORTING PROGRAM

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MITIGATION MONITORING AND REPORTING PROGRAM

Statutory Requirement

When a Lead Agency makes findings on significant environmental effects, the agency must also adopt a "reporting or monitoring program for the changes to the project which it has adopted or made a condition of approval in order to mitigate or avoid significant effects on the environment" (Public Resources Code §21081.6(a) and CEQA Guidelines §15091(d) and §15097). The Mitigation Monitoring and Reporting Program (MMRP) is implemented to ensure that the mitigation measures and project revisions are implemented. Therefore, the MMRP must include all changes in the proposed project either adopted by the project proponent or made conditions of approval by the Lead or Responsible Agency.

Administration of the Mitigation Monitoring and Reporting Program

The Board of Trustees of the California State University (Board of Trustees) is the Lead Agency responsible for the adoption of the MMRP. The project applicants, California Polytechnic State University San Luis Obispo and ASI, are responsible for implementation of the MMRP, in coordination with other identified entities. According to CEQA Guidelines §15097(a), a public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity that accepts the delegation. The Board of Trustees delegate responsibility for verifying and documenting compliance with the MMRP to the local campus, in this case, California Polytechnic State University San Luis Obispo. Specifically, the Cal Poly Facilities Planning and Capital Projects department, as coordinator of the project and its construction, will be responsible for compliance. However, until mitigation measures have been completed, the Lead Agency remains responsible for ensuring that the implementation of the measure occurs in accordance with the program.

Mitigation Measures and Reporting Program

The MMRP table is structured to enable quick reference to mitigation measures and the associated monitoring program based on the environmental resource. The numbering of mitigation measures correlates with numbering of measures found in the Initial Study/Mitigated Negative Declaration for the I Field Improvements Project.

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Mitigation Monitoring and Reporting Program

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	Aesthetics			
AES-1	Prior to project construction, an evaluation of the lighting manufacturer's lighting data (Appendix B, Visual Impact Assessment, Figure 5) shall be conducted for the purpose of confirming that no light trespass would occur beyond the campus boundary and that no point-source light would be visible from beyond the campus boundary. The Report shall be prepared by a qualified engineer who is not a prospective vendor or manufacturer of the lighting system to be used on the project. The lighting evaluation shall include the following at a minimum: a. If off-campus light trespass or point-source visibility is identified in the Lighting Evaluation Report, specific recommendations shall be identified to eliminate such trespass and/or visibility. Recommendations may include but not be limited to: repositioning lights, lowering heights, increasing sizes of cut-off shields, altering types of luminaires or wattage, or modifying operational procedures. b. The University shall implement the recommendations made by the Lighting Evaluation Report. The results of the independent lighting evaluation shall be field verified to ensure light trespass has been adequately eliminated at off-campus locations and no point-source lighting is visible from beyond the campus boundary.	Verification through review and approval of independent lighting evaluation, plan check, and field inspection	Prior to project construction	Cal Poly Facilities Planning and Capital Projects
AES-2	Prior to construction of the retaining wall, the project plans shall be revised to save the existing eucalyptus trees located between the I Field and Slack Street upon confirmation by a certified arborist that retaining the trees would not pose a safety hazard. A certified arborist shall evaluate the trees to determine whether or not they can be feasibly and safely retained onsite. If retaining any of the trees is determined to be possible, the certified arborist shall provide written recommendations to confirm that no impacts would occur to the trees to be retained or their root zones as a result of project construction and operation. All recommendations of the certified arborist shall be incorporated into the project plans and implemented by the University prior to construction of the retaining wall.	Verification through review of arborist report, plan check, and field inspection	Prior to construction of the retaining wall	Cal Poly Facilities Planning and Capital Projects

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	Air Quality			
AQ-1	Dust Control[1] 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. 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 measure listed above, the following dust control measures shall be implemented to reduce fugitive dust emissions generated during construction activities in accordance with the *Cal Poly Master Plan and Final EIR* (Cal Poly 2001): • Reduce the amount of disturbed area where possible.	Verification through plan check and field inspection	Throughout the duration of construction activities	Cal Poly Facilities Planning and Capital Projects

[1] Dust control measures have been modified from the original measures provided in the *Cal Poly Master Plan and Environmental Impact Report* (2001) to reflect current SLOCAPCD recommendations as provided in the SLOCAPCD *CEQA Air Quality Handbook* (SLOCAPCD 2012).

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	• On-site vehicle speeds should be reduced to 15 miles per hour 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 dirt stockpile areas shall be sprayed daily and covered with tarps or other dust barriers as needed. • Use water trucks, APCD approved dust suppressants, or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site and from exceeding the District's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible. • All roadways 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. • Rock pads and/or rumble strips (or similar) shall be installed where vehicles enter and exit unpaved areas onto streets, or trucks and equipment shall be washed off before leaving the site. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible. • All PM10 mitigation measures shall be shown on grading and building plans. • The contractor or builder shall consider the use of a SLOAPCD-approved dust suppressant where feasible to reduce the amount of water used for dust control. • The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints and reduce visible emissions below the SLOAPCD's limit of 20 percent opacity for greater than 3 minutes in any 60 minute period. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such person(s) shall be provided to the SLOAPCD Compliance Division prior to the start of any grading, earthwork or demolition. • Effective February 25, 2000, the APCD prohibited developmental burning of vegetative material within San Luis Obispo County. If you have any questions regarding these requirements, contact the ACPD Engineering & Compliance Division at (805) 781-5912.			

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
AQ-2	Equipment Emission Control[2] • On-road diesel vehicles shall comply with Section 2485 of Title 13 or the California Code of Regulations. This regulation limits idling from diesel-fueled commercial vehicles with gross vehicular weight ratings of more than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles: – Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and – Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in sleeper berth for greater than 5 minutes at any location when within 1,000 feet of a restricted area, except as noted in Subsection (d) of the regulation. • Off-road diesel equipment shall comply with the 5-minute idling restriction identified in Section 2449(d)(2) of the California Air Resources Board's In-Use Off-Road Diesel regulation. • The project shall require that all fossil-fueled equipment shall be properly maintained and tuned according to manufacturer's 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. • Use diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State off-Road Regulation. • Use on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation. • Construction or trucking companies with fleets that that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NOx exempt area fleets) may be eligible by proving alternative compliance. • All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit.	Verification through plan check and field inspection	Throughout the duration of construction activities	Cal Poly Facilities Planning and Capital Projects

[2] Equipment emission control measures have been modified from the original measures provided in the *Cal Poly Master Plan and Environmental Impact Report* (2001) to reflect current SLOCAPCD recommendations as provided in the SLOCAPCD *CEQA Air Quality Handbook* (SLOCAPCD 2012).

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	• Electrify equipment when feasible. • Substitute gasoline-powered in place of diesel-powered equipment, where feasible. • Use alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel. • No on or off-road diesel equipment shall be allowed to idle within 1,000 feet of sensitive receptors. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the idling restrictions limit. To the extent feasible, no equipment staging areas shall be located within 1,000 feet of any sensitive receptors. • Proposed truck routes shall be evaluated and selected to ensure routing patterns have the least impact to residential dwellings and other sensitive receptors, such as schools, parks, day care centers, nursing homes, and hospitals.			
AQ-3	In the event materials potentially containing asbestos are to be disturbed or removed from the project site, the Construction Contractor shall comply with the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M – asbestos NESHAP). These requirements include, but are not limited to: 1) written notification, within at least 10 business days of activities commencing, to the APCD, 2) asbestos survey conducted by a Certified Asbestos Consultant, and 3) applicable removal and disposal requirements of identified ACM.	Include in project specifications and denote on plans where needed; verify compliance in field through inspection	Prior to final specification and plan approval; field check during construction	Cal Poly Facilities Planning and Capital Projects
AQ-4	The presence or absence of naturally-occurring asbestos must be determined prior to start of soil disturbing activities. If Naturally Occurring Asbestos (NOA) is not present on-site, an exemption request will be filed with the SLOAPCD. If NOA is present on-site, the project will comply with all requirements outlined in the Asbestos Airborne Toxic Control Measures.	Include in project specifications and denote on plans where needed; verify compliance through review and approval of geologic evaluation	Prior to ground disturbance and project construction	Cal Poly Facilities Planning and Capital Projects
AQ-5	Prior to ground disturbance and construction, the Construction Contractor shall ensure a geologic evaluation is conducted to determine if the area disturbed is exempt from the Air Resources Board Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (93105). If the site is not exempt from the ATCM requirements, the Construction Contractor shall comply with all requirements outlined in the Asbestos ATCM, which may include development of an Asbestos Dust Mitigation Plan and an Asbestos Health and Safety Program for approval by the San Luis Obispo APCD.	Include in project specifications and denote on plans where needed; verify compliance through review and approval of geologic evaluation; document compliance if condition is present	Prior to ground disturbance and project construction	Cal Poly Facilities Planning and Capital Projects

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
AQ-6	Prior to ground disturbance and construction, the Construction Contractor shall obtain all required permits for the use of portable equipment, 50 horsepower or greater, from the San Luis Obispo APCD.	Verify through review and approval of required permits and consultation with the San Luis Obispo Air Pollution Control District	Prior to ground disturbance and construction	Cal Poly Facilities Planning and Capital Projects
	Biological Resources			
BR-1	Vegetation removal shall be scheduled to occur outside of the nesting season (avoidance period would be September 1 to February 14) if possible, to avoid birds that may be nesting within areas of disturbance during or just prior to construction.	Include in project specifications and denote on plans where needed; verify compliance through plan check and field inspection	Prior to construction and throughout the duration of construction activities, as necessary	Cal Poly Facilities Planning and Capital Projects
BR-2	Prior to construction, if construction activities are proposed to occur during the typical nesting season (which is February 15 to August 31) within 200 feet of potential nesting habitat, a nesting bird survey shall be conducted by qualified biologists in potential nesting habitat at least two weeks prior to construction to determine presence/absence of nesting birds within the project area. Work activities shall be avoided within 100 feet of active bird nests and 200 feet of active raptor nests until young birds have fledged and left the nest. Readily visible exclusion zones shall be established in areas where nests must be avoided. The University shall be contacted if any state or federally listed bird species are observed during surveys. The U.S Fish and Wildlife Service and California Department of Fish and Wildlife shall be contacted for additional guidance if nesting birds are observed within or near the boundaries of the project site. Nests, eggs, or young of birds covered by the Migratory Bird Treaty Act and California Fish and Game Code would not be moved or disturbed until the end of the nesting season or until young fledge, whichever is later, nor would adult birds be killed, injured, or harassed at any time.	Include in project specifications and denote on plans where needed; verify compliance through plan check and field inspection; retain environmental monitor, as necessary; prepare and comply with monitoring plan; document compliance in monitoring reports	Prior to construction and throughout the duration of construction activities, as necessary	Cal Poly Facilities Planning and Capital Projects, qualified biological monitor

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
BR-3	Vegetation removal in potential nesting habitats shall be monitored and documented by a qualified biological monitor(s) regardless of time of year.	Include in project specifications and denote on plans where needed; verify compliance through plan check and field inspection; retain environmental monitor, as necessary; prepare and comply with monitoring plan; document compliance in monitoring reports	Prior to construction and throughout the duration of construction activities, as necessary	Cal Poly Facilities Planning and Capital Projects, qualified biological monitor
BR-4	During construction, the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible. When practicable, invasive exotic plants in the project site will be removed and properly disposed.	Include in project specifications and denote on plans where needed; verify compliance in field through field inspection and monitoring reports as applicable	Throughout the duration of construction activities	Cal Poly Facilities Planning and Capital Projects, qualified biological monitor
	Cultural Resources			
CR-1	In the event unknown archaeological resources are exposed or unearthed during project construction, all earth disturbing work within the vicinity of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find. If the archaeologist determines that the resource is an "historic resource" or "unique archaeological resource" as defined by California Environmental Quality Act Guidelines Section 15064.5 and avoidance is not feasible, further evaluation by the archaeologist shall occur. The archaeologist's recommendations for further evaluation may include a Phase II testing and evaluation program to assess the significance of the site. Resources found not to be significant will not require mitigation. Impacts to sites found to be significant shall be mitigated through implementation of a Phase III data recovery program. After the find has been appropriately mitigated, work in the area may resume. A Chumash representative shall monitor any mitigation work associated with prehistoric cultural material.	Retain archaeological and Native American monitors; prepare and comply with monitoring plan; document compliance in monitoring reports, as necessary	Throughout the duration of construction activities, as necessary	Cal Poly Facilities Planning and Capital Projects, qualified archaeologist

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
CR-2	If soil excavation associated with grading activities requires disturbance of bedrock formations, a qualified paleontologist will be retained to monitor construction activities in those areas. Should any vertebrate fossils or potentially significant finds (e.g., numerous well-preserved invertebrate or plant fossils) be encountered during work on the site, all activities in the immediate vicinity of the find shall cease until the qualified paleontologist evaluates the find for its scientific value. If deemed significant, the paleontological resource(s) shall be salvaged and deposited in an accredited and permanent scientific institution where they will be properly curated and preserved. If monitoring is required, the qualified paleontologist shall submit a monitoring report to the University following completion of all required monitoring activities.	Include in project specifications and denote on plans where needed; verify compliance through review and approval of identified extent of grading/potential to disturb bedrock prior to project construction; retain paleontological monitors; prepare and comply with monitoring plan; document compliance in monitoring reports, as necessary	Throughout the duration of construction activities, as necessary	Cal Poly Facilities Planning and Capital Projects, qualified paleontologist
	Noise			
NOI-1	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	Include in project specifications and denote on plans where needed; verify compliance through plan check and field inspection	Throughout the duration of construction activities	Cal Poly Facilities Planning and Capital Projects

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
	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.			
NOI-2	The following measures shall be implemented during project construction: a. Noise-generating construction activities shall be limited to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday. Noise-generating construction activities shall be prohibited on Sundays and holidays. b. Construction equipment should be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds should be closed during equipment operation. c. Lay-down and vehicle staging areas shall be located at the furthest practical distance from nearby residential land uses. d. Whenever possible, the noisiest construction activities and haul truck activities shall be scheduled during periods of the day (e.g., non-peak traffic hours) that would have the least impact or during summer sessions and other times when classes are not in session.	Include in project specifications and denote on plans where needed; verify compliance through plan check and field inspection	Throughout the duration of construction activities	Cal Poly Facilities Planning and Capital Projects

Mitigation Measure	Requirements of Measure	Compliance Method	Verification Timing	Responsible Party
NOI-3	Onsite sports and recreational events shall be limited to the following hours: a. All onsite recreational and intramural sporting events, not including Intercollegiate Athletics activities, shall be limited to between the hours of 7:00 a.m. and 10 p.m., Monday through Friday, and between the hours of 8:00 a.m. and 10:00 p.m. on weekends. All onsite Intercollegiate Athletics activities (i.e., football practices, soccer practices) shall be limited to between the hours of 6:00 a.m. and 10 p.m., Monday through Friday, and between the hours of 8:00 a.m. and 10:00 p.m. on weekends. Use of the field for the proposed Intercollegiate Athletics and recreational and intramural sports activities outside of the hours specified in this measure, including practice/event setup and closing activities, shall be prohibited. Any increase or extension of other existing uses of the field currently occurring (i.e., limited band practices), including any increase in the frequency or duration or type of events, shall be prohibited.	Include in project specifications and denote on plans where needed; verify compliance through regular inspection and maintenance of field hours of operation	During operation	Cal Poly Facilities Planning and Capital Projects
NOI-4	The use of amplified PA/sound systems shall be prohibited.	Include in project specifications and denote on plans where needed; verify compliance through regular inspection and prohibition of amplified PA system use	During operation	Cal Poly Facilities Planning and Capital Projects