DIVISION 01 – GENERAL REQUIREMENTS

01 11 00  Summary of Work
01 23 00  Bid Alternative Procedures
01 25 00  Substitution Procedures
01 26 13  Requests for Interpretation
01 31 13  Project Coordination
01 31 19  Project Meetings
01 31 26  Hazardous Material Information
  “Asbestos on Campus” published by Cal Poly, March 2005 – Comprehensive
01 32 00  Construction Progress Documentation
01 33 00  Submittal Procedures
01 35 13  Special Project Procedures
01 35 16  Alteration Project Procedures
01 35 53  Security
01 41 00  Regulatory Requirements
01 42 00  References
01 45 00  Quality Control
01 50 00  Temporary Facilities and Controls
01 51 00  Temporary Utilities
01 52 00  Construction Facilities
01 54 00  Construction Aids
01 55 00  Vehicular Access and Parking
01 56 00  Temporary Barriers and Enclosures
01 56 39  Temporary Tree and Plant Protection
01 57 00  Temporary Controls
01 60 00  Product Requirements
01 73 29  Cutting and Patching
01 74 19  Construction Waste Management and Disposal
01 77 00  Closeout Procedures
01 78 23  Operation and Maintenance Data
01 78 30  Warranties and Bonds

END OF SECTION
SUMMARY OF WORK

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:
1. Project Description
2. Work by Trustees
3. Trustees Supplied Products
4. Contractor Use of Premises
5. Trustees Occupancy
6. Special University Requirements and Controls
7. Contractor's Duties
8. Specification Formats and Convention

B. Related Specification Sections
1. Section 01 50 00 - Temporary Facilities and Controls
2. Section 01749 - Construction Waste Management and Disposal
3. Technical Specifications, Divisions 1 thru 16.

1.02 PROJECT DESCRIPTION

A. General Description of the Work
1. The work shall conform to the contract drawings listed and to the specifications, which form a part of this package.
2. Work of this contract includes, but is not limited to, construction of the Oppenheimer Upper Equestrian Arena Stallion Barn and Associated Site work and fencing.
3. Project Name and Location: Oppenheimer Upper Equestrian Arena, California Polytechnic State University, San Luis Obispo, California.
4. Project Summary:
   I. Reference Documents: Record drawings for existing utilities are available in the Cal Poly Plan Room. Call the Project Manager, Austin Creel, (805) 756-7252, for an appointment.

B. Project Schedule
1. This Project is scheduled to commence construction on or about June 19, 2016 with a completion date of December 22, 2017

1.03 CONTRACTOR USE OF PREMISES

A. General:
1. Refer to Contract General Conditions, Article 4.00.
2. Do not cause unreasonable delay or hindrance, or impose hardship on the public, students, University, or others engaged in University work.
3. Schedule construction activities to minimize disruption to the University and to University users.
4. Do not interrupt University utilities without prior written permission from the Trustees.
5. Confine operations at sites to areas permitted Contract Documents.
6. Do not unreasonably encumber site with materials or equipment.
7. Protect Contractor’s and Trustees’ material stored on premises. Keep site and building secure.
8. Obtain and pay for use of additional storage or Work areas that may be required for operations.
10. Do not overload structure.

1.04 TRUSTEES OCCUPANCY
A. The use of the pipeline will commence immediately after work is accepted and/or approved. Run-outs and Utilidor piping must be reenergized immediately once approved for use. Warranty period will not begin until entire Project is accepted (There will be no partial acceptance and/or partial warranty periods).
B. Cooperate with Trustees to minimize conflict and to facilitate University operations.
C. Schedule Work to accommodate Trustees’ occupancy.

1.05 SPECIAL UNIVERSITY REQUIREMENTS AND CONTROLS
A. Preservation: Existing buildings, slabs, walks, paving, landscaping and other improvements, which are to remain, either adjacent to new construction or elsewhere on the University, shall be protected from damage or defacement. Damage or defacement caused by the Contractor shall be repaired or replaced to the satisfaction of the Trustees. Repairs to damaged asphalt paving shall be made with hot asphalt. Repairs to other damaged surfaces shall be made with in kind material to a like new condition regardless of its existing condition.
B. Salvage: The Trustees shall have first rights of salvage for items. Salvage items removed in connection with this work are to remain the property of the Trustees and shall be delivered to the campus location designated by the Trustees Representative. If the Trustees waive salvage rights for an item, the item becomes the property and responsibility of the Contractor. Comply with Section 01749 - Construction Waste Management and Disposal.
C. Issuance of University Keys: Keys to work areas, if required, must be obtained from the Trustees Representative. The Contractor or an authorized representative shall sign for receipt of keys. Upon completion of the work, keys shall be returned to the Trustees Representative. If the Contractor fails to return keys issued, the Contractor shall be liable for the total cost of labor and materials to re-key areas accessible with the lost keys. Final payment shall not be authorized until keys have been accounted for.
D. Contract Work Limits: Areas affected by this project.
1. Exception: Unless noted on the drawings.
E. Existing University Utilities:
1. Notify Trustees seven (7) calendar days minimum in advance of intended interruption of utility services.
   I. Required interruptions: Incorporate into Contractor’s construction schedule.
II. Times and dates for interruptions: At the discretion of the Trustees, and may be on a Saturday, Sunday, holiday during quarter break, or after normal working hours and beyond seven (7) calendar days after notifications.

2. Identify and locate known underground utilities.
   I. Trustees will provide access to known documentation before bid and during construction.
   II. Contact Facilities Planning and Capital Projects for existing utility atlas.
      i. Most underground utilities at Cal Poly are not “Public” and cannot be located by calling Underground Service Alert (800) 642-2444.

3. Undocumented utilities: Refer to Part B - Contract General Conditions, Article 4.08.e Utilities.

4. Show utility interruptions on the Contractor’s monthly schedule update and 3-week look-ahead schedule.

F. Holidays, Quarter Breaks, Weekends:
   1. Prior to start of construction: Obtain a calendar from the Trustees showing major campus events, study and examination periods, holidays and quarter breaks.
   2. Disruptive work: Discouraged during study and exam times, and major campus events.
   3. The Contractor may be asked to suspend work and/or deliveries during the following, or similar University events:

<table>
<thead>
<tr>
<th>Event</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commencement</td>
<td>Generally the third Saturday in June</td>
</tr>
<tr>
<td></td>
<td>Generally the third Saturday in December</td>
</tr>
<tr>
<td>Open House</td>
<td>Generally the third Friday and Saturday in April</td>
</tr>
<tr>
<td>Week of Welcome</td>
<td>Generally the week before Fall Quarter</td>
</tr>
<tr>
<td>Residence Hall Move-in</td>
<td>Generally weekend before Fall Quarter</td>
</tr>
<tr>
<td>Finals Weeks</td>
<td>Generally the third week in March</td>
</tr>
<tr>
<td></td>
<td>The week before June commencement</td>
</tr>
<tr>
<td></td>
<td>The week before December commencement</td>
</tr>
<tr>
<td>Residence Hall Move-in</td>
<td>Generally the third week in September;</td>
</tr>
<tr>
<td></td>
<td>Second week in December</td>
</tr>
<tr>
<td></td>
<td>First week in January</td>
</tr>
<tr>
<td></td>
<td>Week before June commencement</td>
</tr>
</tbody>
</table>

4. For scheduling purposes, anticipate five (5) University event related non-work days in each calendar year. Extension of the contract time shall not be allowed for these non-work days.

5. For noise control, refer to Section 01500 – Temporary Facilities and Controls.

1.06 CONTRACTOR’S DUTIES

A. Provide and pay for:
   1. Labor, material and equipment.
   2. Tools, construction equipment and machinery.
   3. Telephone, fax, computer and communication services. See Section 01500 – Temporary Facilities and Controls.
SUMMARY OF WORK

I. Telephone: pay for the connection to University system and pay for services.

II. Make arrangements with University to activate telephone and communication services.

III. Make connections and provide labor, materials and equipment for site distribution of Contractor's phone and communication services.


   I. Pay for and make connections and provide labor, materials and equipment for site distribution of temporary utilities from the Campus' point of connection.

   II. Remove temporary utilities from the site when the work is completed.

   III. Pay for water and electricity for construction.

5. Other facilities and services necessary for proper execution and completion of Work.

B. Pay legally required sales, consumer and use taxes.

C. Secure and pay for site-specific costs for proper execution and completion of Work, and as applicable at time of receipt of bids.

   1. Licenses
   2. Permits and Fees
   3. Governmental Fees
   4. Royalties

D. Give required notices.

E. Comply with codes, ordinances, rules, regulations, orders and other legal requirements of public authorities, which bear on performance of Work.

   1. The Contractor shall certify in writing that no materials containing Asbestos are incorporated in the work, the Asbestos Hazard Emergency Regulations Act.

F. Promptly submit written notice to Trustees Representative of observed variance of Contract Documents from legal requirements.

   1. Architect will prepare modifications to Contract Documents for required changes.

   2. If Contractor observes work known to be contrary to requirements, and does not notify the Trustees Representative, then Contractor assumes responsibility for work not meeting the requirements.

G. Enforce strict discipline and good order among employees. Do not employ on Work:

   1. Unfit persons.
   2. Persons not skilled in assigned task.

H. Comply with Cal Poly Sexual Harassment Policy. Advise sub-contractors in writing and post policy in prominent place. Cal Poly Sexual Harassment Policy website is http://www.employequity.calpoly.edu/sexual_harassment_prevention.html

SUMMARY OF WORK

01010 - 4
1.07 SPECIFICATION FORMATS AND CONVENTIONS

A. Specification Format: The Specifications are organized into Divisions and Sections using the 16-division format and CSI/CSC’s "1995 MasterFormat" numbering system.

1. Section Identification: The Specifications use Section numbers and titles to help cross-referencing in the Contract Documents. Sections in the Project Manual are in numeric sequence; however, the sequence is incomplete because all available Section numbers are not used. Consult the table of contents at the beginning of the Project Manual to determine numbers and names of Sections in the Contract Documents.

2. Division 01: Sections in Division 01 shall apply to the execution of the Work of all Sections in the Specifications.

B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.

2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.

   I. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

C. Drawing Keynotes: Throughout the drawings, specification keynotes are used to reference work and indicate the general section of the specifications in which the noted work is addressed. The keynotes do not define or limit the scope to a particular trade or section. Coordinate a complete scope of work.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes: Substitution for Work specified in Divisions 02 thru 49.

B. Related Specification Sections:
   1. Divisions 01 thru 49

1.02 DEFINITIONS

A. The request for an alternative, equal, or substitution of materials and equipment is governed by the Contract General Conditions, Article 5.04.

1.03 SPECIFIED WORK

A. Contractor's Options:
   1. Product specified only by reference standards:
      a. Select a product meeting standards.
   2. Product specified by naming several products or manufacturers:
      a. Select a product or manufacturer named.
   3. Product specified by naming several products or manufacturers and reference standards:
      a. Product and manufacturer names indicate products and manufacturers, which meet standards.
      b. Select a product meeting standards.
   4. Product specified by naming only product to match existing campus standard:
      a. Select product specified.
   5. Product specified by naming one or more products, and stating "or equal to" or "approved equivalent":
      a. Select product named, or submit request for substitution for a product not specifically named.
      i. Refer to Article 1.06 - Acceptance of Substitutions.

1.04 ALTERNATIVE OR EQUALS REQUEST

A. Content of Request:
   1. Attached "Alternate / or Equal Request Form."
   2. Note: No other forms accepted.

B. Submit requests ten (10) calendar days minimum prior to bid.

C. Provide complete information to permit determination of the equality offered in materials or equipment.

D. Provide samples when requested by the Trustees, including:
   1. Product identification, including manufacturer's name and address
2. Manufacturer’s literature, including product description, performance and test data, and reference standards
3. A side-by-side tabulation of proposed equal with the specified materials or product.

1.05 SUBSTITUTION REQUEST

A. Cost to Contractor for review of Substitution Request:
1. Review of a Substitution Request may be billed to the Contractor at the Architect’s hourly rate; two-hour minimum, whether approved or rejected.

B. Content of Request:
1. Attached “Substitution Request Form.”
2. Note: No other forms accepted.
3. For products, attach:
   a. Product identification, including manufacturer’s name and address.
   b. Manufacturer’s literature including product description, performance and test data and reference standards.
   c. Samples: Trustees may also require samples of both requested items and proposed substitution.
4. For construction methods, attach:
   a. Detailed description of proposed methods.
   b. Drawings illustrating methods.
5. Attach an itemized comparison detailed in a side-by-side tabulation of proposed substitution with product or method specified.

C. In making a request for substitution, Contractor attests that:
1. Proposed product or method is equal or superior to that specified.
2. Proposed product or method has the same guarantee or warranty as that specified.
3. Installation of accepted substitution into Work includes making changes required for Work to be complete.
4. Additional costs incurred as a result of substitution shall be paid by the Contractor.

D. Submit five (5) copies of substitution request.

1.06 ACCEPTANCE OF SUBSTITUTIONS

A. Procedures:
1. The Contract is based on materials, equipment and methods described in the Contract Documents.
2. Architect will consider proposals submitted as per Section 01 25 00 - Product Options and Substitutions, Article 1.05.
3. Architect is sole judge of the acceptance of substitutions.
   a. The Architect will judge function and use.
      i. Acceptance of a substitution does not waive the product manufacturer’s responsibility for product liability.
4. Substituted materials, equipment or methods shall not be used.
   a. Exception: If approved by the Architect.
5. Substitutions shall not be considered:
   a. If indicated, or implied on product submittals.
b. If acceptance will require substantial revision of Contract Documents.
c. If submitted more than thirty-five (35) calendar days after date of issuance of Notice to Proceed of the Contract.
d. Exception:
   i. If the specified or drawing item has been verified to be discontinued, or is unavailable.
   ii. If the Trustees desires a cost savings for the product or system.
   iii. At the discretion of the Trustees.

PART 2 - PRODUCTS

2.01 ALTERNATE / OR EQUAL REQUEST FORM
   A. See the form attached at the end of this section.

2.02 SUBSTITUTION REQUEST FORM
   A. See the form attached at the end of this section.

PART 3 - EXECUTION

3.01 GENERAL
   A. Reproduced attached form.
   B. Use for requests of equal or alternate product and material; and proposed substitutions.
ALTERNATE / OR EQUAL REQUEST FORM

TO: ________________________________________________

We submit the following product or material as an equal for the specified item for this project for consideration:

PROJECT: __________________________________________

SPECIFIED ITEM: _____________________________________

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
<th>Paragraph</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

PROPOSED CREDIT: ______________________________________

The undersigned requests consideration of the following:

PROPOSED EQUAL PRODUCT OR MATERIAL: ________________________

<table>
<thead>
<tr>
<th>Attached data:</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Product Description</td>
</tr>
<tr>
<td>☐ Specifications</td>
</tr>
<tr>
<td>☐ Drawings</td>
</tr>
<tr>
<td>☐ Photographs</td>
</tr>
<tr>
<td>☐ List Three Projects, minimum, where proposed product or material has been used within a 100-mile distance of Campus project (including names, addresses and telephone numbers of Owners)</td>
</tr>
<tr>
<td>☐ Additional Information required for adequate evaluation of request</td>
</tr>
</tbody>
</table>

For the proposed product or material, the undersigned certifies:

1. The dimensions shown on drawings or code requirements are not affected.
2. The function, appearance and quality are equivalent or superior to the specified or drawing item.
3. There is no adverse affect on other trades, or the construction warranty requirements.
4. Maintenance and service parts are locally available for the proposed product or material.
5. It shall pay for subsequent changes in incorporating the proposed product or material that was not apparent at the time of approval into the Work, including compensation to the Architect as described above.

Submitted By:

Signature ____________________________

Firm ________________________________

Address _____________________________

Date ________________________________

Telephone __________________________

Remarks ____________________________

For use by Design Consultant only:

☐ Accepted

☐ Accepted as Noted

☐ Not Accepted

☐ Received Too Late

By ________________________________

Date ______________________________
SUBSTITUTION REQUEST FORM

TO: ____________________________________________________________

We submit the following product or method as substitution for the specified item for this project for consideration:

PROJECT: ______________________________________________________

SPECIFIED ITEM: _______________________________________________

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
<th>Paragraph</th>
<th>Description</th>
</tr>
</thead>
</table>

PROPOSED CREDIT: _________________________________________________

The undersigned requests consideration of the following:

PROPOSED SUBSTITUTION: ___________________________________________

 Attached data:

- [ ] Product Description
- [ ] Performance Data (with applicable portions clearly identified)
- [ ] Specifications
- [ ] Test Data (with applicable portions clearly identified)
- [ ] Drawings
- [ ] Cost and Quality Data for specified item and proposed substitution
- [ ] Photographs
- [ ] Description of Changes to Contract Document required by proposed substitution
- [ ] List Three Projects, minimum, where proposed substitution has been used within a 100-mile distance of Campus project (including names, addresses and telephone numbers of Owners)
- [ ] Additional Information required for adequate evaluation of request

For the proposed substitution, the undersigned certifies:

1. The dimensions shown on drawings or code requirements indicated are not affected.
2. The function, appearance and quality are equivalent or superior to the specified or drawing item.
3. There is no adverse affect on other trades, or the construction warranty requirements.
4. Maintenance and service parts are locally available for the proposed substitution.
5. It shall compensate the Architect at an hourly rate for review, investigation and comments, whether or not the request is approved; and for changes required to the building design, including engineering design, detailing, and construction costs caused by the requested substitution. The Architect is those firms or individuals listed by reference on the Drawings, including Consultants.
6. It shall pay for subsequent changes in incorporating the proposed substitution that were not apparent at the time of approval into the Work, including compensation to the Architect as described above.

Submitted By: ___________________________________________________

Signature _______________________________________________________

Firm ___________________________________________________________

Address _________________________________________________________

Date ___________________________________________________________

For use by Design Consultant only:

- [ ] Accepted
- [ ] Accepted as Noted
- [ ] Not Accepted
- [ ] Received Too Late

By ____________________________________

Date ______________________________

Remarks _______________________________________________________

SUBSTITUTION PROCEDURES

01 25 00 - 5
END OF SECTION
PART 1 - GENERAL

SUMMARY

Section includes:
Interpretation of contract documents during the bidding period.

1.01 INTERPRETATION OF CONTRACT DOCUMENTS

A. If a firm contemplating submitting a bid for the proposed contract is in doubt as to the true meaning of part of the schematic drawings, performance specifications, or other Contract Documents, or finds discrepancies in, or omissions from the drawings or performance specifications, they may submit a written request for an interpretation or correction to the Trustees.

B. Interpretation or correction of the Contract Documents will be made by Addendum and will be e-mailed to each person receiving a set of such documents.

C. Trustees shall not be responsible for other explanation or interpretation of the Contract Documents.

1.02 REQUESTS FOR INTERPRETATION DURING BID

A. Bidders shall use the form on page 2 titled, "Request for Interpretation of Contract Documents During Bid." to submit written requests for interpretation or corrections by e-mail or fax to the University:

   Cal Poly State University
   Attn: Eric Soderin
   E-mail: esoderin@calpoly.edu
   Fax: (805) 756-7566

B. To expedite the interpretation process, interpretations will be e-mailed to bidders as addenda.

C. Information shall be printed or typed including: Company name, address, phone, fax number, contact person, date, time of request, and question or clarification.

D. If bidders have several questions that will not fit on one form, photo copy the form, number each page, and submit multiple forms.

1.03 DEADLINE FOR REQUESTS FOR INTERPRETATION DURING BID

A. Requests for interpretation shall be received by the Trustees not later than ten (10) calendar days before the date bids will be opened.

B. The person submitting the request shall be responsible for its delivery.
THE CALIFORNIA STATE UNIVERSITY

REQUEST FOR INTERPRETATION OF CONTRACT DOCUMENTS DURING BID

To: Cal Poly State University
Attn: Joel Neel (jneel@calpoly.edu, Fax (805) 756-7566)
Project: Oppenheimer Upper Equestrian Pavilion

Date: ______________________  Time: ______________________

Company: ______________________________________________________

Contact Person: __________________________________________________

Address: _________________________________________________________

_______________________________________________________________

Telephone: ___________________________  FAX: _________________________

Plan Sheet: ___________________________  Specification Section: ________

INTERPRETATION REQUESTED:

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

REPLY:

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

TO A / E:

_________________________________________________________________

_________________________________________________________________

END OF SECTION
1.01 SUMMARY

A. Section Includes:
   1. Requirements for project coordination.
   2. Meetings
   3. Coordination of Submittals
   4. Coordination of Space
   5. Coordination of Contract Closeout

B. Related Specification Sections:
   1. Section 01 31 19 - Project Meetings
   2. Section 01 33 00 - Submittal Procedures
   3. Section 01 77 00 - Close-out Procedures

1.02 PROJECT COORDINATION

A. General:
   1. Coordinate the work; do not delegate responsibility for coordination to subcontractors.
   2. Anticipate the interrelationship of subcontractors and their relationship with the total work.
   3. Resolve differences or disputes between subcontractors and materials suppliers concerning coordination, interference, or extent of work between sections. The Contractor’s decisions, if consistent with the Contract Documents, shall be final. The Architect and Trustees Representative are not required to coordinate work between sections and shall not do so.
   4. Coordinate the work of subcontractors and material suppliers, so that their work is performed in a manner to minimize interference with, and to facilitate the progress of the work.
   5. Provide detailing for a complete project.
   6. Do not cover work (piping, wiring, etc.,) until inspected and certificates issued.
   7. Remove and replace work not conforming to the Contract Documents. Repair or replace work damaged by these operations.
   8. Coordination with Other Contracts: Coordinate work of this Contract with other contracts and contractors.
   9. Coordinate associated work to insure that work will be accomplished as rapidly as the progress of the project will permit and so that work shall not be delayed.

B. Tight Conditions:
   1. Coordinate work in advance; before installation and before work proceeds.
   2. Prepare coordinated layout shop drawings for review.
      a. Show constraints and site conditions.
      b. Show piping and valves, work in “tight” areas, and solutions to “tight” conditions.
c. Provide dimensions of locations, elevations, and clearances.
d. Refer to Section 01 33 00 - Submittal Procedures, Article 1.07 Shop Drawings.

C. Coordination:
   1. Coordinate work between trades with site conditions.
   2. Coordinate required adjustments. Clearly identify adjustments by circling on the coordinated layout shop drawings.
   3. Submit specific questions (regarding coordination of site conditions, and work between trades) with appropriate shop drawings documenting areas in question with Contractor’s proposed solution.

D. Submission and review of coordinated layout shop drawings:
   1. Prepare reproducible drawings.
   2. Submit to trades for review.
   3. Revise drawings to compensate for review by trades.
   4. Review revisions with trades.
   5. Submit to Trustees Representative for review.
   6. Review of coordinated layout shop drawings is for verification that Contractor has performed coordination work.

E. Review does not include verification of exact dimensions, clearances, arrangements and compliance with codes.

F. Final coordinated layout shop drawings shall show that trades affected have made reviews and shall be signed by trades at completion of coordination.
   1. General Contractor shall assure that trades have coordinated work.
   2. Include stamp with labeled space for trades to sign on submittal indicating that layout shop drawing has been coordinated.
   3. No layout shop drawing shall be reviewed without stamped and signed coordination assurance by General Contractor.

G. Coordinated layout shop drawings showing work of trades are required. Individual trade layout shop drawings shall not be accepted.

1.03 MEETINGS

A. Hold coordination meetings and pre-installation conferences with requisite personnel to assure coordination of Work. See also Section 01 31 19 - Project Meetings.

1.04 COORDINATION OF SUBMITTALS

A. Schedule and coordinate submittals specified in Section 01 33 00 - Submittal Procedures, and in Section 01 77 00 - Close-out Procedures.
   1. Coordinate work of various Sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
   2. Coordinate requests for substitutions to assure compatibility of space, of operating elements, and affect on work of other sections.

1.05 COORDINATION OF SPACE
A. Coordinate use of Project space and sequence of installation of work.

1.06 COORDINATION OF CONTRACT CLOSEOUT

A. Coordinate completion and cleanup of work of separate sections in preparation for University occupancy.

B. After University occupancy of premises, coordinate access to site by various sections for correction of defective work and work not Contract Documents, to minimize disruption of University’s activities.

C. Assemble and coordinate closeout submittals specified in Section 01 77 00 - Close-out Procedures.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
1. Pre-Construction Conference
2. Pre-Installation Conference
3. Progress Meetings
4. Billing Meetings
5. Guarantee / Warranties, Bonds, and Service and Maintenance Contracts
   Review Meeting
6. Commissioning Meetings
7. Project Close-Out Meeting

B. Related Specification Sections:

1.02 PRE-CONSTRUCTION CONFERENCE:

A. A meeting shall be scheduled at the University by the Trustees Representative immediately prior to Contractor move-in. Representatives of the Trustees, the Contractor, selected Subcontractors, Architect, Construction Manager, and Architect’s Consultants, and appropriate Trustees agents including the Deputy State Fire Marshal shall be present as needed.

B. Job site procedures and the following items shall be discussed:
1. Procedures for maintaining record documents
2. Trustees and Architect’s requirements
3. Construction facilities and controls
4. Temporary utilities
5. Security and Construction area clearing
6. Materials testing and inspection
7. Requirements of start-up trades
8. Project Layout
9. Safety Program
10. Coordination of construction impacts at the University
11. Review preliminary schedule
12. Progress payments
13. Change order procedures
14. Project close-out

1.03 PRE-INSTALLATION CONFERENCES

A. A meeting shall be scheduled at the Project Site by the Contractor before each construction activity that requires coordination with other construction. Installer and representatives of manufacturers and fabricators involved in or affected by the installation, and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Representatives of the Trustees, the Contractor, selected Subcontractors, Architect, Construction Manager, and Architect’s Consultants, and appropriate Trustees agents including the Deputy State Fire Marshal shall be present as needed.
1. Distribute written notice of agenda, meeting time, and location a minimum of four (4) calendar days in advance.

B. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
   2. Options.
   3. Related Change Orders.
   4. Review of mockups.
   5. Possible conflicts.
   7. Time schedules.
   8. Weather limitations.
   9. Manufacturer's written recommendations.
  10. Installation procedures.
  11. Warranty requirements.
  14. Testing and inspecting requirements.
  15. Required performance results.

C. Record significant conference discussions, agreements, and disagreements.

D. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

1.04 PROGRESS MEETINGS

A. A meeting shall be conducted bi-weekly, by the Construction Manager, Trustees Representative or the Architect. The Contractor's Project Manager and the Contractor's Superintendent shall attend.

B. The meeting shall be held in the job office or other designated location on a regularly scheduled basis. The date and hour shall be determined by the Trustees Representative.

C. Contractor shall distribute the meeting minutes to the attendees within one (1) week. Attendees taking exception to the meeting notes shall state so in writing to the Contractor within five (5) working days following receipt of meeting notes.

D. Contractor shall provide a three-week (3-week) look-ahead schedule as described in the Contract General Conditions, Article 35.16. This schedule shall be updated weekly. The progress schedule shall be a subset of the project schedule. The Construction Manager and Architect shall review this schedule to identify early scheduling changes or conflicts.

E. Standard Site-Meeting Agenda
   1. Job Status/Schedule
      a. Construction schedule
         i. Three-week look ahead schedule
      b. Long-lead procurement items effecting schedule
      c. Trustees-induced delays.
d. Contractor-caused delays.
e. Requests for Information (RFIs) - review responses effecting schedule
f. Shop drawing – review submittals and responses effecting schedule
g. Change Order items effecting schedule.

2. Old Business
3. New Business
4. Non-conformance Items
5. Status of As-Builts
6. Other Current Problem Areas / Resolutions
7. Environmental /Safety Considerations
8. Change Order Meeting

1.05 BILLING MEETINGS

A. As part of the last progress meeting each month, schedule and hold a billing meeting with the Construction Manager for the purpose of agreeing on the percentage of the work completed up to that date and establishing the amount to be requested in the Application for Payment.

B. Location: Trustees’ field office.

C. Attending shall be:
   1. Trustees Representative
   2. Contractor
   3. Architect
   4. Inspector

D. Prepare an itemized draft of the month’s proposed billing for review with the Construction Manager at the billing meeting.

1.06 GUARANTEE / WARRANTIES, BONDS, AND SERVICE AND MAINTENANCE CONTRACTS REVIEW MEETING

A. Arrange and hold a meeting at the Project Site to review guarantees/warranties, bonds, and service and maintenance contracts for materials and equipment.

B. Notify the following attendees of the date and time fourteen (14) calendar days minimum in advance.
   1. Meeting attendees:
      a. The Trustees Representative
      b. Architect
      c. Trustees’ and Architect’s Consultants
      d. Contractor
      e. Subcontractors, as appropriate to the agenda
      f. Suppliers, as appropriate to the agenda
      g. Others, as appropriate to the agenda

C. Repair or replace defective items, and extend service and maintenance contracts.

1.07 PROJECT CLOSE-OUT MEETING
A. Schedule: Four (4) weeks minimum prior to the scheduled completion of the Project, for the convenience of the Contractor, the Architect shall include in the standard meeting agenda, a Project Close-out meeting. Failure by the Architect to schedule this meeting shall not be a basis for delay claim by the Contractor.

B. Purpose: To produce an action-list of major items required to be completed prior to the issuance of the Notice of Completion.

1. Assign an action-responsibility and a projected action-completion date to each item.
2. Timely complete close-out items.
3. Items to be considered include:
   a. Punch list
   b. O & M manuals
   c. Spare Parts/Materials
   d. As-built Drawings and Specifications
   e. As-built Schedule
   f. Other Regulatory Inspection
      i. State Fire Marshal
   g. Removal of Temporary Facilities
   h. Final Cleaning and Pest Control
   i. Acceptance
   j. Notice of Completion
   k. Final Payment
   l. Occupancy
   m. Other close-out items

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes: Administrative Procedures required by the Trustees.

B. Related Specification Sections:
   1. “Asbestos on Campus” Published by Cal Poly, March, 2005 - Comprehensive
   2. Technical Specifications Divisions 01 thru 49

1.02 NOTICE OF EXISTING LEAD AND ASBESTOS CONTAINING MATERIALS

A. Lead:
   1. Lead coatings have been detected throughout the University in various buildings. Contractor must comply with applicable federal, state, and local regulations, specifically Title 8, California Code of Regulations Sections 1532.1 and 5216.
   2. Lead Paint and Coating Prohibition:
      a. Do not use lead containing paint, coatings and materials.
      b. Do not install lead painted or coated products or materials.
         i. Lead containing paints or coatings are defined as paint or coating containing more than 0.06 percent lead by weight as specified by the Consumer Product Safety Commission.
      c. Prior to bid opening date:
         i. If specified or non-specified items (paints, coatings, products or materials), which do contain lead, are intended for incorporation in this project:
            1) Subcontractors shall inform the Contractor.
            2) Contractor shall inform the Trustees.
            3) Trustees shall select an alternate item to be included in the bid.
      d. If Trustees is not notified of projects items that contain lead, by default, Contractor certifies a lead-free project.
      e. The Trustees may, at its discretion, allow a lead containing item to be used if no suitable or feasible alternative exists.
   3. If lead is discovered in paint, coatings, products or materials installed or applied within one year from the close of this contract:
      a. Contractor may be required to have applied lead paints, coatings, products or materials removed and repainted or recoated with a lead-free equivalent selected by the Trustees.
      b. Removal of lead-containing products or materials shall be done by personnel trained, certified, and licensed to perform lead removal. Comply with regulations.

B. Asbestos:
   1. Asbestos-containing materials have been detected throughout the University in various buildings. The Contractor must comply with
applicable federal, state, and local regulations, specifically California Code of Regulations, title 8.

2. Asbestos containing materials are defined as having an asbestos content of greater than 0.1 percent, Title 8, California Code of Regulations 5194 (d)(4), (d)(5)(B).

3. Asbestos Prohibition:
   a. Do not use materials or product containing asbestos.
   b. Prior to bid opening date:
      i. If specified or non-specified items, which do contain asbestos, are intended for incorporation in the project:
         1) Subcontractors shall inform the Contractor.
         2) Contractor shall inform the Trustees.
         3) Trustees shall select an alternate item to be included in the bid.
   c. If Trustees is not notified of projects items that contain asbestos, by default, Contractor certifies an asbestos-free project.

4. If asbestos is discovered in products or materials installed or applied within one year from the close of this contract:
   a. Contractor may be required to have applied asbestos products or materials removed and replaced with a non-asbestos equivalent selected by the Trustees.
   b. Removal of asbestos-containing products or materials shall be done by personnel trained, certified, and licensed to perform asbestos removal in accordance with applicable regulations.

1.03 SUBMITTALS

A. Accident Reporting:
   1. Forward a copy of accident report, which the Contractor or Subcontractors submit to their insurance carriers, to the Architect and Trustees Representative within seven (7) calendar days after the day the accident occurred.

B. Other Submittals:
   1. If agreed to in writing at the Preconstruction safety meeting:
      a. Submit other required items.
      b. Submit action plan for handling hazardous materials, including:
         i. Number, type, and experience of employees to be used for the Work.
         ii. Description of how safety and health regulations and standards shall be met.
         iii. Type of protective equipment and work procedures to be used.
   2. Emergency procedures for accidental spills or exposures.
   3. Certification: Project is lead and asbestos free.

1.04 SAFETY

A. Adhere to safety orders issued by the State of California Cal-OSHA, etc., pertaining to the Contract.
   1. Maintain traffic ways free of construction materials and debris on streets and sidewalks adjacent to, or leading to, the various on-University work areas.
2. Provide traffic controls, flag persons, lighted barricades, or similar devices to efficiently and safely control traffic movement where construction operations interfere with the free movement of traffic.
3. Barricade excavations in traffic ways (streets and sidewalks) at night with flasher and reflectorized barricades.

B. Safety Officer:
1. Appoint an individual to act as safety officer to maintain public safety of construction areas.
   a. The safety officer shall work closely with the Trustees Representative to provide continuous public safety.

PART 2 - PRODUCTS

2.01 GENERAL

A. Comply with the regulations for special facilities, devices, equipment, clothing, and similar items used by the Contractor in the execution of the Work

PART 3 - EXECUTION

3.01 HAZARDOUS MATERIALS

A. Notify the Trustees, in writing, of material suspected of being hazardous, which is encountered during execution of the Work. The Trustees shall perform tests to determine if the material is hazardous. If the material is found hazardous and additional protective measures are needed, a Contract Change Order may be required. Refer to the Part 1A - General Conditions.

B. Lead:
1. If suspected lead-containing materials are found, stop activity immediately and notify the Trustees Representative.
2. If, during the course of construction, it is discovered that new paints, coatings, products or materials contain lead:
   a. Remove items from the project.
   b. Trustees will select different paints, coatings, products or materials.
   i. Exception: If Trustees has determined in advance that those paints, coatings, product or materials containing lead are acceptable.

C. Asbestos:
1. If suspected asbestos-containing materials are found, stop activity immediately and notify the Trustees Representative.
2. If, during the course of construction, it is discovered that new products or materials contain asbestos:
   a. Remove items from the project.
   b. Trustees will select a different products or materials.

3.02 STOP WORK ORDERS
A. When the Contractor or its Subcontractors are notified by the Trustees Representative of noncompliance with the provisions of the Contract and the action(s) to be taken:
   1. Stop work immediately, if so directed.
   2. Correct the unsafe or unhealthy condition within 48 hours after receipt of a notice of violation.
   3. If the Contractor fails to comply promptly, all or part of the work being performed may be stopped by the Trustees Representative with a “Stop Work Order.”
   4. A start order will be given immediately when the Trustees Representative determines that satisfactory corrective action has been taken.
   5. No extension of time, or compensation for damages will be given for work stoppage.

3.03 PROTECTION

A. Take necessary precautions to prevent injury to the public, or damage to property of others.
   1. For the purposes of this contract, the public includes persons not employed by the Contractor or a Subcontractor working under the Contractor’s direction.

B. Do not perform Work in area occupied by the public or University employees:
   1. Exception: If specifically permitted by the Contract or the Trustees, and if adequate steps are taken to protect the public and the University employees.

C. When practicable, fence, barricade, or block off work area from public to prevent unauthorized entry into work area.

D. Alternate Precautions: Use alternate precautions, such as signs, signal persons, barricades or similar protection around particularly hazardous operations, when the nature of the Work prevents isolation of the work area, and the public may be in or pass through, under or over the work area.

E. Public Thoroughfare:
   1. When Work is to be performed over a public thoroughfare such as a road, or sidewalk, close the thoroughfare, if possible, or take other precautions such as the installation of screens or barricades.
   2. Provide special protection of the type detailed in 29 CFR 1910/1926, when the exposure to heavy falling objects exists, as during demolition.

F. Remove fences and barricades upon completion of the project to the satisfaction of the Trustees Representative.

G. Prohibited: Storing, positioning or use of equipment, tools, materials, scraps, and trash in a manner likely to present a hazard to the public by its shifting, ignition, or other hazardous qualities.

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes: Forms and reports.

B. Related Specification Sections:
   1. Section 01 25 00 - Substitution Procedures
   2. Section 01 33 00 - Submittal Procedures

1.02 CONTRACTOR FORMS

A. Provide Forms and Reports required by the Trustees and Architect for Administrative Procedures and items to document the Project as required by the Contract Documents, including forms and reports provided under this specification section.

1.03 TRUSTEES REPRESENTATIVE OR CONSTRUCTION MANAGER FORMS

A. Provide Forms and Reports as required for the Administrative Procedures and items to document the Project as required by the Contract Documents, including forms provided under this specification section.

1.04 FORMAT APPROVAL

A. Prior to issuing Forms or Reports, the format shall be submitted to the Trustees by the Architect, Construction Manager and the Contractor for review and approval.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.01 FORMS AND REPORTS

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<th>Name of Form or Report</th>
<th>Source</th>
<th>Form #</th>
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<td>Alternate / Or Equal Request Form</td>
<td>See Section 01 25 00 –</td>
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<td>Substitution Procedures</td>
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<td>Contractor Change Order Request Summary</td>
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<td>Cost Proposal</td>
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<td>Daily Superintendent’s Report</td>
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<td>Field Instruction</td>
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END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:
   1. Campus No Smoking Policy
   2. Stop Work
   3. Systems Startup, Interruption or Shutdown
   4. Cultural Resources

1.02 CAMPUS NO SMOKING POLICY

A. No Smoking Policy: The Board of Trustees has adopted a No Smoking Policy on Campus, except in designated areas. The Contractor shall assure that employees, subcontractors, material suppliers and visitors comply with the policy. The Contractor may designate a smoking area, away from Campus personnel, facilities and pathways, if approved in advance by the Trustees.

1.03 STOP WORK

A. The Trustees have the right, at any time, to stop any or all of the Contractor’s work by written notification to the Contractor. Such notification does not relieve the Contractor of other contract requirements, such as maintenance of the site, and does not modify specified milestones if not a critical path activity. Upon receipt of a notice to Stop Work, the Contractors shall immediately and in a safe manner, halt the associated work and, as directed by the Trustees, clean up and stabilize the work by fencing, backfilling, or other action deemed appropriate by the Trustees.

1.04 SYSTEMS STARTUP, INTERRUPTION OR SHUTDOWN

A. The University Representative shall be present during deactivation/reactivating of systems and, unless otherwise approved in advance and in writing, shall be directly responsible for physically deactivating andreactivating the system. Scheduling of these outages and of University representation shall occur as a part of the Work Plan process.

B. A formal and detailed procedure and schedule shall be submitted to the Trustees and approved prior to deactivation or reactivation of systems or components. Development of these procedures is the responsibility of the Contractor and these procedures shall be approved as part of the Work Plan process. The procedures shall be in the form of an attachment to the Access Request Form and shall be provided as a part of the Work Plan process. This is particularly critical of activities that shut down services to buildings (e.g. transformer installation, electrical power, domestic water connection, sanitary sewer connections, cooling, telecommunications, etc.).

C. Systems critical to building safety or security (such as fire protection systems, and building security systems) that are required to be interrupted, altered,
relocated or temporarily shut down as a result of this Work shall only be shut down upon advance notification to the Trustees. Further, implementation of a procedure approved by the Trustees shall be in compliance with prevailing codes and standards. This includes, but not limited to, providing an NFPA Fire Watch when a Fire Protection System is interrupted or shut down, and providing fire sprinkler piping relocation in compliance with NFPA 13.

1.05 CULTURAL RESOURCES

A. These requirements are in addition to Article 4.03 of the Contract General Conditions.

B. The project does not pass through known archaeological sites. However, it is conceivable that unrecorded archaeological sites could be discovered during construction.

C. In the event that artifacts, human remains, or other cultural resources are discovered during subsurface excavations at locations of the Work, protect the discovered items, cease work for a distance of a 335 foot (100 meter) radius of the area, immediately notify the Trustees Representative in writing, and comply with applicable laws.

D. The Trustees may retain an Archaeologist to monitor and recover data and artifacts during the period work has ceased. Notify the Trustees seven (7) calendar days minimum prior to initial excavation and coordinate excavation work requiring monitoring with the Archaeologist.

E. Items found, which are considered to have archaeological significance, are the property of the Trustees.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY
A. Section includes: Coordination, alterations, cutting and protection.

B. Related Specification Sections
1. Section 01 73 29 - Cutting and Patching
2. Section 01 77 00 - Closeout Procedures

1.02 SUBMITTALS
A. Submit a written request to the Trustees Representative seven (7) calendar days prior to executing cutting or alteration, which affect
1. Work of the University or separate contractor.
2. Structural value or integrity of elements of the Project

B. Request shall include the following:
1. Work of the University or separate Identification of the Project.
2. Description of affected work.
3. Necessity for cutting or alteration.
4. Effect on work of the University or separate contractor, or on structural or weatherproof integrity of the Project.
5. Alternatives to cutting and patching.
6. Cost proposal, when applicable.
7. Written permission of separate contractor whose work will be affected.
8. Description of proposed work including:
   a. Scope of cutting, patching, alteration or excavation.
   b. Trades to execute work.
   c. Products proposed to be used.
   d. Extent of refinish to be included.
9. Date and time work will be uncovered.

C. Should conditions of Work or schedule indicate a change of products from original installation, submit request for substitution as specified in Section 01 25 00 – Substitution Procedures.

1.03 COORDINATION AND ALTERATIONS
A. Coordinate the work of trades and schedule elements of alterations and renovation work by procedures and methods to expedite completion of the work.

B. In addition to demolition specifically shown, cut, move or remove items to provide access or to allow alterations and new work to proceed, such as:
1. Repair or remove hazardous or unsanitary conditions.
2. Remove abandoned items and items serving no useful purpose, which are abandoned as part of this project.
3. Remove unsuitable or extraneous materials not marked for salvage, such as abandoned furnishings and equipment, and debris such as rotted wood, rusted metals and deteriorated concrete.

C. Patch, repair, and refinish existing items to remain, to the specified condition for material, with a smooth and clean transition to adjacent new items of construction.

1.04 ALTERATIONS, CUTTING AND PROTECTION

A. Assign the work of moving, removal, cutting and patching, to trades qualified to perform the work in a manner to minimize the possibility of damage to work, and provide means of returning surfaces to appearance of new work.

B. Perform cutting and removal of work with minimal disruption and in a manner to avoid damage to adjacent work.

C. Cut finish surfaces such as concrete, asphalt, or metals, by methods that terminate surfaces in a straight line at a natural point of division.

D. Perform cutting and patching as specified in Section 01 73 29 - Cutting and Patching.

E. Protect existing finishes, equipment, and adjacent construction, which are scheduled to remain, from damage.
   1. Protect existing and new work from weather and extremes of temperature.
   2. Provide controls and protect to prevent damage to remaining work and to new work.

PART 2 - PRODUCTS

2.01 MATERIALS (PRODUCTS FOR PATCHING, EXTENDING AND MATCHING)

A. Provide same products or types of construction as in existing structure, to patch, extend or match existing.

B. Generally the Contract Documents will not define products or standards of quality of work present in existing construction. Determine products by vision and testing. Determine quality of work by using an existing sample for comparison.

C. When a product, finish, or type of construction requires patching, extending or matching, make work complete and consistent with identical standards of quality.

PART 3 - EXECUTION

3.01 PERFORMANCE

A. Patch construction using skilled workers capable of matching quality of work. Quality of patch shall be not less than that specified for new work.
3.02 DAMAGED SURFACES

A. Patch and replace with matching material portions of existing finished surfaces that are found to be damaged, lifted, discolored, or shows other imperfections.
   1. Provide adequate support of substrate prior to patching the finish.
   2. When existing surface finish cannot be matched, refinish entire surface to nearest intersections.

3.03 TRANSITION FROM EXISTING TO NEW WORK

A. When new work abuts or finishes flush with existing work, make a smooth in-plane and clean transition. Patched work shall match existing adjacent work in texture and appearance so that the patch or transition is invisible at a distance of five feet.

3.04 CLEANING

A. Perform periodic and final cleaning as specified in Section 01 77 00 - Closeout Procedures.

B. At completion of work of each trade, clean area and make surfaces ready for work of successive trades.

C. Remove extra materials and items, trash and debris as it accumulates and legally dispose off campus.

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes: The requirements for project security as follows:
   1. Security program
   2. Entry control
   3. Permanent keys
   4. False alarms

B. Related Specification Sections
   1. Section 01 11 00 - Summary of Work

1.02 SECURITY PROGRAM

A. Protect the Work from theft, vandalism, and unauthorized entry. The Contractor shall have sole responsibility for job site security.

B. Initiate program and coordinate with the Trustees for approval job mobilization.

C. Maintain program throughout construction period until the Trustees' occupancy or acceptance precludes the need for the Contractor's security.

D. Provide organized, locked, and supervised storage for receiving and dispensing items of finish hardware throughout construction period.

E. Project Inspectors Access: Provide the Trustees' Project Inspector with keys necessary to gain access to locked areas of the Work. The Trustees' Project Inspector will be responsible for such keys and will return them to the Contractor at acceptance of the project or area is complete.

1.03 ENTRY CONTROL

A. Restrict entrance of persons and vehicles into project site.

B. Allow entrance only to authorized persons with proper identification.

1.04 PERMANENT KEYS

A. Immediately upon receipt of permanent keys for whatever purpose (finish hardware, mechanical equipment, casework, dispensers, lockers, switches, equipment items, etc.), tag or otherwise clearly identify keys according to one approved system and turn them over to the Trustees’ Representative prior to any opportunity of access to keys by parties other than the Trustees.
PART 3 - EXECUTION – NOT USED

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. This Section includes: Statutory and Jurisdictional Regulations and relevant requirements.

B. Related Specification Sections:
   1. Divisions 01 through 49

1.02 STATUTORY AND JURISDICTIONAL REGULATIONS

A. Perform the Work Applicable Code Requirements and applicable requirements of regulatory agencies including, but not limited to, the following:
   1. State of California Code of Regulations (CCR), Title 24 State Building Standards, and the following:

   - CCR-T8 California Code of Regulations, Title 8-Industrial Safety
   - CCR-T19 California Code of Regulations, Title 19-Public Safety
   - CCR-T24 California Code of Regulations, Title 24, Part 1, Administrative Regulations, DSA-SSS.
   - 2016 CBC* California Building Code, California Code of Regulations, Title 24-Part 2, CCR-T24, latest amended (California State Amendments) and adopted edition enforce at time of approval of these documents by Division of State Architect.
   - 2016 CEC* California Electrical Code, California Code of Regulations, Title 24-Part 3, CCR-T24, latest amended (California State Amendments) and adopted edition enforce at time of approval of these documents by Division of State Architect.
   - 2016 CMC* California Mechanical Code, California Code of Regulations, Title 24-Part 4, CCR-T24, latest amended (California State Amendments) and adopted edition enforce at time of approval of these documents by Division of State Architect.
   - 2016 CPC* California Plumbing Code, California Code of Regulations, Title 24-Part 5, CCR-T24 latest amended (California State Amendments) and adopted edition enforce at time of approval of these documents by Division of State Architect.
   - 2016 CFC California Fire Code (Based on the National Fire Code by NFPA Uniform Fire Code), latest amended (California State Amendments) and adopted edition enforce at time of approval of these documents by Division of State Architect.
   - CCR-T24 California Energy Efficiency Standards for Residential

REGULATORY REQUIREMENTS
01 41 00 - 1
B. References to codes, regulations, standards, manufacturers’ instructions, or requirements of regulatory agencies, when used to specify requirements for materials or design elements, shall mean the edition of each in effect as identified in the Contract Documents.

C. The reference standards shall dictate the minimum quality of work or detailing in the absence of specific detailing or specifications.

1.03 ABBREVIATIONS AND ACRONYMS

A. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

BOCA BOCA International, Inc.
(See ICC)

CABO Council of American Building Officials
(See ICC)

IAPMO International Association of Plumbing and Mechanical Officials
(909) 472-4100
www.iapmo.org

ICBO International Conference of Building Officials
(See ICC)

ICBO ES ICBO Evaluation Service, Inc.
(See ICC-ES)

ICC International Code Council
(Formerly: CABO - Council of American Building Officials)
(703) 931-4533
www.iccsafe.org

ICC-ES ICC Evaluation Service, Inc.
(800) 423-6587
www.icc-es.org
(562) 699-0543

SBCCI Southern Building Code Congress International, Inc.
(See ICC)

1.04 CONFLICTS
A. If a conflict exists between referenced regulatory requirements, or between referenced regulatory requirements and the Contract Documents, comply with the more stringent requirements.

1. Exception: If otherwise directed by the Architect.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes: Definitions and abbreviations or acronyms used in the Contract Documents.

B. Related Specification Sections:
1. Section 01 25 00 - Substitution Procedures
2. Section 01 41 00 - Regulatory Requirements
3. Divisions 01 thru 49

1.02 DEFINITIONS

A. General: Basic Contract definitions are included in the Contract General Conditions.

B. Indicated: The term indicated refers to graphic representations, notes, or schedules on the Drawings, or other Paragraphs or Schedules in the Specifications, and similar requirements in the Contract Documents. Terms such as shown, noted, scheduled, and specified are used to help the reader locate the reference. There is no limitation on location.

C. Directed: Terms such as directed, requested, authorized, selected, approved, required, and permitted mean directed by the Architect or Trustees, requested by the Architect, and similar phrases.

D. Approve: The term approved, when used in conjunction with the Architect's action on the Contractor's submittals, applications, and requests, is limited to the Architect's duties and responsibilities as stated in the Conditions of the Contract.

E. Regulation: The term regulations includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.

F. Furnish: The term "furnish" means supply and deliver to the project site, ready for unloading, unpacking, assembly, installation, and similar operations.

G. Install: The term install describes operations at the Project site including the actual unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.

H. Provide: The term “provide” means to furnish and install, complete and ready for the intended use.

I. Installer: An Installer is the Contractor or an entity engaged by the Contractor, either as an employee, subcontractor, or contractor of lower tier, to perform a
particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experienced in the operations they are engaged to perform.

J. Project Site: Space available to the Contractor for performing construction activities, either exclusively or in conjunction, with others performing other work as part of the Project.

K. Testing Agencies: A testing agency is an independent entity engaged to perform specific inspections or tests, either at the Project Site or elsewhere, and to report on and if required, to interpret results of those inspections or tests.

1.03 INDUSTRY STANDARDS

A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

1. Requirements for packaging, packing, marking, and preparation for shipment or delivery included in referenced federal specifications are not mandatory for products provided for this Work.

B. Publication Dates: Comply with standards in effect as of date of the Contract Documents, unless otherwise indicated.

1. When a named or proposed product complies with a referenced standard of different publication date or issue than required by these Specifications, submit the product as a substitute under provisions of Section 01 25 00 - Substitution Procedures. Provide a detailed written summary of changes in product or workmanship quality and performance as a result of the product complying with a different version of a standard from the version referenced.

C. Conflicting Requirements: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.

1. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Where requirements conflict, provide the greater quantity and higher quality indicated. Refer uncertainties to Architect for a decision before proceeding.

2. Where a product is specified by both brand name and reference to 1 or more standards, provide that product only if it actually complies with the required standards. Listing of a product by brand or trade name in these Specifications is not a warranty that the product complies with the standards which may also be listed. If a named product does not comply with 1 or more of the required standards and no alternative product is
listed which does comply, submit a substitute product under provisions of Section 01 25 00 - Substitution Procedures, which complies with the required standards.

D. Copies of Standards: Each entity engaged in construction on Project must be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.

1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source and make them available on request.

E. Abbreviations and Acronyms for Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list. Names, telephone numbers, and Web site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

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<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
<th>Contact Information</th>
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<tr>
<td>ADAAG</td>
<td>Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities</td>
<td>(800) 872-2253, (202) 272-0080</td>
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<tr>
<td></td>
<td>Available from Access Board</td>
<td><a href="http://www.access-board.gov">www.access-board.gov</a></td>
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<td></td>
<td>Available from Government Printing Office</td>
<td><a href="http://www.access.gpo.gov/nara/cfr">www.access.gpo.gov/nara/cfr</a></td>
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<tr>
<td>CRD</td>
<td>Handbook for Concrete and Cement</td>
<td>(601) 634-2355</td>
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<td></td>
<td>Available from Army Corps of Engineers Waterways Experiment Station</td>
<td><a href="http://www.wes.army.mil">www.wes.army.mil</a></td>
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<tr>
<td>DOD</td>
<td>Department of Defense Military Specifications and Standards</td>
<td>(215) 697-6257</td>
</tr>
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<td></td>
<td>Available from Department of Defense Single Stock Point</td>
<td><a href="http://www.dodssp.daps.mil">www.dodssp.daps.mil</a></td>
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<td>DSCC</td>
<td>Defense Supply Center Columbus</td>
<td>(See FS)</td>
</tr>
<tr>
<td>FED-STD</td>
<td>Federal Standard (See FS)</td>
<td>(See FS)</td>
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<td>FS</td>
<td>Federal Specification</td>
<td>(215) 697-6257</td>
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<tr>
<td></td>
<td>Available from Department of Defense Single Stock Point</td>
<td><a href="http://www.dodssp.daps.mil">www.dodssp.daps.mil</a></td>
</tr>
<tr>
<td></td>
<td>Available from General Services Administration</td>
<td>(202) 501-1021</td>
</tr>
<tr>
<td></td>
<td>Available from National Institute of Building Sciences</td>
<td>(202) 289-7800</td>
</tr>
</tbody>
</table>
1.04 ABBREVIATIONS AND ACRONYMS

A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

AA Aluminum Association, Inc. (The) (202) 862-5100
  www.aluminum.org

AAADM American Association of Automatic Door Manufacturers (216) 241-7333
  www.aaadm.com

AABC Associated Air Balance Council (202) 737-0202
  www.aabchq.com

AAMA American Architectural Manufacturers Association (847) 303-5664
  www.aamanet.org

AASHTO American Association of State Highway and Transportation Officials (202) 624-5800
  www.transportation.org

AATCC American Association of Textile Chemists and Colorists (The) (919) 549-8141
  www.aatcc.org

ABMA American Bearing Manufacturers Association (202) 367-1155
  www.abma-dc.org

ACI ACI International (American Concrete Institute) (248) 848-3700
  www.aci-int.org
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
<th>Phone</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACPA</td>
<td>American Concrete Pipe Association</td>
<td>(972) 506-7216</td>
<td><a href="http://www.concrete-pipe.org">www.concrete-pipe.org</a></td>
</tr>
<tr>
<td>AEIC</td>
<td>Association of Edison Illuminating Companies, Inc. (The)</td>
<td>(205) 257-2530</td>
<td><a href="http://www.aeic.org">www.aeic.org</a></td>
</tr>
<tr>
<td>AFPA</td>
<td>American Forest &amp; Paper Association (See AF&amp;PA)</td>
<td></td>
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<tr>
<td>AF&amp;PA</td>
<td>American Forest &amp; Paper Association</td>
<td>(800) 878-8878 (202) 463-2700</td>
<td><a href="http://www.afandpa.org">www.afandpa.org</a></td>
</tr>
<tr>
<td>AGA</td>
<td>American Gas Association</td>
<td>(202) 824-7000</td>
<td><a href="http://www.aga.org">www.aga.org</a></td>
</tr>
<tr>
<td>AGC</td>
<td>Associated General Contractors of America (The)</td>
<td>(703) 548-3118</td>
<td><a href="http://www.agc.org">www.agc.org</a></td>
</tr>
<tr>
<td>AHA</td>
<td>American Hardboard Association (Now part of CPA)</td>
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<td></td>
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<tr>
<td>AHAM</td>
<td>Association of Home Appliance Manufacturers</td>
<td>(202) 872-5955</td>
<td><a href="http://www.aham.org">www.aham.org</a></td>
</tr>
<tr>
<td>AI</td>
<td>Asphalt Institute</td>
<td>(859) 288-4960</td>
<td><a href="http://www.asphaltinstitute.org">www.asphaltinstitute.org</a></td>
</tr>
<tr>
<td>AIA</td>
<td>American Institute of Architects (The)</td>
<td>(800) 242-3837 (202) 626-7300</td>
<td><a href="http://www.aia.org">www.aia.org</a></td>
</tr>
<tr>
<td>AISC</td>
<td>American Institute of Steel Construction</td>
<td>(800) 644-2400 (312) 670-2400</td>
<td><a href="http://www.aisc.org">www.aisc.org</a></td>
</tr>
<tr>
<td>AISI</td>
<td>American Iron and Steel Institute</td>
<td>(202) 452-7100</td>
<td><a href="http://www.steel.org">www.steel.org</a></td>
</tr>
<tr>
<td>AITC</td>
<td>American Institute of Timber Construction</td>
<td>(303) 792-9559</td>
<td><a href="http://www.aitec-glulam.org">www.aitec-glulam.org</a></td>
</tr>
<tr>
<td>ALCA</td>
<td>Associated Landscape Contractors of America</td>
<td>(800) 395-2522 (703) 736-9666</td>
<td><a href="http://www.alca.org">www.alca.org</a></td>
</tr>
<tr>
<td>ALSC</td>
<td>American Lumber Standard Committee, Incorporated</td>
<td>(301) 972-1700</td>
<td><a href="http://www.alsc.org">www.alsc.org</a></td>
</tr>
<tr>
<td>ANSI</td>
<td>American National Standards Institute</td>
<td>(202) 293-8020</td>
<td><a href="http://www.ansi.org">www.ansi.org</a></td>
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</tbody>
</table>
REFERENCES

AOSA  Association of Official Seed Analysts  (505) 522-1437  
      www.aosaseed.com

APA  APA - The Engineered Wood Association  (253) 565-6600  
      www.apawood.org

APA  Architectural Precast Association  (239) 454-6989  
      www.archprecast.org

API  American Petroleum Institute  (202) 682-8000  
      www.api.org

ARI  Air-Conditioning & Refrigeration Institute  (703) 524-8800  
      www.ari.org

ARMA  Asphalt Roofing Manufacturers Association  (202) 207-0917  
      www.asphaltroofing.org

ASCE  American Society of Civil Engineers  (800) 548-2723  
      (703) 295-6300  
      www.asce.org

ASHRAE  American Society of Heating, Refrigerating and  (800) 527-4723  
      Air-Conditioning Engineers  (404) 636-8400  
      www.ashrae.org

ASME  ASME International  (800) 843-2763  
      (The American Society of Mechanical Engineers  (212) 591-7722  
      International)  www.asme.org

ASSE  American Society of Sanitary Engineering  (440) 835-3040  
      www.asse-plumbing.org

ASTM  ASTM International  (610) 832-9585  
      (American Society for Testing and Materials  International)  www.astm.org

AWCI  AWCI International  (703) 534-8300  
      (Association of the Wall and Ceiling Industries  International)  www.awci.org

AWCMA  American Window Covering Manufacturers  (800) 449-8811  
      Association  (See WCSC)  (703) 733-0600  

AWPA  American Wood-Preservers' Association  (334) 874-9800  
      www.awpa.com
REFERENCES

01 42 00 - 7
<table>
<thead>
<tr>
<th>Organizations</th>
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<tr>
<td>CPPA - Corrugated Polyethylene Pipe Association</td>
<td><a href="http://www.cppa-info.org">www.cppa-info.org</a></td>
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<td>CRI - Carpet &amp; Rug Institute (The)</td>
<td><a href="http://www.carpet-rug.com">www.carpet-rug.com</a></td>
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<td>CRSI - Concrete Reinforcing Steel Institute</td>
<td><a href="http://www.crsi.org">www.crsi.org</a></td>
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<td>CSA - CSA International (Formerly: IAS)</td>
<td><a href="http://www.csa-international.org">www.csa-international.org</a></td>
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<tr>
<td>CSI - Cast Stone Institute</td>
<td>10 West Kimball St.</td>
</tr>
<tr>
<td>CSI - Construction Specifications Institute (The)</td>
<td><a href="http://www.csinet.org">www.csinet.org</a></td>
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<td>CSSB - Cedar Shake &amp; Shingle Bureau</td>
<td><a href="http://www.cedarbureau.org">www.cedarbureau.org</a></td>
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<td>CTI - Cooling Technology Institute (Formerly: CTI)</td>
<td><a href="http://www.cti.org">www.cti.org</a></td>
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<td>DHI - Door and Hardware Institute</td>
<td><a href="http://www.dhi.org">www.dhi.org</a></td>
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<td>EIA - Electronic Industries Alliance</td>
<td><a href="http://www.eia.org">www.eia.org</a></td>
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<td>EIMA - EIFS Industry Members Association</td>
<td><a href="http://www.eima.com">www.eima.com</a></td>
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<td>EJCDC - Engineers Joint Contract Documents</td>
<td><a href="http://www.asce.org">www.asce.org</a></td>
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<td>EJMA - Expansion Joint Manufacturers Association,</td>
<td><a href="http://www.ejma.org">www.ejma.org</a></td>
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<td>ESD - ESD Association</td>
<td><a href="http://www.esdassociation.org">www.esdassociation.org</a></td>
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<td>FCI - Fluid Controls Institute</td>
<td><a href="http://www.fluidcontrols">www.fluidcontrols</a> institute.org</td>
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<td>FIBA - Federation Internationale de Basketball Amateur (The International Basketball Federation)</td>
<td><a href="http://www.fiba.com">www.fiba.com</a></td>
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<tr>
<td>FIVB</td>
<td>Federation Internationale de Volleyball (The International Volleyball Federation)</td>
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<td>FM</td>
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<td>FMG</td>
<td>FM Global (Formerly: FM - Factory Mutual System)</td>
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<td>FRSA</td>
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<td>FSA</td>
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<td>FSC</td>
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<td>GA</td>
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<td>GANA</td>
<td>Glass Association of North America</td>
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<td>GRI</td>
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<td>HMMA</td>
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<td>HPVA</td>
<td>Hardwood Plywood &amp; Veneer Association</td>
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<td>HPW</td>
<td>H. P. White Laboratory, Inc.</td>
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<td>Acronym</td>
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<td>IAS</td>
<td>International Approval Services (See CSA)</td>
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<td>IBF</td>
<td>International Badminton Federation</td>
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<td>ICEA</td>
<td>Insulated Cable Engineers Association, Inc.</td>
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<td>ICRI</td>
<td>International Concrete Repair Institute, Inc.</td>
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<td>IEC</td>
<td>International Electrotechnical Commission</td>
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<td>IEEE</td>
<td>Institute of Electrical and Electronics Engineers, Inc. (The)</td>
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<td>IESNA</td>
<td>Illuminating Engineering Society of North America</td>
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<td>IGCC</td>
<td>Insulating Glass Certification Council</td>
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<td>IGMA</td>
<td>Insulating Glass Manufacturers Alliance (The)</td>
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<td>ILI</td>
<td>Indiana Limestone Institute of America, Inc.</td>
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<td>ISO</td>
<td>International Organization for Standardization</td>
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<td>ISSFA</td>
<td>International Solid Surface Fabricators Association</td>
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<td>ITS</td>
<td>Intertek</td>
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<td>ITU</td>
<td>International Telecommunication Union</td>
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<td>Laminating Materials Association</td>
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<td>MBMA</td>
<td>Metal Building Manufacturers Association</td>
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<td>Maple Flooring Manufacturers Association</td>
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<td>NAAMM</td>
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<td>NACE</td>
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<td>NADCA</td>
<td>National Air Duct Cleaners Association</td>
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<td>NAGWS</td>
<td>National Association for Girls and Women in Sport</td>
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<td>NAIMA</td>
<td>North American Insulation Manufacturers Association (The)</td>
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<td>NBGQA</td>
<td>National Building Granite Quarries Association, Inc.</td>
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<td>NCAAA</td>
<td>National Collegiate Athletic Association (The)</td>
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<td>NCMA</td>
<td>National Concrete Masonry Association</td>
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NCPI  National Clay Pipe Institute
www.ncpi.org  (262) 248-9094

NCTA  National Cable & Telecommunications Association
www.ncta.com  (202) 775-3550

NEBB  National Environmental Balancing Bureau
www.nebb.org  (301) 977-3698

NECA  National Electrical Contractors Association
www.necanet.org  (301) 657-3110

NeLMA  Northeastern Lumber Manufacturers’ Association
www.nelma.org  (207) 829-6901

NEMA  National Electrical Manufacturers Association
www.nema.org  (703) 841-3200

NETA  InterNational Electrical Testing Association
www.netaworld.org  (303) 697-8441

NFHS  National Federation of State High School Associations
www.nfhs.org  (317) 972-6900

NFPA  NFPA
www.nfpa.org  (800) 344-3555
www.nfpa.org  (617) 770-3000

NFRC  National Fenestration Rating Council
www.nfrc.org  (301) 589-1776

NGA  National Glass Association
www.glass.org  (703) 442-4890

NHLA  National Hardwood Lumber Association
www.natlhardwood.org  (800) 933-0318
www.natlhardwood.org  (901) 377-1818

NLGA  National Lumber Grades Authority
www.nlga.org  (604) 524-2393

NOFMA  National Oak Flooring Manufacturers Association
www.nofma.org  (901) 526-5016

NRCA  National Roofing Contractors Association
www.nrca.net  (800) 323-9545
www.nrca.net  (847) 299-9070

NRMCA  National Ready Mixed Concrete Association
www.nrmca.org  (888) 846-7622
www.nrmca.org  (301) 587-1400

NSF  NSF International
(National Sanitation Foundation International)
www.nsf.org  (800) 673-6275
www.nsf.org  (734) 769-8010

REFERENCES
01 42 00 - 12
<table>
<thead>
<tr>
<th>Reference</th>
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</table>
| NSSGA     | National Stone, Sand & Gravel Association  
(800) 342-1415  
www.nssga.org |
| NTMA      | National Terrazzo & Mosaic Association, Inc.  
(800) 323-9736  
www.ntma.com |
| NTRMA     | National Tile Roofing Manufacturers Association  
(See RTI) |
| NWWDA     | National Wood Window and Door Association  
(See WDMA) |
| OPL       | Omega Point Laboratories, Inc.  
(800) 966-5253  
www.opl.com |
| PCI       | Precast/Prestressed Concrete Institute  
(312) 786-0300  
www pci org |
| PDCA      | Painting & Decorating Contractors of America  
(800) 332-7322  
www pdca com |
| PDI       | Plumbing & Drainage Institute  
(800) 589-8956  
www pdionline org |
| PGI       | PVC Geomembrane Institute  
(217) 333-3929  
www pgi tp ce uiuc edu |
| PTI       | Post-Tensioning Institute  
(602) 870-7540  
www post tensioning org |
| RCSC      | Research Council on Structural Connections  
(800) 644-2400  
www boltcouncil org |
| RFCI      | Resilient Floor Covering Institute  
(301) 340-8580  
www rfcic om |
| RIS       | Redwood Inspection Service  
(888) 225-7339  
www calredwood org |
| RTI       | Roof Tile Institute  
(312) 670-4177  
www ntrma org |
| SAE       | SAE International  
(724) 776-4841  
www sae org |
| SDI       | Steel Deck Institute  
(847) 462-1930  
www sdi org |
| SDI       | Steel Door Institute  
(440) 899-0010  
www steeldoor org |
<table>
<thead>
<tr>
<th>REFERENCE</th>
<th>ORGANIZATION</th>
<th>DETAILS</th>
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<td>SEFA</td>
<td>Scientific Equipment and Furniture Association</td>
<td><a href="http://www.sefalabs.com">www.sefalabs.com</a></td>
</tr>
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<td>SGCC</td>
<td>Safety Glazing Certification Council</td>
<td><a href="http://www.sgcc.org">www.sgcc.org</a></td>
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<td>Security Industry Association</td>
<td><a href="http://www.siaonline.org">www.siaonline.org</a></td>
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<td>SIGMA</td>
<td>Sealed Insulating Glass Manufacturers Association (See IGMA)</td>
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<td>SJI</td>
<td>Steel Joist Institute</td>
<td><a href="http://www.steeljoist.org">www.steeljoist.org</a></td>
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<td>SMA</td>
<td>Screen Manufacturers Association</td>
<td><a href="http://www.smacentral.org">www.smacentral.org</a></td>
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<td>SMACNA</td>
<td>Sheet Metal and Air Conditioning Contractors' National Association</td>
<td><a href="http://www.smacna.org">www.smacna.org</a></td>
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<tr>
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<td>Society of Motion Picture and Television Engineers</td>
<td><a href="http://www.smpte.org">www.smpte.org</a></td>
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<td>SPFA</td>
<td>Spray Polyurethane Foam Alliance (Formerly: SPI/SPFD - The Society of the Plastics Industry, Inc.; Spray Polyurethane Foam Division)</td>
<td><a href="http://www.sprayfoam.org">www.sprayfoam.org</a></td>
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<td>SPIB</td>
<td>Southern Pine Inspection Bureau (The)</td>
<td><a href="http://www.spib.org">www.spib.org</a></td>
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<td>SPI/SPFD</td>
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<tr>
<td>SPRI</td>
<td>SPRI (Single Ply Roofing Institute)</td>
<td><a href="http://www.spri.org">www.spri.org</a></td>
</tr>
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<td>SSINA</td>
<td>Specialty Steel Industry of North America</td>
<td><a href="http://www.ssina.com">www.ssina.com</a></td>
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<tr>
<td>SSPC</td>
<td>SSPC: The Society for Protective Coatings</td>
<td><a href="http://www.sspc.org">www.sspc.org</a></td>
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<td>Steel Tank Institute</td>
<td><a href="http://www.steeltank.com">www.steeltank.com</a></td>
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<td>Steel Window Institute</td>
<td><a href="http://www.steelwindows.com">www.steelwindows.com</a></td>
</tr>
<tr>
<td>SWRI</td>
<td>Sealant, Waterproofing, &amp; Restoration Institute</td>
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</tbody>
</table>
www.swrionline.org

TCA  Tile Council of America, Inc.  www.tileusa.com  (864) 646-8453

TIA/EIA  Telecommunications Industry Association/Electronic Industries Alliance  www.tiaonline.org  (703) 907-7700

TMS  The Masonry Society  www.masonrysociety.org  (303) 939-9700

TPI  Truss Plate Institute, Inc.  www.tpinst.org  (608) 833-5900

TPI  Turfgrass Producers International  www.turfgrasssod.org  (800) 405-8873  (847) 705-9898

UL  Underwriters Laboratories Inc.  www.ul.com  (800) 285-4476  (847) 272-8800

UNI  Uni-Bell PVC Pipe Association  www.uni-bell.org  (972) 243-3902

USAV  USA Volleyball  www.usavolleyball.org  (888) 786-5539  (719) 228-6800


USITT  United States Institute for Theatre Technology, Inc.  www.usitt.org  (800) 938-7488  (315) 463-6463

WASTEC  Waste Equipment Technology Association  www.wastec.org  (800) 424-2869  (202) 244-4700

WCLIB  West Coast Lumber Inspection Bureau  www.wclib.org  (800) 283-1486  (503) 639-0651

WCMA  Window Covering Manufacturers Association  (See WCSC)

WCSC  Window Covering Safety Council  (Formerly: WCMA - Window Covering Manufacturers Association)  www.windowcoverings.org  (800) 506-4636  (212) 661-4261

WDMA  Window & Door Manufacturers Association  (Formerly: NWWDA - National Wood Window and Door Association)  www.wDMA.com  (800) 223-2301  (847) 299-5200

WI  Woodwork Institute  (Formerly: WIC - Woodwork Institute of  (916) 372-9943

REFERENCES
01 42 00 - 15
PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes: Responsibility, inspections, submittals and repair and protection for quality control services.

B. Section does not include: Testing laboratory.

C. Related Specification Sections:
   1. Section 01 31 13 - Project Coordination
   2. Section 01 73 29 - Cutting and Patching
   3. Section 01 33 00 - Submittal Procedures
   4. Divisions 01 thru 49

1.02 DEFINITIONS

A. Quality control services: Include inspections and tests and related actions including reports, performed by independent agencies, and governing authorities. They do not include Contract enforcement activities performed by the Trustees Representative.

B. Inspection and testing services: Verify compliance with requirements specified or indicated. These services do not relieve the Contractor of responsibility for compliance with Contract Document requirements.

1.03 RESPONSIBILITIES

A. Trustees will engage and pay for the services of an independent agency to perform inspections and tests.
   1. Provide access, assistance and information required for testing of the various portions of the Work as required by regulatory agencies, planning, building and other governmental inspectors, the Contract Documents and the Trustees.
      a. Keep work accessible and exposed for inspection until approved by the Trustees.
   2. Where the Trustees have engaged a testing agency or other entity for testing and inspection of a part of the Work, and the Contractor is also required to engage an entity for the same or related element. Do not employ the entity engaged by the Trustees.
      a. Exception: If agreed to in writing by the Trustees.
   3. Payment for initial testing for tests specifically indicated will be by Trustees.
      a. Exception: Cost of retesting shall be back-charged to the Contractor.

B. Retesting: Pay the cost of retesting where results of required inspections, tests or similar services prove unsatisfactory and do not indicate compliance with
Contract Document requirements, regardless of whether the original test was the Contractor’s responsibility.

1. Cost of retesting construction revised or replaced by the Contractor is the Contractor’s responsibility, where required tests were performed on original construction.

C. Associated Services: Cooperate with agencies performing required inspections, tests and similar services, and provide reasonable auxiliary services as requested.

D. Coordination: The Contractor, Project Manager/Inspector and each agency engaged to perform inspections, tests and similar services shall coordinate the sequence of activities to accommodate required services with a minimum of delay. In addition the Contractor shall coordinate activities to avoid the necessity of removing and replacing construction to accommodate inspections and tests.

1. The Contractor is responsible for communicating to the Construction Manager the scheduling times for inspections, tests, taking samples and similar activities.

2. Schedule Work so that there will be no excessive inspection time. At times that an inspector is required, sufficient work shall be laid out and adequate personnel supplied so that the inspector's time will be used to full advantage. If inspection costs become excessive because of poor shop or construction procedure, such excess costs will be paid for by University, but deducted from the Contract Price.

3. It is solely the responsibility of the Contractor to schedule all inspections and testing. It is solely the responsibility of the Contractor to notify all participants of tests and inspections, including but not limited to; the University, Architect, Construction Manager, Inspector, special inspectors, Archeologist, testing agency, governmental agencies and other required to be involved in the utility shut-down, testing or inspection. The Contractor is required to notify the University in writing in advance as specified in the contract documents and receive written approval of the proposed dates and times from the University prior to scheduling utility shutdowns, tests, inspections or similar activities.

4. Comply with Section 01 31 13 - Project Coordination.

1.04 INSPECTIONS

A. General: Construction work shall be subject to inspection by the Trustees, and Inspector; and the review by the Architect. Should questions arise as to field measurements, grades, locations, etc., the Architect shall determine the project requirements.

1. The Trustees will provide project personnel including inspectors, to be available at the project site.

2. Scheduling the inspectors to be at inspections is solely the responsibility of the Contractor.

3. Approval, as a result of an inspection, is not an approval of a violation of the provisions of the building code, or of other jurisdiction ordinances, including plans and specifications. Inspections presuming to give authority to violate or cancel the provisions of the code, or of plans and specifications, shall not be valid.
4. Work shall remain accessible and exposed for inspection purposes until approved by the Trustees. Contractor shall be liable for expense to remove or replace material to allow inspection.

B. Inspection Requests: When work is ready for inspection, notify the Inspector twenty-four (24) hours minimum before the desired inspection time. Requests shall be in writing and on the inspection request form provided in the Project Manual.

C. Approval Required: Work shall not be done beyond the point indicated in each successive inspection, without first obtaining the approval of the Inspector. The Inspector shall make the requested inspections and indicate in writing that the portion of the construction is satisfactory as completed, or fails to comply with plans and specifications. Correct portions that do not comply and do not cover or conceal until authorized by the Inspector.
   1. When work is completed and ready for occupancy and use, there shall be a final inspection and approval of buildings and structures.
   2. If work is not ready for inspection within ½ hour of arrival of the Architect, or Testing and Inspection Agency Representatives, pay for the site visit.
      a. Charges are on a time-and-materials basis (including travel time) on minimum of 1/2-day basis.
   3. The Contractor may be responsible for inspection costs for extended hours, weekends, and holidays when the work is for the sole benefit of the Contractor. The overtime portion for the inspectors and testing agency shall be paid by the Contractor when inspection and testing services exceed an eight-hour day or 40-hour work week.

D. Inspection Coordination:
   1. Provide an anticipated Inspection Requirements Schedule on a weekly basis.
   2. Coordinate with the three-week look-ahead schedule.
   3. Show the anticipated inspection needs for the next three weeks to facilitate:
      a. Appropriate Trustees coordination and interface.
      b. Mobilization of inspection staffing.

E. Required Inspections include, but are not limited to: Reinforcing steel, concrete pours, soils compaction. Do not be cover or conceal until the Inspector has approved.
   1. Minimum inspection requirements:
      a. Utility Inspection: To be made after utility work is place.
      b. Final Inspection: To be made when the work is completed and ready for use or occupancy.
      c. Other Inspections: The inspector may make or require other inspections of construction work to ascertain compliance with the provisions of the plans and specifications.
      d. Special Inspections: As indicated in Appendix C:
      e. Reinspections: A reinspection fee shall be assessed for each inspection or reinspection when a portion of work requiring inspection is called is not complete or when corrections are not made.
   2. Review the Contract Documents for additional inspection requirements.
F. Test and Inspections are listed below:

<table>
<thead>
<tr>
<th>Sect #</th>
<th>Section Name</th>
<th>Test</th>
<th>Inspection</th>
<th>Paid By</th>
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<tbody>
<tr>
<td>01 45 00</td>
<td>Quality Control</td>
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<td>Final Inspection</td>
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<td>03 30 00</td>
<td>Cast-In-Place Concrete</td>
<td>• Molded Cylinder Test</td>
<td>• Welding Continuous Inspection</td>
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<td>• Concrete Consistency</td>
<td>• Structural Concrete</td>
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<td>• Special Inspection</td>
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<td>05 12 00</td>
<td>Structural Steel Framing</td>
<td>• Bolt Connection Test</td>
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<td></td>
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<td>• Welding</td>
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<td>• Lamellar Tearing</td>
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<td>• Prior Testing of Base Material</td>
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<tr>
<td>05 30 00</td>
<td>Metal Decking</td>
<td>• Mill Analysis &amp; Test Reports</td>
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<td>05 41 00</td>
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<td>• Site Flood Test</td>
<td>• Periodic Inspection</td>
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<td>07 84 00</td>
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<td>07 95 13</td>
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<td>• Water Test</td>
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<td></td>
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<td>• General Pipe Testing</td>
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<td>Rough Mechanical Inspection</td>
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<td>Contractor</td>
</tr>
<tr>
<td>26 08 00</td>
<td>Commissioning of Electrical Systems</td>
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<td>Contractor &amp; University</td>
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<td>Voice Communications</td>
<td>• Soils Density Tests</td>
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<td>• Field Density Tests</td>
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<td>31 23 13</td>
<td>Subgrade Preparation</td>
<td>Backfilling &amp; Compaction</td>
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<td>32 11 23</td>
<td>Aggregate Base Courses</td>
<td>Compaction</td>
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<td>32 93 00</td>
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<td>Hydrostatic Tests, Pressure Tests, Leakage Tests</td>
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<td>Storm Utility Drainage Piping</td>
<td>Hydrostatic Test on Watertight Joints</td>
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<td>University</td>
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</tbody>
</table>

1.05 SUBMITTALS

A. The Trustees’ independent testing agency shall submit a certified written report of each inspection, test or similar service as per Section 01 33 00 - Submittal Procedures, with copies to the Architect, (1 copy), the Trustees (1 copies), the Contractor, and Inspector (2 copies).

B. Report Data: Written reports of each inspection, test or similar service shall include, but not be limited to:

1. Date of issue,
2. Project title and number,
3. Name, address and telephone number of testing agency,
4. Dates and locations of samples and tests or inspections,
5. Names of individuals making the inspection or test,
6. Designation of the Work and test method,
7. Identification of product and Specification Section,
8. Complete inspection or test data,
9. Test results and interpretation of test results,
10. Ambient conditions at the time of sample-taking and testing,
11. Comments or professional opinion as to whether inspected or tested Work complies with Contract Document requirements,
12. Name and signature of Laboratory inspector,
13. Recommendations on retesting.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.01 REPAIR AND PROTECTION
A. General: Upon completion of inspection, testing, sample-taking and similar services, repair damaged construction and restore substrates and finishes to eliminate deficiencies, including deficiencies in visual qualities of exposed finishes. Comply with Section 01 73 29 - Cutting and Patching.

B. Protect construction exposed by or for quality control service activities, and protect repaired construction.

C. Repair and protection is the Contractor’s responsibility, regardless of the assignment of responsibility for inspection, testing or similar services.

D. Testing and special inspection shall be scheduled by the Contractor thru the Trustees Representative.

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:
   1. Requirements for temporary services and facilities, including utilities, construction and support facilities, security and protection.
      a. Temporary utilities:
         i. Electricity
         ii. Telephone service
         iii. Water service
         iv. Sanitary Facilities
      b. Temporary Fire Protection:
         i. Welding, cutting and hot work operations
      c. Temporary construction and support facilities:
         i. Field offices and storage sheds
         ii. Vehicular access and Parking
         iii. Progress cleaning and waste removal
         iv. Temporary Facilities for Trustees Use
         v. Project identification
         vi. Traffic regulation
         vii. Access Routes
      d. Security and facilities protection:
         i. Barricades, warning signs, lights, fencing
         ii. Security
         iii. Environmental protection
         iv. Erosion and sediment control
         v. Water control
         vi. Dust control
         vii. Airborne Asbestos Fiber control
         viii. Smoke and odor control
         ix. Noise control
      e. Removal of utilities, facilities and controls

B. Related Specification Sections
   1. Section 01 11 00 - Summary of Work
   2. Section 01 33 00 - Submittal Procedures
   3. Section 01 35 53 - Security Procedures
   4. Section 01 51 00 - Temporary Utilities
   5. Section 01 52 00 - Construction Facilities
   6. Section 01 54 00 - Construction Aids
   7. Section 01 55 00 - Vehicular Access and Parking
   8. Section 01 56 00 - Temporary Barriers and Enclosures
   9. Section 01 56 39 - Temporary Tree and Plant Protection
   10. Section 01 57 00 - Temporary Controls
   11. Section 01 58 00 - Project Identification

1.02 SUBMITTALS
A. Refer to Section 01 33 00 - Submittal Procedures.

B. Temporary Utilities: Submit reports of tests, inspections, applicable meter readings and similar procedures performed on temporary utilities.

C. Road Closures: Submit written request.

D. Environmental Protection Plan: Submit within 30 days of commencement in Notice to Proceed.

E. State Water Pollution Prevention Plan (SWPPP): Submit Notice of Intend to the Regional Water Quality Control Board (RWQCB) with copies to Trustees Representative and Campus Environmental Health and Safety.

F. Submit notification in writing to the San Luis Obispo County Air Pollution Control District (SLOAPCD) with a copy to the Trustees Representative, 10 days prior to the start of Demolition.

G. Submit notification in writing to the San Luis Obispo County Air Pollution Control District (SLOAPCD) with a copy to the Trustees Representative, 14 days prior to the start of road construction.

H. Submit shop drawings of Project Signs.

1.03 QUALITY ASSURANCE

A. Regulations: Comply with industry standards and applicable laws and regulations of the authorities having jurisdiction, including, but not limited to:
   1. Cal OSHA
   2. Building Code requirements
   3. Health and safety regulations
   4. Utility company regulations
   5. Police, Fire Department and Rescue Squad rules
   6. Environmental protection regulations

   1. Refer to "Guidelines for Bid Conditions for Temporary Job Utilities and Services," prepared jointly by AGC and ASC, for industry recommendations.
   2. Electrical Service: Comply with NEMA, NECA and UL standards and regulations for temporary electric service. Install service in compliance with National Electric Code (CFPA 70).

C. Inspections: Arrange for authorities having jurisdiction to inspect and test temporary utility before use. Obtain required certifications and permits.

1.04 PROJECT CONDITIONS

A. Conditions of Use:
1. Keep temporary services and facilities clean and neat in appearance.
2. Operate in a safe and efficient manner.
3. Take necessary fire prevention measures.
4. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist on the site.

1.05 TEMPORARY UTILITIES

A. General:
   1. Pay all the costs associated with the installation of temporary utilities
   2. Engage appropriate personnel to install temporary or connect to existing service.

B. Electricity:
   1. Electricity may be taken from the University’s system, if available.
      a. Exception: When electricity is not available, arrange and pay for portable power.
   2. Provide electric meter and equipment, including connections and materials, and to extend the utility lines.
   3. Coordinate installation with the Trustees Representative.
   4. Contractor will be billed directly for electricity charges.

C. Telephone Service:
   1. Request and pay for telephone/data and fax facilities available for the duration of contract where the Contractor and its superintendent may be contacted.
   2. Connect to and use University’s phone system.
      a. Request and pay for phone/data installation through the Trustees Representative. Approximate costs are as follows:
         i. Tele/data lines to each trailer $1,000 each
         ii. Phone connection $ 85 each
         iii. Telephone instrument $ 350 each
      b. Pay for phone sets, connection, and use costs.
      c. Contractor will be billed directly for actual Telecommunications charges.

D. Water Service:
   1. Water may be taken from the University’s systems in such quantities and at such times, as it is available.
   2. Provide water meter and temporary materials to extend the utility lines.
   3. Coordinate installation with the Trustees Representative.
   4. Contractor will be billed directly for water charges.

E. Sanitary Facility: Provide on-site in a location suitable for its use.

1.06 TEMPORARY FIRE PROTECTION:

A. Welding, cutting and hot work operations:
   1. Eliminate welding and burning of steel as much as possible. Where unavoidable, perform welding and burning with precaution to avoid fire hazard.
2. **Hot Work Permit:**
   a. Notify Trustees 2 days in advance and obtain permit from State Fire Marshal prior to conducting work involving open flame, sparks, heat or creating and ignition source such as by torch, arc, cutting, grinding, etc.
      i. Provide fire watch for 30 minutes minimum after burning stops.
      ii. Protect adjacent surfaces.

3. Provide supervision of welding operations, combustion type temporary heating units, and similar sources of fire ignition.

4. Install and maintain temporary fire protection facilities to protect against reasonably predictable and controllable fire losses.
   b. Locate fire extinguishers where convenient and effective for intended purpose.

5. Store combustible materials in containers in fire-safe locations.

6. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire protection facilities, stairways and other access routes for fighting fires.

7. Prohibited: Smoking in fire hazard exposure areas.

1.07 **TEMPORARY CONSTRUCTION AND SUPPORT FACILITIES:**

A. Depending on lot availability, Contractor may rent lay down area for field office and/or staging. Contractor(s) requiring lay down area(s) will make this request through the University Representative. If approved Contractor will enter into a rental agreement with University Police/Parking Services. Rates are based on proximity to the campus core and academic term, but will not exceed the current Residential permit rate per space/space equivalent.

B. Field offices and storage sheds:
   1. Location: Locate within the Contractor Lay Down area identified in the documents. Depending on lot availability, Contractor may rent lay down area for field office and/or staging. Contractors requiring lay down area(s) will make this request through the University Representative. If approved, Contractor will enter into a rental agreement with University Police/Parking Services. Rates are based on proximity to the campus core and academic term, but will not exceed the current residential permit rate per space/space equivalent.

2. Field Office for Contractor:
   a. Provide field office facilities for Contractor’s use. Field office shall be neat and substantial.
   b. Provide the number of voice/data outlets connected to Campus system as desired. The Contractor and Subcontractors may connect to the campus internet to facilitate the use of the required web-based project management tools.
      i. Use of the internet is governed by the rules and requirements of the University.
ii. Downloading MP3s and video is strictly forbidden (clogs network traffic).

E. Parking

1. General:
   a. Requirements apply to Contractor, its employees, subcontractors and material suppliers.
   b. Observe University Motor Vehicle and Parking Regulations.
   c. Vehicles not displaying appropriate permits are subject to parking citation.
   d. Park vehicles in designated areas identified by University Representative.

2. Parking Permits:
   a. General Parking: Any vehicle parked on campus not actively used to carry tools, equipment, and supplies must display a valid general permit.
      1) Fee: Current rate for General Daily, Weekly or Quarterly.
      2) Replacement fee: Equivalent to current General rate.
      3) Sold/Issued through University Police, Bldg. #036.
   b. Construction Area – Designated parking within the construction site or undesignated parking near project buildings or work area (sidewalks, greenbelts, dirt area).
      1) Fee: $10.00 per permit flat rate (cost subject to change).
      2) Duration: 6 months.
      3) Replacement rate: $10.00 (cost subject to change).
      4) Rate for projects less than (4) days charged Daily General permit rate.
      5) Limited number of permits available for parking during project hours; number to be determined by University Representative and provided to University Police.
      6) Limited to work trucks with tools, equipment, and supplies.
      7) Issued through University Representative.
   c. Depending on lot availability, Contractor may rent lay down area for field office and/or staging. Contractor(s) requiring lay down area(s) will make this request through the University Representative. If approved Contractor will enter into a rental agreement with University Police/Parking Services. Rates are based on proximity to the campus core and academic term, but will not exceed the current Residential permit rate per space/space equivalent.
F. Progress cleaning and waste removal:
1. Solid Waste Management: Supply solid waste transfer containers. Daily remove debris such as spent air filters, oil cartridges, cans, bottles, combustibles and litter. Prevent trash and papers from blowing onto adjacent property. Personnel shall use refuse containers. Convey contents to a sanitary landfill.
4. Garbage: Store garbage in covered containers; pick up daily and dispose of in a sanitary landfill.
5. Dispose of vegetation, weeds, rubble, and materials removed by the clearing, stripping and grubbing operations off site. Comply with regulations.
6. Rubbish: Materials classified as unsuitable, rubble, shrubbery, trees, timber, trash and garbage.
7. Cleanup and Storage during Construction:
   a. Keep public areas, adjacent to the Contract work limit, clean, safe and free of obstructions including Contractor’s tools, supplies and equipment.
   b. Maintain areas “broom clean” daily.
   c. Contractor storage for materials or tools: Not supplied on University property outside the work limit.
   d. At completion of work, remove debris and surplus material, and dispose legally off campus.
8. Burning or open fires: Not allowed on University property

G. Project identification: Comply with Contract General Conditions, Section 4.24 – Project Sign, Advertising.

H. Traffic Regulation:
1. Grand Avenue, Perimeter Road, Highland Drive, or California Boulevard: No large or slow-moving vehicles between the hours of 7:30 a.m. and 8:30 a.m., Monday through Friday, when school is in session.
2. Restrictions:
   a. Construction traffic is restricted to California Boulevard.
   b. Clearance is restricted to 12 feet-6 inches under train trestle on Highland Drive.
3. Observe traffic laws.
4. Temporary traffic control and temporary traffic signs:
   a. Follow Caltrans guidelines and regulations.
5. Large equipment working in and around pedestrian areas shall require a spotter when backing up.
   a. Drivers of the equipment or back-up alarms are not considered "spotters."
   b. Large equipment includes, but is not limited to, backhoes, dump trucks, concrete trucks and delivery trucks.
6. Flag Persons: Provide trained and equipped flag persons to regulate traffic when construction operations or traffic encroach on public traffic lanes.

7. Flares and Lights: Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.

I. Access Routes:
1. Closure of a road, parking lot or building access:
   a. Obtain Trustees approval.
      i. Submit a written request for proposed road closures using the University’s standard request form a minimum of twenty-one (21) calendar days prior to the proposed closure date.
      ii. Times and dates for such road closure shall be at the discretion of the Trustees.
   b. After Trustees approve:
      i. Signs:
         1) Post sign(s) in approved location(s) forty-eight (48) hours minimum prior to closure.
         2) Size: 18 inches x 24 inches minimum with lettering 2 inches high minimum.
   c. Closures shall be a part of the Contractor’s construction schedule.
   d. Road and building driveway accesses:
      i. 12 feet minimum width for one-way traffic.
      ii. 20 feet minimum width for two-way traffic
      iii. Exception: If complete closure has been approved by the Trustees.
      iv. Exception:
         1) Highland Road: Maintain 2-way traffic.
         2) California Boulevard: Maintain access to parking lot C-4.

1.08 SECURITY AND FACILITIES PROTECTION

F. Barricades, Warning Signs and Lights, Fencing:
   1. Comply with Caltrans standards and code requirements for erection of structurally adequate barricades.
   2. Provide and remove barriers required to perform this work.
   3. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.
   4. Provide barricades and covered walkways required by governing authorities for public rights-of-way.
   5. Protect non-owned vehicular traffic, stored materials, site and structures from damage.
   6. Paint with appropriate colors, graphics and warning signs to inform personnel and the public of the hazard being protected against.
   7. Provide lighting, including flashing red or amber lights, and street signage for lane closures.

G. Security:
1. **Enclosures:**
   a. Install substantial temporary enclosure of partially completed areas of construction.
   b. Provide locking entrances to prevent unauthorized entrance, vandalism, theft and similar violations of security.
   c. Protect concrete from vandalism. Graffiti shall not be allowed in the finished product. Replace vandalized areas. Make repairs from control joint to control joint, and doweled to existing concrete. Repair landscape areas used for setup to their prior condition including leveling, repairing irrigation and reseeding.

2. **Storage:**
   a. Trustees Representative will designate areas for use.
   b. Provide a secure lockup where materials and equipment must be stored, and are of value or attractive for theft.
   c. Enforce discipline in connection with the installation and release of material to minimize the opportunity for theft and vandalism.

3. Comply with Section 01 35 53 - Security.

H. **Environmental Protection:**
   1. The requirements of this Article are in addition to those of Article 35.03 of the Contract General Conditions.
   2. During the progress of the work, keep the premises occupied in a neat and clean condition and protect the environment both on site and off site, throughout and upon completion of the construction project.
   3. Based on the requirements in the Contract Documents, develop a detailed Environmental Protection Plan and submit the plan to the Trustees for approval, within thirty (30) calendar days from the date of commencement specified in the Notice to Proceed. Based on comments by the Trustees, refine or modify plan until acceptable to the Trustees. When approved, distribute the approved plan to employees and subcontractors and their employees.

   The Environmental Protection Plan shall include, but not be limited to, the following items:
   a. Copies of required permits.
   b. Proposed sanitary landfill site.
   c. Other proposed disposal sites.
   d. Noise Control.
   e. Dust Control.
   f. Erosion and Sediment Control.
   g. Site Dewatering.
   h. Copies of agreements with public or private landowners regarding equipment, materials storage, borrow sites, fill sites, or disposal sites. If execution of the agreement made by the Contractor violates local or regional grading or land use regulations, it shall be invalid.
   i. Limits of the site, easement restrictions, location of environmentally sensitive areas, location of contractor’s trailer and location of access gates.

4. **Operational Requirements:** Comply with federal, state and local regulations pertaining to water, air, solid waste and noise pollution.

5. **Definitions of Contaminants:**
   a. **Sediment:** Soil and other debris that have been eroded and transported by runoff water.
b. Solid waste: rubbish, debris, garbage and other discarded solid materials resulting from construction activities, including a variety of combustible and non-combustible wastes, such as ashes, waste materials that result from construction or maintenance and repair work, leaves and tree trimmings.

c. Chemical waste: Includes petroleum products, bituminous materials, salts, acids, alkalis, herbicides, pesticides, disinfectants, organic chemicals and inorganic wastes. Some of the above may be classified as “hazardous.”

d. Sanitary wastes:
   i. Sewage: Domestic sanitary sewage.
   ii. Garbage: Refuse and scraps resulting from preparation, cooking, dispensing and consumption of food.

e. Hazardous Materials:
   i. In the event the Contractor encounters material reasonable believed to be asbestos, polychlorinated biphenyl (PCB), or other hazardous materials on the site, which have not been rendered harmless, immediately stop Work in the area affected and report the condition to the Trustees in writing.
   ii. The Work in the area affected shall not resume, except by written agreement of the Trustees and Contractor, if in fact the material is asbestos, PCB, or other hazardous materials and has not been rendered harmless.
   iii. The Work in the affected area shall resume in the absence of asbestos, PCB, or other hazardous materials, or when the materials have been rendered harmless.

6. Protection of Natural Resources:
   a. General: It is intended that the natural resources within the project boundaries, and outside the limits of permanent work performed under this Contract, be preserved in their existing condition, or be restored to an equivalent or improved condition upon completion of the work. Confine construction activities to areas defined by the public roads, easements, and work area limits shown on the drawings. Return construction areas to their pre-construction elevations except where surface elevations are otherwise noted to be changed. Maintain natural drainage patterns. Conduct construction activities such that ponding of stagnant water conducive to mosquito breeding habitat shall not occur.

   b. Land Resources: do not remove, cut, deface, injure or destroy trees or shrubs outside the work area limits. Do not remove, deface, injure or destroy trees within the work area without permission from the Architect. If requested by Trustees, damaged trees and shrubs shall be removed and replaced by Contractor.

   i. Protection: Protect trees that are located near the limits of the Contractor’s work areas, which may possibly be defaced, bruised or injured, or otherwise damaged by the Contractor’s operations. No ropes, cables or guys shall be fastened to, or be attached to existing trees or shrubs for anchorages.
ii. Trimming: Refer to Section 01 56 39 - Temporary Tree and Plant Protection.

iii. Excavation around Trees: Refer to Section 01 56 39 - Temporary Tree and Plant Protection.

iv. Repair or Restoration: Repair or replace trees or landscape features scarred or damaged by equipment or construction operations. The repair and restoration plan shall be reviewed and approved by the Trustees and the Architect.

v. Temporary Construction: Remove signs of temporary construction facilities such as haul roads, work areas, structures, foundations of temporary structures, stockpiles of excess or waste materials, or other vestiges of construction as directed by the Trustees. Level temporary roads, parking areas and areas that have become compacted or shaped. Unpaved areas, where vehicles are operated, shall receive a suitable surface treatment, or shall be periodically wetted down to prevent construction operations from producing dust damage and nuisance to persons and property. Keep haul roads clear of objects that create an unsafe condition. Promptly remove contaminants or construction materials dropped from construction vehicles. Do not drop mud and debris from construction equipment on public streets. Sweep clean turning areas and pavement entrances as directed by the Trustees Representative.

c. Water Resources: Investigate and comply with applicable federal, state and local regulations concerning the discharge (directly or indirectly) of pollutants to the underground and natural waters. Perform work under this Contract in such a manner that adverse environmental impacts are reduced to a level that is acceptable to the Trustees, Architect and regulatory agencies. Excess site material, mud, debris, etc. washed off roads, site and equipment shall not impact watercourses.

i. Oily Substances: Take special measures to prevent oily or hazardous substances from entering the ground, drainage areas or local bodies of water, and that would affect normal use or aesthetics, or produce a measurable impact on the areas. Dispose of soil or water, which is contaminated with oily substances due to the Contractor’s operations. Comply with applicable regulations.

I. Erosion and Sediment Control (less than one (1) acre)

1. Discharge construction runoff into small drainage areas at frequent intervals to avoid build-up of large potentially erosive flows.

2. Prevent runoff from flowing over unprotected (lack vegetation) slopes.

3. Keep disturbed areas to the minimum necessary for construction.

4. Keep runoff away from disturbed areas during construction.

5. Direct flows over vegetated areas prior to discharge into public storm drainage systems.

6. Trap sediment before it leaves the site, using such techniques as check dams, sediment ponds, silt fences and straw bale barriers.
7. Protect all storm drain inlets to reduce sediment from storm water runoff discharging from the construction site.
8. Remove and dispose of project construction-generated silt that leaves the site.
9. Stabilized disturbed areas as quickly as possible.
10. Remove mud from tires of earth moving trucks and equipment before traversing streets outside the construction area.

J. Water Control
1. Protect existing structure and finishes from water damage during construction.

K. Dust Control
1. These requirements are in addition to Article 4.03 of Part B – Contract General Conditions.
2. Prior to Construction: Submit notification in writing to the San Luis Obispo County Air Pollution Control District (SLOAPCD) with a copy to the Trustees Representative 14 days prior to the start of road construction.
3. Appoint a monitor to oversee and implement dust control measures.
4. Employ measures to avoid the creation of dust and air pollution, and to maintain continuous dust control resulting from construction operations.
5. Execute Work using methods to minimize raising dust from construction operations, to provide positive means to prevent air borne dust from dispersing into atmosphere, and to prevent visible emissions from crossing the project boundaries.
6. Speed of Construction Vehicles: 15 miles per hour maximum.
   a. Exception: If road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment from emitting dust that is visible crossing the project boundaries.
7. Prior to Ground Disturbance:
   a. Water down the project site.
8. During construction:
   a. If, in the opinion of the Trustees, dust particles are leaving the site or nuisance complaints are received, immediately take action to stop dust.
      i. Suspend grading operations, or water the exposed areas when wind conditions create considerable dust, such that a nuisance would generate complaints.
   b. Unpaved Areas not subject to vehicle traffic:
      i. Wet down twice a day minimum.
      ii. When wind velocity exceeds 15 mph, wet down site more frequently.
   c. Unpaved Areas subject to vehicle traffic:
      i. Wet down, treat with a chemical dust suppressant, or cover with material with 0.25 percent asbestos maximum.
   d. Storage Piles:
      i. Wet down, treat with a chemical dust suppressant, or cover with material with 0.25 percent asbestos maximum.
   e. Equipment:
i. Wash down before moving from the project site onto a paved road.

f. Tracking on Paved Roads:
i. Conduct operations to prevent visible track-out onto paved roadways open to the public.
   1) If track-out occurs, clean using wet sweeping immediately.

g. Sweep project area streets weekly.
h. Cover trucks hauling soil, debris, sand or loose materials.
i. Exposed areas, new driveways and sidewalks:
i. Seed, treat with soil binders, or pave as soon as site conditions allow.
ii. If the Trustees determine that seeding is necessary to keep dust particles from leaving the site or to control erosion, immediately seed and water as directed by the Trustees.

L. Airborne Asbestos Fiber Control
1. Cal Poly is located in an area of known naturally occurring asbestos deposits (serpentine outcroppings).
a. Construction, grading, trenching, horizontal boring, and maintenance activities are regulated by:
i. Naturally Occurring Asbestos, Airborne Toxic Control Measure (NOA-CTM) California Air Resources Board regulation, enforced by the San Luis Obispo County Air Pollution Control District (SLOAPCD).
ii. Title 8, California Code of Regulations, Section 1529, Construction Safety Orders for Asbestos Regulation, enforced by the Department of Occupational Safety and Health, Cal/OSHA.

2. A registered geologist has determined that asbestos deposits are not likely to be found on the project site.
3. If suspected asbestos-containing materials are found, stop activity immediately and notify the Trustees Representative. Trustees will provide an evaluation of site conditions and exposure assessment.

M. Smoke and Odor Control
1. Protect primary fresh air intakes to existing and occupied buildings from exhaust from internal combustion engines, paint and solvent fumes and other noxious fumes and vapors.
2. Implement control methods, such as snorkels from engine exhausts, to maintain 50 feet minimum away from air intakes.
3. Activities generating fumes shall be limited to a distance of 50 feet minimum from the air intake grilles.
4. If fume generating procedures occurs within 50 feet of an air intake:
a. Notify the Trustees Representative seven (7) calendar days minimum in advance.
b. Complete the work when it least impacts the University (evenings, weekends, or particularly windy days).
c. Provide carbon filter media, plastic barriers, or other control methods to assure only fresh air enters the building ventilation system.
5. Store volatile liquids, including fuels or solvents in closed containers.
6. Do not burn debris, lumber or other scrap.
7. Open Flame Work: Notify the Trustees in writing and obtain a fire permit from the State Fire Marshal.
8. Properly maintain equipment to reduce gaseous pollutant emissions.

N. Noise Control
1. These requirements are in addition to Article 35.03 of the Contract General Conditions.
2. Maximum noise levels within 1,000 feet of classroom, laboratory, residence, business, adjacent buildings, or other populated area for:
   a. Trenchers, pavers, graders and trucks: 90 dBA maximum at 50 feet as measured under the noisiest operating conditions.
   b. Other equipment: 85 dBA at 50 feet as measured under the noisiest operating conditions.
3. Equipment:
   b. Air compressors: Quiet type such as a “whisperized” compressor. Keep hoods closed while equipment is in operation.
   c. Portable Noise barriers: Provide around jack hammering construction; 3/4-inch plywood lined with 1-inch thick fiberglass on the work side.
4. Operations:
   a. Keep noisy equipment as far as possible from noise-sensitive site boundaries.
   b. Do not leave machines idling.
   c. Use electric power in lieu of internal combustion engine power wherever possible.
   d. Maintain equipment properly to reduce noise from excessive vibration, faulty mufflers, or other sources.
   e. Engines shall have properly functioning mufflers.
5. Scheduling:
   a. Schedule noisy operations to minimize their duration, and disruption to the adjoining users.
   b. Notify the Trustees Representative of seven (7) calendar days minimum in advance of performing work creating unusual noise.
   c. Schedule work at mutually agreeable times.
6. Do not play radios, tape recorders, televisions, and similar items at construction site.
7. When work occurs in or near occupied buildings, keep noise associated with construction activities to a minimum. Noisy operations that may disrupt academic or residential activities shall be scheduled after normal work hours.
8. All noisy work within the area of residence halls and other campus residences shall be restricted between the hours of 10:00 am to 10:00 pm seven (7) days per week, throughout the year. No work will be allowed in residence halls on campus residences during finals week.
9. Trustees reserve 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, Week-of-Welcome, or at other times that may be identified by the Trustees. Trustees reserve the
right to stop noisy work when said work disrupts classes or residential areas. Refer to Section 01 11 00 - Summary of Work.

1.09 TERMINATION AND REMOVAL:

F. Unless the Trustees requires that it be maintained longer, remove each temporary facility when the need has ended, or when replaced by authorized use of a permanent facility, or by Completion.

G. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with the temporary facility.

H. Repair damaged Work, clean exposed surfaces and replace construction that cannot be satisfactorily repaired.

I. At Completion, clean and renovate permanent facilities that have been used during the construction period.

PART 2 - PRODUCTS

2.07 MATERIALS

F. Provide new materials.
   1. Exception: If approved by the Trustees Representative, undamaged previously used materials in serviceable condition may be used.

G. Provide materials suitable for intended use. Do not create unsafe conditions or violate requirements of applicable codes and standards.

2.08 EQUIPMENT

F. Provide new equipment.
   1. If approved by the Trustees, undamaged, previously used equipment in serviceable condition.
   2. Provide equipment suitable for intended use.

G. First Aid Supplies: Comply with governing regulations.

H. Fire Extinguishers:
   1. Temporary offices and similar spaces: Provide hand-carried, portable UL-rated, class "A" fire extinguishers.
   2. In other locations: Provide hand-carried, portable, UL-rated, class "ABC" dry chemical extinguishers, or a combination of extinguishers of NFPA recommended classes for the exposures.
   3. Comply with NFPA 10 and 241 for classification, extinguishing agent and size required by location and class of fire exposure.

2.09 PROTECTION OF INSTALLED WORK

F. Protect installed work and provide special protection where specified in individual specification Sections.
G. Provide temporary and removable protection for installed products. Control activity in immediate work area to minimize damage.

H. Protect new, uninstalled items.

2.10 PROGRESS CLEANING

F. Cleanup and Storage During Construction:
   1. Keep public areas adjacent to the contract work limit clean, safe and free of obstructions including Contractor’s tools, supplied and equipment. Maintain “broom clean” daily.
   2. No Contractor storage for materials or tools will be supplied on campus outside the work limit.
   3. At completion of work, remove debris and surplus material and legally dispose of it off campus.
   4. Provide refuse containers.
      a. Prohibited: Use of University dumpsters.

G. Demolition: Remove trash or debris as it accumulates and legally dispose of it off campus.

2.11 PROJECT SIGNS

F. Identification signs are not allowed in the areas of work.
   1. Exception: Those required by law.

G. Optional: A small (4 feet x 8 feet maximum) sign may be allowed at the construction site, noting the contractor, the project name, the Architect, and subcontractors.
   1. Submit shop drawing of sign per Section 01 33 00 - Submittal Procedures.
      a. Provide sample sign and logos to be used including colors.

2.12 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

F. Remove temporary above grade or buried utilities, equipment, facilities, materials, prior to final application for payment inspections.

G. Clean and repair damage caused by installation or use of temporary work.

H. Restore existing facilities used during construction to original condition.

I. Restore permanent facilities used during construction to specified condition.

PART 3 - EXECUTION – NOT USED.

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:
   1. Temporary utilities:
      a. Temporary power
      b. Temporary lighting
      c. Telephone service
      d. Water service
      e. Sanitary facilities
      f. Heating and cooling
      g. Ventilation during construction
      h. Fire Protection
   2. Removal of temporary utilities

B. Related Specification Sections
   1. Section 01 33 00 - Submittal Procedures
   2. Section 01 73 29 - Cutting and Patching

1.02 REFERENCES

A. ANSI-A10 Safety Requirements for Construction and Demolition
B. CEC California Electric Code
C. CFPA 70 National electric Code
D. CPC California Plumbing Code
E. NECA Temporary Electrical Facilities
F. NFPA 10 Standard for Portable Fire Extinguisher
G. NFPA 241 Standard for Safeguarding Construction, Alterations and Demolition Operations

1.03 SUBMITTALS

A. Refer to Section 01 33 00 - Submittal Procedures.

B. Temporary Utilities: Submit reports of tests, inspections, applicable meter readings and similar procedures performed on temporary utilities.

1.04 QUALITY ASSURANCE

A. Regulations: Comply with industry standards and applicable laws and regulations of the authorities having jurisdiction, including, but not limited to:
   1. Cal OSHA

TEMPORARY UTILITIES
01 51 00 - 1
2. Building Code requirements
3. Health and safety regulations
4. Utility company regulations

B. Standards:
2. ANSI-A10 Series standards for “Safety Requirements for Construction and Demolition,” and
   a. Refer to “Guidelines for Bid Conditions for Temporary Job Utilities and Services,” prepared jointly by AGC and ASC, for industry recommendations.
   b. Electrical Service: Comply with NEMA, NECA and UL standards and regulations for temporary electric service. Install service in compliance with National Electric Code (CFPA 70).
4. California Plumbing Code (CPC)

C. Inspections: Arrange for authorities having jurisdiction to inspect and test temporary utility before use. Obtain required certifications and permits.

1.05 PROJECT CONDITIONS

A. Conditions of Use:
1. Keep temporary services and facilities clean and neat in appearance.
2. Operate in a safe and efficient manner.
3. Take necessary fire prevention measures.
4. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist on the site.

1.06 TEMPORARY UTILITIES

A. General:
1. Pay all the costs associated with the installation of temporary utilities
2. Engage appropriate personnel to install temporary or connect to existing service.

1.07 TEMPORARY POWER:

A. Electricity may be taken from the University's system, if available.
   1. Exception: When electricity is not available, arrange and pay for portable power.
B. Provide electric meter and equipment to extend the utility lines, including branch wiring and distribution boxes.
   1. Provide temporary feeder at location determined by Contractor and approved by Trustees Representative.
   2. Provide conduit, raceways, fittings, conductors, panels, connections, disconnects, overcurrent and ground-fault circuit protection, outlets and meters.
   3. Provide weatherproof enclosures for power components.
C. Option: Use of Permanent Electricity System with Trustees Representative approval.
1. Complete, test and inspect system, and obtain Trustees Inspector and Trustees Representative approvals.
2. Relamp fixtures immediately prior to Contract Completion (punch list) review.

D. Comply with University requirements, NECA Electrical Design Library – Temporary Electrical Facilities and California Electric Code (CEC).
E. Service Disruptions: Coordinate installation with the Trustees Representative. Schedule transfers at times convenient to University and occupants, and minimize disruption of service.
F. Contractor will be billed directly for electricity charges.

1.08 TEMPORARY LIGHTING:

A. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps.
   1. Maintain lighting and provide routine repairs.
   2. Provide weatherproof enclosures for lighting components.
B. Option: Use of Permanent Lighting System with Trustees Representative approval.
   1. Complete, test and inspect system, and obtain Trustees Inspector and Trustees Representative approvals.
C. Lighting Criteria: Light areas to provide for proper performance of construction activities and inspection of Work.

1.09 CAMPUS TELEPHONE SERVICE:

A. Request and pay for telephone/data and fax facilities available for the duration of contract where the Contractor and its superintendent may be contacted.
B. Connect to and use University's phone system.
   1. Request and pay for phone/data installation through the Trustees Representative. Approximate costs are as follows:
      a. Tele/data lines to each trailer $1,000 each
      b. Phone connection $ 85 each
      c. Telephone instrument $ 350 each
   2. Pay for phone sets, connection, and use costs.
   3. Contractor will be billed directly for actual Telecommunications charges.
C. Option: Use of cellular telephone, pagers and NEXTEL radio service with Trustees Representative approval.
   1. Include voice message and paging services.
   2. Contractor shall provide for cost of services.

1.10 WATER SERVICE:

A. Water may be taken from the University's systems in such quantities and at such times, as it is available.
B. Provide water meter and temporary materials to extend branch piping with outlets located so water is available by use of hoses.
C. Temporary water service piping, valves, fittings and meters: Comply with requirements of water utility and California Plumbing Code (CPC).
D. Option: Use of Permanent Water System with Trustees Representative approval.
   1. Complete, sterilize, test and inspect system, and obtain Trustees Inspector and Trustees Representative approvals.
E. Coordinate installation with the Trustees Representative.
F. Contractor will be billed directly for water charges.

1.11 SANITARY FACILITY:
A. Provide and maintain adequate temporary sanitary facilities and enclosures adjacent to field trailer.
   1. Provide number of temporary toilets suitable for number of workers.
   2. Provide wash-up sink with soap, towels and waste disposal.
B. Use of Permanent Sanitary Facilities:
   1. Do not use, unless approved by Trustees Representative.
   2. Immediately prior to Contract Completion, clean and sanitize facilities used during construction.

1.12 VENTILATION DURING CONSTRUCTION:
A. Temporary ventilation devices, energy and related services.
B. Option: Use of Permanent Ventilation Systems with Trustees Representative approval.
   1. Prior to operation of equipment, verify equipment is lubricated and filters are in place.
C. Provide for operation, maintenance and regular replacement of filters and worn and consumed parts.
   1. Immediately prior to Contract Completion, change disposable filters and clean permanent filters.
D. Ventilation Criteria: Vent enclosed areas to assist cure of materials, to dissipate humidity and to provident accumulation of dust, fumes, vapors and gases for proper performance of Work.

1.13 TERMINATION AND REMOVAL:
A. Unless the Trustees requires that it be maintained longer, remove each temporary facility when the need has ended, or when replaced by authorized use of a permanent facility, or by Completion.
B. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with the temporary facility.
C. Repair damaged Work, clean exposed surfaces and replace construction that cannot be satisfactorily repaired.
D. At Completion, clean and renovate permanent facilities that have been used during the construction period.

PART 2 - PRODUCTS
2.01 MATERIALS
A. Provide new materials.
   1. Exception: If approved by the Trustees Representative, undamaged previously used materials in serviceable condition may be used.
B. Provide materials suitable for intended use. Do not create unsafe conditions or violate requirements of applicable codes and standards.

2.02 EQUIPMENT
A. Provide new equipment.
   1. If approved by the Trustees, undamaged, previously used equipment in serviceable condition.
   2. Provide equipment suitable for intended use.

2.03 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS
A. Remove temporary above grade or buried utilities, equipment, facilities, materials, prior to final application for payment inspections.
B. Clean and repair damage caused by installation or use of temporary work.
C. Restore existing facilities used during construction to original condition.
D. Restore permanent facilities used during construction to specified condition.

PART 3 - EXECUTION

3.01 TEMPORARY UTILITIES INSTALLATION
A. General:
   1. Engage the appropriate local utility company or personnel to install temporary service or connect to existing service.
      a. Use Charges: Cost or use charges for temporary facilities are the Contractor's responsibility.
      b. Allowance for Utilities Charges: When Contract includes an allowance for metering of utility services unused amount shall be returned to the Trustees by deductive change order.

B. Water Service: Water may be taken from the University's system in such quantities and at such times as they are available. Provide temporary materials necessary to extending the utility. Install a meter and reimburse the University for water usage.

C. Temporary Electric Power Service: Electricity may be taken from the University's system if available. Provide equipment, including connections, and other materials necessary for extending the utility lines. Coordinate installation with University's Representative. Install meter and reimburse University for power usage. Where sub-metering is not possible or practical, a flat fee may be established by the University.
   1. When not available from the University, arrange and pay for electric service through the local utility or furnish portable power.

D. Temporary Telephones: Provide telephone facility at business office for the duration of contract where Contractor and its superintendent may be contacted.

E. Temporary Fire Protection: Until fire protection needs are supplied by permanent facilities, install and maintain temporary fire protection facilities to protect against

1. Locate fire extinguishers where convenient and effective for intended purpose, but not less than one extinguisher on site for the duration of construction.
2. Store combustible materials in containers in fire-safe locations.
3. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire protection facilities, stairways and other access routes for fighting fires.
4. Smoking is prohibited on Campus except in designated smoking areas.
5. Provide supervision of welding operations, combustion type temporary heating units, and similar sources of fire ignition.

F. Maintenance of Temporary Utilities and Services: Maintain temporary utilities and services in good operating condition until removal. Protect utilities and services from environmental and physical damage.

3.02 TERMINATION AND REMOVAL OF TEMPORARY UTILITIES AND SERVICES

A. Termination and Removal of Temporary Utilities and Services:
1. Unless Trustees require that it be maintained longer, remove each temporary facility when:
   a. Need has ended, or
   b. Replaced by authorized use of a permanent facility, or
   c. No later than Completion.
2. Complete or restore permanent construction that may have been delayed because of interference with the temporary facility.
3. At Completion, clean and renovate permanent facilities that have been used during the construction.

B. Removal of Temporary Underground Utilities and Restoration: Remove temporary underground utility installations to a minimum depth of two-feet below utility services. Contractor shall:
1. Backfill, compact and regrade site as necessary to restore areas or to prepare for indicated paving and landscaping.
2. Restore paving damaged by temporary utilities. Refer to requirements specified in Section 01 73 29 - Cutting and Patching.

C. Cleaning and Repairs:
1. Clean exposed surfaces and repair damage.
2. Where determined by University's Representative that repair of damage is unsatisfactory, replace construction with matching finishes. Refer to requirements specified in Section 01 73 29 - Cutting and Patching.

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:
   1. Field offices and storage sheds
   2. Progress cleaning and waste removal
   3. Temporary facilities for trustees use
   4. Removal of facilities

B. Related Specification Sections
   1. Section 01 33 00 - Submittal Procedures
   2. Section 01 51 00 - Temporary Utilities
   3. Section 01 55 00 - Vehicular Access and Parking
   4. Section 01 56 00 - Temporary Barriers and Enclosures

1.02 SUBMITTALS

A. Layout of Field Offices, Sheds and Storage Areas: Within five working days of the Notice to Proceed, submit proposed layout for field offices, sheds and storage areas.

B. Refer to Section 01 33 00 - Submittal Procedures.

1.03 QUALITY ASSURANCE

A. Regulations: Comply with industry standards and applicable laws and regulations of the authorities having jurisdiction, including, but not limited to:
   1. Cal OSHA
   2. Building Code requirements
   3. Health and safety regulations
   4. Utility company regulations

B. Inspections: Arrange for authorities having jurisdiction to inspect and test temporary utility before use. Obtain required certifications and permits.

1.04 PROJECT CONDITIONS

A. Conditions of Use: Keep temporary facilities clean and neat in appearance.

1.05 TEMPORARY CONSTRUCTION AND SUPPORT FACILITIES:

A. Field offices and storage sheds:
   1. Field Office for Contractor:
      a. Provide field office facilities for Contractor's use. Field office shall be neat and substantial.
      b. Provide the number of voice/data outlets connected to Campus system as desired. The Contractor and Subcontractors may connect to the campus internet to facilitate the use of the
required web-based project management tools. Refer to Section 01 35 25 – Web-based Project Management.

i. Use of the internet is governed by the rules and requirements of the University.

ii. Downloading MP3s and video is strictly forbidden (clogs network traffic).

2. Field Office for Trustees: Within 30 days after receiving a Notice to Proceed for the construction portion of the project, provide office trailer in good condition, minimum 12' x 48'. Prior to furnishing trailer, provide plan showing partitions, furniture, equipment, and telephone service layout to Trustees for approval. Trailer shall display California Commercial Coach Insignia as evidence of meeting or exceeding minimum Construction and Fire Safety requirements of Title 25, California Code of Regulations (CCR), Chapter 3, Sub Chapter 2, Article 3. Location subject to review and approval by the Trustees.

3. Wind and snow load design requirements shall meet most stringent criteria for jobsite location during Contract period. Design load criteria shall be posted within unit per Section 4360.1 of referenced CCR.

4. Provide and pay for all utility connections to Trustees' trailer.

5. Provide heating and air conditioning unit mounted on end of trailer; of sufficient function, capacity and ductwork for equal distribution of air conditioning to all rooms. Roof-mounted units are not acceptable. Unit must be capable of maintaining 68 to 78 degrees F interior to year-round.

6. Provide required tie-down accessories per Section 4368 of referenced Title 25 CCR 3.2.3.

7. Provide at least two exterior doors with steps and entry platforms. Both doors shall be re-keyed to campus standard at Contractor's expense.

8. Provide sufficient ceiling mounted fluorescent lighting to maintain even 60 footcandles illuminated on desk and tabletop work surfaces.

9. Windows, doors, and vents shall be provided with insect screens; maintain in good condition during contract. Provide minimum six (6) 3' x 4' operable windows, spacing as approved. Windows to have security provisions, but not security bars.

10. Provide furnishings in good condition, or built-in equivalents, as follows:

   a. Two (2) each Desk, 34" x 60", locking, double-pedestal, 3 drawers on one pedestal. Laminated plastic top.
   b. Two (2) each Swivel Chair, steel, with arms, upholstered seat and back, mounted on casters.
   c. Two (2) each File Cabinet, steel, locking, letter size, at least 4 drawers.
   d. One (1) each Wall-mounted Plan Rack, with 10 "stick" capacity and 32" long sticks.
   e. Two (2) each Wastebaskets.
   f. Two (2) each Stackable Chairs.
   g. Shelf space to accommodate at least 6 hard hats with coat hooks underneath.
   h. One (1) each White Dry-Erase Board with 8 color market set, eraser, and cleaning fluid, at least 3' x 8'. Provide service and warranty per as per manufacturer's recommendation. Provide supplies ads recommended by manufacturer as needed by University staff.
CONSTRUCTION FACILITIES

01 52 00 - 3

i. One (1) each Copy Machine with auto feed and 10 stack collator, auto reduction and enlargement capability of 8-1/2 x 11, 8-1/2 x 14, and 11 x 17, Xerox 5034 or equal. Provide supplies recommended by manufacturer as needed by University staff. Provide service and warranty per manufacturer's recommendation.

11. Trailer office and furnishings shall remain property of the Contractor; remove from site upon completion of contract.

12. Provide three (3) duplex outlets in each room and general/conference room spaced evenly in rooms and electrical service ready for use, plus three, 6-outlet surge protection strips.

13. Provide four (4) voice/data outlets connected to Campus system (University standard 4-port outlet). Furnish two (2) campus standard Ericsson digital phones (model DBC 213 01/01006 R5A).

14. Provide two (2) 9-channel, two-way radios, Motorola GP300 or equal on Contractor's frequency.

1.06 TERMINATION AND REMOVAL:

A. Unless the Trustees requires that it be maintained longer, remove each temporary facility when the need has ended, or when replaced by authorized use of a permanent facility, or by Completion.

B. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with the temporary facility.

C. Repair damaged Work, clean exposed surfaces and replace construction that cannot be satisfactorily repaired.

D. At Completion, clean and renovate permanent facilities that have been used during the construction period.

PART 2 - PRODUCTS

2.01 CONTRACTOR'S FIELD OFFICES AND SHEDS

A. Contractor's Field Office: Provide a mobile field office of weather-tight construction, with lighting, power, ventilation, heating and cooling.

B. Storage Sheds for Tools, Materials, and Equipment: Contractor shall provide weather-tight sheds, all with the following:
   1. heat and ventilation appropriate for storage of products requiring controlled conditions.
   2. adequate space for organized storage and access.
   3. lighting for inspection of stored materials

PART 3 - EXECUTION

3.01 INSTALLATION OF CONSTRUCTION FACILITIES

A. Layout of Field Offices, Conference Room and Sheds:
1. Location: Comply with directions of University's Representative.
2. Coordinate installation of construction fencing as specified in Section 01 56 00 - Temporary Barriers and Enclosures.
3. Depending on lot availability, Contractor may rent lay down area for field office and/or staging. Contractor(s) requiring lay down area(s) will make this request through the University Representative. If approved Contractor will enter into a rental agreement with University Police/Parking Services. Rates are based on proximity to the campus core and academic term, but will not exceed the current Residential permit rate per space/space equivalent.

3.02 MAINTENANCE OF CONSTRUCTION FACILITIES

A. Maintenance: Maintain construction facilities in proper and safe condition throughout progress of the Work.

B. Replacement: In the event of loss or damage, promptly restore temporary construction facilities by repair or replacement.

3.03 REMOVAL OF CONSTRUCTION FACILITIES

A. Removal of Construction Facilities: Unless otherwise mutually agreed by University's Representative and Contractor, remove temporary materials, equipment, services, and construction prior to Contract Completion review.
   1. Coordinate removal with requirements specified in Section 01 51 00 - Temporary Utilities, Section 01 55 00 - Vehicular Access and Parking, and Section 01 56 00 - Temporary Barriers and Enclosures.
   2. Completely remove in-ground construction facilities to minimum depth of two feet. Backfill, compact and regrade site as necessary to restore areas or to prepare for indicated paving and landscaping.

B. Cleaning and Repairs: Clean and repair damage caused by installation or use of temporary construction facilities.

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:
   1. Temporary lifts and hoists
   2. Debris chutes
   3. Temporary stairs
   4. Scaffolding

B. Related Specification Sections
   1. Section 01 33 00 - Submittal Procedures
   2. Section 01 51 00 – Temporary Utilities
   3. Section 01 52 00 - Construction Facilities
   4. Section 01 55 00 - Vehicular Access and Parking
   5. Section 01 56 00 - Temporary Barriers and Enclosures

1.02 SUBMITTALS

A. Layout of Field Offices, Sheds and Storage Areas: Within five working days of the Notice to Proceed, submit proposed layout for field offices, sheds and storage areas.

B. Refer to Section 01 33 00 - Submittal Procedures.

1.03 CODES AND REGULATIONS

A. Comply with requirements of applicable Federal, State and local safety rules and regulations.

1.04 TEMPORARY LIFTS AND HOISTS

A. Temporary Lifts and Hoists: Provide facilities for hoisting materials and personnel.

   1. Note: Mobile lifts, truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

1.05 DEBRIS CHUTES

A. Provide chutes as necessary for debris removal.

   1. Construct debris chutes of substantial materials. Use cylindrical, laminated fiber forms (Sonotube or equal) to minimize noise of debris removal.
   2. Provide controls at debris chutes to minimize spread of dust and debris.
3. Limit use of debris chutes to times to minimize disruption of activities in adjacent spaces.

1.06 TEMPORARY STAIRS AND SCAFFOLDING

A. Temporary Stairs: Until permanent stairs are available, provide temporary stairs where ladders are not adequate. Cover finished, permanent stairs with protective covering of plywood or similar material so finishes will be undamaged at time of Contract Completion review.

B. Permanent Stair Usage: Use of permanent stairs will be permitted, as long as stairs are cleaned and maintained in a condition acceptable to University's Representative.

1. Provide protective coverings, barriers, devices, signs, or other procedures to protect stairs and to maintain means of egress.

2. If stairs become damaged, restore damaged areas as acceptable to University's Representative.

3. Coordinate usage of existing stairs at occupied facilities with University's Representative.

C. Scaffolding: Provide scaffolding, including design, for access and proper performance of the Work.

PART 2 - PRODUCTS – NOT USED.

PART 3 - EXECUTION

3.01 MAINTENANCE OF CONSTRUCTION AIDS

A. Maintenance: Maintain construction aids in proper and safe condition throughout progress of the Work.

B. Replacement: In the event of loss or damage, promptly restore construction aids by repair or replacement.

3.02 REMOVAL OF CONSTRUCTION AIDS

A. Removal of Construction Aids:

1. Unless otherwise mutually agreed by University's Representative and Contractor, remove construction aids prior to Contract Completion review.

2. Coordinate removal with requirements specified in

3. Section 01 51 00 - Temporary Utilities,

4. Section 01 52 00 - Construction Facilities,
5. Section 01 55 00 - Vehicular Access and Parking and
6. Section 01 56 00 - Temporary Barriers and Enclosures

B. Cleaning and Repairs: Clean and repair damage caused by installation or use of construction aids.

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:
   1. Vehicular Access and Parking
   2. Traffic Regulation
   3. Access Routes
   4. Maintenance of Parking and Access Roads

B. Related Specification Sections
   1. Section 01 33 00 - Submittal Procedures
   2. Section 01 57 00 - Temporary Controls
   3. Section 01 74 19 - Construction Waste Management and Disposal

1.02 SUBMITTALS

A. Road Closures: Submit written request.

B. Refer to Section 01 33 00 - Submittal Procedures.

1.03 CONDITIONS OF USE

A. Conditions of use are applicable to the Contractor, its employees, subcontractors, and material suppliers.

B. Restrict Work to limits of project site.

C. Protect existing, adjacent facilities from damage, including soiling and accumulation of debris.

1.04 VEHICULAR ACCESS AND PARKING

A. Parking

1. General:
   a. Requirements apply to Contractor, its employees, subcontractors and material suppliers.
   b. Observe University Motor Vehicle and Parking Regulations.
   c. Vehicles not displaying appropriate permits are subject to parking citation.
   d. Park vehicles in designated areas identified by University Representative.

2. Parking Permits:
a. General Parking: Any vehicle parked on campus not actively used to carry tools, equipment, and supplies must display a valid general permit.
   1) Fee: Current rate for General Daily, Weekly or Quarterly.
   2) Replacement fee: Equivalent to current General rate.
   3) Sold/Issued through University Police, Bldg. #036.

b. Construction Area – Designated parking within the construction site or undesignated parking near project buildings or work area (sidewalks, greenbelts, dirt area).
   1) Fee: $10.00 per permit flat rate (cost subject to change).
   2) Duration: 6 months.
   3) Replacement rate: $10.00 (cost subject to change).
   4) Rate for projects less than (4) days charged Daily General permit rate.
   5) Limited number of permits available for parking during project hours; number to be determined by University Representative and provided to University Police.
   6) Limited to work trucks with tools, equipment, and supplies.
   7) Issued through University Representative.

c. Depending on lot availability, Contractor may rent lay down area for field office and/or staging. Contractor(s) requiring lay down area(s) will make this request through the University Representative. If approved Contractor will enter into a rental agreement with University Police/Parking Services. Rates are based on proximity to the campus core and academic term, but will not exceed the current Residential permit rate per space/space equivalent.

B. Traffic Regulation

1. General:
   a. Observe traffic laws.
   b. Streets and sidewalks adjacent to, or leading to on-campus work areas: Maintain free of construction material and debris.

2. Traffic Control Plan
   a. Prepare if construction operations interfere with the free movement of vehicle, pedestrian or bicycle traffic.
   b. Initial Approval: University Representative and University Police.
   c. Plan Change Approval: University Representative and University Police.
   d. Include detail appropriate to complexity of work project or incident.
   e. Responsible Parties: Before site is occupied, review and approve.
   f. Include items in Plan:
      1) Means to efficiently and safely control traffic movement.
i. Refer to Section 01 50 00 – Temporary Facilities.

ii. Traffic safety control equipment and traffic signs.

2) Excavations in traffic ways (streets and sidewalks). Refer to Section 01500 – Temporary Facilities.

3) Access routes including Americans with Disabilities Act accessible.

4) Duration of closure and time of operation.

3. Signs, Signals, and Devices:

   a. Comply with Caltrans guidelines and regulations.

   b. Post Mounted and Wall Mounted Traffic Control and Informational Signs:
      As approved by Trustees.

   c. Traffic Control Signals: As approved by Trustees.

   d. Traffic Cones and Drums, Flares and Lights: As approved by Trustees.

   e. Flag person Equipment: As required by Trustees.

4. Flag persons:

   a. Provide trained and equipped flag persons to regulate traffic when:

      1) Construction operations or traffic encroach on public traffic lanes.

      2) Large equipment includes, but is not limited to, backhoes, dump trucks, concrete trucks and delivery trucks.

      3) Not Permitted: Drivers of the equipment or back-up alarms as “spotters.”

5. Flares and Lights: Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.

6. Haul Routes:

   a. Restrictions:

      1) Grand Avenue, Perimeter Road, Highland Drive, and California Boulevard:

         i. No large or slow-moving vehicles allowed between the hours of 7:30a.m. and 8:30 a.m., Monday through Friday when school is in session.

         ii No material deliveries shall be 10 minutes before and 10 minutes after the hour (i.e. 3:50 pm – 4:10 pm), due to high pedestrian traffic flow.

      2) Road under Train Overpass on Highland Drive: 12’-6” clearance.

   b. Consult with University Representative to establish public thoroughfares to be used for haul routes and site access.

   c. Confine construction traffic to designated haul routes.

   d. Provide traffic control at critical areas of haul routes to regulate traffic, to minimize interference with public traffic.
7. Closures of Roads, Parking and Building Access:
   a. Coordination and Project Conditions: Comply with all Sections of Division 1.
   b. Signage:
      1) Post sign(s) in location(s) 48 hours minimum prior to closure date.
      2) Size: 18” x 24” minimum with lettering 2” high minimum
   c. Road and building driveway accesses for emergency vehicles:
      1) one-way traffic: 12’ minimum width
      2) two-way traffic: 20’ minimum width
      3) Exception: If complete closure is approved by Trustees.

8. Traffic Signs and Signals:
   a. Provide signs at approaches to site and on site, at crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic.
   b. Provide, operate, and maintain [automatic] traffic control signals to direct and maintain orderly flow of traffic in areas under Contractor's control, and areas affected by Contractor's operations.
   c. Relocate as Work progresses, to maintain effective traffic control.

9. Pedestrian Crossings:
   a. Cross walk: all crossings that are impacted during construction must have an alternative crossing provided immediately adjacent to work area. All safety measures must be followed.
   b. ADA Ramps, crosswalks and features must be protected.

PART 2 - PRODUCTS – NOT USED.

PART 3 - EXECUTION

3.01 MAINTENANCE OF PARKING AND ACCESS ROADS

   A. Maintenance: Maintain traffic and parking areas in a sound condition. Repair breaks, potholes, low areas, standing water and other deficiencies, to maintain paving and drainage in original or specified condition.

   B. Cleaning of Roadways and Parking Areas: Keep public and private rights-of-way and parking areas clear of construction-caused soiling, dust and debris, especially debris hazardous to vehicle tires. Perform cleaning as frequently as necessary. Coordinate with requirements specified in Section 01 57 00 - Temporary Controls and 01 74 19 – Construction Waste Management and Disposal.

VEHICULAR ACCESS AND PARKING
01 55 00 - 4
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:
   1. Vehicular Access and Parking
   2. Traffic Regulation
   3. Access Routes
   4. Maintenance of Parking and Access Roads

B. Related Specification Sections
   1. Section 01 33 00 - Submittal Procedures
   2. Section 01 57 00 - Temporary Controls
   3. Section 01 74 19 - Construction Waste Management and Disposal

1.02 SUBMITTALS

A. Road Closures: Submit written request.

B. Refer to Section 01 33 00 - Submittal Procedures.

1.03 CONDITIONS OF USE

A. Conditions of use are applicable to the Contractor, its employees, subcontractors, and material suppliers.

B. Restrict Work to limits of project site.

C. Protect existing, adjacent facilities from damage, including soiling and accumulation of debris.

1.04 VEHICULAR ACCESS AND PARKING

A. Parking

1. General:
   a. Requirements apply to Contractor, its employees, subcontractors and material suppliers.
   b. Observe University Motor Vehicle and Parking Regulations.
   c. Vehicles not displaying appropriate permits are subject to parking citation.
   d. Park vehicles in designated areas identified by University Representative.

2. Parking Permits:
a. General Parking: Any vehicle parked on campus not actively used to carry tools, equipment, and supplies must display a valid general permit.
   1) Fee: Current rate for General Daily, Weekly or Quarterly.
   2) Replacement fee: Equivalent to current General rate.
   3) Sold/Issued through University Police, Bldg. #036.

b. Construction Area – Designated parking within the construction site or undesignated parking near project buildings or work area (sidewalks, greenbelts, dirt area).
   1) Fee: $10.00 per permit flat rate (cost subject to change).
   2) Duration: 6 months.
   3) Replacement rate: $10.00 (cost subject to change).
   4) Rate for projects less than (4) days charged Daily General permit rate.
   5) Limited number of permits available for parking during project hours; number to be determined by University Representative and provided to University Police.
   6) Limited to work trucks with tools, equipment, and supplies.
   7) Issued through University Representative.

c. Depending on lot availability, Contractor may rent lay down area for field office and/or staging. Contractor(s) requiring lay down area(s) will make this request through the University Representative. If approved Contractor will enter into a rental agreement with University Police/Parking Services. Rates are based on proximity to the campus core and academic term, but will not exceed the current Residential permit rate per space/space equivalent.

B. Traffic Regulation

1. General:
   a. Observe traffic laws.
   b. Streets and sidewalks adjacent to, or leading to on-campus work areas: Maintain free of construction material and debris.

2. Traffic Control Plan
   a. Prepare if construction operations interfere with the free movement of vehicle, pedestrian or bicycle traffic.
   b. Initial Approval: University Representative and University Police.
   c. Plan Change Approval: University Representative and University Police.
   d. Include detail appropriate to complexity of work project or incident.
   e. Responsible Parties: Before site is occupied, review and approve.
   f. Include items in Plan:
      1) Means to efficiently and safely control traffic movement.
i. Refer to Section 01 50 00 – Temporary Facilities.
ii. Traffic safety control equipment and traffic signs.

2) Excavations in traffic ways (streets and sidewalks). Refer to Section 01500 – Temporary Facilities.

3) Access routes including Americans with Disabilities Act accessible.

4) Duration of closure and time of operation.

3. Signs, Signals, and Devices:
   a. Comply with Caltrans guidelines and regulations.
   b. Post Mounted and Wall Mounted Traffic Control and Informational Signs: As approved by Trustees.
   c. Traffic Control Signals: As approved by Trustees.
   d. Traffic Cones and Drums, Flares and Lights: As approved by Trustees.
   e. Flag person Equipment: As required by Trustees.

4. Flag persons:
   a. Provide trained and equipped flag persons to regulate traffic when:
      1) Construction operations or traffic encroach on public traffic lanes.
      2) Large equipment includes, but is not limited to, backhoes, dump trucks, concrete trucks and delivery trucks.
      3) Not Permitted: Drivers of the equipment or back-up alarms as “spotters.”

5. Flares and Lights: Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.

6. Haul Routes:
   a. Restrictions:
      1) Grand Avenue, Perimeter Road, Highland Drive, and California Boulevard:
         i. No large or slow-moving vehicles allowed between the hours of 7:30 a.m. and 8:30 a.m., Monday through Friday when school is in session.
         ii. No material deliveries shall be 10 minutes before and 10 minutes after the hour (i.e. 3:50 pm – 4:10 pm), due to high pedestrian traffic flow.
      2) Road under Train Overpass on Highland Drive: 12'-6” clearance.
   b. Consult with University Representative to establish public thoroughfares to be used for haul routes and site access.
   c. Confine construction traffic to designated haul routes.
   d. Provide traffic control at critical areas of haul routes to regulate traffic, to minimize interference with public traffic.
7. Closures of Roads, Parking and Building Access:
   a. Coordination and Project Conditions: Comply with all Sections of Division 1.
   b. Signage:
      1) Post sign(s) in location(s) 48 hours minimum prior to closure date.
      2) Size: 18” x 24” minimum with lettering 2” high minimum
   c. Road and building driveway accesses for emergency vehicles:
      1) one-way traffic: 12’ minimum width
      2) two-way traffic: 20’ minimum width
      3) Exception: If complete closure is approved by Trustees.

8. Traffic Signs and Signals:
   a. Provide signs at approaches to site and on site, at crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic.
   b. Provide, operate, and maintain [automatic] traffic control signals to direct and maintain orderly flow of traffic in areas under Contractor's control, and areas affected by Contractor's operations.
   c. Relocate as Work progresses, to maintain effective traffic control.

9. Pedestrian Crossings:
   a. Cross walk: all crossings that are impacted during construction must have an alternative crossing provided immediately adjacent to work area. All safety measures must be followed.
   b. ADA Ramps, crosswalks and features must be protected.

PART 2 - PRODUCTS – NOT USED.

PART 3 - EXECUTION

3.01 MAINTENANCE OF PARKING AND ACCESS ROADS
   A. Maintenance: Maintain traffic and parking areas in a sound condition. Repair breaks, potholes, low areas, standing water and other deficiencies, to maintain paving and drainage in original or specified condition.
   B. Cleaning of Roadways and Parking Areas: Keep public and private rights-of-way and parking areas clear of construction-caused soiling, dust and debris, especially debris hazardous to vehicle tires. Perform cleaning as frequently as necessary. Coordinate with requirements specified in Section 01 57 00 - Temporary Controls and 01 74 19 – Construction Waste Management and Disposal.
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:
   1. Temporary air barriers
   2. Temporary dust and noise barriers
   3. Temporary barricades
   4. Temporary fencing
   5. Temporary protective walkways
   6. Temporary security barriers
   7. Temporary security enclosures

B. Related Specification Sections
   1. Section 01 33 00 - Submittal Procedures
   2. Section 01 35 53 - Security Procedures
   3. Section 01 51 00 - Temporary Utilities
   4. Section 01 52 00 - Construction Facilities
   5. Section 01 54 00 - Construction Aids
   6. Section 01 55 00 - Vehicular Access and Parking
   7. Section 01 56 39 - Temporary Tree and Plant Protection
   8. Section 01 57 00 - Temporary Controls
   9. Section 01 58 00 - Project Identification

1.02 SUBMITTALS

A. Refer to Section 01 33 00 - Submittal Procedures.

1.03 QUALITY ASSURANCE

A. Regulations: Comply with industry standards and applicable laws and regulations of the authorities having jurisdiction, including, but not limited to:
   1. Cal OSHA
   2. Building Code requirements
   3. Police, Fire Department and Rescue Squad rules

1.04 PROJECT CONDITIONS

A. Conditions of Use:
   1. Keep temporary barriers and enclosures clean and neat in appearance.
   2. Operate in a safe and efficient manner.
   3. Take necessary fire prevention measures.
   4. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist on the site.

1.05 TEMPORARY AIR BARRIERS

A. Temporary Closures:
1. Provide temporary weather-tight enclosure for building exterior for protection of construction in progress and completed, and from exposure, foul weather, other construction operations and similar activities.

2. Where heating or cooling is needed and permanent enclosure is not complete, provide insulated temporary enclosures. Coordinate closures with ventilating and material drying or curing requirements to avoid dangerous conditions and effects such as mold.

3. Vertical openings: Close openings of 25 sq. ft. (2.3 sq. m) or less with plywood or similar materials.


5. Tarpaulins: Fire-resistive labeled with flame-spread rating of 15 or less, installed securely using wood framing and other suitable materials.

6. Where temporary wood or plywood enclosure exceeds 100 square feet. (9.2 square meters) in area, use fire-retardant-treated material for framing and main sheathing.

1.06 TEMPORARY DUST AND NOISE BARRIERS

A. Dust and Noise Barriers:

1. Provide dustproof, floor-to-ceiling partitions of not less than nominal 4-inch (100 mm) studs, 2 layers of 3-mil (0.07 mm) polyethylene sheets, inside and outside temporary enclosure.

   a. Overlap and tape full length of joints.

   b. Include 5/8-inch thick gypsum board at temporary partitions serving as noise barrier.

   c. Insulate partitions to minimize noise transmission to adjacent occupied areas.

   d. Seal joints and perimeter of temporary partitions.

2. Fire-Rated Partitions:

   a. Where fire-rated separations are required, maintain separation, including corridor walls and occupancy separations, by construction of stud partitions with gypsum board faces.

   b. Provide construction details to comply with recognized time-rated fire-resistive construction. Typically, 1-hour rated partitions shall be 2x4 wood studs at 16-inches on center or 3-1/2 inch metal studs at 16-inches on center, with 5/8-inch thick Type X gypsum board at both faces, with joints filled, taped and topped.
c. Seal partition perimeters with fire stopping and smoke seal materials.

B. Dust Barrier Passages:
   1. Where passage through dust barrier is necessary, provide gasketed doors or heavy plastic sheets that effectively prevent air passage.
      a. Construct a vestibule and airlock at each entrance to temporary enclosure with not less than 48 inches (1219 mm) between doors.
      b. Maintain water-dampened foot mats in vestibule where passage leads to existing occupied spaces.
      c. Equip doors with security locks.

C. HVAC Protection: Provide dust barriers at HVAC return grilles and air inlets to prevent spread of dust and clogging of filters.

D. Temporary Floor Protection: Protect existing floors from soiling and damage.
   1. Cover floor with 2 layers of 3-mil (0.07-mm) polyethylene sheets, extending sheets 18 inches (460 mm) up the side walls.
   2. Cover polyethylene sheets with 3/4-inch (19-mm) fire-retardant plywood.
   3. Provide floor mats to clean dust from shoes.

1.07 TEMPORARY BARRICADES

A. Landscape Barriers:
   1. Provide barriers around trees and plants designated to remain. Locate barriers as directed outside of drip lines of trees and plants.
   2. Coordinate with requirements specified in Section 01 56 00 – Temporary Tree and Plant Protection.
   3. Protect entire area under trees against vehicular traffic, stored materials, dumping, chemically injurious materials, and puddling or continuous running water.
   4. Restore trees and plants within barriers that are damaged by construction activities. Replace plant materials with that of equal quality and size.

B. Barricades, Warning Signs and Lights, Fencing:
   1. Comply with Caltrans standards and code requirements for erection of structurally adequate barricades.
   2. Provide and remove barriers required to perform this work.
   3. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.
4. Provide barricades and covered walkways required by governing authorities for public rights-of-way.
5. Protect non-owned vehicular traffic, stored materials, site and structures from damage.
6. Paint with appropriate colors, graphics and warning signs to inform personnel and the public of the hazard being protected against.
7. Provide lighting, including flashing red or amber lights, and street signage for lane closures.

C. Guard Rails:
1. Provide substantially and durably constructed guard rails of lumber, firmly anchored by posts embedded in concrete, and complying with Code requirements for temporary barriers.
2. Comply with dimensional requirements and accommodate loads as prescribed by California Building Code (CBC) for permanent guardrails.
3. Locations:
   a. Along tops of embankments and excavations.
   b. Adjoining excavations, in addition to fencing along public walkways and areas accessible by the public.

1.08 TEMPORARY FENCING

A. Chain-Link Fencing: Provide temporary portable chain-link fencing [with windscreen], and concrete or galvanized steel bases for supporting posts.
   1. Locate windscreen on outside of fence, and secure fence at grommets.

B. Wood Fencing: Provide temporary, structurally adequate, protective wood fencing.
   1. Comply with California Building Code (CBC) Chapter 33, Section 3303.7 - Pedestrian Protection and Table 33-A.
   2. Materials: Comply with CBC Section 3303.7.
   3. Finishes: As acceptable to University's Representative. Where fence is exposed to public view, provide one coat wood primer and one coat, minimum semi-gloss paint. Color(s) as directed by University's Representative.

1.09 TEMPORARY PROTECTIVE WALKWAYS

A. Provide temporary stairs, ramps and covered walkways with doors, gates, closures, guardrails, handrails, lighting and protective devices to maintain access and exit ways to existing facilities to remain operational.
   1. Design and location is subject to review by University Representative.
   2. Provide temporary lighting, illuminated interior exit signage, non-illuminated directional and instructional signage, and temporary security alarms for temporary exits and exit passageways.
   3. Connection to existing buildings systems shall be approved by University Representative.
1.10 TEMPORARY SECURITY BARRIERS

A. Provide substantial temporary closures of openings in exterior surfaces and interior areas to prevent unauthorized entrance, vandalism, theft and similar violations of security. Provide doors with self-closing hardware and locks.

B. Storage: Where materials and equipment must be stored, and are of value or attractive for theft, provide a secure lockup. Enforce discipline in connection with the installation and release of material to minimize the opportunity for theft and vandalism.

1.11 TEMPORARY SECURITY ENCLOSURES

A. Security:
   1. Enclosures:
      a. Install substantial temporary enclosure of partially completed areas of construction.
      b. Provide locking entrances to prevent unauthorized entrance, vandalism, theft and similar violations of security.
      c. Protect concrete from vandalism. Graffiti shall not be allowed in the finished product. Replace vandalized areas. Make repairs from control joint to control joint, and doweled to existing concrete. Repair landscape areas used for setup to their prior condition including leveling, repairing irrigation and reseeding.
   2. Storage:
      a. Trustees Representative will designate areas for use.
      b. Provide a secure lockup where materials and equipment must be stored, and are of value or attractive for theft.
      c. Enforce discipline in connection with the installation and release of material to minimize the opportunity for theft and vandalism.
   3. Comply with Section 01 35 53 – Security Procedures.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Provide new materials.
   1. Exception: If approved by the Trustees Representative, undamaged previously used materials in serviceable condition may be used.

B. Provide materials suitable for intended use. Do not create unsafe conditions or violate requirements of applicable codes and standards.

PART 3 - EXECUTION

3.01 PROTECTION OF WORK

A. Protect installed work and provide special protection where specified in individual specification Sections.
B. Provide temporary and removable protection for installed products. Control activity in immediate work area to minimize damage.

C. Protect new, uninstalled items.

3.02 TEMPORARY BARRIERS, ENCLOSURES AND PASSAGEWAYS

A. General:

1. Provide temporary fencing, barriers and guardrails to provide for public safety, to prevent unauthorized entry to construction areas, and to protect existing facilities and adjacent properties from damage from construction operations.

2. Provide for continued occupancy and use of existing buildings and site areas during construction.

3. Comply with applicable requirements of California Building Code (CBC) and authorities having jurisdiction, including industrial safety regulations. Review requirements with University’s Representative.

4. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire-protection facilities, stairways, and other access routes for firefighting.

5. Paint temporary barriers and enclosures with appropriate colors, graphics, and warning signs to inform personnel and public of possible hazard.

6. Provide warning lighting, including flashing red or amber lights where appropriate and necessary.

3.03 PROTECTION OF INSTALLED WORK

A. General: Provide temporary protection for installed products. Control traffic in immediate area to minimize damage.

B. Protective Coverings: Provide protective coverings at walls, projections, jambs, sills, and soffits of openings as necessary to prevent damage from construction activities, such as coatings applications, and as necessary to prevent other than normal atmospheric soiling.

C. Traffic Protection:

1. Protect finished floors, stairs and other surfaces from traffic, soiling, wear and marring.

2. Provide temporary covers of plywood, reinforced kraft paper or temporary rugs and mats so covers do not slip or tear under normal use.

3. Prohibit traffic and storage on waterproofed and roofed surfaces and on landscaped areas.
4. Protect newly fine graded, seeded and planted areas with barriers and flags to designate such areas as closed to pedestrian and vehicular traffic

3.04 MAINTENANCE OF TEMPORARY BARRIERS AND ENCLOSURES

A. Maintenance: Maintain temporary barriers and enclosures in proper and safe condition throughout progress of the Work.

B. Replacement: In the event of loss or damage, promptly restore temporary barriers and enclosures by repair or replacement.

3.05 REMOVAL OF BARRIERS AND ENCLOSURES

A. Unless the Trustees requires that it be maintained longer, remove each temporary facility when the need has ended, or when replaced by authorized use of a permanent facility.

B. Remove temporary barriers and enclosures, prior to Contract Completion review.

C. Coordinate removal with requirements specified in Section 01 51 00 - Temporary Utilities, Section 01 52 00 - Construction Facilities, Section 01 54 00 – Construction Aids, Section 01 55 00 - Vehicular Access and Parking, Section 01 57 00 – Temporary Controls, Section 01 56 39 - Temporary Tree and Plant Protection, and Section 01 58 00 – Project Identification.

D. Clean and repair damage caused by installation or use of temporary work.

E. Restore existing facilities used during construction to original condition and replace construction that cannot be satisfactorily repaired.

F. Restore permanent facilities used during construction to specified condition.

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes: Preservation, protection, and pruning of existing trees and shrubs, and other vegetation.

B. Related Sections:
   1. Section 01 56 00 - Temporary Barriers and Enclosures

PART 2 - PRODUCTS

2.01 BARRIERS

A. Barriers: As specified in Section 01 56 00 - Temporary Barriers and Enclosures.

2.02 FERTILIZER

A. Fertilizer: Unless otherwise directed by University's Representative, type and quantity of fertilizer shall be determined by Contractor’s soil agronomist, who is acceptable to University's Representative.

   1. As basis for bidding, fertilizer shall be Romeo "Greenbelt" 22-14-14 tree fertilizer or approved equal at 4 lb. fertilizer dissolved in 100 gallons water.

B. Accessory Materials: To sustain health of trees and plants, subject to acceptance by University's Representative. Accessory materials shall include mulch, tree and plant stakes and temporary covers.

PART 3 - EXECUTION

3.01 PERFORMANCE REQUIREMENTS

A. Protect trees and plant materials to remain from trades working on site.

   1. Insure that subcontractors are aware of and held responsible for damage to existing trees and plant material.

   2. Insure that protective measures are carried out throughout the construction period.

B. Maintenance: Oversee the watering, fertilizing, pruning, and other measures to protect existing trees.

3.02 GENERAL
A. Protect trees from stockpiling, material storage, including soil, vehicle parking and driving within the tree drip line. Restrict foot traffic to prevent excessive compacting of soil over root systems.

B. Protect root systems of existing trees, shrubs, and ground covers from damage due to chemically injurious materials in solution caused by runoff and spillage during mixing, placement of construction materials, and drainage from stored materials.

C. Protect root system from flooding, erosion, excessive wetting and drying resulting from de-watering and other operations.

D. Do not direct above ground surface runoff into the tree canopy area from adjacent areas. Ensure that sidewalks or other construction do not trap water near the tree.

E. Protect existing plant material against cutting, breaking, bruising and skinning.

F. Do not apply soil sterilants under pavement near existing trees.

G. Do not allow fires under and adjacent to trees or other plants.

H. Replace plants and trees that are damaged or die during construction.

3.03 PROTECTION

A. Protection: Prior to construction activities, especially demolition and excavation, on the site, Contractor shall submit to University's Representative evidence of a contract with a Certified Arborist who shall be responsible for supervising implementation of the following tree protection measures.

1. Protect all existing trees, shrubs and ground covers from stockpiling, material storage including soil, vehicle parking and driving within the tree drip line. Restrict foot traffic to prevent excessive compacting of soil over root systems.

2. Protect root systems of existing trees, shrubs, and ground covers from damage due to chemically injurious materials in solution caused by runoff and spillage during mixing, placement of construction materials, and drainage from stored materials.

3. Protect root system from flooding, erosion, excessive wetting and drying resulting from de-watering and other operations.

4. Above-ground surface runoff shall not be directed into the tree canopy area from adjacent areas. Ensure that sidewalks or other construction do not trap water near the tree. Coordinate with requirements specified in Section 01570 - Temporary Controls.

5. Protect existing plant materials from unnecessary cutting, breaking and skinning of roots and branches, skinning and bruising of bark.

6. Use no soil sterilants under pavement near existing trees.

7. Do not allow fires under and adjacent to existing trees or plants.
B. Maintenance: Throughout duration of the Contract, Contractor shall be responsible for irrigation, fertilizing, pruning, and other measures necessary to protect and nurture all existing trees, plants, ground covers and lawns indicated to remain in Project.

3.04 PRUNING

A. Pruning: Certified Arborist shall direct removal of branches from trees and large shrubs and correctional pruning and cabling of specified trees which are to remain in Project, if required to clear new construction and where indicated, and to direct tree root pruning and relocation Work. Procedure for each tree may vary and shall be subject to approval by Certified Arborist and University's Representative prior to commencing Work.

1. Where indicated by University's Representative, extend pruning operation to restore natural shape of entire tree using only Western Chapter, ISA Pruning Standards.

2. Cut branches and roots with sharp pruning instruments. Do not break, chop, or mutilate.

3. Pruning of existing trees shall be limited to removal of all dead wood 1/2-inch or greater in size and removal of vines and sucker growth. Tree cavities existing on all oak trees shall be cleaned of wood rot.

4. Tree limbs shall be trimmed or removed only under direction of skilled and experienced supervisor, according to directions of Arborist.

3.05 IRRIGATION

A. Irrigation: Irrigate trees and other plants to remain, as necessary to maintain their health before, during and after Work under the Contract, as directed by the Consulting Arborist.

1. Maintain an irrigation schedule and document. Submit schedule to University's Representative for review and acceptance.

2. Provide temporary piping, valves, hoses, emitters and spray heads as necessary until Contract closeout.

B. Soil Preparation: If soil within drip line of trees is compacted, then prior to watering or fertilizing trees, area within the drip lines shall be tilled to break up the top two inches of existing soil.

C. Tree Irrigation: All trees shall be deep-root watered by the use of an injection needle to a depth of 18-inches.

1. Needle shall be inserted into ground at 5-foot intervals in concentric rings around the tree, beginning at trunk. Each ring shall be 4-feet wider than previous one. Process shall continue out to drip line of the tree.

2. For trees greater than 12-inches in caliper, irrigate trees during first month of construction using 1,200 gallons of water per tree.

3. For trees less than 12-inches in caliper, 800 gallons of water shall be used per tree.

4. Repeat procedure every three months until Contract completion.
3.06 FERTILIZING

A. Fertilizing: All trees shall be fertilized before, during, and after construction by pumping under pressure directly 18-inches into root zone as directed by Certified Arborist.

3.07 EXCAVATION AROUND TREES

A. Excavation Around Trees: Excavate within drip lines of trees only where indicated.

1. Where trenching for utilities is required within drip lines, tunnel under and around roots of 2-1/2 inches diameter or larger by hand digging. Do not cut main lateral roots that are two inches or larger. Cut smaller roots that are smaller than two inches that interfere with installation of new Work. Use sharp, approved pruning tools. Pipes shall be routed into alternate locations to avoid conflict with remaining tree roots.

2. Where excavating for new construction is required within drip lines of trees, hand excavate to minimize damage to root systems. Use narrow tine spading forks and comb soil to expose roots. Relocate roots in backfill areas wherever possible. If large, main lateral roots are encountered, expose beyond excavation limits as required to bend and relocate without breaking.

3. If encountered immediately adjacent to location of new construction and relocation is not practical, cut roots approximately six inches back from new construction. Treat and cover cut ends as directed by Certified Arborist.

4. Do not allow exposed roots to dry out before permanent backfill is placed. Provide temporary earth cover, pack with wet peat moss or four layers of wet untreated burlap and temporarily support and protect roots from damage until permanently relocated and covered with backfill. Irrigate to eliminate voids and air pockets.

B. Pruning: Thin branching structure in accordance with Western Chapter, ISA Pruning Standards to balance loss to root system caused by damage or cutting of root system. Thinning shall not exceed 30 percent of existing branching structure.

3.08 GRADING AND FILLING AROUND TREES

A. Grading and Filling Around Trees: Maintain existing grade within drip line of trees unless otherwise indicated.

1. Grade changes shall be limited to six inches of cut or fill from original grade and shall be accomplished by hand.

2. Under all Quercus and Sequoia trees there shall be no grade change under at least the inner 50% of the tree canopy.

B. Lowering Grades Around Trees: Where existing grade is above new finish grade shown around trees, carefully hand excavate within drip line to new grade. Cut roots exposed by excavation to approximately three inches below elevation of new finish grade.
C. Raising Grades Around Trees: Permitted only as acceptable to Certified Arborist and University's Representative.

D. Other Changes: If building pads or foundations are indicated to be constructed within Project area or if existing landscaping requires alteration due to addition of fill or reduced by excavation, notify University's Representative for directions prior to starting Work. Measures as directed by University's Representative, such as addition of small retaining walls or subgrade aeration lines, may be required to mitigate construction procedures affecting tree.

3.09 REPAIR AND REMOVAL OF TREES

A. Repair and Removal of Trees: Certified Arborist and University's Representative will determine whether trees shall be restored or removed. Treat and restore trees damaged by construction operations in a manner acceptable to University's Representative. Perform restoration and pruning promptly after damage occurs to prevent progressive deterioration of damaged trees. If trees cannot be restored, equitable adjustment to Contract Sum shall be made to compensate University for loss, in accordance with the Contract General Conditions.

1. Remove dead and damaged trees that are determined by Certified Arborist to be incapable of restoration to normal growth pattern.

2. Contractor shall be liable for all damage and necessary restoration actions to existing trees, including trunk, branches, or roots. Restoration shall be performed under direction of Certified Arborist.

3.10 REPAIR AND REPLACEMENT OF SHRUBS AND GROUND COVER

A. Repairs and Replacements of Shrubs and Ground Cover: Repair shrubs and other vegetation damaged by construction operation in manner acceptable to University's Representative.

1. Make repairs promptly after damage occurs to prevent progressive deterioration of damaged plant. Remove and replace all dead and damaged plants up to six inch diameter which are determined by University's Representative as being incapable of restoration to normal growth pattern.

2. Provide new shrubs of same size and species as those replaced or as acceptable to the University's Representative.

3.11 COMPENSATION TO UNIVERSITY FOR LOST AND DAMAGED TREES

A. Compensation to University for Lost and Damaged Trees: Contractor shall be liable for loss in value to damaged trees and trees which are damaged beyond restoration, unless trees are specifically indicated on Contract Drawings to be removed.

B. All resulting repair or replacement costs, as determined by University's Representative, shall be compensated to University by credit change order.

1. Because of irreplaceable nature of many existing trees, amount of assessment shall be determined by University's Representative after
consultation with Certified Arborist, and shall depend upon tree species, condition before damage and location value.

2. Disputed sums shall be governed by applicable provisions of the Contract General Conditions.

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:
   1. Video Record of Existing Conditions
   2. Environmental Protection Plan
   3. Temporary Erosion and Sediment Control
   4. Temporary Environmental Controls – Noise and odor
   5. Temporary Storm Water Pollution Control

B. Related Specification Sections
   1. Section 01 11 00 - Summary of Work
   2. Section 01 33 00 - Submittal Procedures
   3. Section 01 56 39 - Temporary Tree and Plant Protection

1.02 SUBMITTALS

A. Refer to Section 01 33 00 - Submittal Procedures.

B. Environmental Protection Plan: Submit within 30 days of commencement in Notice to Proceed.

C. State Water Pollution Prevention Plan (SWPPP): Submit Notice of Intend to the Regional Water Quality Control Board (RWQCB) with copies to Trustees Representative and Campus Environmental Health and Safety.

D. Submit notification in writing to the San Luis Obispo County Air Pollution Control District (SLOAPCD) with a copy to the Trustees Representative:
   1. 10 days prior to the start of Demolition.
   2. 14 days prior to the start of road construction.

E. Submit copy of National Pollutant Discharge Elimination System Permit from the State or Regional Water Quality Control Board 3 days prior to dewatering of non-contaminated groundwater.

1.03 VIDEO RECORD OF EXISTING CONDITIONS

A. General:
   1. Produce video record of existing conditions within and adjacent to Project area.
2. The record shall be used to verify restoration of existing conditions after completion of construction activities.

3. Existing feature not recorded shall be restored as directed by University's Representative, including reconstruction and refinishing as determined necessary by University's Representative.

B. The record on media approved by the Trustees Representative, to record comments identifying locations and describing conditions.

1. University's Representative will accompany Contractor during recording of existing conditions, but will not direct recording process.

2. Video shall record state of existing features, including but not limited to:
   a. Paving
   b. Landscaping
   c. Building surfaces
   d. Utilities
   e. Lighting standards, fencing, signage and other site appurtenances
   f. Sidewalks
   g. Utilidor covers

3. Retain one copy and deliver one copy of video record to University's Representative within seven calendar days after the video record was produced.

4. Video shall record state of existing features, including but not limited to:
   a. Sidewalks
   b. Roadways
   c. Adjacent Buildings
   d. Landscaping

1.04 ENVIRONMENTAL PROTECTION PLAN

A. Environmental Protection:

1. The requirements of this Article are in addition to those of Article 4.03 of the Contract General Conditions.

2. During the progress of the work, keep the premises occupied in a neat and clean condition and protect the environment both on site and off site, throughout and upon completion of the construction project.

3. Based on project requirements, develop a detailed Environmental Protection Plan. Submit the plan to the Trustees for approval, within thirty (30) calendar days from the date of commencement specified in the Notice to Proceed. Based on comments by the Trustees, refine or modify plan until acceptable to the Trustees. When approved, distribute the approved plan to employees and subcontractors and their employees.

4. The Environmental Protection Plan shall include, but not be limited to, the following items:
   a. Copies of required permits.
   b. Proposed sanitary landfill site.
   c. Other proposed disposal sites.
   d. Noise Control.
   e. Dust Control.
f. Erosion and Sediment Control.
g. Site Dewatering.
h. Copies of agreements with public or private landowners regarding equipment, materials storage, borrow sites, fill sites, or disposal sites. If execution of the agreement made by the Contractor violates local or regional grading or land use regulations, it shall be invalid.
i. Limits of the site, easement restrictions, location of environmentally sensitive areas, location of contractor’s trailer and location of access gates.

5. Operational Requirements: Comply with federal, state and local regulations pertaining to water, air, solid waste and noise pollution.

B. Definitions of Contaminants:
1. Sediment: Soil and other debris that have been eroded and transported by runoff water.
2. Solid waste: rubbish, debris, garbage and other discarded solid materials resulting from construction activities, including a variety of combustible and non-combustible wastes, such as ashes, waste materials that result from construction or maintenance and repair work, leaves and tree trimmings.
3. Chemical waste: Includes petroleum products, bituminous materials, salts, acids, alkalis, herbicides, pesticides, disinfectants, organic chemicals and inorganic wastes. Some of the above may be classified as “hazardous.”
4. Sanitary wastes:
   a. Sewage: Domestic sanitary sewage.
   b. Garbage: Refuse and scraps resulting from preparation, cooking, dispensing and consumption of food.
5. Hazardous Materials:
   a. In the event the Contractor encounters material reasonable believed to be asbestos, polychlorinated biphenyl (PCB), or other hazardous materials on the site, which have not been rendered harmless, immediately stop Work in the area affected and report the condition to the Trustees in writing.
   b. The Work in the affected area shall not resume, except by written agreement of the Trustees and Contractor, if in fact the material is asbestos, PCB, or other hazardous materials and has not been rendered harmless.
   c. The Work in the affected area shall resume in the absence of asbestos, PCB, or other hazardous materials, or when the materials have been rendered harmless.

C. Protection of Natural Resources:
1. General:
   a. Preserve the natural resources within the project boundaries, and outside the limits of permanent work performed under this Contract in their existing condition, or to be restored to an equivalent or improved condition upon completion of the work.
b. Confine construction activities to areas defined by the public roads, easements, and work area limits shown on the drawings.

c. Return construction areas to their pre-construction elevations, except where surface elevations are noted to be changed.

d. Maintain natural drainage patterns.

e. Conduct construction activities such that ponding of stagnant water conducive to mosquito breeding habitat shall not occur.

2. Land Resources: Do not remove, cut, deface, injure or destroy trees or shrubs outside the work area limits. Do not remove, deface, injure or destroy trees within the work area without permission from the Architect. If requested by Trustees, damaged trees and shrubs shall be removed and replaced by Contractor.

a. Protection: Protect trees that are located near the limits of the Contractor’s work areas, which may possibly be defaced, bruised or injured, or otherwise damaged by the Contractor’s operations. No ropes, cables or guys shall be fastened to, or be attached to existing trees or shrubs for anchorages.

b. Trimming: Refer to Section 01 56 39 – Temporary Tree and Plant Protection.

c. Excavation around Trees: Refer to Section 01 56 39 – Temporary Tree and Plant Protection.

d. Repair or Restoration: Repair or replace trees or landscape features scarred or damaged by equipment or construction operations. The repair and restoration plan shall be reviewed and approved by the Trustees and the Architect.

e. Temporary Construction: Remove signs of temporary construction facilities such as haul roads, work areas, structures, foundations of temporary structures, stockpiles of excess or waste materials, or other vestiges of construction as directed by the Trustees. Level temporary roads, parking areas and areas that have become compacted or shaped. Unpaved areas, where vehicles are operated, shall receive a suitable surface treatment, or shall be periodically wetted down to prevent construction operations from producing dust damage and nuisance to persons and property. Keep haul roads clear of objects that create an unsafe condition. Promptly remove contaminants or construction materials dropped from construction vehicles. Do not drop mud and debris from construction equipment on public streets. Sweep clean turning areas and pavement entrances as directed by the Trustees Representative.

1.05 TEMPORARY EROSION AND SEDIMENT CONTROL

A. General:

1. Protect existing structure and finishes from storm water damage during construction.

2. Grade site and other Work areas to drain.

3. Provide temporary drainage ditches and diversion measures as necessary to protect construction.

4. Provide erosion control measures as required by authorities having jurisdiction. Comply with local water quality control requirements.
B. Erosion and Sediment Control (less than one (1) acre)
1. Discharge construction runoff into small drainage areas at frequent intervals to avoid build-up of large potentially erosive flows.
2. Prevent runoff from flowing over unprotected (lack vegetation) slopes.
3. Keep disturbed areas to the minimum necessary for construction.
4. Keep runoff away from disturbed areas during construction.
5. Direct flows over vegetated areas prior to discharge into public storm drainage systems.
6. Trap sediment before it leaves the site, using such techniques as check dams, sediment ponds, silt fences and straw bale barriers.
7. Protect all storm drain inlets to reduce sediment from storm water runoff discharging from the construction site.
8. Remove and dispose of project construction-generated silt that leaves the site.
9. Stabilized disturbed areas as quickly as possible.
10. Remove mud from tires of earth moving trucks and equipment before traversing streets outside the construction area.

C. Dust Control
1. These requirements are in addition to Article 4.03 of Part B – Contract General Conditions.
2. Prior to Construction: Submit notification in writing to the San Luis Obispo County Air Pollution Control District (SLOAPCD) with a copy to the Trustees Representative 14 days prior to the start of road construction.
3. Appoint a monitor to oversee and implement dust control measures.
4. Employ measures to avoid the creation of dust and air pollution, and to maintain continuous dust control resulting from construction operations.
5. Execute Work using methods to minimize raising dust from construction operations, to provide positive means to prevent air borne dust from dispersing into atmosphere, and to prevent visible emissions from crossing the project boundaries.
6. Speed of Construction Vehicles: 15 miles per hour maximum.
   a. Exception: If road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment from emitting dust that is visible crossing the project boundaries.
7. Prior to Ground Disturbance:
   a. Water down the project site.
8. During construction:
   a. If, in the opinion of the Trustees, dust particles are leaving the site or nuisance complaints are received, immediately take action to stop dust.
      i. Suspend grading operations, or water the exposed areas when wind conditions create considerable dust, such that a nuisance would generate complaints.
   b. Unpaved Areas not subject to vehicle traffic:
      i. Wet down twice a day minimum.
      ii. When wind velocity exceeds 15 mph, wet down site more frequently.
   c. Unpaved Areas subject to vehicle traffic:
      i. Wet down, treat with a chemical dust suppressant, or cover with material with 0.25 percent asbestos maximum.
d. Storage Piles:
   i. Wet down, treat with a chemical dust suppressant, or cover with material with 0.25 percent asbestos maximum.

e. Equipment:
   i. Wash down before moving from the project site onto a paved road.

f. Tracking on Paved Roads:
   i. Conduct operations to prevent visible track-out onto paved roadways open to the public.
      1) If track-out occurs, clean using wet sweeping immediately.

g. Sweep project area streets weekly.

h. Cover trucks hauling soil, debris, sand or loose materials.

i. Exposed areas, new driveways and sidewalks:
   i. Seed, treat with soil binders, or pave as soon as site conditions allow.
   ii. If the Trustees determine that seeding is necessary to keep dust particles from leaving the site or to control erosion, immediately seed and water as directed by the Trustees.

D. Airborne Asbestos Fiber Control
1. The University campus is located in an area of known naturally occurring asbestos deposits (serpentine outcappings).
   a. Construction, grading, trenching, horizontal boring, and maintenance activities are regulated by:
      i. Naturally Occurring Asbestos, Airborne Toxic Control Measure (NOA-ACTM) California Air Resources Board regulation, enforced by the San Luis Obispo County Air Pollution Control District (SLOAPCD).
      ii. Title 8, California Code of Regulations, Section 1529, Construction Safety Orders for Asbestos Regulation, enforced by the Department of Occupational Safety and Health, Cal/OSHA.

2. A registered geologist has determined that asbestos deposits are not likely to be found on the project site.

3. If suspected asbestos-containing materials are found, stop activity immediately and notify the Trustees Representative. Trustees will provide an evaluation of site conditions and exposure assessment.

1.06 TEMPORARY ENVIRONMENTAL CONTROLS

A. Smoke and Odor Control
1. Protect primary fresh air intakes to existing and occupied buildings from exhaust from internal combustion engines, paint and solvent fumes and other noxious fumes and vapors.

2. Implement control methods, such as snorkels from engine exhausts, to maintain 50 feet minimum away from air intakes.

3. Activities generating fumes shall be limited to a distance of 50 feet minimum from the air intake grilles.

4. If fume generating procedures occurs within 50 feet of an air intake:
a. Notify the Trustees Representative seven (7) calendar days minimum in advance.

b. Complete the work when it least impacts the University (evenings, weekends, or particularly windy days).

c. Provide carbon filter media, plastic barriers, or other control methods to assure only fresh air enters the building ventilation system.

5. Store volatile liquids, including fuels or solvents in closed containers.

6. Do not burn debris, lumber or other scrap.

7. Open Flame Work: Notify the Trustees in writing and obtain a fire permit from the State Fire Marshal.

8. Properly maintain equipment to reduce gaseous pollutant emissions.

B. Noise Control

1. These requirements are in addition to Article 4.03 of the Contract General Conditions.

2. Maximum noise levels within 1,000 feet of classroom, laboratory, residence, business, adjacent buildings, or other populated area for:
   a. Trenchers, pavers, graders and trucks: 90 dBA maximum at 50 feet as measured under the noisiest operating conditions.
   b. Other equipment: 85 dBA at 50 feet as measured under the noisiest operating conditions.

3. Equipment:
   b. Air compressors: Quiet type such as a “whisperized” compressor. Keep hoods closed while equipment is in operation.
   c. Portable Noise barriers: Provide around jack hammering construction; 3/4-inch plywood lined with 1-inch thick fiberglass on the work side.

4. Operations:
   a. Keep noisy equipment as far as possible from noise-sensitive site boundaries.
   b. Do not leave machines idling.
   c. Use electric power in lieu of internal combustion engine power wherever possible.
   d. Maintain equipment properly to reduce noise from excessive vibration, faulty mufflers, or other sources.
   e. Engines shall have properly functioning mufflers.

5. Scheduling:
   a. Schedule noisy operations to minimize their duration, and disruption to the adjoining users.
   b. Notify the Trustees Representative of seven (7) calendar days minimum in advance of performing work creating unusual noise.
   c. Schedule work at mutually agreeable times.

6. Do not play radios, tape recorders, televisions, and similar items at construction site.

7. When work occurs in or near occupied buildings, keep noise associated with construction activities to a minimum. Noisy operations that may disrupt academic or residential activities shall be scheduled after normal work hours.
8. All noisy work within the area of residence halls and other campus residences shall be restricted between the hours of 10:00 am to 10:00 pm seven (7) days per week, throughout the year. No work will be allowed in residence halls on campus residences during finals week.

9. Trustees reserve 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, Week-of-Welcome, or at other times that may be identified by the Trustees. Trustees reserve the right to stop noisy work when said work disrupts classes or residential areas. Refer to Section 01 11 00 – Summary of Work.

1.07 TEMPORARY STORM WATER POLLUTION CONTROL

A. Water Resources:
   1. Investigate and comply with applicable federal, state and local regulations concerning the discharge (directly or indirectly) of pollutants to the underground and natural waters.
   2. Perform work in such a manner that adverse environmental impacts are reduced to a level that is acceptable to the Trustees, Architect and regulatory agencies.
   3. Do not allow excess site material, mud, debris, etc. washed off roads, site and equipment to impact watercourses.

B. Oily Substances:
   1. Take special measures to prevent oily or hazardous substances from entering the ground, drainage areas or local bodies of water, and that would affect normal use or aesthetics, or produce a measurable impact on the areas.
   2. Dispose of soil or water, which is contaminated with oily substances due to the Contractor's operations complying with applicable regulations.

C. De-Watering
   1. Maintain excavations free of water. Provide and operate pumping equipment as necessary.
   2. Removal of contaminated water from excavations, dewatering of contaminated groundwater and discharging of contaminated soils via surface erosion is prohibited.
   3. Perform dewatering of non-contaminated groundwater after Contractor obtains a National Pollutant Discharge Elimination System Permit from the State or Regional Water Quality Control Board having authority.

PART 2 - PRODUCTS – NOT USED.

PART 3 - EXECUTION

3.01 REMOVAL OF CONTROLS

A. Remove temporary controls when the need has ended, or when replaced by permanent facility, or by Completion.

B. Clean and repair damage caused by installation or use of temporary controls.
PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
   1. Products
   2. Product delivery
   3. Product storage and handling

1.02 PRODUCT REQUIREMENTS

A. Furnish products of qualified manufacturers suitable for intended use. Furnish products of each type by single manufacturer.
   1. Exception: If specified.

B. Do not use materials and equipment removed from existing premises.
   1. Exception: As specifically permitted by Contract Documents.

C. Furnish interchangeable components from same manufacturer for components being replaced.

1.03 PRODUCT DELIVERY REQUIREMENTS

A. Transporting and handling products: Comply with manufacturer’s instructions.

B. Promptly inspect shipments to ensure:
   1. Products comply with requirements.
   2. Quantities are correct.
   3. Products are undamaged.

C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

1.04 PRODUCT STORAGE AND HANDLING REQUIREMENTS

A. Store and protect products: Comply with manufacturers’ instructions.

B. Store with seals and labels intact and legible.

C. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.

D. For exterior storage of fabricated products, place on sloped supports above ground.

E. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
F. Store loose granular materials on solid flat surfaces in well-drained area. Prevent mixing with foreign matter.

G. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

H. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and maintained in acceptable condition.

PART 2 - PRODUCTS – NOT USED.

PART 3 - EXECUTION– NOT USED.

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
1. Cutting, fitting and patching to complete the work and to make its parts fit together properly.
2. Uncover portions of work to provide for installation of ill-timed work.
3. Remove and replace defective work.
4. Remove and replace work not conforming to requirements of Contract Documents.
5. Remove samples of installed work as required for testing Section 01 45 00 - Quality Control.
6. Join and finish construction at connections to other structures.

B. Related Sections
1. Section 01 45 00 - Quality Control
2. Section 01 25 00 - Substitution Procedures.
3. Technical Specifications Divisions 02-49

1.02 SUBMITTALS

A. Submit a written request to the Trustees Representative seven (7) calendar days prior to executing cutting or alteration, which affects:
1. Work of the Trustees or separate contractor.
2. Structural value or integrity of elements of the Project.
3. Integrity or effectiveness of weather-exposed or moisture-resistant elements or systems.
4. Efficiency, operational life, maintenance or safety of operational elements.

B. Request shall include the following:
1. Identification of the Project.
2. Description of affected work.
3. Necessity for cutting or alteration.
4. Effect on work of the Trustees or separate contractor, or on structural or weatherproof integrity of the Project.
5. Alternatives to cutting and patching.
6. Cost proposal, when applicable.
7. Written permission of separate contractor whose work will be affected.
8. Description of proposed work including:
   a. Scope of cutting, patching, alteration or excavation.
   b. Trades to execute work.
   c. Products proposed to be used.
   d. Extent of refinish to be included.
9. Date and time work will be uncovered.
C. Should conditions of Work or schedule indicate a change of products from original installation, submit request for substitution as specified in Section 01 25 00 – Substitution Procedures.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Comply with specifications and standards for specific product involved.

B. Where specifications are not included for items requiring patching, provide materials of equal or better quality than existing and finish matching existing.

C. Provide new materials for cutting and patching.

PART 3 - EXECUTION

3.01 INSPECTION

A. Inspect existing condition of the Project, including elements subject to damage or to movement during cutting and patching.

B. After uncovering work, inspect conditions affecting installation of products, or performance of work.

C. Report unsatisfactory or questionable conditions to the Trustees in writing; do not proceed with work until the Trustees have provided further inspections.

3.02 PREPARATION

A. Provide adequate temporary support to assure structural value or integrity of affected portion of the Work.

B. Provide devices and methods to protect other portions of the Project from damage.

   1. Provide supervision of welding operations, combustion type temporary heating units, and similar sources of fire ignition.

D. Hot Work Permit: Notify Trustees 2 days in advance and obtain permit prior to conducting work involving open flame, sparks, heat or creating an ignition source such as by torch, arc, cutting, grinding, etc.

3.03 PERFORMANCE
A. Execute cutting by methods, which will provide proper surfaces to receive repairs.

B. Employ same installer or fabricator to perform cutting and patching work as employed for new construction for weather-exposed or moisture-resistant elements.

C. Execute fitting and adjustment of products to provide finished installation to comply with specified products, functions, tolerances and finishes.

D. Restore work, which has been cut or removed; install new products to provide completed work requirements of Contract Documents.

E. Fit work tight to pipe, sleeves, conduits and penetrations through surfaces.

F. Refinish entire surfaces to provide even finish to match adjacent finishes:
   1. For continuous surfaces, refinish to nearest intersection.
   2. For an assembly, refinish entire unit.

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes:
   1. Waste and Environmental Project Goals

B. Related Specification Sections:
   1. Section 01 74 19 - Site Clearing

1.02 WASTE MANAGEMENT GOALS FOR THE PROJECT

A. The Trustees have established that this project shall minimize the creation of construction and demolition waste on the job site. Factors that contribute to waste such as over packaging, improper storage, ordering error, poor planning, breakage, mishandling, and contamination, shall be minimized. Of the inevitable waste that is generated, as many of the waste materials as economically feasible shall be reused, salvaged, or recycled. Waste disposal in landfills shall be minimized.

B. Diversion Goals: A minimum of 75% of total project waste shall be diverted from landfill. The following waste categories, at a minimum, shall be diverted from landfill:
   1. Land clearing debris
   2. Clean dimensional wood, palette wood
   3. Plywood, OSB, and particleboard
   4. Concrete
   5. Bricks
   6. Concrete Masonry Units (CMU)
   7. Asphalctic concrete
   8. Cardboard, paper, packaging
   9. Asphalt roofing shingles
   10. Metals
   11. Gypsum drywall (unpainted)
   12. Paint
   13. Glass
   14. Plastics
   15. Carpet and pad
   16. Beverage containers

1.03 REFERENCES AND RESOURCES


B. California Integrated Waste Management Board. Phone: (916) 255-2296. E-mail: opa@ciwmb.ca.gov.

1.04 WASTE MANAGEMENT PLAN

A. Waste Management Plan: Within ten (10) calendar days after the date of the Notice to Proceed, the Construction Manager at Risk shall submit to the Trustees and Architect a Waste Management Plan. The plan shall contain the following:

1. Estimate of total project waste to be generated, name of the landfill(s) where project waste would normally be disposed of, tipping fees, and estimated cost of disposing of project waste in landfill(s).

2. Estimate total tons of the following waste category to be diverted from landfill.
   a. Concrete
   b. Asphalitic concrete
   c. Brick
   d. Other

3. Estimate of total cubic yards of the following waste categories to be diverted from landfill.
   a. Clean dimensional wood, palette wood
   b. Plywood, OSB, and particleboard
   c. Cardboard, paper, packaging
   d. Other

4. Estimate of amounts (weight, feet, square yards, gallons, etc.) of the following waste categories.
   a. Metals
   b. Carpet
   c. Paint
   d. Other

5. Estimate of net cost savings or additional costs resulting from separating and recycling (versus landfilling) each material. "Net" means that the following have been subtracted from the cost of separating and recycling.
   a. Revenue from the sale of recycled or salvaged materials.
   b. Landfill tipping fees saved due to diversion of materials from the landfill.

1.05 MANAGEMENT PLAN IMPLEMENTATION

A. Plan Distribution: The Construction Manager at Risk shall provide copies of the Waste Management Plan to the Job Site Foreman, each Subcontractor, the Trustees and the Architect.

B. Instruction: The Construction Manager at Risk shall provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the project.

C. Meetings: Construction Manager at Risk shall conduct Construction Waste Management meetings. Meetings shall include subcontractors affected by the Waste Management Plan. At a minimum, waste management goals and issues shall be discussed at the following meetings:
   1. Pre-bid meetings.
   2. Pre-construction meeting.
   3. Regularly scheduled job-site meetings.

D. Separation Facilities: The Construction Manager at Risk shall designate a specific area or areas to facilitate separation of materials for potential reuse,
salvage, recycling, and return. Recycling and waste bin areas are to be kept neat and clean and clearly marked in order to avoid co-mingling of materials. Bins shall be protected during non-working hours from off-site contamination.

E. Materials Handling Procedures: Materials to be recycled shall be protected from contamination and shall be handled, stored, and transported in a manner that meets the requirements set by the designated facilities for acceptance.

F. Transportation: A description of the means of transportation of the recyclable materials (whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler and removed from the site) and destination of materials. Provide an estimate of how often bins will need to be emptied.

G. Hazardous Wastes: Hazardous wastes shall be separated, stored, and disposed of according to local regulations.

H. Application for Progress Payments: The Construction Manager at Risk shall submit with each Application for Progress Payment a Summary of the project waste generated. Failure to submit this information shall render the Application for Payment incomplete and shall delay Progress Payment. The Summary shall contain the following information:
1. The amount (in tons or cubic yards) of material landfilled from the project, the identity of the landfill, the total amount of tipping fees paid at the landfill, and the total disposal cost. Include manifests, weight tickets, receipt, and invoices.
2. For each material recycled, reused, or salvaged from the project, include the amount (in tons or cubic yards, pounds, feet, square yards, gallons, etc.), the date removed from the job site, the receiving party, the transportation cost, the amount of any money paid or received for the recycled or salvaged material, and the net total cost or savings of salvage or recycling each material. Attach manifest, weight tickets, receipts, and/or invoices.

PART 2 - PRODUCTS

2.01 GUIDE TO LOCAL COMPANIES

A. Guide to construction and demolition recycling and disposal - the following list is not an exhaustive list and it is the contractors responsibility to verify the information:

<table>
<thead>
<tr>
<th>CONSTRUCTION AND DEMOLITION RECYCLING GUIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardboard</td>
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</tbody>
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CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL
01 74 19 - 3
## CONSTRUCTION AND DEMOLITION RECYCLING GUIDE

<table>
<thead>
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<tbody>
<tr>
<td>A-1 Metals &amp; Salvage</td>
<td>238-3545</td>
<td>Paso Robles</td>
<td></td>
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</tr>
<tr>
<td>Bedford Metals</td>
<td>922-4977</td>
<td>Santa Maria</td>
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<tr>
<td>Heilman Salvage</td>
<td>466-4893</td>
<td>Atascadero</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Paso Robles Recycling</td>
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<td>Paso Robles</td>
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</tr>
<tr>
<td>Zanker Landfill</td>
<td>408/263-2384</td>
<td>Gilroy</td>
<td></td>
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</table>

## ROLL-OFF COMPANIES

*Note: These companies accept mixed boxes for recycling*

<table>
<thead>
<tr>
<th>Company</th>
<th>Phone</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Equip Svc.</td>
<td>489-9521</td>
<td>Arroyo Grande</td>
</tr>
<tr>
<td>API Roll-Off Services</td>
<td>928-8689</td>
<td>Santa Maria</td>
</tr>
<tr>
<td>Coastal Roll-Off</td>
<td>543-0473</td>
<td>San Luis Obispo</td>
</tr>
<tr>
<td>Have Bins</td>
<td>466-3636</td>
<td>Atascadero</td>
</tr>
<tr>
<td>Mid-State Solid Waste</td>
<td>434-9112</td>
<td>Templeton</td>
</tr>
<tr>
<td>Paso Robles Roll-off</td>
<td>238-2385</td>
<td>Paso Robles</td>
</tr>
<tr>
<td>R &amp; R Roll-Off</td>
<td>929-8000, 528-8440</td>
<td>Nipomo</td>
</tr>
<tr>
<td>San Miguel Roll-Off</td>
<td>239-1266</td>
<td>San Miguel</td>
</tr>
</tbody>
</table>

## LAND FILLS & TRANSFER STATIONS

<table>
<thead>
<tr>
<th>Facility</th>
<th>Phone</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago Grade Landfill</td>
<td>466-2985</td>
<td>Templeton</td>
</tr>
<tr>
<td>Cold Canyon Landfill</td>
<td>549-8332</td>
<td>San Luis Obispo</td>
</tr>
<tr>
<td>Paso Robles Landfill</td>
<td>238-2028</td>
<td>Paso Robles</td>
</tr>
<tr>
<td>Nipomo Transfer Station</td>
<td>922-9255</td>
<td>Nipomo</td>
</tr>
</tbody>
</table>

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**PART 3 - EXECUTION - NOT USED**
END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes: Administrative and procedural requirements for project close-out, including but not limited to:
1. Punch list
2. Record document submittals
3. Warranties
4. Close-out procedures: Close out meeting
5. Final cleaning
6. Adjusting
7. Final Acceptance

B. Related Specification Sections:
1. Section 01 33 00 - Submittal Requirements
2. Section 01 32 00 - Construction Progress Documentation
3. Section 01 45 00 - Quality Control
4. Section 01 50 00 - Temporary Facilities and Controls
5. Section 01 77 00 - Closeout Procedures
6. Section 01 78 23 - Operation and Maintenance Data
7. Section 01 78 30 - Warranties and Bonds
8. Divisions 01 thru 49

1.02 PUNCH LIST INSPECTIONS

A. Procedures:
1. When work is complete, request, in writing, that a punch list be prepared.
2. Architect will schedule the punch list.
3. Architect will perform a preliminary walk-through.
   a. If, in the judgment of the Architect and the Trustees Representative, the project is not sufficiently complete, the punch list will stop and Contractor will be advised.
      i. Contractor may be back charged. Refer to Section 01 45 00 - Quality Control.
      ii. The Architect will repeat inspection when requested.
4. Results of the completed inspection will form the basis of requirements for final acceptance punch-list.

1.03 SUBMITTALS

A. Record Documents
1. Submit upon completion of the work.

B. Record Specification
1. Submit upon completion of the work.
2. General:
   a. Do not use record documents for construction purposes.
b. Protect from deterioration and loss in a secure, fire-resistive location.
c. Provide access to record documents for the Trustees' and the Architect's reference during normal working hours.

3. Record Drawings:
   a. Maintain a clean, undamaged set of Contract Drawings and Shop Drawings.
   b. Mark set to show the actual installation where the installation varies substantially from the Work as originally shown.
      i. Mark drawing most capable of showing conditions fully and accurately.
   c. Where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings.
   d. Give particular attention to concealed elements that would be difficult to measure and record at a later date.
   e. Mark record sets with red erasable pencil; use other colors to distinguish between variations in separate categories of the work.
   f. Mark new information important to the Trustees, but not shown on Contract Drawings or Shop Drawings, including utility locations with X, Y, and Z coordinates.
   g. Record changes made by RFI or other directive.
      i. Note related Change Order numbers.
      ii. Organize record drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on the cover of each set.
      iii. Upon completion of the work, submit Record Drawings to the Architect for further processing.

4. Record Specifications:
   a. Maintain one (1) complete copy of the Project Specifications, including addenda, and one (1) copy of other written construction documents, such as Change Orders and modifications issued in printed form during construction.
   b. Mark these documents to show substantial variations in actual work performed in comparison with the text of the Specifications and modifications.
   c. Give particular attention to substitutions, selection of options and similar information on elements that are concealed or cannot be readily discerned later by direct observation.
   d. Note related record drawing information and Product Data.
   e. Record actual product used.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION

3.01 CLOSE-OUT PROCEDURES:

A. Close-out Meeting:
1. The Construction Manager and the Inspector will request a "Close-out" meeting approximately one (1) week prior to the anticipated completion date. Coordinate with Section 01 77 00 – Closeout Procedures.

2. Prepare Action List at meeting:
   a. List major items required to be completed prior to the issuance of the Notice of Completion.
   b. Assign an action-responsibility and a projected action-completion date to each item.
      i. Note: Contractor shall provide timely completion of required close-out items.

3.02 FINAL CLEANING

A. Cleaning during construction is required by the Part B - Contract General Conditions, and included in Section 01 50 00 - Temporary Facilities and Controls.

B. Employ experienced workers or professional cleaners for final cleaning.
   1. Complete the following cleaning operations before requesting inspection for Certification of Completion.
      a. Clean the site, including landscape development areas, of rubbish, litter and foreign substances.
      b. Sweep paved areas broom clean; remove stains, spills and other foreign deposits.

C. Protection: Remove temporary protection and facilities installed for protection of the work during construction.

D. Comply with regulations of authorities having jurisdiction and safety standards for cleaning.
   1. Do not burn waste materials.
   2. Do not bury debris or excess materials on the University property.
   3. Do not discharge volatile, harmful or dangerous materials into drainage systems.
   4. Waste Materials: Remove from the site and dispose of in a lawful manner.
   5. Extra Materials: Deliver to the University as directed.

3.03 FINAL ACCEPTANCE

A. Preliminary Procedures: Before requesting final inspection for certification of Architect’s final acceptance, complete the following:
   1. Submit a certified copy of the Architect’s final inspection list of items to be completed or corrected, stating that each item has been completed, or otherwise resolved for acceptance, and the list has been endorsed and dated by the Architect.

B. Re-inspection Procedure: The Architect will re-inspect the work upon receipt of notice that the work, including inspection list items from earlier inspections ("punch list"), has been completed.
   1. Exception: Items whose completion has been delayed because of circumstances acceptable to the Trustees.
   2. Upon completion of re-inspection, the Architect will:
a. Prepare and submit to the Trustees, a certificate of final acceptance; or
b. Advise the Contractor of work that is incomplete, or of obligations that have not been fulfilled, but are required for final acceptance.

3. Upon final acceptance by the Architect, the Inspector of Record (IOR) will prepare a letter to the Trustees stating that the project has been constructed in accordance with the contract documents and is complete in all respects.

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:
   1. Product data and related information appropriate for Trustees’ maintenance and operation of products furnished under Contract.

B. Related Specification Sections:
   1. Section 01 33 00 - Submittal Procedures

1.02 QUALITY ASSURANCE

A. Preparation of data shall be done by personnel:
   1. Trained and experienced in maintenance and operation of described products.
   2. Familiar with requirements of this Section.
   3. Skilled as technical writer to the extent required to communicate essential data.
   4. Skilled as drafters competent to prepare required drawings.

1.03 FORM OF SUBMITTALS

A. Prepare three (3) copies of data in form of an instructional manual for use by University personnel.

B. Format:
   1. Size: 8-1/2 inches by 11 inches
   2. Paper: Manufacturer’s printed data, or neatly typewritten.
   3. Drawings:
      a. Provide reinforced punched binder tab, bind in with text.
      b. Fold larger drawings to size of text pages.
   4. Provide flyleaf for each separate product, or piece of operating equipment.
   5. Organize manual in order of specification Divisions and Sections.
      a. Provide typed description of product, and major component parts of equipment.
      b. Provide indexed tabs.
   6. Cover: Identify volume with typed or printed title, “Operation and Maintenance Instructions” and list:
      a. Title of Project
      b. Identity of separate structure.
      c. Identity of general subject matter covered in the manual.

C. Binders:
   2. Maximum ring size: 2 inches per 700 sheets
3. When multiple binders are used, correlate the data into related consistent groupings.

D. Review:
   1. Submit three (3) sets of the manual to Trustees Representative for review and approval. If the manual is acceptable, the Architect shall forward two of the sets to the University’s Representative.

1.04 CONTENT OF MANUAL

   A. Neatly typewritten table of contents, arranged in systematic order.
      1. Contractor, name of responsible principal, address and telephone number.
      2. A list of products required to be included, indexed to content of the volume.
      3. List, with product, name, address and telephone number of:
         a. Subcontractor or installer.
         b. Maintenance contractor.
         c. Identify area of responsibility.
         d. Local source of supply for parts and replacement.
      4. Identify product by product name and other identifying symbols.

   B. Product Data:
      1. Include sheets that are pertinent to the specific product.
      2. Annotate sheet to:
         a. Clearly identify specific product or part installed.
         b. Clearly identify data applicable to installation.
         c. Delete references to inapplicable information.

   C. Drawings:
      1. Supplement product data with drawings to clearly illustrate:
         a. Relations of Component parts of equipment and systems.
         b. Control and flow diagrams.
      2. Coordinate drawings with information in Project Record Documents to assure correct illustration of completed installation.
         a. Do not use Project Record Documents as maintenance drawings.

   D. Written text, as required to supplement product data for the particular installation:
      1. Organize in a consistent format under separate headings for different procedures.
      2. Provide logical sequence of instructions for procedure.

   E. Copy of warranty, bond and service contract issued.
      1. Provide information sheet for University personnel, give:
         a. Proper procedures in event of failure.
         b. Instances that might affect validity of warranties or bonds.

   F. Copy of Material Safety Data Sheet (MSDS) received with products or materials delivered to the site for incorporation into the Project, for Trustees future reference.

1.05 MANUAL FOR MATERIALS AND FINISHES
A. Submit three copies of complete manual in final form. Comply with Section 01 33 00 – Submittals.

B. Content, for architectural products, applied materials and finishes:
   1. Manufacturer’s data, giving full information on products.
      a. Catalog number, size, and composition.
      b. Color and texture designations.
      c. Information required for re-ordering special manufactured products.
   2. Instructions for care and maintenance.
      a. Manufacturer’s recommendation for types of cleaning agents and methods.
      b. Cautions against cleaning agents and methods that are detrimental to the product.
      c. Recommended schedule for cleaning and maintenance.

C. Content, for moisture-protection and weather-exposed products:
   1. Manufacturer’s data, giving full information on products.
      a. Applicable standards.
      b. Chemical composition.
      c. Details of installation.
   2. Instructions for inspection, maintenance, and repair.

D. Additional requirements for maintenance data: Respective sections of Specifications.

1.06 MANUAL FOR EQUIPMENT AND SYSTEMS

A. Submit three (3) copies of complete manual in final form.

B. Content, for each unit of equipment and system, as appropriate:
   1. Description of unit and component parts.
      a. Function, normal operating characteristics, and limiting conditions.
      b. Performance curves, engineering data and tests.
      c. Complete nomenclature and commercial number of replaceable parts.
   2. Operation procedures:
      a. Start-up, break-in, routine and normal operation instructions.
      b. Regulation, control, stopping, shutdown, and emergency instructions.
      c. Summer and winter operation instructions.
      d. Special operation instructions.
   3. Maintenance Procedures:
      a. Routine operations.
      b. Guide to "trouble shooting".
      c. Disassembly, repair and reassembly.
      d. Alignment, adjusting and checking.
   4. Servicing and lubrication schedule.
      a. List of lubricants required.
   5. Manufacturer’s printed operation and maintenance instructions.
   6. Description of sequence of operation by control manufacturer.
OPPENHEIMER UPPER EQUESTRIAN PAVILION
MAJ 16-MJ0067

7. Original manufacturer's parts list, illustrations, assembly drawings and diagrams required for Maintenance.
   a. Predicted life of parts subject to wear.
   b. Items recommended to be stocked as spare parts.
8. As-installed control diagrams by controls manufacturer.
   a. As-installed color-coded piping diagrams.
10. Charts of valve tag numbers, with location and function of each valve.
11. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.
12. Other data as required under pertinent sections of specifications.

C. Content, for each electric and electronic system, as appropriate:
   1. Description of system and component parts.
      a. Function, normal operating characteristics and limiting conditions.
      b. Performance curves, engineering data and tests.
      c. Complete nomenclature and commercial number of replaceable parts.
   2. Circuit directories of panel boards.
      a. Electrical service.
      b. Controls.
      c. Communications.
   3. As-installed color-coded wiring diagrams.
   4. Operation procedures:
      a. Routine and normal operation instructions.
      b. Sequences required.
      c. Special operation instructions.
   5. Maintenance procedures:
      a. Routine operations.
      b. Guide to "trouble-shooting."
      c. Disassembly, repair and reassembly.
      d. Adjustment and checking
   6. Manufacturer's printed operation and maintenance instructions.
   7. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.
   8. Other data as required under pertinent sections of specifications.

D. Prepare and include additional data when the need for such data becomes apparent during instruction of University personnel.

E. Additional requirements for operation and maintenance data: Respective sections of specifications.

1.07 INSTRUCTION OF UNIVERSITY PERSONNEL

A. Operation and maintenance manual shall constitute the basis of instruction.
   1. Review contents of manual with personnel in full detail to explain all aspects of operations and maintenance.
PART 3 - EXECUTION – NOT USED

END OF SECTION
PART 1 - GENERAL

1.01 SUMMARY

A. This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturer's standard warranties on products and special warranties.
   1. Refer to the General Conditions for terms of the Contractor's special warranty of quality of work and materials.
   2. General close-out requirements are included in Section 01 77 00 - Closeout Procedures.
   3. Specific requirements for warranties for the Work and products and installations that are specified to be warranted are included in the individual Sections of Divisions 02 thru 49.
   4. Certifications and other commitments and agreements for continuing services to Trustees are specified elsewhere in the Contract Documents.

B. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

C. Related Specification Sections:
   1. Section 01 33 00 - Submittal Procedures.
   2. Section 01 77 00 - Closeout Procedures
   3. Divisions 02 thru 49.

1.02 DEFINITIONS

A. Standard Product Warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Trustees.

1.03 WARRANTY REQUIREMENTS

A. Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.

B. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.

C. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an: acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Trustees has
benefited from use of the Work through a portion of its anticipated useful service life.

D. Trustees' Recourse: Written warranties made to the Trustees are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Trustees can enforce such other duties, obligations, rights or remedies.

1. Rejection of Warranties: The Trustees reserve the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.

E. The Trustees reserve the right to refuse to accept Work for the Project where a special warranty, certification or similar commitment is required on such Work or part of the Work until evidence is presented that entities required to countersign such commitments are willing to do so.

1.04 SUBMITTALS

A. Submit written warranties to the Architect prior to the date for Notice of Completion. The Architect's Notice of Completion designates a commencement date for warrants. All warranties shall be dated and commence from the date of completion.

1. When a designated portion of the Work is completed and occupied or used by the Trustees, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Architect within fifteen days of completion of the designated portion of the Work. Extend warranties as required for extended warranties.

B. When a special warranty is required to be executed by the Contractor, or the Contractor and a subcontractor, supplier or manufacturer, prepare a written document that contains appropriate terms, and identification, ready for execution by the required parties. Submit a draft to the Trustees through the Architect for approval prior to final execution.

1. Refer to individual Sections of Divisions 02 thru 49 for specific content requirements, and particular requirements for submittal of special warranties.

C. Form of Submittal: Prior to Completion, compile two copies of each required warranty and bond property executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.

D. Bind warranties and bonds in heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2" by 11" paper.

1. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product, and the name, address and telephone number of the installer.
2. Identify each binder on the front and the spine with the typed or printed title "WARRANTIES AND BONDS", the Project title or name, and the name of the Contractor.

3. When operating and maintenance manuals are required for warranted construction, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION