DOCUMENT 00 0101

Theresa

DESIGN-BUILD REQUEST FOR PROPOSALS AND PROJECT MANUAL

for

County of San Mateo

Facilities Division, Department of Public Works

555 County Center

Redwood City, CA 94063

Skylonda Fire Station No. 58 Replacement

Request for
Design-Build Entity Proposals

PROPOSAL DUE DATE:
SEPTEMBER 16, 2015 BEFORE 3:00 P.M.

FACILITIES PLANNING, DESIGN & CONSTRUCTION

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ARTICLE 1 – BRIDGING DOCUMENTS

1.01 For available Bridging Documents see Document 00 5201 (Bridging Documents).

1.02 For available Existing Project information see Document 00 3100 (Available Project Information) and Document 00 3132 (Geotechnical Data and Existing Conditions)

END OF DOCUMENT

DOCUMENT 00 1119

REQUEST FOR PROPOSALS

The County of San Mateo ("Owner"), will receive competitive sealed Proposals from Design-Build Entities as prescribed by State of California Legislation and described herein, for the following public work: Skylonda Fire Station No. 58 Replacement Project No. PC008 ("Project").

ARTICLE 1 – INTRODUCTION

1.01 Receipt of Proposals

A. Owner will receive sealed Proposals at the County Government Center, Department of Public Works, 555 Government Center, Fifth Floor, Redwood City, California 94063, on Wednesday, September 16, 2015. Proposals shall be due before 3:00 p.m., as determined by time and date stamped on the package in the Department of Public Works, fifth floor reception area.

B. All Proposal envelopes will be time-stamped to reflect their submittal time. Owner will reject Proposals received after the specified time and will return such Proposals to the Proposers unopened.

C. Proposers are hereby notified that the U.S. Postal Service does not deliver parcels directly to the Department of Public Works. If a Proposer is delivering its Proposal via U.S. Postal Service, additional time will need to be allotted, as delays could result in the rejection of a Proposal.

1.02 Proposal Requirements

A. This Document 00 1119 sets forward terms and conditions for development, preparation, receipt, review and evaluation of the Proposals for the Project.

B. Each Proposer (also referred to as "Design-Build Entity" or "DBE") must submit its Proposal in accordance with this Document 00 1119.

C. Only the Three (3) Design-Build Entities who are pre-qualified pursuant to the Owner Prequalification Process for Design Build Entities, issued April 14, 2015 and any amendments, modifications or supplements thereto, are eligible to submit Proposals.

D. For this Project, the County will be utilizing a Best Value selection procurement process whereby the County will establish an acceptable budget range for the complete project defined in Document 00 1119 (Bridging Documents). Bridging Documents will also define a ranked list of five (5) building design options. The DBE Proposer will determine the highest attainable design option and provide a Fix Fee proposal to complete the highest attainable design option.

1. The acceptable Fix Fee Proposal will be within the range of $4,500,000 and $6,250,000. Any Proposal with Fix Fee pricing in excess of this range may be considered non-responsive and not considered.
2. The building Design Option types will be defined in detail in Document 00 1119 (Bridging Documents). There are five (5) acceptable options. (List below is highest rank to lowest rank: from
    1) New Apparatus, Barracks, and Office facilities in a single structure incorporating a drive-through apparatus bays
    2) New Apparatus, Barracks, and Office facilities in a single structure not incorporating a drive-through bays
    3) New Apparatus Building incorporating drive-through apparatus bays, and a separate Barracks/Office Building (two structures)
    4) New Apparatus, Barracks and Office facilities incorporating drive-through

apparatus bays for some vehicles, and separate structure for the remaining vehicles (two structures). The separate 'vehicle-only structure would not require drive-through apparatus bays.

5) **At A Minimum,** the County intends to build a replacement Fire Station Barracks/Office Building that will consolidate the functions and operations of the structures into a single structure.

E. If a Proposer determines that the Project cannot be designed and constructed to achieve the performance, design objectives described in the Specifications and Bridging Documents, within the Fixed Fee Proposal Range, the Proposer shall notify Owner regarding the following options:

1. Propose a design that is within the Fixed Fee Range but shall not achieve all performance criteria. In this option, the Proposer shall list what criteria cannot be achieved as part of its Proposal. The list shall be presented in two parts:

   a. All items that are absolutely not provided, and

   b. Any items that are provided but at a lower performance level than requested. Owner will evaluate the Proposal as submitted; **OR**

2. Withdraw from the proposal competition.

1.03 DBE Selection Milestone Schedule

The supplied DBE Selection Milestone Schedule is meant as a guideline. Actual dates may vary during RFP process.

- County to Issue RFP 7/8/15
- DBE Confidential Meeting # 1 Window 7/29/15 – 8/4/15
- DBE Confidential Meeting # 2 Window 8/5/15 – 8/18/15
- DBE RFP Questions Due 8/18/15
- County to Responds to DBE Questions 8/25/15
- DBE Proposals Due 9/16/15
- DBE Proposal Presentation 9/22/15 – 9/25/15

1.04 Bridging Documents

A. Bridging Documents describe the minimum mandatory scope, and needs of the Project.

B. Bridging Documents are made available under Document 00 5201 (Bridging Documents).

1.05 Critical Success Factors

A. Critical Success Factors ("CSF") are those issues that the County Project Team and its project

1. The Skylonda Fire Station must be staffed, occupied, and entirely operational by December 30, 2016. consultants have agreed are essential to the success of this Project, and are the core essence of the Proposer's responsibility. It is essential that the Proposer be responsive to the CSF and use the CSF as a guide in both the development of their Proposal, and in the design and construction of the requirements of the Design Build Package. All Proposals will be reviewed and evaluated in light of the following Critical Success Factors.

2. Owner's, CalFire, and other stakeholders have been integrally involved in developing the

bridging documents for the project. The Design-Build Entity will be expected to exhibit and foster ongoing teamwork and collaboration with this project team in every aspect of the effort to complete the project design, construction, start-up and testing, commissioning, transition, completion and activation.

3. The Design-Build-Entity will be expected to comply with requirements of Owner Contracts including but not limited to successful reviews approvals and inspections of the Project from design through occupancy.

4. The Design-Build Entity will be expected to:

   a. Meet the intent of the Bridging Documents;

   b. Comply with the requirements of all Federal, State, Owner, and other authorities having jurisdiction regulations for required reviews, approvals, permits, construction, inspection, and record keeping;

   c. Create a Project that is energy efficient and uses sustainable design elements and construction practices and minimizes life-cycle costs;

   d. Thoroughly start-up and test and commission new systems to ensure efficient and reliable operation and compliance with performance requirements established in the Bridging Documents; and

   e. Systematically furnish all required warranties, operation and maintenance manuals, and record documents and successfully transition and train facility staff, closing out the Project with no defects.

B. The CSF are the minimum standards that must be implemented under this Project. To obtain the best value for the Fixed Fee, as indicated below, Owner requests Proposers to include Additional and Voluntary types of Enhancements in their Proposals. All Enhancements must be of high quality, add significant value, provide benefit to Owner and are beyond the minimum requirements established in the RFP.

C. The Bridging Documents represent the minimum requirement of the Project and an item will not be considered an Enhancement if it is utilized to meet an "or equal" requirement.

D. Owner retains the right to decline any Enhancements.

ARTICLE 2 – PROPOSAL DEVELOPMENT

2.01 Site Visit, and Confidential Meetings

A. Owner will make itself available for two confidential meetings with each Proposer during the Proposal development period, at an equally agreed upon location, with times to be established with individual DBE. Meeting agendas are to be prepared by the DBE and sent to the Owner at least 5 days in advance of the meeting date to ensure the proper consultants and stakeholders are available for the meeting. The meetings are to be planned to be no more than three (3) hours. A Proposer may defer any meeting at its discretion. Owner will use reasonable efforts to preserve the confidentiality of all discussions, and documents presented, during these meetings, along with any competitive advantage(s) associated therewith, at least until Proposals are submitted and as otherwise permitted by law.

B. Owner will transmit to all Proposers any Addenda as Owner in its discretion considers necessary to provide clarification, response to questions from the Proposers or from confidential meetings.

Proposers shall not rely upon oral statements; nor shall oral statements be binding or legally effective.

2.02 Existing Conditions and Related Data

A. Refer to Document 00 3100 (Available Project Information) and Document 00 3132 (Geotechnical Data and Existing Conditions).

2.03 Addenda

A. Owner will transmit to all Proposers any Addenda as Owner in its discretion considers necessary to provide clarification, response to questions from the Proposers or from confidential meetings. Proposers shall not rely upon oral statements; nor shall oral statements be binding or legally effective.

B. Proposers must direct to Owner all questions about the meaning or intent of this Document 00 1119 (Request for Proposal) and other Proposal Documents. Proposers must submit their questions by in writing.

C. Owner will send by email Addenda to each of the three pre-qualified Proposers to the address supplied to Owner by each of them.

D. If Owner deems advisable, Owner may also issue Addenda to modify the Proposal Documents.

E. Addenda shall be acknowledged in Proposal Form by number and shall be part of the Contract Documents. Proposers may obtain a complete listing of Addenda from Owner.

2.04 Other Requirements Prior To Proposing

A. Submission of a Proposal signifies the Proposer's careful examination of Proposal Documents and complete understanding of the nature, extent and location of Work to be performed.

B. Proposer must complete the required investigations described in Document 00 7253 (General Conditions), as a condition to submitting a Proposal, and submission of Proposal shall constitute the Proposer's express representation to Owner that Proposer has fully completed these required investigations.

ARTICLE 3 – CONTENT OF PROPOSALS

3.01 General Proposal Submission - Contents

A. Each Proposer shall submit its Proposal to the Owner at the address indicated herein.

B. Each Proposer shall submit proposals neatly organized, bound binders with the appropriate table of contents and tabs/dividers for:

1. One (1) complete original Project Proposal with original signatures and all required deliverables. Separate from the copies and clearly marked as "ORIGINAL"
2. Six (6) copies of the Project Proposal and all required deliverables.
3. Written text: 8 ½" x 11" sheets of paper.
4. Drawings: ½ size standard edge bound or stapled.
5. Two (2) thumb drives with an electronic copy of the Project Proposal and all required deliverables.

C. Proposers shall submit their Proposals and all deliverables in a manner that is structured to permit easy and definitive evaluation of each Factor identified herein as Evaluation Factors.

D. Proposals shall be deemed to include any written responses of a Proposer to any questions or requests for information of Owner made as part of the Proposal evaluation process after submission of the Proposal.

E. The Proposal must contain the following, fully completed (and where applicable, executed) documents:

1. Document 00 4200 (Proposal Form).

   a. The Proposal Form must be completed as indicated therein. Proposers must provide information for all items, including Additive Enhancements (Schedule 1-A), Voluntary Enhancements (Schedule 1-B), and hourly rates for architects and engineers for changes in Contract Amounts (Schedule V). Information regarding Voluntary Enhancements must either be included in Proposer's Technical Proposal Submission or attached to Proposal Form.

2. Proposal Security.

   a. Proposers must submit with their Proposals cash, a certified check or cashier's check from a responsible bank in the United States, or a corporate surety bond furnished by a surety authorized to do surety business in the State of California, of not less than 10% of the Fixed Fee, payable to the Owner.
   b. Corporate surety bonds must be in form of Document 00 4316 (Bond Accompanying Proposal).
   c. Owner will reject as non-responsive any Proposal submitted without the necessary Proposal security. Owner may retain all Proposal securities and Proposal bonds until the later of 90 days after Proposal opening or execution of the Contract and deposit of all necessary bonds and other items, at which time Owner shall return the Proposal securities and Proposal bonds of any non-defaulting Proposer.

3. Document 00 4330 (Subcontractors List), identifying all Subcontractors who will participate in the Contract which are known as of the Proposal date (in accordance with Public Contract Code §20133((d)(3)(A)(i)).

4. Document 00 4516 (Design-Build Entity Certifications), signed and completed (and including any appendices) as indicated therein.

5. Document 00 4520 (Non-Collusion Declaration), subscribed and sworn before a notary public. No Proposer may make or file or be interested in more than one Proposal for the same supplies, services or both.

6. Letter from Surety. A letter from a surety duly licensed to do business in the State of California, having a financial rating from A. M. Best Company of A-, VII or better, confirming that surety has agreed to provide Design-Build Entity with performance and payment bonds in accordance with the requirements set forth in the Contract Documents 00 6113.13 (Construction Performance Bond) and 00 6113.16 (Construction Labor and Material Payment Bond), with minimum penal sums in the amounts set forth therein.

7. Letter from Insurer. A letter from an insurance underwriter, having a financial rating identified in Document 00 7316 (Supplementary General Conditions – Insurance and Indemnification), confirming that the insurer will provide the coverages and amounts required for Design-Build Entity specified in the Contract Documents including Builders Risk insurance.

8. Material Changes List. If Proposer is unable to certify in Document 00 4516 that all information it submitted to Owner in connection with the Pre-Qualification Process remains true and correct in all material respects as of the date of submitting its Proposal, a list of all such changes ("Material Changes List"), accompanied by the same types of information that Proposer was required to submit for as part of the Pre-Qualification Process.

9. Technical Proposal Submission, containing the following items, as further described or referenced in paragraph 3.02 below:

    a. Proposed Staffing and Designated Subcontractors
    b. Proposed Design and Design Approach; Life-Cycle Costs
    c. Draft Project Management Plan
    d. Enhancements; Additive and Voluntary
    e. Skilled Labor Force Ability
    f. Acceptable Safety Record

F. To assist in Owner evaluation, Proposers are encouraged to organize their Technical Proposal Submissions based on the following items, as further described in paragraph 4.03 below:

    a. Proposed Team Technical Design and Construction Expertise
    b. Proposed Design and Design Approach
    c. Project Pricing and Features
    d. Draft Project Management Plan
    e. Preliminary Baseline Design/Construction Schedule
    f. Life-Cycle Costs over 15 Years
    g. Skilled Labor Force Availability
    h. Acceptable Safety Record

3.02 Technical Proposal Submission

A. Proposed Staffing and Designated Subcontractors

1. Submit a list of the proposed staffing for the Project; the listing must include all key team personnel previously approved in the Pre-Qualification Process, and include at a minimum the specific positions indicated below, and such others as Owner may request before Proposal date ("Key Personnel"). Substitutions will not be permitted without prior approval of the Owner. Additional staff required but not part of the Pre-Qualification Process should be added.
    a. Project Director
    b. Design Project Manager
    c. Architect of Record
    d. Design Architect
    e. Project Architect
    f. Construction Project Manager
    g. General Superintendent

2. All Subcontractors who are known to be performing portions of the Work on Proposal day (Designated Subcontractors) must be identified in Document 00 4330 (Subcontractors List). All Subcontractors not designated or trade not performed by the Design-Build Entity must be competitively bid and awarded by the Design-Build Entity. Subcontractors designated on Proposal day will not require public bidding beyond this RFP process. Refer to Document 00 4330 Article II for subsequent subcontractor procurement requirements.

3. All Subcontractors working on Project Site, whether included in Proposal or otherwise, must have an Experience Modification Rate (EMR) of 1.00 or less.

B. Proposed Design and Design Approach; Life-Cycle Costs

1. General: Prepare written documents listed below to depict the Proposer's design in response to the Owner's requirements. The submittal requirements listed below are minimum requirements. Proposer may submit additional materials in their Proposal. Additional materials submitted by the Proposer may or may not be reviewed by the Owner at the Owner's sole discretion. Internet links to websites are not permitted. Design

narrative may include diagrams, graphic illustrations, conceptual sketches and ideas, exhibits, and photographic images. (Site plans, conceptual floor plans, grading plans to be scaled to fit standard drawing sheet size (30" x 42") with ½ size sheets required for submittal).

2. Building Program Report: Spreadsheet format indicating all proposed program spaces with both net and gross square footages as compared to the required building program net and gross square footages. Deviations from the required building program gross square footages are to be clearly highlighted. Additions to the Owner's issued Specifications are to be clearly noted.

3. Prepare conceptual design plans that illustrate the character, including conceptual drawings and proposed Voluntary Enhancements as necessary to describe the Architect's design intent. Plans shall include at a minimum:

    a. Site Plan: Overall site plan including the size and locations of the proposed building elements, landscape, hardscape (including parking), leach field, and drive access.
    b. Conceptual Floor Plans: 1/16" = 1'-0" Scale (minimum) overall plans of the proposed building elements.

4. Technical Approach Plans for the Project, including backup documentation as appropriate, to identify the proposed types, integration, and operations of systems for the facility illustrating the best value for the Owner. Technical approach plans are to include:

    a. Narrative detailing the basic approach.
    b. Conceptual layout of building systems.
    c. Proposed systems including a general description of types, efficiencies, quantities and capacities.
    d. Approach to maintaining and servicing proposed systems
    e. Narrative outlining the proven track record of the proposed systems and vendors including tried and tested processes, systems and capabilities.

5. On- and Off-Site Civil and Utilities Systems

    a. Provide a narrative description and where applicable, conceptual drawings of the proposed civil engineering design and approach, including the proposed unique design features, conformance with the sustainability features and energy conservation for the best value for the Owner.

6. Prepare conceptual Site Utility Plans with points of connection including: Sanitary Sewer, Domestic and Fire Water, Storm Drain, Gas and Electrical services.

7. Include hard and soft calculations which demonstrate the level of energy efficiency, as well as a Statement regarding the Proposers' experience in using such programs.

8. Submit a Life-Cycle Cost (LCC) analysis of proposed systems describing the Proposer's approach for evaluating alternatives and developing cost effective designs, systems and components as part of sustainable design. Life-cycle benefit analyses must be shown as present value amounts using a 5.5% discount rate, 15 year life-cycle period, 3% energy costs escalation rate, 3% personnel/staff escalation rate and 2% maintenance cost escalation rate. Proposer's LCC analysis should take into account its proposed Base Project Plus Enhancements reflected in Part II of Schedule of Proposal Prices in Document 00 4200 Proposal Form.

C. Draft Project Management Plan

Submit a draft Project Management Plan that addresses all the following

1. Communication Plan, including:
   a. Proposer's Organization and Lines of Communication
   b. Electronic Communications, including requirements for a Site Project website (to be provided by Design-Build Entity)
   c. Meetings and Conferences
2. Contract Administration and Procedures
3. Collaboration and Coordination
4. Quality Assurance / Quality Control
5. Construction Traffic Management
6. Storm Water Pollution Prevention (if required)
7. EIR Mitigation Measure implementation and monitoring
8. Systems/Design Confirmation
9. Waste Management
10. Safety
11. Commissioning
12. Record Documents
13. Scheduling
14. Monthly Report
15. Conflict Resolution
16. Transition and Close-out

D. Preliminary Baseline Design/Construction Schedule, and Staffing Plan

1. Submit a preliminary baseline design/construction schedule to complete the Work incorporating critical milestones and events known or understood by the Project Proposer. The schedule must represent the Project Proposer's intended plan for completing the Work within the contract time, and comply with Section 01 3200 Progress Schedules and Reports paragraph 2.03C. Schedule must also include considerations for keeping fire station operational.

2. Submit a Key Personnel staffing schedule, indicating all periods when each of the Key Personnel (as defined in paragraph 3.02A above) are anticipated to be working on the Project.

3. In developing the Preliminary Baseline Design/Construction Schedule the Project Proposer should consider activities, logic, durations, and milestones related to the following:

   a. Systems/Design Confirmation

   Review and approval by Owner of design for each project component as necessary to document Design-Build Entity's specific approach to meet the performance requirements required by Bridging Documents, and as required to construct the Project including, but not limited to:

      1. Demolition
      2. On and off-site utilities
      3. Site grading and geotechnical requirements
      4. Main facility design and construction

   b. Stakeholder Reviews

   Proposed review and confirmation activities and durations for stakeholder team during program confirmation, systems confirmation, design, construction, submittal review, start-

up and testing, commissioning, and project close-out.

c. Regulatory Agency Reviews

Proposed review and approval activities and durations during design, construction, commissioning, and project close-out including, but not limited to:

1. County Fire Marshal (Fire, Life Safety)
2. County Building Inspection Department
3. County Planning
4. Public Works
5. California Department of Transportation (Road Improvements)
6. All additional Authorities Having Jurisdiction

d. Include requirements for building commissioning

E. Enhancements; Additive and Voluntary

1. An Enhancement is a demonstrated benefit to the Project that is beyond the minimum requirements established in the Bridging Documents.

2. Project includes two (2) different types of Enhancements, "Additive" and "Voluntary". Additive Enhancements are design elements that the Owner would like to have incorporated into the Project if possible within the Fixed Fee, and are listed below:

A1 - Early Project Completion

3. In addition to the Additive Enhancements, Proposers are encouraged to propose other Enhancements that could improve the Project, referred to as Voluntary Enhancements. Voluntary Enhancements may include, without limitation, the following:

a. Furnish extended warranties and guarantees for major equipment.
b. Any design feature that would increase safety and security for staff beyond that required by the Bridging Documents.
c. Any design feature or material specification that would increase reliability/durability of facility operations or reduce the cost of facility maintenance beyond that required by the Bridging Documents.
d. Increased longevity and durability for equipment or materials.
e. Extend roofing warranties from 10 to 20 years for buildings with membrane roofing.
f. Other design elements that would increase the value of the facility to the Owner or User.

4. For each Voluntary Enhancement, submit the following:

a. A unique Voluntary Enhancement identification number beginning with "V1" (to be used in Proposal Form Schedule 1-B);
b. A narrative description of the Enhancement;
c. A description of the benefits to the County;
d. Affected Specification/Bridging Documents section references and changes (if applicable);
e. New performance criteria (if applicable);
f. New concept drawings (if applicable);
g. A comparison between the original Bridging Documents requirements and the proposed Enhancement;

h. Cost benefit analysis (if applicable).

Proposers much list each Enhancement (Additive and Voluntary) on Schedule 1-A or 1-B of the Proposal Form (Document 00 4200), provide the Proposal Price for each Enhancements and identify the County Decision Point Date which is the date which the Owner must make a final determination regarding inclusion or exclusion of the Enhancement in the Project.

F. Skilled Labor Force Ability
1. All information required to establish Evaluation Factor # VII, Skilled Labor Force Availability. See paragraph 4.03 below).

G. Acceptable Safety Record
1. All information required to establish Evaluation Factor # VIII, Acceptable Safety Record. See paragraph 4.03 below).

3.03 Proposal Guide

To aid Proposers in preparing and submitting their Proposals, the following is provided as a guide:

A. The certification of the Fixed Fee must be without any conditions, alterations or exceptions other than as provided in paragraph 1.02E above.

B. Design-Build Agreement administration refinements, conditions regarding price escalation, Design-Build Agreement language modifications, value engineering to attain Owner's budget, additional allowances that limit the extent of work, modifications to RFP documents that reduce the RFP requirements or scope of work, and/or infer pre-approval of substitutions, or any other conditions, clarifications that reduce the requirements and/or infer a pre-approval of a change to the requirements or a conditional acceptance of the Project Proposal will not be allowed and may be the basis for considering the Project Proposal to be non-responsive at the sole discretion of the Owner.

C. Substitutions: It is the intent of the Owner to utilize the creative expertise of the Proposers. The requirements of the Contract Documents establish the design intent, level of quality and utility and special requirements. Proposers may propose, as Voluntary Enhancements, alternate materials, methods, and means to achieve the required results. However, the burden of compliance with the intent of Bridging Documents remains with the Proposer.

D. The evaluation of the Proposals during this selection phase is not intended to be final judgment on the validity or acceptability of alternate solutions.

E. Proposals for substitutions must be made in conformance with the Contract Documents and be made on a system-wide basis such that the Owner is not asked to piecemeal its review of individual elements of a system. The Owner will reasonably cooperate in considering and reviewing substitutions and modifications. The Owner is not required, however, to approve substitutions or modifications that would change or reduce the performance standards, intended use, or value of the Project.

F. The acceptance of, and/or the issuance of a stipend in connection with the Project Proposal, does not constitute acceptance by the Owner that any or all of the proposed elements are in conformance with the Contract Documents.

G. The Proposer is responsible for foreseeable site conditions and hazardous materials to the extent described in the Proposal Documents that could be reasonably inferred by the Proposers based on their experience and expertise on similar projects.

H. Proposers are required to perform their own site investigations.

ARTICLE 4 – PROPOSAL RECEIPT AND EVALUATION

4.01 General

A. All three pre-qualified Proposers will participate in the preparation and submittal of this request for proposals. Award is to be made and will be based on the best value Proposal.

B. The two pre-qualified Proposers who are not awarded the Contract will receive a stipend of $15,000 for their participation in the Proposal process. In exchange for its participation in the Proposal process, and subject to compliance with the obligations herein, all pre-qualified Proposers shall agree to the following conditions:

1. Any pre-qualified Proposer not awarded the Contract shall agree not to protest the award of the Contract to a different pre-qualified Proposer.

2. All Proposal documents and other submissions and concepts discussed by any pre-qualified Proposer shall become the property of the Owner.

C. Any pre-qualified Proposer that fails to submit a responsive Proposal, including without limitation withdrawing from the competition as provided in paragraph 1.02E above shall not receive a stipend.

4.02 Proposal Receipt and Evaluation

A. Owner shall date and time stamp Proposals on receipt. Proposals will not be opened publicly, but may become public as described below.

B. Owner will open the Proposals, and perform a preliminary review to identify any patently defective Proposals. Owner action on defective Proposals may include refusal to evaluate such Proposals and elimination of Proposer submitting such Proposals from the Proposal process. Owner reserves all rights to take any action consistent with the requirements of this Document 00 1119 (Request for Proposals), including, without limitation, requesting additional information after receipt and opening of Proposals and waiving any inconsequential defects.

C. All Proposals from Proposers which remain after the preliminary review shall be evaluated by the Selection Committee, which will be comprised of individuals selected by the Owner. The Selection Committee will review the Proposals and award points using the methodology described in this Document 00 1119.

4.03 Evaluation Factors/Best Value

A. Maximum Points for Each Evaluation Factor: Owner will evaluate each Proposal based upon the following factors, with the maximum number of points allocated to each factor as indicated in the Points Matrix below.

EVALUATION FACTORS		Maximum Points
I.	Proposed Design Option and Design Approach	30
II.	Proposed Team Technical Design and Construction Expertise	20
III.	Project Pricing and Features	15
IV.	Draft Project Management Plan	10
V.	Preliminary Baseline Design/Construction Schedule	10
VI.	Life-Cycle Costs over 15 Years	5
VII.	Skilled Labor Force Availability	5
VIII.	Acceptable Safety Record	5
	Total Maximum	**100**

B. Evaluation Factor Description.

1. Factor # I: Proposed Design and Design Approach.

The owner is interested in building highest attainable Design Option from Document 00 5201 (Bridging Documents) including New Apparatus, Barracks, and Office facilities. The Proposer with the highest ranked Design Option will receive the maximum number of points for this factor. With each design option being worth 5 points

a. The Proposer whose proposed Project design and approach to designing the Project, which provides Owner with the best combination of quality, utility, architectural aesthetics of the proposed design solutions, and design innovation, while still complying with all Project Operational, Performance and quality requirements is determined by Owner to be the best, when compared with the design and approaches proposed by the other Proposers, will receive the maximum number of points for this factor.

b. For purposes of this evaluation factor: The term "architectural aesthetics of the proposed design solutions" shall broadly encompass the totality of a Proposer's proposed design approach and innovative solutions, including the quality and responsiveness of any Plans, Drawings, Schematics, Specifications, and similar Design Documents submitted with the Proposal. Presentation drawings which adequately depict the proposed appearance, functionality and layout of the facility

are highly encouraged.

2. Factor # II: Proposed Team Technical Design and Construction Expertise (including Designers and Subcontractors)
The Proposer whose proposed team, including designers and designated Subcontractors, that is determined by Owner to be the most qualified, when compared with the teams proposed by the other Proposers, will receive the maximum number of points for this factor. All other Proposers will receive fewer points, as determined by Owner.

3. Factor # III: Project Pricing and Features

   a. This factor is divided into two scored Parts: Base Project (Document 00 4200 Proposal Form, Part I), with a maximum five points; and Base Project plus Additive and Voluntary Enhancements (Document 00 4200 Proposal Form, Part II), with a maximum 15 points.

   b. Base Project Part I Score. Each Proposer who provides a Total Base Price (Document 00 4200 Proposal Form, Part I) that is equal to or less than the Fixed Fee shall receive 5 points. All other Proposers will receive zero points for this sub-factor. A base price equal to the Fixed Fee will be considered an offer in which no Enhancements with a monetary value are offered.

   c. Base Project Plus Enhancements Part II Score (Document 00 4200 Proposal Form, Part II).

      1) Additive Enhancements: The Proposer whose Base Project Plus Additive Enhancements are determined by Owner to provide the greatest value to Owner, will receive 2 points. All other Proposers will receive fewer points, as determined by Owner.

      2) Voluntary Enhancements: The Proposer whose Voluntary Enhancements are determined by Owner to provide the greatest utility, functionality, and overall best value to Owner, will receive 8 points. All other Proposers will receive fewer points, as determined by Owner

   d. Proposers are reminded that Owner will pay for any Enhancement only if actually included in Contract, either at time of award or subsequently as an Alternate and that each Proposer agrees to design and construct the Project as described in the Bridging Documents, and satisfy all other Design-Build Entity obligations under the Contract Documents, for the Total Base Price identified in Document 00 4200 (Proposal Form) Part I.

   e. All Enhancements (Additive and Voluntary) which are not included in Contract at time of award shall become Alternates. Owner may add any Alternate to Contract, at price indicated in Document 00 4200 (Proposal Form) Schedules 1-A or 1-B, as applicable, by notifying Design-Build Entity no later than the date indicated for each item in Schedules 1-A or 1-B, as applicable ("County Decision Point Date").

4. Factor # IV: Draft Project Management Plan

   a. The Proposer whose draft Project Management Plan, including the clarity of the intent of each individual item and the continuity of all items comprising the overall plan is determined by Owner to be the most thorough, comprehensive and likely to achieve the highest quality project will receive the maximum number of points for this factor. All other Proposers will receive fewer points, as determined by Owner.

5. Factor # V: Preliminary Baseline Design/Construction Schedule.

a. The Proposer whose Preliminary Baseline Design/Construction Schedule is determined by Owner to show a (i) recognition of and understanding of the tasks necessary to complete the Project, (ii) clear identification of the process requirements for each of the project stakeholders and all governing agencies that will affect the project, (iii) acknowledgement of critical milestones, and (iv) efficiencies that can be achieved in project delivery and also, (v) the earliest realistically achievable completion dates, when compared with the Preliminary Baseline Design/Construction Schedules proposed by the other Proposers, and which includes a Key Personnel staffing schedule consistent with the proposed progress of the Work, will receive the maximum number of points for this factor. All other Proposers will receive fewer points, as determined by Owner.

6. Factor # VI: Life Cycle Costs over 15 Years

a. Owner is interested in constructing new facilities whose sustainable design results in a low life cycle cost as calculated over a thirty (15) year period and in assessing realistically achievable ideas for costs savings. As such, Owner will evaluate each Proposer's Life-Cycle Cost (LCC) analysis and estimate the reasonably anticipated life cycle costs over 15 years associated with each Proposal, based on each Proposer's Base Project Plus Enhancements and taking into account (i) replacement costs of any systems/components whose service lives do not exceed 15 years, and (ii) annual price increases and present value discounts. The Proposer whose Proposal is (1) estimated to have the least expensive life-cycle costs over 15 years and (2) determined to contain the most realistic proposals for cost savings shall receive the maximum number of points for this factor. All other Proposers will receive fewer points, as determined by Owner.

7. Factor # VII: Skilled Labor Force Availability

a. The availability of skilled labor is essential to the successful completion of the project. Each Proposer that satisfies the requirements for "skilled labor force availability" as defined in California Public Contract Code Section 20133(d)(4)(B)(v) shall receive the maximum number of points for this factor. Any Proposer who does not satisfy those requirements shall receive fewer points, as determined by Owner.

8. Factor # VIII: Acceptable Safety Record

a. Safety is of paramount importance. The selected Design-Build Entity must have an acceptable safety record. Each Proposer whose safety record is determined to be acceptable as provided by California Public Contract Code Section 20133(d)(4)(B)(vi) shall receive the maximum number of points for this factor. Any Proposer whose "safety record" is not "acceptable" under that Section shall receive fewer points, as determined by Owner.

C. Best Value; Tie Breaker. The Proposal that receives the greatest total number of points based on the above Evaluation Factors shall be considered to provide the Best Value to the Owner. In the event of a tie, pursuant to Public Contract Code Section 20150.9, the Owner reserves the right to select the Proposal which, in the Owner's sole discretion, is determined to provide a superior design and construction solution with regard to sustainability, efficiency, systems and processes. The selected Proposal shall be considered to provide the Best Value to the Owner.

4.04 Modification / Addition of RFP Procedures

A. Owner reserves the right to modify existing procedures and/or establish additional procedures for the Proposal process, and will notify all Proposers if Owner exercises this right.

ARTICLE 5 – AWARD

5.01 Notice of Intent to Award

A. If the Contract is to be awarded, Owner will notify the Proposer whose best and final Proposal is determined to provide the Best Value to the Owner. Owner shall issue Document 00 5050 (Notice of Intent to Award). Owner shall electronically mail the Notice to all Proposers who submitted Best and Final Proposals and all parties who requested that the Owner provide such notice. The Notice shall identify the Design-Build Entity recommended for award.

5.02 Award of Contract

A. Upon completion of Owner's evaluation of all Proposals, including without limitation all required action by the Owner's Board of Supervisors, Owner shall issue Document 00 5100 (Notice of Conditional Award), which shall identify the highest ranked Proposer.

B. Document 00 5100 (Notice of Conditional Award) shall, among other things, identify which Additive and Voluntary Enhancements (if any) will be included in Work at time of award. All other Enhancements will become Alternates, each of which will be subject to acceptance by Owner at the respective prices, and until the respective dates ("County Decision Point Date), specified in the successful Proposer's final Document 00 4200 (Proposal Form) Schedules 1-A and 1-B.

5.03 Post-Notice of Conditional Award Requirements

A. After Notice of Conditional Award, the successful Design-Build Entity must submit the documents listed in items 1 and 4 below no later than 5:00 p.m. on the date that is five (5) business days after issuance of Notice of Conditional Award, and the remaining documents listed below no later than 5:00 p.m. on the date that is seven (7) business days after receipt of all required approvals from the Owner. Execution of the Contract is dependent upon approval of these documents:

1. Document 00 5200 (Agreement): To be executed by the successful Design-Build Entity. Submit three (3) copies, each bearing all required original signatures.
2. Document 00 6113.13 (Construction Performance Bond): To be executed by successful Design-Build Entity and surety, in the amount of 100% of the Fixed Fee. Submit three (3) copies, each bearing all required original signatures.
3. Document 00 6113.16 (Construction Labor and Material Payment Bond): To be executed by successful Design-Build Entity and surety, in the amount of 100% of the Fixed Fee. Submit three (3) copies, each bearing all required original signatures.
4. Document 00 6536 (Guaranty): To be executed by successful Design-Build Entity, in the form set forth in Document 00 6536 (Guaranty). Submit three (3) copies, each bearing all required original signatures.
5. Insurance forms, documents, certificates and endorsements required by Document 00 7316 (Insurance). Submit one (1) copy, each bearing all required original signatures.
6. Project Labor Agreement. Submit two (2) copies, each bearing all required original signatures.
7. Any other document specified in Document 00 5100 (Notice of Conditional Award).

5.04 Failure to Execute and Deliver Documents

A. If the Design-Build Entity to whom the Contract is awarded fails or neglects to execute and deliver all required Contract Documents including bonds, insurance certificates and other documents, as required in paragraph 5.03 above, Owner may, in its sole discretion, deposit the Design-Build Entity's surety bond, cashier's check or certified check for collection, and retain the proceeds as liquidated damages for Design-Build Entity's failure to enter into the Contract Documents. Design-Build Entity agrees that calculating the damages Owner may suffer as a result of the Design-Build Entity's failure to execute and deliver all required Contract Documents and other required documents would be extremely difficult and impractical and that the amount of the Design-Build Entity's required Proposal security shall be the agreed and presumed amount of Owner's damages.

5.05 Right to Reject Proposals

A. Owner may reject any and all Proposals and waive any informalities or minor irregularities in the Proposals at its sole discretion. Owner also reserves the right, in its discretion, to reject any or all Proposals and to re-issue a new Request for Proposals for the Project. Owner reserves the right to reject any or all nonconforming, non-responsive, unbalanced or conditional Proposals, request other proposals and to reject the Proposal of any Design-Build Entity if Owner believes that it would not be in the best interest of the Owner to make an award to that Design-Build Entity, whether because the Proposal is not responsive or the Design-Build Entity is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by Owner. Owner also reserves the right to waive informalities, inconsequential deviations or minor irregularities not involving price, time or changes in the Work, to the fullest extent permitted by law. For purposes of this paragraph, an unbalanced Proposal is one having nominal prices for some work items and enhanced prices for other work items.

ARTICLE 6 – GENERAL CONDITIONS AND REQUIREMENTS

6.01 Contact Information

Mailing and street address of Owner's main office:

ATTN: Theresa Yee, Capital Projects Manager
County of San Mateo Public Works
555 County Center, Fifth Floor
Redwood City, CA 94063
Telephone: (650) 363-4100
Email: Tyee@smcgov.org

6.02 Wage Rates

A. Design-Build Entities are required to comply with all applicable state and federal prevailing wage requirements and/or regulations. Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the State of California Department of Industrial Relations, are on file at Owner's main office and are deemed included in the Proposal Documents. Upon request, Owner will make available copies to any interested party. State prevailing wage requirements are published by the Director of the State of California Department of Industrial Relations and can be found online at www.dir.ca.gov.

B. Proposers are notified that this Project is subject to the requirements of Division 2, Part 7, Chapter 1 of the Labor Code (Public Works), and the requirements of Title 8. Division 1, Chapter 8. Subchapter 4.5 of California Code of Regulations (Compliance Monitoring and Enforcement by Department of Industrial Relations), including the obligation to furnish certified payroll records directly to the Labor Commissioner in accordance with 8 CCR 16461.

6.03 Equal Employment Opportunity

A. Design-Build Entity shall comply with all applicable federal, state, and local laws, rules, and regulations in regard to nondiscrimination in employment because of race, color, ancestry, national origin, religion, sex, marital status, age, medical conditions, disability, or any other reason.

6.04 Ownership of Documents

A. All materials, including copyrights for original design work, submitted by Design-Build Entity in response to this Request for Proposals shall become the property of the Owner.

6.05 Public Records Act Requests

A. Pursuant to the California Public Records Act, Owner will make available to the public Design-Build

Entity's Proposals (to the extent opened), all correspondence and written questions submitted during the Proposal period, all Proposal submissions opened in accordance with the procedures of this Document 00 1119, and all subsequent Proposal evaluation information. Any submissions not opened will remain sealed and eventually be returned to the submitter. Except as otherwise required by law, Owner will not disclose trade secrets or proprietary financial information submitted that has been designated confidential by Design-Build Entity. Any such trade secrets or proprietary financial information that a Design-Build Entity believes should be exempted from disclosure shall be specifically identified and marked as such. Blanket-type identification by designating whole pages or sections shall not be permitted and shall be invalid. The specific information must be clearly identified as such.

B. Upon a request for records regarding a Proposal, Owner will notify Design-Build Entity involved within ten days from receipt of the request of a specific time when the records will be made available for inspection. If the Design-Build Entity timely identifies any "proprietary, trade secret, or confidential commercial or financial" information that Design-Build Entity determines is not subject to public disclosure, and requests Owner to refuse to comply with the records request, Design-Build Entity shall take all appropriate legal action and defend Owner's refusal to produce the information in all forums; otherwise, Owner will make such information available to the extent required by applicable law, without restriction.

C. All materials included with and Information disclosed in the Proposal and the attendant submissions are the property of Owner. Subject to the requirements in the Public Records Act, reasonable efforts will be made to prevent the disclosure of information except on a need-to-know basis during the evaluation process.

6.06 Definitions

A. Except as set forth herein, all abbreviations and definition of terms used in these Instructions are set forth in Document 00 7253 (General Conditions) or Specifications Section 01 4200 (References and Definitions).

END OF DOCUMENT

DOCUMENT 00 2100

ACCESS, INDEMNITY AND RELEASE AGREEMENT

(If Invasive Testing is Allowed)

Dated _____

POTENTIAL DBE: _____

OWNER: COUNTY OF SAN MATEO

SITE: 17290 Skyline Boulevard, Woodside CA

PROJECT: Skylonda Fire Station No. 58 Replacement

In consideration of the above-referenced Owner's permitting the undersigned potential Design-Build Entity ("DBE") to have access to, and to conduct investigations, tests and/or inspections on the Site ("access"), and effective upon such access, DBE hereby agrees as follows:

1.01 To the greatest extent permitted by law, including without limitation California Civil Code Section 2782, DBE hereby releases, and shall defend, indemnify and hold harmless Owner, and its officers, employees, consultants, representatives, and agents, and all other parties having any other interest in the Site, against any claim or liability, including attorney's fees, arising from or relating to any Site-related access, investigation, test, inspection and/or other activity conducted by DBE or any of DBE's officers, employees, consultants, representatives, and/or agents, regardless of whether claim or liability is caused in part by the negligence of Owner or by any released and indemnified party.

1.02 DBE hereby waives the provisions of California Civil Code Section 1542 which provides as follows:

> A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor.

1.03 DBE shall repair any damage to the Site or adjacent property resulting from activities authorized hereunder, and comply with and be subject to all other requirements and obligations described or referenced in Document 00 3132 (Geotechnical Data and Existing Conditions).

1.04 Attached hereto (or to be delivered separately before DBE's visit to the Site) is a certificate for comprehensive general liability insurance satisfying the requirements of Document 00 7253 (General Conditions).

1.05 Although this Access, Indemnity and Release Agreement is not a Contract Document (see Document 00 5200 [Agreement]), it shall be fully effective and binding regardless of whether DBE submits a Proposal for the subject Project, is awarded a contract for the Project, or otherwise.

DBE: _____

By: _____
Signature

Its: _____
Title (If Corporation: Chairman, President or Vice President)

By: _____
Signature

Its: _____
Title (If Corporation: Secretary, Assistant Secretary, Chief Financial Officer or Assistant Treasurer)

END OF DOCUMENT

DOCUMENT 00 3100

AVAILABLE PROJECT INFORMATION

ARTICLE 1 – INFORMATION PROVIDED TO PROPOSERS PRIOR TO PROPOSAL

1.01 The following files were made available to all prospective Proposers prior to the submission of Proposals for the Project Work.

1.02 The following drawings, plans, specifications, data, reports and information were provided solely for information purposes only and are not part of the Contract Documents.

A. **San Mateo County, Skylonda – Geotechnical Investigation**
April 10, 2015- Rutherford + Chekene

B. **San Mateo County, Skylonda – Initial Study/Mitigated Negative Declaration DRAFT**
April, 2015- MIG|TRA Environmental Sciences, Inc.
(Revisions Pending Schematic Design Completion)

C. **San Mateo County, Skylonda – Summary Report of Hazardous Building Materials**
March 13, 2015- SCA Environmental Inc.

D. **San Mateo County Skylonda – Project Area Survey (topo & utility survey information)**
BKF Engineers

E. **San Mateo County, Skylonda – Septic Repair Plan and**
Perc Test

F. **San Mateo County, Skylonda – Existing Site Analysis**
MWA Architects

G. **San Mateo County, Skylonda – Facility Needs Assessment**
MWA Architects and BKF Engineers

H. **Site Plan and Photos**
MIG|TRA Environmental Sciences, Inc.

END OF DOCUMENT

DOCUMENT 00 3132

GEOTECHNICAL DATA AND EXISTING CONDITIONS

ARTICLE 1 – REPORT AND INFORMATION

1.01 Existence of Reports and Utility Surveys

A. Owner, its consultants, and prior contractors may have collected documents providing a general description of the Site and conditions of the Work. These documents may consist of geotechnical reports for and around the Site, contracts, contract specifications, as-built drawings, and utility drawings. These reports, documents and other information are not part of the Contract Documents and do not show new work to be constructed, but rather depict existing conditions that Design-Build Entity ("DBE") will have to address as part of its construction planning and operations. Available report included but are not limited to the following:

A. San Mateo County, Skylonda – Geotechnical Investigation
April 10, 2015
Rutherford + Chekene

1.02 Inspection of Reports

A. DBE should fully inspect and review geotechnical reports, project survey, master plan, and other information regarding existing conditions at the Site. These reports, documents and other information, are not part of the Contract Documents. Nevertheless, DBE accepts full responsibility for reviewing, knowing, and understanding the contents of all of these materials.

1.03 Inclusion in Project Manual

A. Geotechnical report is included in the Project Manual and information regarding existing conditions is also included in the Project Manual, but neither shall be considered part of the Contract Documents, but rather "for information only." DBE is required to obtain their own geotechnical report to finalize their design and conduct any additional investigations to fully understand existing site conditions.

1.04 Available Documentation

A. DBE acknowledges that the following documentation has been made available for DBE's review by Owner for this Contract:

1. See Document 00 3100 (Available Project Information).

ARTICLE 2 – USE OF INFORMATION ON EXISTING CONDITIONS AND REQUIRED PRE-CONTRACTING INVESTIGATIONS

2.01 DBE's attention is directed to the Contract Documents including, but not limited to, Document 00 7253 (General Conditions), and also to the Division 1 Specifications (e.g., Section 01 1100 – Summary of Work).

ARTICLE 3 – ACCESS TO SITE FOR INVESTIGATIONS

3.01 Before contracting, Owner will provide DBE access to the Site to conduct such examinations, investigations, explorations, tests, and other studies, as DBE deems necessary. DBE must fill all holes and clean up and restore the Site to its former conditions upon completion of such explorations, investigations, tests, and studies.

3.02 Investigations may be performed only under the provisions of Document 00 2100 (Access, Indemnity and Release Agreement) and Document 00 7253 (General Conditions) including, but not limited to, proof of insurance and obligation to indemnify against claims arising from such investigation work. DBE shall supply all labor, material, and equipment required to perform any investigations as it deems necessary. Owner has the right to limit the number of pieces of machinery operating at one time due to safety concerns.

END OF DOCUMENT

DOCUMENT 00 4200

PROPOSAL FORM

Owner will receive sealed Proposals at the County of San Mateo Government Center, Department of Public Works located at 555 Government Center, 5th Floor, Redwood City, CA 94063 at the date and time identified in Document 00 1119 (Request for Proposals). Proposals will received by the time and date stamp clock in the Department of Public Works, 5th Floor or the following public work:

COUNTY OF SAN MATEO, EMERGENCY DISPATCH AND RESPONSE CENTER
REDWOOD CITY, CALIFORNIA
Project No. PC008

TO THE COUNTY OF SAN MATEO

THIS PROPOSAL IS SUBMITTED BY:_____

1.01 Submission of Proposal. The undersigned Design-Build Entity proposes and agrees, if this Proposal is accepted, to enter into an agreement with the COUNTY OF SAN MATEO, a public entity ("**Owner**") in the form included in the Contract Documents, Document 00 5200 (Agreement), to perform and furnish the Work specified of the Contract Documents and this Proposal. This Proposal consists of this Document 00 4200 and the following documents:

Date	Description
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

1.02 Documents Comprising Proposal. This Proposal consists of this Proposal Form and documents required and identified in Document 00 1119 (Request for Proposals), submitted herewith.

1.03 Time Period for Acceptance of Proposal. This Proposal will remain subject to acceptance for ninety (90) calendar days after the day of Proposal opening, unless a greater period is authorized by the Board of Supervisors, and may not be withdrawn during that time period. If this Proposal is accepted, Design-Build Entity will sign and submit the Agreement, bonds and other documents required by these Contract Documents.

1.04 In Submitting this Proposal, Proposer Represents:

a. Proposer has examined all of the Contract Documents and the following Addenda (receipt of all of which is hereby acknowledged).

Addendum Number	Addendum Date	Signature of Proposer

b. Proposer acknowledges receipt of Pre-Proposal Conference minutes, if any.

c. Proposer has visited the Site and performed all tasks, research, investigation, reviews, examinations, and analysis and given notices, regarding the Project and the Site, as set forth in Document 00 5200 (Agreement), Article 5 and Document 00 7253 (General Conditions), Article 3.

d. Proposer has given the Owner prompt written notice of all conflicts, errors, ambiguities, or discrepancies that it has discovered in or among the Bridging Documents or other Proposal Documents and as-built drawings and actual conditions and the written resolution thereof through Addenda issued by the Owner is acceptable to Design-Build Entity.

e. Proposer acknowledges that different methods will be used determine (1) the number of points that Proposer may receive on account of this Proposal; and (2) the exact scope of Work of Contract Documents and associated Contract Sum. Proposer acknowledges that Proposer's ultimate scope of Work and associated Contract Sum (if it is awarded the Contract) may be different than any amount or specific combination of Work indicated in this Proposal.

1.05 Schedule of Proposal Prices: Based on the foregoing, Proposer proposes and agrees to fully perform the Work within the time stated and in strict accordance with the Contract Documents for the following sums of money listed in the following Schedule of Proposal Prices, and to perform the Additive Enhancements included in Schedule 1-A and Voluntary Enhancements included in Schedule 1-B, respectively, attached hereto, for the sums of money specified therein.

All Proposal items, including lump sums, unit prices and Enhancements, must be filled in completely. Certain Proposal items are described in Section 01 1100 (Summary of Work); others are described in Bridging Documents or elsewhere in Contract Documents. Quote in figures only, unless words are specifically requested.

PART I—Base Price

ITEM	DESCRIPTION	TOTAL PRICE
1.	All Work of Contract Documents (including without limitation all work as identified in the Bridging Documents)	$
	Total Base Price	**$**

PART II—Base Price Plus Enhancements

ITEM	DESCRIPTION	TOTAL PRICE
2.	Additive Enhancements nos. _____ (as further defined in Schedule 1-A)	$
	Base Price Plus Additive Enhancements Price	**$**
3.	Voluntary Enhancements nos. _____ (as further defined in Schedule 1-B)	$
	Base Price Plus Additive and Voluntary Enhancements Price	**$**

PART III—Other Alternates

ITEM	OTHER ALTERNATES	PRICE
		$

PART IV—Contract Modification Rates For Architect / Engineers
(As per Section 01 2600 Paragraph 2.02.B.4.):

ITEM	DESCRIPTION	TOTAL
4.	Hourly Rates for Architects and Engineers	See Schedule V

Design-Build Entity represents that the foregoing rates do not exceed, and acknowledges and agrees that such rates may not exceed, the applicable personnel's regular rates for work and services on other California public entity projects. These rates shall remain fixed through December 31, 2016 and are subject to adjustment after that dates based upon agreement with the Owner.

1.06 Owner Right to Reject this Proposal. The undersigned understands that Owner reserves the right to reject this Proposal, or all Proposals, in its sole discretion.

1.07 Acceptance of this Proposal. If written notice of the acceptance of this Proposal, referred to as the Notice of Award, is mailed or delivered to the undersigned within the time described in the documents listed in Document 00 1119 (Request for Proposals) as a condition of award, all within the time and in the manner specified above and in these Contract Documents. Notice of Award or request for additional information may be addressed to the undersigned at the address set forth below.

1.08 **Proposal Security.** The undersigned encloses a certified check or cashier's check of a responsible bank in the United States, or a corporate surety bond furnished by a surety authorized to do a surety business in the State of California, in the amount of 10% of project cost made payable to the COUNTY OF SAN MATEO .

1.09 **Principals.** The names of all persons interested in the foregoing Proposal as principals are: (IMPORTANT NOTICE: If Design-Build Entity or other interested person (including any partner or joint venturer of any partnership or joint venture Design-Build Entity, respectively) is a corporation, give the legal name of corporation, state where incorporated, and names of president and secretary thereof; if a partnership, give name of the firm and names of all individual co-partners composing the firm; if Design-Build Entity or other interested person is an individual, give first and last names in full).

_____

_____

Licensed in accordance with an act for the registration of Contractors, and with license number:

_____.

1.10 This Proposal is subject to the terms and conditions in Document 00 1119 (Request for Proposals), and is submitted by:

_____
[Name of Design-Build Entity]

By: _____

Title: _____

NOTE: If the Design-Build Entity is a corporation, set forth the legal name of the corporation together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation. If the Design-Build Entity is a partnership, set forth the name of the firm together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership. All signer(s) represent and warrant that they are authorized to sign this Proposal on behalf of Design-Build Entity.

Business Address: _____

_____

Telephone Number: _____

Fax Number: _____

E-Mail Address:: _____

Date of Proposal: _____

END OF DOCUMENT

Schedule 1-A

TABLE OF ADDITIVE ENHANCEMENTS

Additive Enhancement	Is the price for this Enhancement included in Proposal Item 2?	Price	County Decision Point Date
A1 - Early Project Completion		$	
A2 - Second Elevator		$	
A3 - Ground Floor Public Restroom		$	
A4 - Workout Room		$	
A5 - Bunk Room		$	
		$	
		$	
		$	
		$	

Notes: (1A) See Document 00 1119 (Request for Proposals), para. 3.02.E.

(2A) Owner reserves right to select any Additive Enhancement for Contract and any Additive Enhancement, even if included in Proposal Item 2, that is not included in Work at time of award becomes an Alternate, at price indicated.

(3A) "County Decision Point Date" is defined in Document 00 5200 (Agreement) para. 1.03. See also Section 01 1100 (Summary of Work) para. 1.03.

Schedule 1-B

TABLE OF VOLUNTARY ENHANCEMENTS

Voluntary Enhancements	Is the price for this Enhancement included in Proposal Item 3?	Price	County Decision Point Date
		$	
		$	
		$	
		$	
		$	
		$	
		$	
		$	
[Add additional sheets if necessary]			

Notes: (1B) See Document 00 1119 Request for Proposals), para. 3.02.E. A detailed description of each Voluntary Enhancement/Alternate shall be included in the Technical Proposal Submission of the Proposal.

(2B) Owner reserves right to select any Voluntary Enhancement for Contract. Any Voluntary Enhancement which is not included in Work at time of award, even if included in Proposal Item 3, becomes an Alternate, at price indicated.

(3B) "County Decision Point Date" is defined in Document 00 5200 (Agreement) para. 1.03. See also Section 01 1100 (Summary of Work) para. 1.03.

Schedule V

HOURLY RATES FOR ARCHITECTS AND ENGINEERS FOR CHANGES IN CONTRACT AMOUNTS

(Rates Valid through 6/31/2017)

DOCUMENT 00 4316

BOND ACCOMPANYING PROPOSAL

KNOW ALL BY THESE PRESENTS:

That the undersigned

_____,
(Name of Contractor)

as Principal and the undersigned as Surety are held and firmly bound unto Owner, San Mateo County, as obligee, in the penal sum of 10% of the Fixed Fee lawful money of the United States of America, for the payment of which, well and truly to be made, we bind ourselves, our successors, executors, administrators, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the said Principal is submitting a Proposal for the San Mateo County Skylonda Fire Station No. 58 Replacement Project.

THE CONDITION OF THIS OBLIGATION IS SUCH that if the Proposal submitted by the said Principal be accepted and the Contract be awarded to said Principal and said Principal shall within the required periods enter into the Contract so awarded, execute Document 00 5200 (Agreement) and provide the required Construction Performance Bond, Construction Labor and Material Payment Bond, insurance certificates, Guarantee, and all other endorsements, forms, and documents required under Document 00 1119 (Request for Proposals), then this obligation shall be void, otherwise to remain in full force and effect.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument this _____ day of _____, 20___.
(Month)

(Corporate Seal) By _____
Principal

By _____
Surety

(Corporate Seal) By _____
Attorney in Fact

END OF DOCUMENT

DOCUMENT 00 4330

SUBCONTRACTORS LIST

ARTICLE I – INITIAL SUBCONTRACTOR PROCUREMENT

A. Design-Build Entity shall use this sheet to list those Subcontractors who shall perform Proposal Work that are required to be listed by Public Contract Code Section 20133 and the "Subletting and Subcontracting Fair Practices Act" set forth in Public Contract Code Section 4100, et seq.

B. All Subcontractors must have an Experience Modification Rate (EMR) of 1.00 or less.

Full Name, Address and Telephone Number of Subcontractor:	Type of Work to be Performed:	Subcontractor's License No.

(Attach additional sheets if necessary)

ARTICLE II – SUBSEQUENT SUBCONTRACTOR PROCUREMENT

A. All subcontractors that were not listed above by the Design-Build Entity in accordance with Public Contract Code Section 20133, clause (i) of subparagraph (A) of paragraph (3) of subdivision (d) shall be awarded by the Design-Build Entity in accordance with the process set forth by the County in the Contract. All subcontractors bidding on contracts pursuant to this section shall be afforded the protections of the "Subletting and Subcontracting Fair Practices Act" contained in Chapter 4 (commencing with Section 4100) of Part 1 of the Public Contract Code. The Design-Build Entity shall do both of the following:

(1) Provide public notice of availability of work to be subcontracted in accordance with the publication requirements applicable to the competitive bidding process of the local agency, including a fixed date and time on which qualifications statements, bids, or proposals will be due.

(2) Establish reasonable qualification criteria and standards.

(3) Award the subcontract either on a best value basis or to the lowest responsible bidder. The process may include prequalification or short-listing. The foregoing process does not apply to construction subcontractors listed in the original proposal. Subcontractors awarded construction subcontracts under this subdivision shall be afforded all the protections of Chapter 4 (commencing with Section 4100) of Part 1.

B. Lists of subcontractors, bidders, and bid awards relating to the Project shall be submitted by the Design-Build Entity to Owner within 14 days of the award. These documents are deemed to be public records and shall be available for public inspection pursuant to this chapter and Article 1 (commencing with Section 6250) of Chapter 3.5 of Division 7 of the Government Code.

END OF DOCUMENT

DOCUMENT 00 4516

DESIGN-BUILD ENTITY CERTIFICATIONS

TO BE EXECUTED BY DESIGN-BUILD ENTITY AND SUBMITTED WITH PROPOSAL

The undersigned Design-Build Entity certifies to Owner as set forth in sections 1 through 12 below.

1. Certification Regarding Key Personnel

The undersigned Design-Build Entity certifies and affirms to the County of San Mateo, a public entity ("Owner"), that if awarded this Contract, Design-Build Entity will prosecute the work with the key personnel identified in its Pre-Qualification Process submittals and acknowledges that if there are any substitutions to said key personnel that are not approved by Owner prior to submission of Proposal, they may result in (a) Owner's determination that this Proposal is non-responsive, and/or (b) the imposition of Liquidated Damages.

2. Statement Of Convictions

By my signature hereunder, I hereby swear, under penalty of perjury, that no more than one final, unappealable finding of contempt of court by a Federal Court has been issued against Proposer within the past two years because of failure to comply with an order of a Federal Court or to comply with an order of the National Labor Relations Board.

3. Certification Of Worker's Compensation Insurance

By my signature hereunder, as the Design-Build Entity, I certify that I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the work of this Contract.

4. Certifications Of Prevailing Wage Rates, Records, And Apprentices

By my signature hereunder, as the Design-Build Entity, I certify that I am aware of the provisions of Section 1773 of the California Labor Code, which requires the payment of prevailing wage on public projects. Also, that the Design-Build Entity and any subcontractors under the Design-Build Entity, shall comply with California Labor Code §1776, regarding wage records, and with California Labor Code §1777.5, regarding the employment and training of apprentices. It is the Design-Build Entity's responsibility to ensure compliance by any and all subcontractors performing work under this Contract. I further certify that I am aware that this Project is subject to the requirements of Division 2, Part 7, Chapter 1 of the Labor Code (Public Works), and the requirements of Title 8. Division 1, Chapter 8. Subchapter 4.5 of California Code of Regulations (Compliance Monitoring and Enforcement by Department of Industrial Relations), including the obligation to furnish certified payroll records directly to the Labor Commissioner in accordance with 8 CCR 16461.

5. Certification Of Compliance With Public Works Chapter Of Labor Code

By my signature hereunder, as the Design-Build Entity, I certify that I am aware of Sections 1777.1 and 1777.7 of the California Labor Code and Design-Build Entity and Subcontractors are eligible to bid and work on public works projects.

6. Certification Of Adequacy Of Contract Amount

By my signature hereunder, as the Design-Build Entity, pursuant to Labor Code Section 2810(a),

I certify that, if awarded the Contract based on the undersigned's Proposal, the Contract will include funds sufficient to allow the Design-Build Entity to comply with all applicable local, state, and federal laws or regulations governing the labor or services to be provided. I understand that Owner will be relying on this certification if it awards the Contract to the undersigned.

7. Certification of Acceptability of Contract Documents

By my signature hereunder, as the Design-Build Entity, I certify that Proposer acknowledges that Owner has already transmitted the Contract Documents in draft form to state officials and has obtained prior state approval of the acceptability of the Contract Documents. Accordingly, Proposer has carefully reviewed the Contract Documents and certifies as follows:

[Please check and/or complete one of the following]

_____If the undersigned is selected to be the Design-Build Entity, following issuance of Notice of Conditional Award to the undersigned, the undersigned will sign the Agreement form and provide the other required forms that have been included within the Contract Documents in the same form as drafted as of the date hereof, including all Addenda identified in the undersigned's Proposal and with applicable information from the undersigned's Proposal inserted, without seeking revisions to the Agreement form or any other Contract Document.

_____If the undersigned is selected to be the Design-Build Entity, following issuance of Notice of Conditional Award to the undersigned, the undersigned will sign the Agreement form and provide the other required forms that have been included within the Contract Documents in the same form as drafted as of the date hereof, including all Addenda identified in the undersigned's Proposal and with applicable information from the undersigned's Proposal inserted, with only the revisions to the Agreement form or other Contract Documents shown in underline and ~~strikeout~~, format, attached to these Certifications as Appendix __, consisting of _____ pages. Proposer must attach an Appendix if this item is checked.

8. Certification Of Skilled Labor Force Availability

By my signature hereunder, as the Design-Build Entity, I certify that the Proposer is a party to an agreement with a registered apprenticeship program, approved by the California Apprenticeship Council, which has graduated apprentices in each of the preceding five years (provided that this graduation requirement shall not apply to programs providing apprenticeship training for any craft that has been deemed by the Department of Labor and the Department of Industrial Relations to be an apprenticeable craft in the five years prior to enactment of Public Contract Code Section 20133), and that attached hereto is a copy of that agreement, which is true and correct and in full force and effect.

9. Certification Of Acceptable Safety Record

[Please check and/or complete one of the following]

_____By my signature hereunder, as the Design-Build Entity, I certify that the Proposer's experience modification rate for the most recent three-year period is an average of 1.00 or less, and its average Total Recordable Injury/Illness rate and average lost work rate for the most recent three-year period does not exceed the applicable statistical standards for its business category or the Proposer is a party to an alternative dispute resolution system as provided for in Section 3201.5 of the Labor Code.

_____By my signature hereunder, as the Design-Build Entity, except as provided in Appendix ___, consisting of _____ pages, attached hereto, I certify that the Proposer's experience modification rate for the most recent three-year period is an average of 1.00 or less, and its average Total Recordable Injury/Illness rate and average lost work rate for the most recent three-

year period does not exceed the applicable statistical standards for its business category or the Proposer is a party to an alternative dispute resolution system as provided for in Section 3201.5 of the Labor Code . Proposer must attach an Appendix, identifying and explaining all exceptions to this certification, if this item is checked.

10. Certifications Regarding Selection Process

[Please check and/or complete one of the following]

_____The undersigned confirms it has no objections or protests to any Design-Build Entity selection procedure, process or requirement, or any other any aspect of the Design-Build Entity selection process, and does not object to any aspect of the Design-Build Entity selection process.

_____Attached as Appendix __, consisting of _____ pages, is a detailed description of all objections and protests the undersigned has regarding any aspect of the Design-Build Entity selection process. Proposer must attach an Appendix if this item is checked.

11. Certification Regarding Material Changes

[Please check and/or complete one of the following]

_____The undersigned certifies that all information it submitted to Owner in connection with the Pre-Qualification Process, including without limitation any modifications, amendments or supplements thereto ("Pre-Qualification Information") remains true and correct in all material respects as of the date of submitting its Proposal.

_____Except as provided on the Material Changes List, submitted as provided in Document 00 1119 (Request for Proposals), the undersigned certifies that all information it submitted to Owner in connection with the Pre-Qualification Process, including without limitation any modifications, amendments or supplements thereto ("Pre-Qualification Information") remains true and correct in all material respects as of the date of submitting its Proposal. Proposer must include a Material Changes List with its Proposal if this item is checked.

12. Definitions

All capitalized terms not otherwise defined in these Design-Build Entity Certifications shall have the meanings provided in Document 00 1119 (Request for Proposals) or Section 01 4200 (References and Definitions).

DESIGN-BUILD ENTITY: _____
(Name of Design-Build Entity)

Date: _____, **[2015]** By: _____
(Signature)

Name: _____
(Print Name)

Its: _____
(Title)

END OF DOCUMENT

DOCUMENT 00 4520

NON-COLLUSION DECLARATION
TO BE EXECUTED BY PROPOSER AND SUBMITTED WITH PROPOSAL
(PUBLIC CONTRACT CODE §7106)

PROJECT TITLE: SKYLONDA FIRE STATION REPLACEMENT PROJECT

The undersigned declares:

I am the _____ of _____
(Office of Affiant) (Name of Proposer)

the party making the foregoing Proposal.

The Proposal is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The Proposal is genuine and not collusive or sham. The Proposer has not directly or indirectly induced or solicited any other proposer to put in a false or sham Proposal. The Proposer has not directly or indirectly colluded, conspired, connived or agreed with any proposer or anyone else to put in a sham Proposal, or to refrain from proposing. The Proposer has not in any manner, directly or indirectly, sought by agreement, communication or conference with anyone to fix the Proposal price of Proposer or any other proposer, or to fix any overhead, profit or cost element of the Proposal price, or of that of any other proposer. All statements contained in the Proposal are true. The Proposer has not, directly or indirectly, submitted his or her price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, Proposal depository, or to any member or agent thereof to effectuate a collusive or sham Proposal, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a Proposer that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the Proposer.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____, at _____,
(Date) (City)
_____.
(State)

_____
(Name of Proposer)

_____
(Signature of Principal)

NOTE: If Proposer is a partnership or a joint venture, this declaration must be signed and sworn to by every member of the partnership or venture.

NOTE: If Proposer [including any partner or venturer of a partnership or joint venture] is a corporation, this declaration must be signed by the Chairman, President, or Vice President and by the Secretary, Assistant Secretary, Chief Financial Officer, or Assistant Treasurer.

NOTE: If Proposer's declaration on this form is made outside the State of California, the official position of the person making such declaration shall be certified according to law.

END OF DOCUMENT

COMPLETED:
Issued on 10/16/2015 & filed in project files.

DOCUMENT 00 5050

NOTICE OF INTENT TO AWARD

DATE ISSUED: _____, 2015

PROJECT NUMBER: PC008

PROJECT TITLE: **SKYLONDA FIRE STATION No. 58 REPLACEMENT**

_____, the _____ of

Owner intends to recommend to its Board of Supervisors the Conditional Award of the above-referenced

Project to _____.
(Name of Design-Build Entity)

SAN MATEO COUNTY

By: _____

_____
(Print name)

Title: _____

Date: _____

END OF DOCUMENT

COMPLETED
11/10/2015 Issued & filed in project files.

DOCUMENT 00 5100

NOTICE OF CONDITIONAL AWARD

Dated _____

TO: _____ ("Design-Build Entity")

ADDRESS: _____

PROJECT NO.: PC008

CONTRACT FOR: **SKYLONDA FIRE STATION NO. 58 REPLACEMENT PROJECT**

1. Subject to receipt of all required approvals from the Owner, the Contract Sum of your Contract (including the Additive Enhancements and Voluntary Enhancements identified below) is _____ Dollars ($_____).

2. The Work of your Contract includes the following Enhancements in addition to the Base Project:

   a. Additive Enhancements

Enhancement Identification Number	Additive Enhancement Description	Enhancement Price
		$
		$
		$
		$
		$

   b. Voluntary Enhancements

Enhancement Identification Number	Voluntary Enhancement Description	Enhancement Price
		$
		$
		$
		$
		$

3. As required by Public Contract Code Section 20133(d)(4)(B)(iv), the second and third-ranked Design-Build Entities are _____and _____.

4. Copies of the proposed Contract Documents listed below accompany this Notice of Conditional Award.

5. You must comply with the following conditions precedent by 5:00 p.m. of the third business Day following the date of this Notice of Conditional Award, that is, by **[Day of the Week, Month Day, 201__]**:

a. Deliver to Owner seven fully executed counterparts of Document 00 5200 (Agreement). Each copy of Document 00 5200 (Agreement) must bear your original signature on the signature page and your initials on each page.

b. Deliver to Owner seven original copies of Document 00 6536 (Guaranty), each executed by you.

6. Additionally, you must comply with the following conditions precedent by 5:00 p.m. of the seventh Day following the date the County approves the award of the Contract to the Design-Build Entity, as described in Document 00 0119 (Request for Proposals):

a. Deliver to Owner three originals of Document 00 6113.13 (Construction Performance Bond), executed by you and your surety.

b. Deliver to Owner three originals of Document 00 6113.16 (Construction Labor and Material Payment Bond), executed by you and your surety.

c. Deliver to Owner an original set of the insurance certificates with endorsements required under Document 00 7316 (Supplementary Conditions – Insurance and Indemnification).

d. Deliver to Owner three copies, each bearing all required original signatures of of the Project Labor Agreement, as required.

7. Failure to comply with these conditions within the time specified will entitle Owner to consider your Proposal abandoned, to annul this Notice of Award, and to declare your Proposal security forfeited.

8. Within 21 Days after you comply with the conditions in Paragraphs 5 and 6 above, Owner will return to you one fully signed counterpart of Document 00 5200 (Agreement).

9. Upon commencement of the Work, you and each of your Subcontractors shall certify and provide Owner copies of payroll records on forms provided by the Division of Labor Standards Enforcement, in accordance with California Labor Code §1776.

SAN MATEO COUNTY

BY: _____
(Title)

_____
(Print Name)

ATTEST: _____
Secretary

_____
(Print Name)

AUTHORIZED BY COUNTY RESOLUTION:

NO: _____

ADOPTED: _____, 2015

[Copy of Resolution Attached]

END OF DOCUMENT

COMPLETED:
Issued on 11/3/2015 by Board of Supervisors
Resolution # 074160

DOCUMENT 00 5200

AGREEMENT
(Design-Build)

THIS AGREEMENT, dated this _____ day of _____, **2015** by and between _____ [Name of Design-Build Entity], whose place of business is located: _____ ("Design-Build Entity"), and San Mateo County ("Owner"), acting under and by virtue of the authority vested in Owner by the laws of the State of California.

PROJECT NUMBER: PC008

SKYLONDA FIRE STATION REPLACEMENT PROJECT

WHEREAS, upon receipt of approval of Owner's contract award to Design-Build Entity from the County Board of Supervisors, Owner's conditional award of the Contract will become unconditional.

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth, Design-Build Entity and Owner agree as follows:

ARTICLE 1 - SCOPE OF WORK OF THE CONTRACT

1.01 Work of the Contract

A. Design-Build Entity hereby agrees to serve as the stipulated sum Design-Build Entity for the Project identified herein, inclusive of complete planning, design and engineering services, construction management services, complete permitted plan sets, construction services, completion and commissioning services, and turnover of a complete, functional and legally operable Project, in accordance with the Specifications, Drawings, and all other terms and conditions of the Contract Documents ("Work").

B. Without limiting the foregoing, Work specifically includes the following Enhancements:

1. Additive Enhancements: _____.

2. Voluntary Enhancements: _____

1.02 Price for Completion of the Work

A. Owner shall pay Design-Build Entity the following Contract Sum, _____ _____ ($_____) for completion of Work in accordance with Contract Documents (including Additive and Voluntary Enhancements identified in paragraph 1.01B above).

1.03 Allowances

A. Contract Sum includes the following allowances (see Section 01 01 1100 para. 1.4A.1 and 1.4A.2)

1.
2.

B. See also Section 01 2100 Allowances.

C. Allowance Work will be authorized by Owner in writing, following change order procedures to determine cost, supporting documentation and authorization to proceed. Unused allowance amounts at Contract completion shall reduce the Contract Sum accordingly.

ARTICLE 2 - COMMENCEMENT AND COMPLETION OF WORK

2.01 Commencement of Work

A. Design-Build Entity shall commence Work on _____.

B. Owner reserves the right to modify or alter the Commencement Date.

2.02 Completion of Work

A. Design-Build Entity shall achieve Final Completion of the entire Work no later than December 30, 2016.

2.03 Design and Construction Milestones

A. Design-Build Entity shall also complete design and construction of the Project consistent with the following milestones.

1. Certificate of Beneficial Occupancy of entire Project: Recorded by December 30, 2016.

2.04 Liquidated Damage Amounts

A. Owner and Design-Build Entity recognize that time is of the essence of this Agreement and that Owner will suffer financial loss, if the Work is not completed within the time specified herein, taking into account any extensions thereof allowed in accordance with the Contract Documents.

B. Consistent with terms, conditions, stipulations and limitations in Document 00 7253 (General Conditions) regarding liquidated damages, Design-Build Entity and Owner agree that because of the nature of the Project, it would be impractical or extremely difficult to fix the amount of actual damages incurred by Owner because of a delay in completion of the Work. Accordingly, in the event of delay in completion of the Work, or any applicable portion, Owner and Design-Build Entity agree that Design-Build Entity shall pay Owner as liquidated damages the number of Dollars provided below:

1. As liquidated damages for delay, Design-Build Entity shall pay Owner fifteen hundred dollars ($1,500) for each day that expires after the time specified herein for Design-Build Entity to achieve the Final Completion of the entire Work (paragraph 2.02A above), until achieved.

2.05 Scope of Liquidated Damages

A. Measures of liquidated damages shall apply cumulatively.

B. Limitations and stipulations regarding liquidated damages are set forth in Document 00 7253 (General Conditions).

ARTICLE 3 - PROJECT REPRESENTATIVES AND STAFFING

3.01 Owner's Project Administrator

A. Owner has designated Director of Public Works as its Project Administrator to act as Owner's Representative in those matters relating to the Contract Documents that do not require The Board of Supervisors approval.

B. To the extent The Board of Supervisors approval is not required, Project Administrator shall have authority over various matters pertaining to the Contract Documents and shall have sole authority to modify the Contract Documents on behalf of Owner, to accept work, and to make decisions or actions binding on Owner, and shall have sole signature authority on behalf of Owner. By this clause, Project Administrator is not assigned any rights or obligations that require The Board of Supervisors approval.

C. Owner may assign all or part of the Project Administrator's rights, responsibilities and duties to a Construction Manager, or other Owner Representative.

D. Exceptions to the foregoing Article 3.01 shall be in accordance with Public Contract Code 20142 in which case authority has been delegated to its Deputy Director of Public Works.

3.02 Design-Build Entity's Project Manager and Key Personnel

A. Design-Build Entity has designated _____ as its Project Manager to act as Design-Build Entity's Representative in all matters relating to the Contract Documents. For the construction phase, the Project Manager shall be resident at the Project Site and shall be devoted solely to the Project. Design-Build Entity's Project Manager shall be the single point of contact for all Project communications between Owner and Design-Build Entity, and shall be responsible for distributing all communications from Owner and Owner's consultants (including without limitation from Bridging Architect or Construction Manager on Owner's behalf) to Design-Build Entity's Superintendent and others as Design-Build Entity deems appropriate.

B. Design-Build Entity's Proposal lists the key personnel identified on Attachment 2 Design-Build Entity intends to provide to the Project to perform its design, construction and obligations under the Contract Documents, and their anticipated start times, anticipated duration of commitment to work on the Project, and for each duration percentage of commitment to work on the Project (together, "Key Personnel") . Design-Build Entity represents that such staff have the necessary licenses, experience and qualifications to satisfactorily perform the requirements of the Contract Documents and that at all times Design-Build Entity shall maintain such staff or similar staff having all necessary licenses, certifications, experience and skills necessary to perform all obligations of the Contract Documents

Design-Build Entity may not change the identity of its Project Manager or any other Key Personnel without prior Owner written approval, which approval shall not be unreasonably withheld, provided such replacement has similar or greater experience and qualifications.

C. Design-Build Entity acknowledges that the quality and qualifications of the Key Personnel were important factors in Owner's selection of Design-Build Entity for the Project. Design-Build Entity and Owner agree that the personal services of the Key Personnel is a material term of the Contract Documents, and substitution or removal or change in role or level of effort, of such Key Personnel would result in damages to the Owner, the measure of which would be impractical or extremely difficult to fix, and in lieu of which Owner and Design-Build Entity have agreed to liquidated damages as described below:

1. For any substitution of any Key Personnel individual before the end of the individual's Project commitment period provided in Design-Build Entity's Key Personnel staffing

schedule, Owner may assess once and Design-Build Entity shall accept liquidated damages in the amount of six (6) times the gross monthly salary for the substituted Key Personnel.

D. Liquidated damages for substitution of Key Personnel shall be deducted from the next applicable Application for Payment or, if insufficient, shall be paid by Design-Build Entity.

E. No liquidated damages shall under be due under this paragraph 3.02 for any substitution required due to death, incapacity or employment termination of a Key Personnel.

3.03 Bridging Architect

A. MWA Architects furnished the Bridging Documents (Performance Criteria and Concept Drawings) and shall have the rights assigned to Bridging Architect in the Contract Documents.

3.04 Construction Manager

A. Owner intends to delegate certain of its Project Administrator's rights to Owner's Construction Manager and may delegate further rights with notice to Design-Build Entity. Owner's Construction has not been selected.

ARTICLE 4 - CONTRACT DOCUMENTS

4.01 Contract Documents consist of the following documents, including all changes, Addenda, and Modifications thereto:

Document 00 4200	Proposal Form, attached hereto
Document 00 4316	Bond Accompanying Proposal
Document 00 4330	Subcontractors List and all amendments thereto, as set forth in Public Contract Code Section 20133
Document 00 5050	Notice of Recommendation to the Board of Supervisors by the Evaluation Committee
Document 00 5100	Notice of Conditional Award
Document 00 5200	Agreement
Document 00 5201	Bridging Documents & Annex 1
Document 00 5500	Notice to Proceed with Design
Document 00 5501	Notice to Proceed with Construction
Document 00 6113.13	Construction Performance Bond
Document 00 6113.16	Construction Labor And Material Payment Bond
Document 00 6530	Agreement and Release of Any And All Claims
Document 00 6325	Substitution Request Form
Document 00 6536	Guaranty
Document 00 7253	General Conditions
Document 00 7316	Supplementary Conditions – Insurance and Indemnification
Document 00 7380	Apprenticeship Programs
Document 00 9311	Addenda

Division 01 Sections identified in Document 00 0110 Table of Contents

Design-Build Entity's Proposal for San Mateo County dated _____

Final Construction Documents (following receipt of all approvals required by other Contract Documents), whether included in the final 00 0115 (Lists of Bridging Documents and Construction Documents) provided by Design-Build Entity in accordance with Section 01 1101 (Summary of Work – Design-Build Design Services) paragraph 2.02, Document 00 4330 (Subcontractors List) or otherwise.

4.02 There are no Contract Documents other than those listed above. The Contract Documents may only be amended, modified or supplemented as provided in Document 00 7253 (General Conditions).

ARTICLE 5 - MISCELLANEOUS

5.01 Terms and abbreviations used in this Agreement are defined in Document 00 7253 (General Conditions) and Section 01 4200 (References and Definitions) and will have the meaning indicated therein. Prior to executing this Agreement, Design-Build Entity has performed all required pre-construction investigations required and described in the Contract Documents.

5.02 Design-Build Entity shall include the following Owner addressees on all ordinary course Project communications:

Theresa Yee, Capital Projects Manager
County of San Mateo Public Works
555 County Center, Fifth Floor
Redwood City, CA 94063

Owner's Designated Construction Manager (TBD)

5.03 In addition to the above, all notices to Design-Build Entity and the other party (including requests, demands, approvals or other communications other than ordinary course Project communications) in connection with the Project shall be in writing and shall include the word "NOTICE" in the subject line and shall be directed as follows.

San Mateo County
Jim Porter, Director
County of San Mateo Public Works
555 County Center, Fifth Floor
Redwood City, CA 94063

with a copy to:
Doug Koenig, Deputy Director
County of San Mateo Public Works
555 County Center, Fifth Floor
Redwood City, CA 94063

[Design-Build Entity]

A. Notice shall be sufficiently given for all purposes as follows:

1. When personally delivered to the recipient, notice is effective on delivery.

2. When mailed by certified mail with return receipt requested, notice is effective on receipt if delivery is confirmed by a return receipt.

3. When delivered by reputable delivery service, with charges prepaid or charged to the sender's account, notice is effective on delivery if delivery is confirmed by the delivery service.

4. Notice by facsimile or electronic mail shall not be allowed or constitute "Notice" under this paragraph 5.03.

B. Any correctly-addressed notice that is refused, unclaimed, or undeliverable because of an act or omission of the party to be notified shall be considered to be effective as of the first date that the notice was refused, unclaimed, or considered undeliverable by the postal authorities, messenger, or overnight delivery service.

C. Either party may, by written notice given at any time or from time to time require subsequent notices to be given to another individual person, whether a party or an officer or a representative, or to a different address, by giving the other party notice of the change in any manner permitted by this paragraph 5.03.

D. The provisions of this paragraph 5.03 shall not alter, modify or excuse any legal or contractual requirement relating to claims under Document 00 7253 (General Conditions) Article 12.

5.04 In order to induce Owner to enter into this Agreement, Design-Build Entity represents that it is duly organized, existing and in good standing under applicable state law; is licensed to perform all aspects of the Work; will employ only persons and subcontractors and designers with all required licenses and certifications; that Design-Build Entity is duly qualified to conduct business in the State of California; that Design-Build Entity has duly authorized the execution, delivery and performance of this Agreement, the other Contract Documents and the Work to be performed herein; and that the Contract Documents do not violate or create a default under any instrument, agreement, order or decree binding on Design-Build Entity.

5.05 Design-Build Entity shall not assign any portion of the Contract Documents.

5.06 Should any part, term or provision of this Agreement or any of the Contract Documents, or any document required herein or therein to be executed or delivered, be declared invalid, void or unenforceable, all remaining parts, terms and provisions shall remain in full force and effect and shall in no way be invalidated, impaired or affected thereby. If the provisions of any law causing such invalidity, illegality or unenforceability may be waived, they are hereby waived to the end that this Agreement and the Contract Documents may be deemed valid and binding agreements, enforceable in accordance with their terms to the greatest extent permitted by applicable law. In the event any provision not otherwise included in the Contract Documents is required to be included by any applicable law, that provision is deemed included herein by this reference (or, if such provision is required to be included in any particular portion of the Contract Documents, that provision is deemed included in that portion).

5.07 It is understood and agreed that in no instance are the persons signing this Agreement for or on behalf of Owner or acting as an employee, agent, or representative of Owner, liable on this Agreement or any of the Contract Documents, or upon any warranty of authority, or otherwise, and it is further understood and agreed that liability of Owner is limited and confined to such liability as authorized or imposed by the Contract Documents or applicable law.

5.08 In entering into a public works contract or a subcontract to supply goods, services or materials pursuant to a public works contract, Design-Build Entity or Subcontractor offers and agrees to assign to the awarding body all rights, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. §15) or under the Cartwright Act (Chapter 2 (commencing with §16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time Owner tenders final payment to Design-Build Entity, without further acknowledgment by the parties.

5.09 Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the State of California Department of Industrial Relations, are deemed included in the Contract Documents and on file at Owner's Office, and shall be made available to any interested party on request. Pursuant to California Labor Code §§ 1860 and 1861, in accordance with the provisions of Section 3700 of the Labor Code, every Design-Build Entity will be required to secure the payment of compensation to his employees. Design-Build Entity represents that it is aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that

Code, and Design-Build Entity shall comply with such provisions before commencing the performance of the Work of the Contract Documents.

5.010 Owner shall have the right to review all phases of Design-Build Entity's design including, but not limited to, drawings, specifications, shop drawings, samples and submittals, as specified in the Contract Documents. Such review and other action shall not relieve Design-Build Entity of its responsibility for a complete design complying with the requirements of the Contract Documents; but rather, such review shall be in furtherance of Owner's monitoring and accepting the design as developed and issued by the Design-Build Entity, consistent with these Contract Documents. Design-Build Entity's responsibility to design and construct the Project in conformance with the Contract Documents shall be absolute.

5.11 This Agreement and the Contract Documents shall be deemed to have been entered into in the City of Redwood City, County of San Mateo, State of California, and governed in all respects by California law (excluding choice of law rules). The exclusive venue for all disputes or litigation hereunder shall be in the Superior Court for San Mateo County.

IN WITNESS WHEREOF the parties have executed this Agreement the day and year first above written.

RECOMMENDED AND APPROVED AS TO CONTENT:

By _____

_____

APPROVED AS TO FORM:

OFFICE OF THE COUNTY COUNSEL

_____

SAN MATEO BOARD OF SUPERVISORS

By _____
President

DESIGN-BUILD ENTITY

_____
Type of Entity
(corporation, partnership, sole proprietorship)

By _____
Signature

_____
Typed Name

_____
Title of Individual Executing Document on behalf of Firm

By _____
Signature

_____
Typed Name

_____
Title of Individual Executing Document on behalf of Firm

END OF DOCUMENT

Attachment 1

KEY PERSONNEL
(See Agreement 3.02)

Position	Name	Start times, anticipated durations, and for each duration percentage of commitment to work on the Project
Project Executive		
Design Principal		
General Contractor Principal		
DBE Project Director		
Design Project Manager		
Architect of Record		
Design Architect		
Project Architect		
Project Manager		
Design Manager		
General Superintendent		
MEP Superintendent		
Quality Control Manager		
Project Controls Manager		
Safety Manager		

DOCUMENT 00 5201

BRIDGING DOCUMENTS

ARTICLE 1 – GENERAL

1.01 Bridging Documents

A. Bridging Documents define Owner's Program Requirements for the Project, including but not limited to:

1. Size, type, shape, height, configuration, and desired design character of buildings, improvements, appurtenances and Sites.

2. Performance, and in some cases prescriptive specifications, covering the quality of materials, equipment, building components and workmanship, public spaces, landscape design, and general architectural character of the buildings, improvements, appurtenances and Sites.

3. Preliminary plans or building layouts.

4. Site requirements, parking and infrastructure items.

ARTICLE 2 – INTERPRETATION OF BRIDGING DOCUMENTS

2.01 General—Prescriptive or Performance Standards

A. Bridging Documents identify items using either prescriptive or performance standards. When items are subject to prescriptive standards, the Project provided by Design-Build Entity shall include the specific item as described. When items are subject to performance standards, the Project provided by Design-Build Entity shall include items which satisfy the required performance standards.

2.02 Silence Regarding Standard

A. Where Bridging Documents are silent regarding whether a prescriptive or performance standard is intended, Design-Build Entity shall provide a Project which satisfies the following general standards:

1. For all items of aesthetics, required systems, equipment, and user items or items subject to visual observation, Bridging Documents are intended to specify prescriptive standards, either as specifically stated in the Bridging Documents or by reference to other project design elements.

2. For all items of engineering performance and code compliance (e.g., electrical runs, duct layouts and other engineering systems specified in terms of performance or code requirements), and other items of design or construction not subject to visual observation, Bridging Documents are intended to specify performance standards.

2.03 Relationship to Proposal - General Conditions and Division 1 Specifications

A. Bridging Documents represent the final agreed Contract scope and supersede anything inconsistent in Design-Build Entity's Proposal.

B. To the extent that the Bridging Specifications contain certain terms and conditions that are also addressed in Document 00 7253 (General Conditions) and Division 1 Specifications (commencing with Section 01 1100) of these Contract Documents, then precedence shall be given to the more stringent of the two requirements that in Owner's judgment provides the Owner with the greater quality or scope of service.

ARTICLE 3 – COMPLETENESS OF BRIDGING DOCUMENTS

3.01 Intent

A. Bridging Documents are intended to describe and specify requirements for fully functional and legally operable Fire Station, Essential Services Facility, generally meeting in all respects Owner's required design, construction, equipment and performance standards.

3.02 Effect of Incompleteness or Omissions

A. If any Bridging Documents are determined, at any time, to be incomplete and/or to omit any required aspect of design, construction, equipment, systems or other component necessary to provide fully functional and operational Fire Station then Design-Build Entity shall request additional Project related information from Owner in accordance with Document 00 7253 (General Conditions) and Section 01 2600 (Modification Procedures and Pricing of Changed Work).

ARTICLE 4 – LIST OF BRIDGING DOCUMENTS AND RELATED MATERIALS

4.01 Bridging Documents Include:

A. Project Background, Performance Criteria and Concept Drawings for the Skylonda Fire Station are set forth in Annex 1 to this Document 00 5201, including all design narratives, architectural program items, drawings, technical specifications, site utilization requirements, and all plans, , reports, data and other obligations included or referenced therein.

B. Without limiting the foregoing, Construction Documents prepared by Design-Build Entity are **not** Bridging Documents.

4.02 Additional Supporting Project Information:

A. Design-Build Entity's attention is also directed to Document 00 3100 (Available Project Information), which lists documents and materials containing existing conditions information that were provided to prospective Design-Build Entities prior to the submission of Proposals. The documents and information referenced in Document 00 3100 are not part of the Contract Documents and are "for information purposes only."

END OF DOCUMENT

DOCUMENT 00 5500

NOTICE TO PROCEED WITH CONSTRUCTION

Dated: _____, 2015

To: _____
(Contractor)

Address: _____

_____

CONTRACT FOR: **SKYLONDA FIRE STATION NO. 58 REPLACEMENT**
REDWOOD CITY, CA

PROJECT NO: **PC008**

You are notified that the Contract Time under the above Contract will commence to run on _____, **[201__]**. On that date, you are to start performing your obligations with respect to Work at the Site under the Contract Documents. In accordance with Article 2 of Document 00 5200 (Agreement), the dates of Substantial Completion and Final Completion for the entire Work are _____, **[201__]** and _____, **[201__]**, respectively.

Before you may start any Work at the Site, you must:

1. Submit certified Safety Program and related information
2. **[TBD, e.g. Permits, WDID from water board, SWPPPs, etc.]**

SAN MATEO COUNTY

By: _____

James Porter
(Print Name)

Its: Director of Public Works

Date: _____

END OF DOCUMENT

COMPLETED:
Issued on 11/4/2015 & filed in project files

DOCUMENT 00 5501

NOTICE TO PROCEED WITH DESIGN SERVICES

Dated: _____, 2015

To: _____
(Contractor)

Address: _____

_____

CONTRACT FOR: **SKYLONDA FIRE STATION NO. 58 REPLACEMENT PROJECT**
REDWOOD CITY, CA

PROJECT NO: **PC008**

You are notified that the Contract Time under the above Contract will commence to run on _____, **[201__]**. On that date, you are to start performing your obligations with respect to Work at the Site under the Contract Documents. In accordance with Article 2 of Document 00 5200 (Agreement), the dates of Substantial Completion and Final Completion for the entire Work are _____, **[201__]** and _____, **[201__]**, respectively.

This Notice to Proceed with Design Services does not authorize performance of any Work at the Site. Performance of Work at the Site requires issuance of a Notice to Proceed for Construction and satisfaction of all related conditions.

SAN MATEO COUNTY

By: _____

James Porter
(Print Name)

Its: Director of Public Works

Date: _____

END OF DOCUMENT

DOCUMENT 00 6113.13

CONSTRUCTION PERFORMANCE BOND
(Design-Build)

THIS CONSTRUCTION PERFORMANCE BOND ("Bond") is dated ***[Month, Day]***, 201_ is in the amount of ***[_____Insert Amount_____]*** ("Penal Sum"),which is 100% of the Contract Sum and is entered into by and between the parties listed below to ensure the faithful performance of the Design-Build Contract identified below. This Bond consists of this page and the Bond Terms and Conditions, Paragraphs 1 through 14 attached to this page. Any singular reference to ***[Insert name of Design-Build Entity]*** ("Design-Build Entity"), ***[Insert name of Surety]*** ("Surety"), SAN MATEO ("Owner"), or other party shall be considered plural where applicable.

DESIGN-BUILD ENTITY:	**SURETY:**
[Insert name of Design-Build Entity]	***[Insert name of Design-Build Entity]***
_____	_____
Address	Principal Place of Business
_____	_____
City/State/Zip	City/State/Zip

DESIGN-BUILD CONTRACT: Agreement for the Skylonda Fire Station No.58 Replacement Project located at 17290 Skyline Boulevard, Woodside CA, dated ***[Month, Day]***, 201_, in the amount of ***[_____Insert Amount_____]***).

DESIGN-BUILD ENTITY AS PRINCIPAL	**SURETY**
Company: (Corp. Seal)	Company: (Corp. Seal)
Signature:_____	Signature: _____
Name: _____	Name: _____
Title: _____	Title: _____

COMPLETED:
Rcvd 11/20/2015 & filed in project files

BOND TERMS AND CONDITIONS

1 Design-Build Entity and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to Owner for the complete and proper performance of the Design-Build Contract, which is incorporated herein by reference.

2 If Design-Build Entity completely and properly performs all of its obligations under the Design-Build Contract, Surety and Design-Build Entity shall have no obligation under this Bond.

3 If there is no Owner Default, Surety's obligation under this Bond shall arise after:

3.1 Owner provides Surety with written notice that Owner has declared a Design-Build Entity Default under the Design-Build Contract pursuant to the terms of the Design-Build Contract; and

3.2 Owner has agreed to pay the Balance of the Contract Sum:

3.2.1 To Surety in accordance with the terms of this Bond and the Design-Build Contract; or

3.2.2 To a Design-Build Entity selected to perform the Design-Build Contract in accordance with the terms of this Bond and the Design-Build Contract.

4 When Owner has satisfied the conditions of Paragraph 3 above, Surety shall promptly (within 40 Days) and at Surety's expense elect to take one of the following actions:

4.1 Arrange for Design-Build Entity, with consent of Owner, to perform and complete the Design-Build Contract (but Owner may withhold consent, in which case the Surety must elect an option described in Paragraphs 4.2, 4.3 or 4.4 below); or

4.2 Undertake to perform and complete the Design-Build Contract itself, through its agents or through independent contractors or design-build entities; provided, that Surety may not select Design-Build Entity as its agent or independent contractor or design-build entity without Owner's consent; or

4.3 Undertake to perform and complete the Design-Build Contract by obtaining bids from qualified contractors or design-build entities acceptable to Owner for a contract for performance and completion of the Design-Build Contract and, upon determination by Owner of the lowest responsive and responsible Bidder, arrange for a contract to be prepared for execution by Owner and the contractor or design-build entity selected with Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Design-Build Contract; and, if Surety's obligations defined in Paragraph 7 below, exceed the Balance of the Contract Sum, then Surety shall pay to Owner the amount of such excess; or

4.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor or design-build entity, and with reasonable promptness under the circumstances and, after investigation and consultation with Owner, determine in good faith its monetary obligation to Owner under Paragraph 7 below, for the performance and completion of the Design-Build Contract and, as soon as practicable after the amount is determined, tender payment therefor to Owner with full explanation of the payment's calculation. If Owner accepts Surety's tender under this Paragraph 4.4, Owner may still hold Surety liable for future damages then unknown or unliquidated resulting from the Design-Build Entity Default, as agreed by Owner and Surety at the time of tender. If

Owner disputes the amount of Surety's tender under this Paragraph 4.4, Owner may exercise all remedies available to it at law to enforce Surety's liability under Paragraph 7 below.

5 If Surety does not proceed as provided in Paragraph 4 above then Surety shall be deemed to be in default on this Bond ten Days after receipt of an additional written notice from Owner to Surety demanding that Surety perform its obligations under this Bond. Such Surety default shall be independent from the Design-Build Entity Default. To the extent Surety's independent default causes Owner to suffer damages, including, but not limited to, delay damages, which are different from, or in addition to (but not duplicative of) damages which Owner is entitled to receive under the Design-Build Contract, Surety shall also be liable for such damages.

6 At all times Owner shall be entitled to enforce any remedy available to Owner at law or under the Design-Build Contract including, without limitation, and by way of example only, rights to perform work, protect Work, mitigate damages, advance critical Work to mitigate schedule delay, and coordinate Work with other consultants or contractors or design-build entities.

7 If Surety timely elects to act under Paragraphs 4.1, 4.2 or 4.3 above and complies with its obligations under this Bond, Surety's obligations under this Bond are commensurate with the obligations of Design-Build Entity under the Design-Build Contract. Surety's obligations shall include, but are not limited to:

7.1 The responsibilities of Design-Build Entity under the Design-Build Contract for completion of the Design-Build Contract and correction of Defective Work;

7.2 The responsibilities of Design-Build Entity under the Design-Build Contract to pay liquidated damages; and

7.3 Additional legal, design professional and delay costs resulting from Design-Build Entity Default or resulting from the actions or failure to act of the Surety under Paragraph 4 above (but excluding attorney's fees incurred to enforce this Bond).

8 If Surety timely elects to act under Paragraphs 4.1, 4.3 or 4.4 above and complies with its obligations under this Bond, Surety's monetary obligation under this Bond is limited by the amount of this Bond identified herein as the Penal Sum.

9 No right of action shall accrue on this Bond to any person or entity other than Owner or its successors or assigns.

10 Surety hereby waives notice of any change, alteration or addition to the Design-Build Contract or to related subcontracts, design agreements, purchase orders and other obligations, including changes of time, and of any Owner action in accordance with Paragraph 6 above. Surety consents to all terms of the Design-Build Contract, including provisions on changes to the Contract. No extension of time, change, alteration, Modification, deletion, or addition to the Contract Documents, or of the Work (including services) required thereunder, or any Owner action in accordance with Paragraph 6 above shall release or exonerate Surety on this Bond or in any way affect the obligations of Surety on this Bond, unless such action is an Owner Default. Except in the event of an Owner Default, and to the extent Surety is damaged thereby, Surety hereby waives the provisions of California Civil Code Section 2809, and any other law which either prohibits, restricts, limits or modifies in any way any obligation of a surety which is larger in amount or in any other respect more burdensome than that of the principal.

11 Any proceeding, legal or equitable, under this Bond shall be instituted in any court of competent jurisdiction where a proceeding is pending between Owner and Design-Build Entity regarding the Design-Build Contract, or in the courts of the County, or in a court of competent jurisdiction in the

location in which the Work is located. Communications from Owner to Surety under Paragraph 3.1 above shall be deemed to include the necessary agreements under Paragraph 3.2 above unless expressly stated otherwise.

12 All notices to Surety or Design-Build Entity shall be mailed or delivered (at the address set forth on the signature page of this Bond), and all notices to Owner shall be mailed or delivered as provided in Document 00 5200 (Agreement). Actual receipt of notice by Surety, Owner or Design-Build Entity, however accomplished, shall be sufficient compliance as of the date received at the foregoing addresses.

13 Any provision in this Bond conflicting with any statutory or regulatory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein.

14 Definitions

14.1 Balance of the Contract Sum: The total amount payable by Owner to Design-Build Entity pursuant to the terms of the Design-Build Contract after all proper adjustments have been made under the Design-Build Contract, for example, deductions for progress payments made, and increases/decreases for approved Modifications to the Design-Build Contract.

14.2 Design-Build Contract: The agreement between Owner and Design-Build Entity identified on the signature page of this Bond, including all Contract Documents and changes thereto.

14.3 Design-Build Entity Default: Material failure of Design-Build Entity, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Design-Build Contract, limited to "default" or any other condition allowing a termination for cause as provided in Document 00 7200 (General Conditions).

14.4 Owner Default: Material failure of Owner, which has neither been remedied nor waived, to pay Design-Build Entity progress payments due under the Design-Build Contract or to perform other material terms of the Design-Build Contract, if such failure is the cause of the asserted Design-Build Entity Default and is sufficient to justify Design-Build Entity termination of the Design-Build Contract.

END OF DOCUMENT

COMPLETED
Rcvd 11/24/2015 filed in project files.

DOCUMENT 00 6113.16

CONSTRUCTION LABOR AND MATERIAL PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS:

1.01 THAT WHEREAS, the County of San Mateo ("Owner") has awarded to **(Name of Design-Build Entity)**_____ as Principal Contract Number _____ dated the ____ day of _____, 20___ (the "Contract"), titled SAN MATEO COUNTY SKYLONDA FIRE STATION NO. 58 PROJECT in the amount of $_____, which Contract is by this reference made a part hereof, for the Work of the following Contract:

A. Work is comprised of the design and construction of new Skylonda Fire Station No. 58 Building located at 17290 Skyline Boulevard, Woodside, CA.

1.01 AND WHEREAS, Principal is required to furnish a bond in connection with the Contract to secure the payment of claims of laborers, mechanics, material suppliers, and other persons as provided by law;

1.02 NOW, THEREFORE, we, the undersigned Principal and (Name of Surety)_____ _____, as Surety, are held and firmly bound unto Owner in the sum of 100% OF THE CONTRACT PRICE ($_____), for which payment well and truly to be made we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

1.03 THE CONDITION OF THIS OBLIGATION IS SUCH, that if Principal, or its executors, administrators, successors, or assigns approved by Owner, or its subcontractors shall fail to pay any of the persons named in California Civil Code §9100, or amounts due under the State of California Unemployment Insurance Code with respect to work or labor performed under the Contract, or for any amounts required to be deducted, withheld, and paid over to the State of California Employment Development Department from the wages of employees of Principal and subcontractors pursuant to Section 13020 of the State of California Unemployment Insurance Code with respect to such work and labor, that Surety will pay for the same in an amount not exceeding the sum specified in this bond, plus reasonable attorneys' fees, otherwise the above obligation shall become and be null and void.

1.04 This bond shall inure to the benefit of any of the persons named in California Civil Code §9100, as to give a right of action to such persons or their assigns in any suit brought upon this bond. The intent of this bond is to comply with the California Mechanic's Lien Law.

1.05 Surety, for value received, hereby expressly agrees that no extension of time, change, modification, alteration, or addition to the undertakings, covenants, terms, conditions, and agreements of the Contract, or to the work to be performed thereunder, shall in any way affect the obligation of this bond; and it does hereby waive notice of any such extension of time, change, modification, alteration, or addition to the undertakings, covenants, terms, conditions, and agreements of the Contract, or to the work to be performed thereunder.

1.06 Surety's obligations hereunder are independent of the obligations of any other surety for the payment of claims of laborers, mechanics, material suppliers, and other persons in connection with Contract; and suit may be brought against Surety and such other sureties, jointly and severally, or against any one or more of them, or against less than all of them without impairing Owner's rights against the other.

1.07 Correspondence or claims relating to this bond shall be sent to Surety at the address set forth below.

IN WITNESS WHEREOF, we have hereunto set our hands this _____ day of _____, 20___.

DESIGN-BUILD ENTITY AS PRINCIPAL		**SURETY**	
Company:	(Corp. Seal)	Company:	(Corp. Seal)
_____		_____	
Signature		Signature	
_____		_____	
Name		Name	
_____		_____	
Title		Title	
Address:_____		Address:_____	
_____		_____	
_____		_____	

END OF DOCUMENT

DOCUMENT 00 6200

WITHHELD CONTRACT FUNDS CERTIFICATION

PART 1 - GENERAL

1.01 Summary

A. Public Contract Code Section §22300 requires the inclusion in invitations for public agency bids and in public agency contracts a provision which will, at the expense of the contractor, permit the substitution of securities of equal value for any construction progress monies withheld to ensure performance under a contract. Therefore, as the Design-Build Entity for the Project, Design-Build Entity hereby certifies the following:

[ ] I do not intend to substitute securities for monies withheld and thereby avail myself of the process and rights provided in Public Contract Code Section §22300.

[ ] I do intend to exercise my option as specified in Public Contract Code Section §22300 and hereby agree to the following:

1. I will establish an escrow agreement satisfactory to the Owner, with a state or federally chartered bank, which shall contain at a minimum provisions governing inter alia:

   a. The amount of securities to be deposited;

   b. The type of securities to be deposited, (eligible securities for deposit are described in Government Code Section 16430);

   c. The providing of powers of attorney or other documents necessary for the transfer of the securities deposited;

   d. The terms and conditions of conversion to cash to provide funds to meet defaults by the Contractor including, but not limited to termination of the Contractor's control over the work, stop notices filed pursuant to law, assessment of liquidated damages or other amounts to be kept or retained under the provisions of the contract;

   e. The decrease in value of securities on deposit; and

   f. The termination of the escrow agreement upon completion of the contract and acceptance by the Owner.

2. I will obtain written consent of the surety to any such agreement; and

3. I will attach to each progress payment submitted a notarized copy of escrow instructions executed by agents thereof and on bank letterhead as proof that such an account has been established. Such instructions will set forth that securities deposited shall not be withdrawn for any purpose (with contractor's complete and unreserved agreement) without prior written approval by the Owner with respect to the Project herein above referenced.

_____
Signature of Design-Build Entity

END OF DOCUMENT

DOCUMENT 00 6290

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

California Public Contract Code §22300

THIS ESCROW AGREEMENT ("Escrow Agreement") is made and entered into this _____ day of _____, 201__, by and between San Mateo County, ("Owner"), whose address is the 555 County Center, Department of Public Works, Fifth Floor, Redwood City, CA 94063-1665, **(Name of Design-Build Entity)** _____ ("Design-Build Entity"), whose place of business is located at **(Design-Build Entity's Address)** _____ _____, and **[ ]** Owner, as escrow agent **OR [ ] (Name of Bank)** _____ _____, a state or federally chartered bank in the State of California, whose place of business is located at _____ ("Escrow Agent").

For the consideration hereinafter set forth, Owner, Design-Build Entity and Escrow Agent agree as follows:

1.01 Pursuant to California Public Contract Code §22300, Design-Build Entity has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by Owner pursuant to Contract Number _____ entered into between Owner and Design-Build Entity for the Skylonda Fire Station No. 58 Replacement Project located at 17290 Skyline Boulevard, Woodside, California in the amount of $_____ dated _____ _____, 201__ (the "Contract"). Alternatively, on written request of Design-Build Entity, Owner shall make payments of the retention earnings directly to Escrow Agent. When Design-Build Entity deposits the securities as a substitute for Contract earnings, Escrow Agent shall notify Owner within ten Days of the deposit. The market value of the securities at the time of substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between Owner and Design-Build Entity. Securities shall be held in name of _____, and shall designate Design-Build Entity as the beneficial owner.

1.02 Owner shall make progress payments to Design-Build Entity for those funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that Escrow Agent holds securities in the form and amount specified above.

1.03 When Owner makes payment(s) of retention earned directly to Escrow Agent, Escrow Agent shall hold said payment(s) for the benefit of Design-Build Entity until the time that the escrow created under this Escrow Agreement is terminated. Design-Build Entity may direct the investment of the payments into securities. All terms and conditions of this Escrow Agreement and the rights and responsibilities of the parties shall be equally applicable and binding when Owner pays Escrow Agent directly.

1.04 Design-Build Entity shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account, and all expenses of Owner. Such expenses and payment terms shall be determined by Owner, Design-Build Entity, and Escrow Agent.

1.05 Interest earned on securities or money market accounts held in escrow and all interest earned on that interest shall be for sole account of Design-Build Entity and shall be subject to withdrawal by Design-Build Entity at any time and from time to time without notice to Owner.

1.06 Design-Build Entity shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from Owner to Escrow Agent that Owner consents to withdrawal of amount sought to be withdrawn by Design-Build Entity.

1.07 Owner shall have the right to draw upon the securities in the event of default by Design-Build Entity. Upon seven Days' written notice to Escrow Agent from Owner of the default, Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by Owner.

1.08 Upon receipt of written notification from Owner certifying that the Contract is final and complete, and that Design-Build Entity has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Design-Build Entity all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payments of fees and charges.

1.09 Escrow Agent shall rely on written notifications from Owner and Design-Build Entity pursuant to Paragraphs 1.05 through 1.08, inclusive, of this Document 00 6290 and Owner and Design-Build Entity shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of securities and interest as set forth above.

1.10 Names of persons who are authorized to give written notice or to receive written notice on behalf of Owner and on behalf of Design-Build Entity in connection with the foregoing, and exemplars of their respective signatures are as follows:

ON BEHALF OF OWNER:

_____
Title

_____
Name

_____
Signature

_____
Address

_____
City/State/Zip Code

ON BEHALF OF DESIGN-BUILD ENTITY:

_____
Title

_____
Name

_____
Signature

_____
Address

_____
City/State/Zip Code

ON BEHALF OF ESCROW AGENT:

_____
Title

_____
Name

_____
Signature

_____
Address

_____
City/State/Zip Code

At the time the Escrow Account is opened, Owner and Design-Build Entity shall deliver to Escrow Agent a fully executed counterpart of this Document 00 6290 (Escrow Agreement).

IN WITNESS WHEREOF, the parties have executed this Escrow Agreement by their proper officers on the date first set forth above.

OWNER:

_____
Title

_____
Name

_____
Signature

DESIGN-BUILD ENTITY:

_____
Title

_____
Name

_____
Signature

ATTEST:

_____
Signature

_____
Print Name

ESCROW AGENT:

_____
Title

_____
Print Name

_____
Signature

REVIEWED AS TO FORM:

_____
Counsel for Owner

_____
Print Name

_____
Date

END OF DOCUMENT

DOCUMENT 00 6325

SUBSTITUTION REQUEST FORM

(Subject to Requirements of Section 01 1101 (Summary of Work – Design-Build Design Services)

To: **County of San Mateo**
555 County Center
Department of Public Works, Fifth Floor
Redwood City, CA 94063-1665

PROJECT: **Owner Project No: _____**	**Design-Build Entity:**

Substitution Request By:	Firm:

Transmittal Record	**Attn:**	**Firm:**	**Date Sent:**	**Date Rec'd:**	**Date Due:**
Design-Build Entity to Owner					
Design-Build Entity to Bridging Architect					
Owner / Bridging Architect to Consultant					
Bridging Architect to Owner Representative					
Owner Representative to Design-Build Entity					

We hereby submit for your consideration the following product instead of the specified item for the Project:

Section / Drawing	**Article**	**Specified Item**
Proposed Substitution:		

We have (a) attached manufacturer's literature, including complete technical data and laboratory test results, if applicable, (b) attached an explanation of why proposed substitution is a true equivalent to specified item, (c) included complete information on changes to Contract Documents that the proposed substitution will require for its proper installation, and (d) filled in the blanks below:

Design-Build Entity to complete questions that follow and certifies to the accuracy of all answers:

A.	Does the substitution affect dimensions shown on Drawings? Yes __ / No __. If No, please explain proposed mitigation and why substitution is equivalent to originally specified item:
B.	Will the undersigned pay for changes to the building design, including engineering and detailing costs caused by the requested substitution? Yes __ / No __. If No, please state reasons explain why substitution is equivalent to originally specified item:
C.	What effect does the substitution have on other trades? No effect: __ / Some effect__. If substitution will affect other trades, please explain the effect and why substitution is equivalent to originally specified item:
D.	Will substitution cause change to Project Schedule, or to critical delivery dates? Add? Shorten? If the substitution will add to schedule dates or affect critical activities, please explain why substitution is equivalent to originally specified item:
E.	Please describe differences between proposed substitution and specified item? Please explain and identify any and all differences, and please explain why substitution is equivalent to originally specified item:
F.	What is the Cost Differential to Design-Build Entity in original specified item and proposed substitution including all mark-ups? [If substitution requested prior to Contract execution, skip this question.]
G.	Are Manufacturer's guarantees for the proposed item the same as for item specified? Yes ____; No____. If No, please explain why substitution is equivalent to originally specified item:

H.	Design-Build Entity accepts full responsibility for delays caused by redesign of other items of the Work necessitated by substitution? Yes __ / No __. If No, please state reasons and explain why substitution is equivalent to originally specified item:
I.	Design-Build Entity states that the function, appearance and quality are equivalent or superior to the specified item? Yes __ / No __. If No, please explain why substitution is equivalent to originally specified item:

We certify that the function, appearance, and quality of the proposed substitution are equivalent or superior to those of the specified item, except as we may specifically state otherwise in this request.

Submitted by:_____ Signature: _____

Firm:_____ Date: _____

Address:_____ Phone/ Fax: _____

_____

Remarks:_____

Consultant Response:	**Owner Representative Response:**
o Accepted	o Accepted
o Not Accepted	o Not Accepted
o Accepted As Noted	o Accepted As Noted
o Received Too Late	o Received Too Late
Remarks:_____	**Remarks:**_____
_____	_____
By:_____	**By:**_____

END OF DOCUMENT

DOCUMENT 00 6530

AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS
[Public Contract Code § 7100]
(Design-Build)

THIS AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS ("Agreement and Release"), made and entered into this _____ day of _____, 201__, by and between the County of San Mateo ("Owner"), and _____ ("Design-Build Entity"), whose place of business is _____.

1.01 Owner and Design-Build Entity entered into Contract for Project Number PC008 (the "Contract") for design and construction of the Skylonda Fire Station No. 58 Replacement Project, located at 17290 Skyline Boulevard, Woodside CA.

1.02 The Work under the Contract has been completed.

1.03 NOW THEREFORE, it is mutually agreed between Owner and Design-Build Entity as follows:

A Design-Build Entity will not be assessed liquidated damages except as detailed below:

Original Contract Sum	$ _____
Modified Contract Sum	$ _____
Payment to Date	$ _____
Liquidated Damages	$ _____
Payment Due Design-Build Entity	$ _____

B Subject to the provisions of this Agreement and Release, Owner will forthwith pay to Design-Build Entity the sum of [_____ Dollars and _____ Cents ($_____)] under the Contract, less any amounts withheld under the Contract or represented by any Notice to Withhold Funds on file with Owner as of the date of such payment.

C Design-Build Entity acknowledges and hereby agrees that there are no unresolved or outstanding claims in dispute against Owner arising from the Contract, except for the claims described in Paragraph 1.03(E) of this Document 00 6530. It is the intention of the parties in executing this Agreement and Release that this Agreement and Release shall be effective as a full, final and general release of all claims, demands, actions, causes of action, obligations, costs, expenses, damages, losses and liabilities of Design-Build Entity against Owner, and all if its agents, employees, consultants, inspectors, representatives, assignees and transferees, except for the Disputed Claims set forth in Paragraph 1.03(E) of this Document 00 6530. Nothing in this Agreement and Release shall limit or modify Design-Build Entity's continuing obligations described in Paragraph 6 of this Document 00 6530.

D The following claims submitted under Document 00 7253 (General Conditions), Article 12, are disputed (hereinafter, the "Disputed Claims") and are specifically excluded from the operation of this Agreement and Release.

E **[Insert information in Chart below, affix attachment if necessary]**

CLAIM NO.	DATE SUBMITTED	DESCRIPTION OF CLAIM	AMOUNT OF CLAIM

F Consistent with California Public Contract Code §7100, Design-Build Entity hereby agrees that, in consideration of the payment set forth in Paragraph 1.03(B) of this Document 00 6530, Design-Build Entity hereby releases and forever discharges Owner, and all of its agents, employees, consultants, inspectors, assignees and transferees from any and all liability, claims, demands, actions or causes of action of whatever kind or nature arising out of or in any way concerned with the Work under the Contract.

G Guarantees and warranties for the Work, and any other continuing obligation of Design-Build Entity, shall remain in full force and effect as specified in the Contract Documents.

H Design-Build Entity shall immediately defend, indemnify and hold harmless Owner, any of the Owner's Representatives, Project Manager, and all of their agents, employees, consultants, inspectors, assignees and transferees, from any and all claims, demands, actions, causes of action, obligations, costs, expenses, damages, losses and liabilities that may be asserted against them by any of Design-Build Entity's suppliers and/or Subcontractors of any tier and/or any suppliers to them for any and all labor, materials, supplies and equipment used, or contemplated to be used in the performance of the Contract, except for the Disputed Claims set forth in Paragraph 1.03(E) of this Document 00 6530.

1.04 Design-Build Entity hereby waives the provisions of California Civil Code §1542, which provide as follows:

> **A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER, MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR.**

1.05 The provisions of this Agreement and Release are contractual in nature and not mere recitals and shall be considered independent and severable, and if any such provision or any part thereof shall be at any time held invalid in whole or in part under any federal, state, county, municipal or other law, ruling, or regulation, then such provision, or part thereof shall remain in force and effect only to the extent permitted by law, and the remaining provisions of this Agreement and Release shall also remain in full force and effect, and shall be enforceable.

1.06 Design-Build Entity represents and warrants that it is the true and lawful owner of all claims and other matters released pursuant to this Agreement and Release, and that it has full right, title and authority to enter into this instrument. Each party represents and warrants that it has been represented by counsel of its own choosing in connection with this Agreement and Release.

1.07 All rights of Owner shall survive completion of the Work or termination of the Contract, and execution of this Agreement and Release.

*** * * CAUTION: THIS IS A RELEASE - READ BEFORE EXECUTING * * ***

OWNER: SAN MATEO

By: _____
Signature

Name: _____
Print

Its: _____
Title

ATTEST:

_____
Secretary

_____
Print

DESIGN-BUILD ENTITY:

By: _____
Signature

Name: _____
Print

Its: _____
Title

ATTEST:

By: _____
Signature

Name: _____
Print

Its: _____
Title

REVIEWED AS TO FORM:

Dated: _____, [201__]

By: _____
Counsel for Owner

Name: _____
Print

END OF DOCUMENT

COMPLETED
11/24/2015 Rcvd & filed in project files.

DOCUMENT 00 6536

GUARANTY

TO: The COUNTY OF SAN MATEO ("Owner"), for construction of its SKYLONDA FIRE STATION No. 58 REPLACEMENT PROJECT located at 17290 Skyline Boulevard, Woodside CA.

The undersigned guarantees all construction performed on this Project and also guarantees all material and equipment incorporated therein.

Design-Build Entity hereby grants to Owner for a period of ten (10) years following the date of Final Acceptance of the Work completed, its unconditional warranty of the quality and adequacy of all of the Work including, without limitation, all design, engineering, professional services, labor, materials and equipment provided by Design-Build Entity and its Subcontractors of all tiers in connection with the Work.

Neither final payment nor use nor occupancy of the Work performed by the Design-Build Entity shall constitute an acceptance of Work not done in accordance with this Guaranty or relieve Design-Build Entity of liability in respect to any express warranties or responsibilities for faulty materials or workmanship. Design-Build Entity shall remedy any defects in the Work and pay for any damage resulting therefrom, which shall appear within one year, or longer if specified, from the date of Final Acceptance of the Work completed.

If within ten (10) years after the date of Final Acceptance of the Work completed, or such longer period of time as may be prescribed by laws or regulations, or by the terms of Contract Documents, any Work is found to be Defective, Design-Build Entity shall promptly, without cost to Owner and in accordance with Owner's written instructions, correct such Defective Work. Design-Build Entity shall remove any Defective Work rejected by Owner and replace it with Work that is not Defective, and satisfactorily correct or remove and replace any damage to other Work or the work of others resulting therefrom. If Design-Build Entity fails to promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the Defective Work corrected or the rejected Work removed and replaced. Design-Build Entity shall pay for all claims, costs, losses and damages caused by or resulting from such removal and replacement. Where Design-Build Entity fails to correct Defective Work, or defects are discovered outside the correction period, Owner shall have all rights and remedies granted by law.

Inspection of the Work shall not relieve Design-Build Entity of any of its obligations under the Contract Documents. Even though equipment, materials, or Work required to be provided under the Contract Documents have been inspected, accepted, and estimated for payment, Design-Build Entity shall, at its own expense, replace or repair any such equipment, material, or Work found to be Defective or otherwise not to comply with the requirements of the Contract Documents up to the end of the guaranty period.

All abbreviations and definitions of terms used in this Agreement shall have the meanings set forth in the Contract Documents.

The foregoing Guaranty is in addition to any other warranties of Design-Build Entity contained in the Contract Documents, and not in lieu of, any and all other liability imposed on Design-Build Entity under the Contract Documents and at law with respect to Design-Build Entity's duties, obligations, and performance under the Contract Documents. In the event of any conflict or inconsistency between the

terms of this Guaranty and any warranty or obligation of the Design-Build Entity under the Contract Documents or at law, such inconsistency or conflict shall be resolved in favor of the higher level of obligation of the Design-Build Entity.

Date: _____, 20___

_____
Design-Build Entity's name

By: _____
Signature

_____
Print Name

_____
Title

_____
Street Address

_____
City, State, Zip code

END OF DOCUMENT

DOCUMENT 00 7253

GENERAL CONDITIONS
(Design-Build)

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DOCUMENT 00 7253

GENERAL CONDITIONS
(Design-Build)

ARTICLE 1 – GENERAL

1.01 Defined Terms

A. All abbreviations and definitions of terms used and not otherwise defined in this Document 00 7253 are set forth in Section 01 4200 (References and Definitions).

B. This Document 00 7253 subdivides at first level into Articles, and then into paragraphs, then into subparagraphs.

1.02 Documents

A. Contract Documents are complementary; what is called for by one is as binding as if called for by all.

B. Contract Documents shall not be construed to create a contractual relationship of any kind between (1) Bridging Architect or any Owner Representative and Design-Build Entity; (2) Owner and/or its representatives and (except in the event of assignment upon termination) a Subcontractor, sub-Subcontractor, or supplier of any Project labor, materials, or equipment; or (3) between any persons or entities other than Owner and Design-Build Entity.

C. Owner shall, however, be deemed to be an intended third-party beneficiary of subcontracts and purchase orders of any tier, and each such agreement shall so provide.

1.03 Precedence of Documents

A. In the case of discrepancy or ambiguity in the Contract Documents, the following order of precedence shall prevail:
   1. Modifications in inverse chronological order (i.e., most recent first), and in the same order as specific portions they are modifying;
   2. Division 00 5000 Series Documents, including but not limited to, Document 00 5200 (Agreement), and terms and conditions referenced therein, and such other documents within the Division 00 5000 Series (i.e., starting at 00 5200 and continuing to 00 5299) and the Division 00 6000 Series Documents (i.e., starting at 00 6000 and continuing to 00 6999);
   3. Division 00 7300 Series Documents, including but not limited to, Supplementary Conditions, and any Division 00 8000 Series Documents (i.e., starting at 00 8000 and continuing to 00 8999);
   4. Division 00 7200 Series Documents, including but not limited to, Document 00 7253 (General Conditions-Design-Build);
   5. Division 01 (General Requirements) Series Specifications;
   6. Bridging Documents;
   7. Architectural Program Statement;
   8. Space Design Criteria and Data Sheets;
   9. Drawings;
   10. Technical Specifications starting with Division 02 Series and continuing to Division 33 Series;
   11. Written numbers over figures, unless obviously incorrect;
   12. Figured dimensions over scaled dimensions;
   13. Schedules when identified as such will control over all other portions of the Drawings;

14. Specific Notes will control over all other notes and all other portions of the Drawings except Schedules;
15. Large-scale drawings over small-scale drawings;
16. Specific details over standard or typical details.

B. The Bridging Documents are considered complimentary in establishing design intent and Owner requirement. In case of conflict, the higher quality or quantity will govern.

C. Any conflict between Drawings and Specifications above Division 1 will be resolved in favor of the document of the latest date (i.e., the most recent document), and if the dates are the same or not determinable, then in favor of Specifications.

D. Any conflict between a bill or list of materials shown in the Contract Documents and the actual quantities required to complete Work required by Contract Documents, will be resolved in favor of the actual quantities.

E. In the event the Specifications include divisions above Division 33 (e.g., Division 34 and above), then such divisions shall be included within the Contract Documents unless identified otherwise.

ARTICLE 2 – SCOPE OF DESIGN-BUILD OBLIGATION

2.01 All-Inclusive Design-Build Obligation

A. Except as may be specifically limited and/or excluded in Document 00 5201 (Bridging Documents) and Section 01 1100 (Summary of Work), Design-Build Entity shall provide a complete, legally operable, functional and maintainable Project, in accordance with the Contract Documents, including providing, furnishing, and performing all necessary design, engineering, architectural and construction services and providing and furnishing all necessary supplies, housing, materials and equipment, and all necessary supervision, labor, and services required for the engineering, design, procurement, quality assurance and inspection, construction, installation, startup, checkout, testing, site cleanup and for the training of Owner's personnel, all in conformity with the requirements, legal requirements, criteria, performance guarantees, and warranties set forth in the Contract Documents, for a complete, full and legally operable Project in full conformance with Contract requirements. The signature and seal of a licensed engineer(s) or architect(s) shall be obtained as necessary for compliance with legal requirements.

B. Design-Build Entity's professional architectural and engineering services shall include without limitation, all architectural services and all civil, electrical, fire protection, mechanical, structural engineering, landscape, cost estimating, planning and coordination services required to complete the Project and to perform Design-Build Entity's obligations under the Contract Documents ("Services"). Design-Build Entity and its Designers and other consultants shall possess all necessary training, licenses and permits to perform the Services, and performance of the Services shall conform to the standard of practice of a professional with substantial experience and expertise in performing professional services of like nature and complexity of the Services. Design-Build Entity's licensed architectural and engineering Designers shall owe a duty of care to Owner in performing their architectural and engineering portions of the Services.

C. No construction or alteration of any Owner facility under the Contract Documents shall commence prior to the receipt of the written acceptance of the final Drawings and Specifications from the Owner and, as required, approvals from County and City Fire Marshals (if applicable) and all authorities having jurisdiction. Design-Build Entity shall design and construct complete, operational, a fully functional and legally operable project, in full compliance with all applicable laws, codes and standards (both public and private), including but not limited to, the standards included and warranties expressed in the Contract Documents and manufacturer's recommendations pertaining to individual items of equipment or systems. Design-Build Entity shall have full responsibility to manage, coordinate and comply with requirements of authorities

with jurisdiction, including but not limited to, jurisdiction's City Fire Marshal, and Owner's fire and building officials.

D. Without limiting any other provision of Contract Documents, Design-Build Entity must design and construct the Project to enable conformance with operational, fire and life safety, and applicable standards contained in Titles 15 and 24, California Code of Regulations (CCR).

2.02 Description of Design Requirements

A. Without limiting the generality of the foregoing paragraphs, Design-Build Entity and its Designers shall prepare preliminary designs, interim designs, complete designs, engineering, working drawings, shop drawings and generate drawings and/or engineering analysis setting forth in detail the specifications and requirements for the purchasing and procurement of the services, materials and equipment, all necessary utilities and water supply for construction, and for the construction of the complete, operational, legally operable and fully functional Project and shall furnish the services of all necessary supervisors, architects, engineers, designers, draftsmen, and other personnel necessary for the preparation of those drawings and specifications required for the Work. The design shall include all disciplines necessary to design and engineer the Project, including but not limited to, architectural, civil, structural, mechanical, electrical, instrumentation and control work.

B. Design-Build Entity shall coordinate the services of all architectural and engineering disciplines and other Designers involved in completing the Work, including without limitation, conducting design coordination meetings with Designers in the frequency necessary for Design-Build Entity to meet its design coordination obligations herein and all other provisions of Contract Documents.

C. All professional services shall be performed with the degree of care, skill, and responsibility customary among such licensed personnel with substantial experience and expertise in work similar to the Work of this Contract.

D. Design-Build Entity and its Designers' design shall provide that all surfaces, fixtures and equipment are readily accessible for maintenance, repair or replacement by ladders, power lifts, cat walks, and the like without exceeding the design loads of the floors, roofs, ceilings, and that such access is in conformance with Cal OSHA. All drawings, specifications, structural and electrical design calculations, site data, cost estimates and any other deliverable required by State or Federal law shall comply with State and federal standards. Design-Build Entity shall comply with any other requirements of public or private authorities with jurisdiction over the Project, the Drawings and Specifications, and tie-ins to the Project. Design-Build Entity shall comply with the applicable standard of care when preparing Drawings and Specifications to comply with applicable building codes, ordinances, statutes, laws, standards, governmental regulations and private restrictions, including necessary tie-ins, applicable to the Project and the Services, including, but not limited to, those listed in this Contract, all environmental, energy conservation, energy tie-in, and disabled access requirements, regulations and standards of the Owner (if applicable) and all other authorities having jurisdiction over the Project.

E. Design-Build Entity shall attend meetings with the community, representatives of Owner, interested parties governmental entities, as necessary, and provide information and diagrams to fully describe the intended design and the Project.

2.03 Owner's Right to Review

A. Owner at all times shall have the right (but not the duty) to review Design-Build Entity's design work, whether performed by Design-Build Entity or Designers of any tier, and whether in a final or preliminary form, to determine progress and conformance to the requirements of Contract Documents.

B. In the event Owner should ever dispute the conformance of any design work (at any stage) with the intent of the Bridging Documents, then Owner's determination shall control and Design-Build Entity and/or its Designers shall perform the disputed design services and/or work to completion in accord with the Owner's determination. Design-Build Entity shall, however, retain its rights under the procedure in this Document 00 7253 (General Conditions) Article 12 for claims and disputes, and Design-Build Entity may under that procedure, in its name, advance any claim of any Designer.

2.04 Description Of Construction Obligations

A. Without limiting the generality of the foregoing paragraph, Design-Build Entity shall provide, at a minimum, the following Services and materials and equipment, provided, however, that these sections shall not be construed in any way to limit Design-Build Entity's obligations hereunder to design, engineer, furnish, construct, checkout, startup, and test a complete, operable and maintainable Project in accordance with the provisions of the Contract Documents.

B. Design-Build Entity shall furnish the services of all personnel, including supervisors, engineers, designers and draftsmen necessary for the Work. Except as otherwise provided in Contract Documents, Design-Build Entity shall obtain, at Design-Build Entity's expense, all governmental and private approvals, licenses, and permits required to complete the Work, including but not limited to, all aspects of coordination and approvals of any type from state and/or local agencies and authorities with jurisdiction, for example and not by way of limitation, County and City Fire Marshal, and Owner's building officials.

C. Design-Build Entity shall provide, install and complete as specified and pay for all labor, materials and equipment, tools, supplies, construction equipment and machinery, construction, start-up and testing (except that testing to be provided by the Owner), site cleanup, utilities, transportation, and other facilities and services (including any temporary materials, equipment, supplies and facilities) necessary for the proper execution and completion of the complete, operational, and fully functional Project including required permanent interconnection for electricity, and any other utilities and demonstration of fully satisfactory operation of all systems and equipment.

D. Design-Build Entity shall provide all equipment and materials and furnish the services of all supervision, buyers, inspectors (other than any Owner-engaged-inspector acting solely on Owner's behalf), expeditors, and other personnel necessary to procure all materials and equipment for the construction of the Project. Design-Build Entity shall provide, install, complete and pay for all labor, materials and equipment, tools, supplies, construction equipment and machinery, construction utilities (including all water, power and sanitary facilities), transportation (including road or other infrastructure and improvements on and off the Site), customs clearance, quality assurance, and other facilities and services (including any temporary or consumable materials, water, fuels, and electricity necessary for the proper execution and completion of the Work, including any of the utilities, as required). Design-Build Entity shall maintain all materials and equipment in accordance with manufacturer's requirements while such materials and equipment are in transit or care and custody of the Design-Build Entity. Design-Build Entity shall supervise and direct the Work, and shall furnish the services of all supervisors, forepersons, skilled and unskilled labor, and all other personnel necessary to design and construct the complete, operational, legally operable and fully functional Project and appurtenant projects described in the Contract Documents. Without limiting the generality of the foregoing, Design-Build Entity shall provide any and all construction required for the temporary upgrading of any public or private road which is inadequate for the performance of the Work, temporarily relocate any interference in public or private roadways necessary for the transportation of equipment and materials, and repair all excessive damage to, or deterioration (other than fair wear and tear) of, any public or private road which arises out of the performance of the Work.

E. Design-Build Entity shall provide all Project-related insurance (See Document 00 7316 – Supplementary Conditions – Insurance and Indemnification – Design Build), except as otherwise

provided by Contract Documents.

F. Design-Build Entity shall supervise and direct Work, and shall furnish the services of all supervisors, foremen, skilled and unskilled labor, quality control and all other personnel in sufficient quantities and with sufficient skills necessary to perform the Services in accordance with the Contract Documents. At Owner's request, Design-Build Entity shall replace, at Design-Build Entity's expense, any individual if it is determined by Owner and Design-Build Entity that such individual's continued presence would jeopardize the quality or timely completion of the Work. Whenever required by applicable laws or the Contract Documents, Design-Build Entity shall employ licensed personnel as necessary to perform engineering, design, architectural, or other professional services in the performance of the Work.

G. Design-Build Entity shall be solely responsible for all construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work under the Contract Documents, and Owner shall not be responsible for or exercise any control over the actions or omissions of Design-Build Entity, any supplier, or any of their employees or agents performing any of the Work or Design-Build Entity's warranty obligations. Design-Build Entity shall prosecute the Work continuously and diligently and complete the Work in accordance with all requirements of the Contract Documents.

H. Design-Build Entity shall coordinate ingress and egress to and from the Site so as to minimize disruption to the Work and to traffic in the vicinity of the Site. DBE shall ensure ingress and egress to adjacent facilities is not impeded or blocked, unless previously addressed or discussed with Owner and noticed to affected parties. Hours of work affecting restricted access to adjacent businesses or residents shall be between 9 a.m. – 4 p.m.

I. The Design-Build Entity shall be solely responsible for developing a construction phasing strategy this acceptable to the County, and that allows for continuous 24/7 operations of the existing fire station. The DBE construction phasing strategy shall also address the temporary relocation fo all equipment, supplies and fire fighting apparatus, and shall include provision acceptable to the County for protecting items from the weather and construction activities, including the incorporation of security measures. The DBE will also be responsible for providing all temporary utilities, including temporary power required to facilitate the construction phasing and cut-over of the building systems.

J. Design-Build Entity shall be responsible for the layout of the Work and shall perform all necessary surveying during the construction of the Projects. Design-Build Entity shall take field measurements, verify all field conditions, and carefully compare all of the foregoing and other available information with Contract Documents. The accuracy of all grades, elevations, alignments, and plumbing of any structures and the location of all facilities described in the final plans and specifications shall be the responsibility of the Design-Build Entity. Design-Build Entity shall preserve all permanent survey construction monuments and benchmarks. Prior to the final completion date, Design-Build Entity shall accurately correct all Project documents to as-built conditions and deliver to Owner these as-built documents in accordance with the Contract Documents. Such documents shall show the location of the Project and shall show all related easements, improvement, utilities and rights of way above and below ground, on and off the Site, as of the date of delivery of such documents. Such documents shall also show the dimensions and the distances to the nearest benchmarks.

K. Design-Build Entity shall provide appropriate installation and startup representatives from suppliers of major equipment and all necessary supervising personnel, all equipment, tools, construction and temporary material, and all labor for checkout, startup and testing. Design-Build Entity shall be responsible for checkout, startup and testing of the Project and shall carry out those activities in accordance with all applicable codes and legal requirements, startup and checkout requirements and procedures as set forth in the Contract Documents or established by any Owner-engaged Commissioning Agent.

L. While Design-Build Entity shall provide all required safety and warning signs, and wage notices, Design-Build Entity may not post any other signs without Owner's express written consent.

M. Design-Build Entity shall be responsible for Site security until Final Completion, or termination of the Work. Such security shall include, to the extent reasonably necessary, barriers, lighting, controlled access, and other measures required to prevent vandalism, theft, and danger to personnel, the Project, materials and equipment.

N. Design-Build Entity shall prepare or cause to be prepared and shall furnish to Owner all drawing logs, drawings, manufacturer's drawings and data, supplier manuals and operating manuals in accordance with the Contract Documents.

O. Design-Build Entity shall ensure that Owner and its representatives shall, at all times, have access to the Project for all purposes. In order to allow Owner and its representatives to be present, Design-Build Entity shall give Owner at least three (3) days advance notice of any system or equipment checkout or testing. If Owner desires access to any places where work is being performed or from which materials and equipment are being obtained, Design-Build Entity shall provide or arrange reasonable access thereto and shall provide Owner reasonable advanced notice of any factory tests or other off site tests. Design-Build Entity shall maintain the Site in a safe condition to permit Owner and any person authorized in writing by Owner to inspect and review all field work during working hours, including materials and equipment, installation, calibration, startup and testing.

P. As part of the procurement of equipment, to be determined by Owner and Design-Build Entity during Project Design, Design-Build Entity shall provide to Owner a list of recommended operating spare parts, which list shall include all relevant costs and ordering lead time information with terms and conditions. If requested, Design-Build Entity shall procure such operating spare parts from Suppliers, as requested by Owner, on behalf of Owner. The cost of such operating spare parts shall be covered by Contract Modification.

Q. Design-Build Entity shall perform all services and activities necessary to comply with all applicable governmental regulations and requirements and to obtain all applicable governmental reviews and approvals for and regarding the Work.

R. When any equipment or portion of the Work is damaged, Design-Build Entity shall inform Owner as soon as possible and provide Owner a damage report detailing such occurrence, any required repairs, and the estimated duration of such repairs.

S. Except for special inspections performed by Owner, Design-Build Entity shall provide to Owner all tests and measurements, laboratory analyses, and reports made or prepared in connection with the Work.

T. Design-Build Entity's progress schedules shall be in accordance with Section 01 3200 Progress Schedules and Reports.

U. Design-Build Entity shall be responsible for all labor relations matters relative to the Work on the Site and shall at all times use all reasonable efforts to maintain harmony among all workers employed in connection with the Work on the Site.

ARTICLE 3 – REQUIRED INVESTIGATIONS

3.01 Required Investigations –All Projects

A. For all Projects, and prior to submitting a Proposal and as a condition of executing Document 00 5200 (Agreement), Design-Build Entity shall make reasonable efforts to investigate fully the

Work of the Contract per the requirements of this Article.

B. Design-Build Entity shall visit the Site, examine thoroughly and understand fully the nature and extent of the Contract Documents, Work, Site, locality, actual conditions and as-built conditions, and all other information made available before executing the Work Authorization. Design-Build Entity's investigation shall include, without limitation, requesting and thoroughly examining of all reports of exploration and tests of subsurface conditions, as-built drawings, drawings, product specification(s) or reports, made available by Owner for contracting purposes or during Design-Build Entity's pre-construction services, of existing above ground and (to the extent applicable) below ground conditions (together, "Existing Conditions Data"), including, as applicable, Underground Facilities, geotechnical data, as-built data, utility surveys, record documents of all types, hazardous materials surveys, or similar materials which may appear in the Contract Documents, and all local conditions, and federal, state and local laws and regulations that in any manner may affect cost, progress, performance or furnishing of Work or which relate to any aspect of the means, methods, techniques, sequences or procedures of construction to be employed by Design-Build Entity and safety precautions and programs incident thereto.

C. Also, Design-Build Entity shall: (i.) completely and thoroughly correlate all Existing Conditions Data, and shall provide Owner with prompt written notice of all conflicts, errors, ambiguities, or discrepancies of any type, that it discovered in or among the Contract Documents and the Existing Conditions Data, and (ii.) subject to Owner's approval conduct any such additional or supplementary examinations, investigations, explorations, tests, studies and data compilations, concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site or otherwise, which may affect cost, progress, performance or furnishing of Work or which relate to any aspect of the means, methods, techniques, sequences or procedures of construction to be employed by Design-Build Entity and safety precautions and programs incident thereto or which Design-Build Entity deems necessary to determine that it could perform and furnish the Work in accordance with the time, price and other terms and conditions of Contract Documents.

D. By executing Document 00 5200 (Agreement), Design-Build Entity agrees that Owner has responded to and resolved any conflict, error or ambiguity in the Existing Conditions Data and Contract Documents that Design-Build Entity has brought to Owner's attention. During performance of the Contract, Design-Build Entity will be charged with knowledge of all information that it should have learned in performing its required pre-construction services and pre-construction investigations and other obligations, and shall not be entitled to Change Orders (time or compensation) due to any information, error, inconsistency, omission, or conditions that Design-Build Entity should have known as a part of this Work. Design-Build Entity shall be responsible for the resultant losses, including, without limitation, the cost of correcting Defective Work.

E. In performing the Work of the Contract Documents, Design-Build Entity shall rely on the results of its own independent investigations of existing conditions and not on information provided by Owner. Design-Build Entity shall conduct such further investigations of existing conditions as are necessary for Design-Build Entity to perform the Services and shall advise Owner of any further design or other services necessary to complete the Project.

3.02 Required Investigations—Renovation Projects

A. For Projects involving renovation of existing facilities, Design-Build Entity shall verify by independent investigation all such aboveground and as-built conditions, and bring any discrepancies to Owner's attention through written question. In executing Document 00 5200 (Agreement), Design-Build Entity shall rely on the results of its own independent investigation and shall not rely on Owner-supplied information regarding aboveground conditions and as-built conditions, and Design-Build Entity shall accept full responsibility for its verification work sufficient to complete the Work as intended.

B. Regarding aboveground and as-built conditions shown on the Contract Documents or supplied by Owner, such information has been compiled in good faith, however, Design-Build Entity must independently verify such information. Design-Build Entity shall also consider fully the fact that information supplied regarding existing above ground and as-built conditions at or contiguous to the Site is in many cases based on information furnished to Owner by others (e.g., the prior owner or builders), and that due to their age or their chain of custody since preparation, may not meet current industry standards for accuracy. Owner does not expressly or impliedly warrant or represent that information as to aboveground conditions or as-built conditions indicated in the Contract Documents or supplied by Owner, is correctly shown or indicated, or otherwise complete for construction purposes.

3.03 Required Investigations—Excavation and Utilities Relocation Projects

A. For Projects involving excavation or relocation of existing utilities, Design-Build Entity shall make reasonable efforts to verify information regarding Underground Facilities, including but not limited to, requesting additional information or verification of information as necessary.

B. Because of the nature and location of Owner and the Project, the existence of Underground Facilities is deemed inherent in the Work of the Contract, as is the fact that Underground Facilities are not always accurately shown or completely shown on as-built records, both as to their depth and location. Design-Build Entity shall, therefore, take care to note the existence and potential existence of Underground Facilities, in particular, above and below grade structures, drainage lines, storm drains, sewers, water, gas, electrical, chemical, hot water, and other similar items and utilities. Design-Build Entity shall carefully consider all supplied information, request additional information Design-Build Entity may deem necessary, and visually inspect the Site for above ground indications of Underground Facilities (such as, for example not by way of limitation, the existence of existing service laterals, appurtenances or other types of utilities, indicated by the presence of an underground transmission main or other visible facilities, such as buildings, new asphalt, meters and junction boxes, on or adjacent to the Site). Design-Build Entity shall also consider fully the fact that information supplied regarding existing Underground Facilities at or contiguous to the Site is in many cases based on information furnished to Owner by others (e.g., the builders of such Underground Facilities or others), and that due to their age or their chain of custody since preparation, may not meet current industry standards for accuracy.

The DBEs proposing on this project are warned that the Site contains hazardous substances known to pose serious personal health and other related dangers. The successful DBE shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection therewith. DBEs shall be responsible for preparing and maintaining a Health and Safety Plan that shall govern the successful removal of any hazardous materials prior to demolition of existing structures.

C. Design-Build Entity shall also consider local underground conditions and typical practices for Underground Facilities, either through its own direct knowledge or through its subcontractors, and fully consider this knowledge in assessing the existing information and the reasonableness of its reliance.

D. Regarding subsurface conditions other than Underground Facilities shown on the Contract Documents or otherwise supplied by Owner, Design-Build Entity may rely only upon the general accuracy of actual reported depths, actual reported character of materials, actual reported soil types, actual reported water conditions, or actual obstructions shown or indicated in the Contract Documents. Owner is not responsible for the completeness of any subsurface condition information, Design-Build Entity's conclusions or opinions drawn from any subsurface condition information, or subsurface conditions that are not specifically shown. (For example, Owner is not responsible for soil conditions in areas contiguous to areas where a subsurface condition is

shown.)

ARTICLE 4 – CONTRACT AWARD AND COMMENCEMENT OF THE WORK

4.01 Award of Contract

A. Owner will make its Conditional Award of Contract by issuing a Notice of Conditional Award.

B. As a condition to Owner signing Document 00 5200 (Agreement), however, Design-Build Entity shall deliver to Owner the executed agreements, forms, bonds and insurance documents required by Document 00 1119 (Request for Proposals) and Document 00 4200 (Proposal Form) in the required quantities and within the required times.

C. Bonds shall specifically include:
   1. Corporate surety bond, in the form of Document 00 6113.13 (Construction Performance Bond), in the penal sum of 100% of the Design-Build Entity's Proposal as accepted, to guaranty faithful performance of the Work; and
   2. Corporate surety bond, in the form of Document 00 6113.16 (Construction Labor and Material Payment Bond), in the penal sum of 100% of the Design-Build Entity's Proposal as accepted, to guaranty payment of wages for services engaged and of bills contracted for materials, supplies, and equipment used in performance of Contract Documents.

D. Sureties on payment and performance bonds shall be satisfactory to Owner. Corporate sureties on these bonds and on bonds accompanying Proposals shall be duly licensed to do business in the State of California and shall have an A.M. Best Company financial rating of A, VIII or better.

E. Document 00 7316 (Insurance and Indemnification) incorporated herein by this reference, provides insurance requirements.

4.02 Commencement of Design and Construction Work

A. When Design-Build Entity and Owner have signed the Contract Documents and all other applicable conditions have been satisfied, Owner will serve a Notice to Proceed With Design Services (Document 00 5501) on Design-Build Entity to that effect. When Design-Build Entity has obtained all required approvals (including without limitation from Owner and County Fire Marshal) to begin actual on-Site construction of all or a portion of the Work, Owner will serve a Notice to Proceed with Construction (Document 00 5500) on Design-Build Entity to that effect. Any Notice to Proceed shall be issued by depositing it in a post office or post office box regularly maintained by United States Postal Service in a pre-paid wrapper directed to Design-Build Entity at legal address or (at Owner's option) by delivery by other means authorized for notices under the Contract documents at legal address. No construction Work may be performed at the Site until Owner and County Fire Marshal has approved Construction Documents and Owner has issued Notice to Proceed with Construction.

B. The start date for Contract Time shall be on the date indicated in the applicable Notice to Proceed. If no date is indicated, the start date for Contract Time shall be the 15th Day from the date that Design-Build Entity receives, by hand or overnight delivery or facsimile transmission, Owner's written Notice to Proceed, unless the Notice to Proceed is served by mail only, in which case the start date for Contract Time shall be the fifth Day following the mailing date. The total number of Days for completion of the Work under the Contract Documents shall be as provided in Document 00 5200 (Agreement).

4.03 Subcontractors

A. All subcontracts that were not listed by the Design-Build Entity in its Proposal shall be awarded by

the Design-Build Entity in accordance with the Contract Documents.

B. Design-Build Entity shall, at a minimum, do all of the following:
   1. Provide public notice of the availability of work to be subcontracted.
   2. Provide a fixed date and time on which the subcontracted work will be awarded.
   3. If more than one subcontractor that was not listed by the Design-Build Entity in its Proposal is to be awarded a subcontract by the Design-Build Entity, the Design-Build Entity may provide multiple listing and award dates as necessary for completion of the Project Work, according to the Subcontractor Procurement Plan developed in accordance with Section 01 1102 (Summary of Work – Design-Build Contractor Services).
   4. With Owner's concurrence and in compliance with all applicable legal, regulatory and professional standards and Contract Documents requirements), Design-Build Entity may release design packages for construction to properly awarded design-build subcontractors prior to completion of Construction Documents. Owner's consent shall not be unreasonably withheld, provided, however, Design-Build Entity and its Subcontractors must complete Construction Documents and details under procedures permitting Owner rights of review and acceptance of final details sufficient to assure compliance with design intent.

C. In any contract between Design-Build Entity and a Subcontractor, and in a contract between a Subcontractor and any subcontractor thereunder, the percentage of the retention proceeds withheld may not exceed the percentage specified in the Contract Documents (not greater than 5%). If Design-Build Entity provides written notice to any Subcontractor who is not a member of Design-Build Entity's team in its Proposal, prior to or at the time the Subcontractor's bid is requested, that a bond may be required and the Subcontractor subsequently is unable or refuses to furnish a bond to Design-Build Entity, then Design-Build Entity may withhold retention proceeds in excess of the percentage specified in the Contract Documents from any payment made by Design-Build Entity to the Subcontractor.

D. Design-Build Entity shall provide Owner with additional versions of Document 00 4330 (Subcontractors List) as follows:
   1. Within fourteen (14) days of award of any subcontract, a Document 00 4330 identifying all Subcontractors not included on a prior Document 00 4330; and
   2. Before commencing any construction Work, a complete Document 00 4330 identifying all Subcontractors, however and whenever procured.

E. All Subcontractors bidding on subcontracts shall be afforded the protections contained in Chapter 4 (commencing with Section 4100) of Part 1 of Division 2 of the Public Contract Code. Without limiting the forgoing, Design-Build Entity shall not substitute any other person or firm in place of any Subcontractor listed in the Proposal. Consistent with the Subcontractor Listing Law, Subcontractors shall not assign or transfer their subcontracts or permit them to be performed by any other Design-Build Entity without Owner's written approval. At Owner's request, Design-Build Entity shall provide Owner with a complete copy of all executed subcontracts or final commercial agreements with Subcontractors and/or suppliers.

F. Subcontract agreements shall preserve and protect the rights of Owner under the Contract Documents so that subcontracting will not prejudice such rights. To the extent of the Work to be performed by a Subcontractor, Design-Build Entity shall require the Subcontractor's written agreement (1) to be bound to the terms of Contract Documents and (2) to assume vis-à-vis Design-Build Entity all the obligations and responsibilities that Design-Build Entity assumes toward Owner under the Contract Documents. (These agreements include for example, and not by way of limitation, all warranties, claims procedures and rules governing submittals of all types to which Design-Build Entity is subject under the Contract Documents.)

G. Design-Build Entity shall provide for the assignment to Owner of all rights any Subcontractor may have against any manufacturer, supplier, or distributor for breach of warranties and guaranties relating to the Work performed by the Subcontractor under the Contract Documents.

H. All Subcontractors performing Work on the Project Site, whether included in Design-Build Entity's Proposal or otherwise, must have an Experience Modification Rate (EMR) of 1.00 or less.

ARTICLE 5 – BRIDGING DOCUMENTS, DRAWINGS AND SPECIFICATIONS

5.01 General

A. Bridging Documents supplied under Document 00 5201 establish the design intent and the minimum requirements for the quality and type of materials to be used in the Project. Bridging Documents and any addenda will be used to confirm that Design-Build Entity-prepared Design Development and Construction Documents are in conformance with the design intent and the minimum requirements for the quality and type of materials to be used in the Project.

B. Design-Build Entity-prepared Construction Documents are the Drawings and Specifications for construction. Subject to all provisions of Contract Documents, Design-Build Entity shall construct the Project in accordance with those Drawings and Specifications. The warranty and other requirements in the Contract Documents (including Bridging Documents), however, shall constitute the minimum design, material, quality, workmanship and other standards required under the Contract Documents, and shall have higher precedence in case of inconsistency with the Design-Build Entity prepared Construction Documents.

C. Where Owner has specified equipment or materials, Design-Build Entity shall provide the specified equipment or materials (regardless of any Design-Build Entity contention that proposed equipment or materials meet or exceed Owner's requirements).

D. Design-Build Entity shall be fully responsible for all design errors, including without limitation all errors, inconsistencies and omissions in the Design-Build Entity-prepared Construction Documents, and shall report any such matter to Owner promptly following discovery. Design-Build Entity has full "turnkey" responsibility to deliver the fully functional, operational Project described in Document 00 5201 (Bridging Documents), as referenced in the Contract Documents.

5.02 Intent

A. Final Drawings and Specifications shall describe a functionally complete and operable Project (and all parts thereof) to be constructed in accordance with the requirements of Contract Documents and in compliance with all applicable codes and standards. Unless expressly excluded elsewhere in the Contract Documents, Design-Build Entity shall perform any work, provide services and furnish any materials or equipment that may reasonably be inferred from the requirements of Contract Documents or from prevailing custom or trade usage as being required to produce this intended result. Design-Build Entity shall furnish all permits, temporary controls, machinery, tools, facilities, employee training and testing, hoisting facilities, shop drawings, storage, testing, security, transportation, disposal, the securing of all necessary or required field dimensions, the cutting or patching of existing materials, notices, documents, reports, agreements and all general conditions, seismic requirements, general requirements and incidentals and any other items required or necessary to timely and fully complete such Work described and the results intended by Contract Documents and, in particular, Drawings and Specifications and (as applicable) Bridging Documents.

B. Design-Build Entity shall interpret Bridging Documents words or phrases used to describe Work (including services), materials or equipment that have well-known technical or construction industry or trade meaning in accordance with that meaning. Bridging Documents' intent specifically includes the intent to require construction that complies with all applicable laws, codes and standards.

C. Divisions and Specification Sections and the identification on any Bridging Documents shall not

control Design-Build Entity in preparing final Construction Documents, dividing Work among Subcontractors or suppliers or delineating the Work to be performed by any specific trade.

5.03 Drawing Details

A. A typical or representative detail on Drawings shall constitute the standard for workmanship and material throughout corresponding parts of Work, as long as it otherwise complies with all Bridging Documents requirements. Where necessary, and where reasonably inferable from Drawings, Design-Build Entity shall adapt such representative detail for application to such corresponding parts of Work. If Owner requests, the details of such adaptation shall be subject to prior approval by Owner. Repetitive features shown in outline on Drawings which otherwise comply with Bridging Documents shall be in exact accordance with corresponding features completely shown.

5.04 Interpretation Of Bridging Documents

A. Should any discrepancy appear or any dispute arise as to the importance of anything contained in Bridging Documents, or should Design-Build Entity have any questions or requests relating to Bridging Documents or any Contract Document for which Owner is responsible under the Contract Documents, Design-Build Entity shall refer the matter to Owner, in writing. Owner will issue with reasonable promptness written responses, clarifications or interpretations as Owner may determine necessary, which shall be consistent with the intent of and be reasonably inferable from Contract Documents. Such written clarifications or interpretations shall be binding upon Design-Build Entity. If Design-Build Entity believes that a written response, clarification or interpretation justifies an adjustment in Contract Sum, Design-Build Entity shall give Owner prompt written notice as provided in Section 01 2600 (Modification Procedures and Pricing of Changed Work). If the parties are unable to agree to the amount or extent of the adjustment, if any, then Design-Build Entity shall perform the Work in conformance with Owner's response, clarification, or interpretation and may make a written claim for the adjustment as provided in Article 12 of this Document 00 7253.

5.05 Checking Of Drawings

A. Before undertaking each part of construction Work, Design-Build Entity shall carefully study and compare Contract Documents and check and verify pertinent figures shown in the Contract Documents and all applicable field measurements. Design-Build Entity shall be responsible for all errors, except for those attributable to Contract Documents for which Owner is responsible and which could not have been avoided even by such comparison. Unless obviously incorrect or otherwise expressly provided, figures shown on final Drawings shall be followed; Design-Build Entity shall not scale measurements. Design-Build Entity shall promptly report to Owner, in writing, any conflict, error, ambiguity or discrepancy that Design-Build Entity may discover in any Contract Document, along with (1) an indication of whether Owner or Design-Build Entity is responsible for that Contract Document, and (2) Design-Build Entity's proposed resolution.

5.06 Standards To Apply Where Specifications Are Not Furnished

A. Wherever in the Contract Documents (including without limitation Bridging Documents), or in any orders given by Owner, it is provided that Design-Build Entity shall furnish materials or manufactured articles or shall do work for which no detailed or performance specifications are set forth, and Document 00 5201 (Bridging Documents) does not otherwise establish the applicable standard, the following general specifications shall apply.

B. Design and construction shall meet the standards required to provide Owner with a first class, fully functional Project, designed and constructed in a manner consistent with the standards, equipment, materials and design, found in comparable, first class, fully functional, contemporary

facilities of similar type and function.

C. Materials or manufactured articles shall be of the grade, in quality and workmanship, consistent with the requirements of this Contract and obtainable in the market from firms of established good reputation, or, if not ordinarily carried in stock, shall conform to the usual standards for first-class materials or articles of the kind required, with due consideration of the use to which they are to be put. Work for which no detailed specifications are set forth herein shall conform to the requirements of this subparagraph.

5.07 Deviation From Specifications And Drawings

A. Design-Build Entity shall perform Work in accordance with Drawings and Specifications. Deviations from Drawings and from the dimensions therein given, or from the Specifications, whether or not error is believed to exist, and whether or not error is responsibility of Design-Build Entity and its Designers, shall be made only when approved in writing by Owner and, if required, by other authority having jurisdiction. Design-Build Entity may deviate from Drawings or the dimensions given in the Drawings, and may deviate from the Specifications, only upon Owner's advance written approval of the proposed deviation, either by Change Order, Change Directive or Supplemental Instruction. Design-Build Entity will be responsible for all additional Owner costs relating to such matters, including, but not limited to, any additional costs of Bridging Architect.

B. Change Orders changing the approved Drawings and Technical Specifications are subject to approval (i) by Owner as provided in Article 14 of this Document 00 7253 and Section 01 2600 (Modification Procedures and Pricing of Changed Work).

C. Design-Build Entity's design and construction experience was a material factor in its selection as Design-Build Entity for this Project. Design-Build Entity shall rely on its experience and proactively cooperate, coordinate and schedule (as necessary) Change Requests, submittals, field questions (if any), inspections, and document assembly, to facilitate the prompt and efficient use of the Change Order and Change Directive procedure as necessary to prevent delay in actual field construction.

5.08 Ownership And Use Of Drawings, Specifications And Contract Documents -- Ownership Of Results/Works for Hire

A. Any interest (including copyright interests) of Design-Build Entity or its Subcontractors or consultants, including Designers (together, "Sub-consultants"), in studies, reports, memoranda, computational sheets, Construction Documents, artwork, copy, posters, billboards, photographs, videotapes, audiotapes, systems designs, software, reports, diagrams, surveys, source codes, and any other original works of authorship (including electronic media) created by Design-Build Entity or its Sub-consultants in connection with the Work, shall become the property of Owner. To the extent permitted by Title 17 of the United States Code, work product produced under the Contract Documents shall be deemed works for hire and all copyrights in such works shall be the property of Owner. In the event that it is ever determined that any works created by Design-Build Entity or its Sub-consultants under the Contract Documents are not works for hire under U.S. law, Design-Build Entity hereby assigns to Owner all copyrights to such works. With Owner's prior written approval, Design-Build Entity and its Sub-consultants may retain and use copies of such works for reference and as documentation of experience and capabilities.

B. Design-Build Entity and its Sub-consultants shall, however, retain the copyright in their standard details, and grant Owner an unlimited license to use such details for all purposes reasonably related to the Project, including, without limited to, the operation, maintenance, repair, renovation, restoration, and expansion thereof. Should Owner desire to reuse any of the items specified above and not use the services of Design-Build Entity or applicable Sub-Designer, then the Owner agrees to assume any and all obligations for their reuse and, if applicable, process the same through all authorities having jurisdiction, and Owner releases Design-Build Entity and its

Sub-consultants from liability associated with the reuse.

C. Owner acknowledges that (i) any functionally required elements, such as standard space configurations, (ii) individual standard features such as windows, doors and other ordinary building components, (iii) functional elements whose design or placement is dictated by utilitarian concerns, and (iv) any other design element which any applicable law generally excludes from the scope of a copyright, are excluded from the copyright granted to Owner.

ARTICLE 6 – CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

6.01 Owner's Right to Perform Construction and to Award Separate Contracts

A. Owner may perform with its own forces, construction or operations related to the Project. Owner may also award separate contracts in connection with other portions of the Project or other construction or operations, on the Site or areas contiguous to the Site, under conditions similar to these Contract Documents, or may have utility owners perform other work. When separate contracts are awarded for different portions of the Project or other construction or operations on the Site, the terms "Contractor" or "Design-Build Entity" in these Contract Documents shall mean the Design-Build Entity herein.

6.02 Mutual Responsibility

A. Design-Build Entity shall afford all other contractors, utility owners and Owner (if Owner is performing work with its own forces), proper and safe access to the Site, and reasonable opportunity for the installation and storage of their materials. Design-Build Entity shall ensure that the execution of its Work properly connects and coordinates with others' work, and shall cooperate with them to facilitate the progress of the Work.

B. Design-Build Entity shall coordinate its Work with the work of other separate contractors, Owner, and utility owners. Design-Build Entity shall hold coordination meetings with other contractors, Owner and its representatives, and utility owners as required by Section 01 3119 (Project Meetings).

C. Unless otherwise provided in the Contract Documents, Design-Build Entity shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other work. Design-Build Entity shall not endanger any work of other separate contractors, Owner or utility owners by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of Owner and the others whose work will be affected.

D. Design-Build Entity's duties and responsibilities under Article 6 of this Document 00 7253 are for the benefit of Owner and also for the benefit of such other contractors and utility owners working at the Site to the extent that there are comparable provisions for the benefit of Design-Build Entity in the direct contracts between Owner and such other contractors and utility owners.

E. To the extent that any part of Design-Build Entity's Work is to interface with work performed or installed by other contractors or utility owners, Design-Build Entity shall inspect and measure the in-place work. Design-Build Entity shall promptly report to Owner in writing any defect in in-place work that will impede or increase the cost of Design-Build Entity's interface unless corrected. Owner will require the contractor responsible for the Defective Work to make corrections so as to conform to its contract requirements, or, if the defect is the result of an error or omission in any Contract Documents for which Owner is responsible (i.e., excluding Construction Documents), issue a Change Order. If Design-Build Entity fails to measure, inspect and/or report to Owner in writing defects that are reasonably discoverable in Contract Documents for which Owner is

responsible, Design-Build Entity shall bear all costs of accomplishing the interface acceptable to Owner. This provision shall be included in any and all other contracts or subcontracts for Work to be performed where such a conflict could exist.

6.03 Owner Authority over Coordination

A. Owner will have authority over coordination of the activities of multiple contractors in cases where Owner performs work with its own forces or contracts with others for the performance of other work on the Project, or utilities work on the Site. Owner may at any time and in its sole discretion, designate a person or entity other than Owner to have authority over the coordination of the activities among the various contractors. Owner's authority with respect to coordination of the activities of multiple contractors and utility owners shall not relieve Design-Build Entity of its obligation to other contractors and utility owners to coordinate its Work with other contractors and utility owners as specified in this Article. Design-Build Entity shall promptly notify Owner in writing when another Design-Build Entity on the Project fails to coordinate its work with the Work of Contract Documents.

B. Design-Build Entity shall suspend any part of the Work or carry on the same in such manner as directed by Owner when such suspension or prosecution is necessary to facilitate the work of other contractors or workers. No damages or claims by Design-Build Entity will be allowed if the suspension or Work change is due in whole or in part to Design-Build Entity's failure to perform its obligation to coordinate its Work with other contractors and utility owners. Damages or claims will be allowed only to the extent of fault by Owner if the suspension or Work change is due in whole or in part to another Design-Build Entity's failure to coordinate its work with Design-Build Entity, other contractors, and utility owners. Owner reserves the right to back charge Design-Build Entity for any damages or claims incurred by other contractors as a result of Design-Build Entity's failure to perform its obligations to coordinate with other contractors and utility owners. Owner may deposit the funds retained with a Court of competent jurisdiction pursuant to applicable interpleader procedures and Design-Build Entity releases Owner of further liability regarding such funds.

6.04 Owner Furnished Products

A. Where Owner procures products or materials directly, Owner's responsibilities shall include:
1. Arrange for and deliver Owner-reviewed Shop Drawings, Product Data, and Samples, to Design-Build Entity.
2. Arrange and pay for delivery to site.
3. On delivery, inspect products jointly with Design-Build Entity.
4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
5. Arrange for manufacturers' warranties, inspections, and service.

B. Where Owner procures products or materials directly, Design-Build Entity's responsibilities shall include:
1. Review Owner-reviewed Shop Drawings, Product Data, and Samples.
2. Receive and unload products at site; inspect for completeness or damage jointly with Owner.
3. Handle, store, install, and finish products.
4. Repair or replace items damaged after receipt.
5. Install into Project per Contract Documents.

ARTICLE 7 – OWNER AND PAYMENT

7.01 Owner Representative(s)

A. Owner Representative(s) will have limited authority to act on behalf of Owner as set forth in the Contract Documents. Except as otherwise provided in these Contract Documents or subsequently identified in writing by Owner, Owner will issue all communications to Design-Build Entity through Owner Representative, and Design-Build Entity shall issue all communications to Owner through Owner Representative in a written document delivered to Owner. Should any direct communications between Design-Build Entity and Owner's consultants, architects or Architect/Engineers not identified in Document 00 5200 (Agreement) occur during field visits or by telephone, Design-Build Entity shall immediately confirm them in a written document copied to Owner.

7.02 Means and Methods of Design and Construction

A. Subject to those rights specifically reserved in the Contract Documents, Owner will not supervise, or direct, or have control over, or be responsible for, Design-Build Entity's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, or Design-Build Entity's failure to comply with laws and regulations applicable to the furnishing or performance of Work (including Services). Owner will not be responsible for Design-Build Entity's failure to perform or furnish the Work in accordance with Contract Documents.

7.03 Receipt and Processing Of Applications for Payment

A. As required by Section 01 2000 (Measurement and Payment), Design-Build Entity shall prepare the schedules, submit Applications for Payment and warrant title to all Work covered by each Application for Payment. Owner will review Design-Build Entity's Applications for Payment and Owner will and make payment thereon, and Design-Build Entity shall make payments to Subcontractors, suppliers and others, as required by Section 01 2000.

ARTICLE 8 – CONTROL OF THE WORK

8.01 Supervision of Work by Design-Build Entity

A. Design-Build Entity shall supervise, inspect, and direct Work competently and efficiently, devoting the attention and applying such personal skills and expertise as may be required and necessary to perform Work in accordance with Contract Documents.

B. Design-Build Entity is fully responsible for Design-Build Entity's own acts and omissions. Design-Build Entity is responsible for all acts and omissions of its Subcontractors, suppliers, Designers, and other persons and organizations performing or furnishing any of the Work, labor, materials, or equipment under a direct or indirect contract with Design-Build Entity.

C. Design-Build Entity shall be solely responsible for and have control and charge of construction means, methods, techniques, sequences and procedures, safety precautions and programs in connection with the Work. Design-Build Entity shall be responsible to see that the completed Work complies accurately with Contract Documents.

D. In addition to Design-Build Entity's Project Manager as described in Document 00 5200 (Agreement), Design-Build Entity shall keep on the Site at all times during Work progress a competent resident Superintendent, who shall not be replaced without Owner's express written consent. The Superintendent shall be Design-Build Entity's representative at the Site and shall have complete authority to act on behalf of Design-Build Entity.

8.02 Observation of Work by Owner

A. Owner Representative(s). See paragraph 7.01 above.

B. In exercising its responsibilities and authorities under the Contract Documents, Owner does not assume any duties or responsibilities to any Subcontractor or supplier and does not assume any duty of care to Design-Build Entity, Design-Build Entity's Subcontractors, Designers or suppliers. Except as expressly set forth in the Contract Documents, in exercising their respective responsibilities and authorities under the Contract Documents, neither Bridging Architect nor any Owner Representative assume any duties or responsibilities to any Subcontractor, sub-Subcontractor, Designer or supplier nor assume any duty of care to Design-Build Entity or any Subcontractor, sub-Subcontractor, Designer or suppliers.

C. Work shall be performed under Owner's general observation and administration. Design-Build Entity shall comply with Owner's directions and instructions in accordance with the terms of Contract Documents, but nothing contained in these General Conditions shall be taken to relieve Design-Build Entity of any obligations or liabilities under the Contract Documents. Owner's failure to review or, upon review, failure to object to any aspect of Work (including Services) reviewed, shall not be deemed a waiver or approval of any non-conforming aspect of Work.

8.03 Delegation To Consultant

A. Owner may delegate to Bridging Architect and/or other Owner consultant (collectively for purposes of this paragraph, "Consultant") the Owner's role (or portions thereof) under the Contract Documents to observe construction and to perform construction administration including receiving, reviewing, and responding to RFI submittals (if any), and initial review of change order requests. When Owner so delegates these functions, Design-Build Entity must copy Owner on all writings, RFI's, submittals and communications pertaining to such delegated matters, and Owner shall have the right to affirm or disaffirm Bridging Architect or Consultant decisions and recommendations (but must do so promptly). Owner shall at all times retain the sole right to sign and approve change orders.

B. If engaged, Consultant will advise and consult with Owner, but will have authority to act on behalf of Owner only to extent provided in the Contract Documents or as set forth in writing by Owner. Consultant will not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with Work. Consultant will not be responsible for or have control over the acts or omissions of Design-Build Entity, Subcontractors or their agents or employees, or any other persons performing Work.

C. Consultant may review Design-Build Entity's submittals, such as Shop Drawings, Product Data, and Samples, but only for conformance with design concept of Work and with information given in the Contract Documents.

D. Consultant may visit the Site at intervals appropriate to stage of construction to become familiar generally with the progress and quality of Work and to determine in general if Work is proceeding in accordance with Contract Documents. Based on its observations, Consultant may recommend to Owner that it disapprove or reject Work that Consultant believes to be defective or will not produce a complete Project that conforms to Contract Documents or will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by Contract Documents. Owner will also have authority to require special inspection or testing of Work, whether or not the Work is fabricated, installed or completed.

E. Consultant may conduct inspections to recommend to Owner the dates that Design-Build Entity has achieved Substantial Completion and Final Acceptance, and will receive and forward to

Owner for review written warranties and related documents required by Contract Documents.

8.04 Access to Work

A. During performance of Work, Owner and its agents, officers, consultants, and employees may at any time enter upon Work, shops or studios where any part of the Work may be in preparation, or factories where any materials for use in Work are being or are to be manufactured, and Design-Build Entity shall provide proper and safe facilities for this purpose, and shall make arrangements with manufacturers to facilitate inspection of their processes and products to such extent as Owner's interests may require. Other contractors performing work for Owner may also enter upon Work for all purposes required by their respective contracts. Subject to the rights reserved in the Contract Documents, Design-Build Entity shall have sole care, custody, and control of the Site and its Work areas.

B. Owner may, at any time, and from time to time, during the performance of the Work, enter the Work Site for the for the purpose of installing any necessary work by Owner labor or other contracts, and for any other purpose in connection with the installation of facilities. In doing so, Owner shall endeavor not to interfere with Design-Build Entity and Design-Build Entity shall not interfere with other work being done by or on behalf of Owner.

C. If, prior to completion and final acceptance of all the Work, Owner takes possession of any structure or facility (whether completed or otherwise) comprising a portion of the Work with the intent to retain possession thereof (as distinguished from temporary possession contemplating return to Design-Build Entity), then, while Owner is in possession of the same, Design-Build Entity shall be relieved of liability for loss or damage to such structure other than that resulting from the Design-Build Entity's fault or negligence. Such taking of possession by Owner shall not relieve the Design-Build Entity from any provisions of the Contract respecting such structure, other than to the extent specified in the preceding sentence, nor constitute a final acceptance of such structure or facility.

D. If, following installation of any equipment or facilities furnished by Design-Build Entity, defects requiring correction by Design-Build Entity are found, Owner shall have the right to operate such unsatisfactory equipment or facilities and make reasonable use thereof until the equipment or facilities can be shut down for correction of defects without injury to Owner.

ARTICLE 9 – WARRANTY, GUARANTY, AND INSPECTION OF WORK

9.01 Warranty and Guaranty

A. General Representations and Warranties. Design-Build Entity represents and warrants that it is and will be at all times fully qualified and capable of performing every Phase of the Work and to complete Work in accordance with Title 24, California Code of Regulations and the terms of Contract Documents. Design-Build Entity warrants that all design and construction services shall be performed in accordance with generally accepted professional standards of good and sound design and construction practices and all requirements of Contract Documents, and that the design as developed will comply with the Bridging Documents and the intended use of the Project. Design-Build Entity warrants that Work, including but not limited to each item of materials and equipment incorporated therein, shall be new, of suitable grade of its respective kind for its intended use, and free from defects in design, architecture and/or engineering, materials, construction and workmanship. Design-Build Entity warrants that Work shall conform in all respects with all applicable requirements of federal, state and local laws, applicable construction codes and standards, licenses, and permits, Bridging Documents and all descriptions set forth therein, and all other requirements of Contract Documents. Design-Build Entity shall not be responsible, however, for the negligence of others in the specification of specific equipment, materials, design parameters and means or methods of construction where that is specifically shown and expressly required by Contract Documents.

B. Extended Guaranties. Any guaranty exceeding two years provided by the supplier or manufacturer of any equipment or materials used in the Project shall be extended for such term. Design-Build Entity shall supply Owner with all warranty and guaranty documents relative to equipment and materials incorporated in the Project and guaranteed by their suppliers or manufacturers.

C. Environmental and Toxics Warranty. The covenants, warranties and representations contained in this paragraph are effective continuously during Design-Build Entity's Work on the Project and following cessation of labor for any reason including, but not limited to, Project completion. Design-Build Entity covenants, warrants and represents to Owner that:

1. To Design-Build Entity's knowledge after due inquiry, no lead or asbestos-containing materials were installed or discovered in the Project at any time during Design-Build Entity's construction thereof. If any lead or asbestos-containing materials were discovered, Design-Build Entity made immediate written disclosure to Owner.
2. To Design-Build Entity's knowledge after due inquiry, no electrical transformers, light fixtures with ballasts or other equipment containing PCBs are or were located on the Project at any time during Design-Build Entity's construction thereof.
3. To Design-Build Entity's knowledge after due inquiry, no storage tanks for gasoline or any other toxic substance are or were located on the Project at any time during Design-Build Entity's construction thereof. If any such materials were discovered, Design-Build Entity made immediate written disclosure to Owner.
4. Design-Build Entity's operations concerning the Project are and were not in violation of any applicable environmental federal, state, or local statute, law or regulation dealing with hazardous materials substances or toxic substances and no notice from any governmental body has been served upon Design-Build Entity claiming any violation of any such law, ordinance, code or regulation, or requiring or calling attention to the need for any work, repairs, construction, alteration, or installation on or in connection with the Project in order to comply with any such laws, ordinances, codes, or regulations, with which Design-Build Entity has not complied. If there are any such notices with which Design-Build Entity has complied, Design-Build Entity shall provide Owner with copies thereof.

9.02 Inspection of Work

A. All materials, equipment, and workmanship used in Work shall be subject to inspection and testing at all times during construction and/or manufacture in accordance with the terms of Contract Documents. Work and materials, and manufacture and preparation of materials, from beginning of construction until final completion and acceptance of Work, shall be subject to inspection and rejection by Owner, its agents, representatives or independent contractors retained by Owner to perform inspection services, or governmental agencies with jurisdictional interests. Design-Build Entity shall provide them proper and safe conditions for such access and advise them of Design-Build Entity's Site safety procedures and program so that they may comply therewith as applicable. Upon request or where specified, Owner shall be afforded access for inspection at the source of supply, manufacture or assembly of any item of material or equipment, with reasonable accommodations supplied for making such inspections.

B. Design-Build Entity shall give Owner a minimum of two business days' notice of readiness of Work for all required inspections, tests or approvals, and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

C. Owner will hire through separate contract, a Special Inspection and Materials Testing Laboratory. Upon advance notice as set forth above, Owner will endeavor to schedule required inspections, but if resources are not available, Design-Build Entity may need to reschedule the Work at no additional cost to the Owner. If Work fails any inspection, Design-Build Entity will be responsible for Owner's reinspection costs.

D. In the event that a scheduled inspection is canceled in less than 24 hours' notice by Design-Build Entity and the Owner incurs costs associated with the cancellation, Design-Build Entity will reimburse Owner for the actual costs of the canceled inspections. The amount will be deducted from payment owed Design-Build Entity.

E. If applicable laws or regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested or approved by an employee or other representative of such public body, Design-Build Entity shall assume full responsibility for arranging and obtaining such inspections, tests or approvals, and furnish Owner with the required certificates of inspection, or approval. Owner will pay the cost of initial testing and Design-Build Entity shall pay all costs in connection with any follow-up or additional testing. Design-Build Entity shall also be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests or approvals required for the acceptance of materials or equipment to be incorporated in the Work, or of materials, mix designs, or equipment submitted for approval prior to Design-Build Entity's purchase thereof for incorporation in the Work.

F. If Design-Build Entity covers any Work, or the work of others, prior to any required inspection, test or approval without written approval of Owner, Design-Build Entity shall uncover the Work at Owner's request. Design-Build Entity shall bear the expense of uncovering Work and replacing Work.

G. In any case where Design-Build Entity covers Work contrary to Owner's request, Design-Build Entity shall uncover Work for Owner's observation or inspection at Owner's request. Design-Build Entity shall bear the cost of uncovering Work.

H. Whenever required by Owner, Design-Build Entity shall furnish tools, labor and materials necessary to make examination of Work that may be completed or in progress, even to extent of uncovering or taking down portions of finished Work. Should Work be found unsatisfactory, cost of making examination and of reconstruction shall be borne by Design-Build Entity. If Work is found to be satisfactory, Owner, in manner herein prescribed for paying for alterations, modifications, and extra Work, except as otherwise herein specified, will pay for examination.

I. Owner shall select testing agencies to conduct required tests and inspections for the Project. A list of required structural tests and inspections prepared by Design-Build Entity shall be provided to the designated testing agency, Owner's representative and Inspector prior to the start of construction.

J. The testing agency shall forward the test results to Design-Build Entity, Owner, the Project Inspector, and any authority having jurisdiction requested by Owner, within 14 days of the date of the test.

K. Inspection of the Work by or on behalf of Owner, or Owner's failure to do so, shall not under any circumstances be deemed a waiver or approval of any non-conforming aspect of the Work. Design-Build Entity shall have an absolute duty, in the absence of a written Change Order signed by Owner, to perform Work in conformance with the Contract Documents.

L. Any inspection, evaluation, or test performed by or on behalf of Owner relating to the Work is solely for the benefit of Owner, and shall not be relied upon by Design-Build Entity. Design-Build Entity shall not be relieved of the obligation to perform Work in accordance with the Contract Documents, nor relieved of any guaranty, warranty, or other obligation, as a result of any inspections, evaluations, or tests performed by Owner, whether or not such inspections, evaluations, or tests are permitted or required under the Contract Documents. Design-Build Entity shall be solely responsible for testing and inspecting Work already performed to determine whether such Work is in proper condition to receive later Work.

9.03 Correction of Defective Work

A. Design-Build Entity shall correct Defective Work promptly upon knowledge of it. If Design-Build Entity fails to supply sufficient skilled workers, suitable materials or equipment, or to furnish or perform the Work in such a way that the completed Work will conform to Contract Documents, Owner may order Design-Build Entity to replace any Defective Work, or stop any portion of Work to permit Owner (at Design-Build Entity's expense) to replace such Defective Work. These Owner rights are entirely discretionary on the part of Owner, and shall not give rise to any duty on the part of Owner to exercise the rights for the benefit of Design-Build Entity or any other party.

B. Owner may direct Design-Build Entity to correct any Defective Work or remove it from the Site and replace it with Work that is not defective and satisfactorily correct or remove and replace any damage to other Work or the work of others resulting from the correction or removal. Design-Build Entity shall be responsible for any and all claims, costs, losses and damages caused by or resulting from such correction or removal. A Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work and the Contract Sum. If the parties are unable to agree to the amount of an appropriate decrease in the Contract Sum, Owner may decide the proper amount or, in its discretion may elect to leave the Contract Sum unchanged and deduct from moneys due Design-Build Entity, all such claims, costs, losses and damages caused by or resulting from the correction or removal. If Design-Build Entity disagrees with Owner's calculations, it may make a claim as provided in Article 12 of this Document 00 7253. Owner's rights under this paragraph shall be in addition to any other rights it may have under the Contract Documents or by law.

C. Correction period:
   1. With respect to equipment and machinery supplied by Design-Build Entity and incorporated into the Work and placed into continuous service, if within one year after the date of Final Completion of the portion of the Work incorporating the equipment and/or machinery (or, to the extent expressed by Change Order or Certificate of Final Completion, one year after Owner's written acceptance of such equipment), or such longer period as may be prescribed by laws or regulations, or by the terms of the Contract Documents, any equipment or machinery is found to be defective, Design-Build Entity shall promptly, without cost to Owner and in accordance with Owner's written instructions, correct such Defective Work
   2. With respect to structures within the scope of Work, if within one year after the date of Final Completion, or such longer period of time as may be prescribed by laws or regulations, or by the terms of Contract Documents, any Work is found to be defective, Design-Build Entity shall promptly, without cost to Owner and in accordance with Owner's written instructions, correct such Defective Work.
   3. Design-Build Entity shall remove any Defective Work rejected by Owner and replace it with Work that is not defective, and satisfactorily correct or remove and replace any damage to other Work or the work of others resulting therefrom. If Design-Build Entity fails to promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the Defective Work corrected or the rejected Work removed and replaced.
   4. Design-Build Entity shall pay for all claims, costs, losses and damages caused by or resulting from such removal and replacement. Where Design-Build Entity fails to correct Defective Work, or defects are discovered outside the correction period, Owner shall have all rights and remedies granted by law.

D. Where Defective Work or rejected Work (and damage to other Work resulting therefrom) has been removed and replaced under this provision after the commencement of the correction period, the correction period hereunder with respect to such Work shall be extended for an additional period of one year after such removal and replacement has been satisfactorily completed.

E. If following installation of any equipment, machinery, or facilities furnished by Design-Build Entity, defects requiring correction by Design-Build Entity are found, Owner shall have the right to operate such defective equipment or facilities and make reasonable use thereof until the equipment, machinery, or facilities can be shut down for correction of defects without causing injury to Owner.

9.04 Acceptance and Correction of Defective Work by Owner

A. Owner may accept Defective Work. Design-Build Entity shall pay all claims, costs, losses and damages attributable to Owner's evaluation of and determination to accept such Defective Work. If Owner accepts any Defective Work prior to final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work and the Contract Sum. If the parties are unable to agree to the amount of an appropriate decrease in the Contract Sum, Owner may deduct from moneys due Design-Build Entity, all claims, costs, losses, damages, expenses and liabilities attributable to the Defective Work. If Design-Build Entity disagrees with Owner's calculations, Design-Build Entity may make a claim as provided in Article 12 of this Document 00 7253. If Owner accepts any Defective Work after final payment, Design-Build Entity shall pay to Owner, an appropriate amount as determined by Owner.

B. Owner may correct and remedy a deficiency if, after five Days' written notice to Design-Build Entity, Design-Build Entity fails to correct Defective Work or to remove and replace rejected Work as set forth in this Article; or provide a plan for correction of Defective Work acceptable to Owner; or perform Work in accordance with Contract Documents. In connection with such corrective and remedial action, Owner may exclude Design-Build Entity from all or part of the Site; take possession of all or part of Work and suspend Design-Build Entity's Work related thereto; take possession of all or part of Design-Build Entity's tools, appliances, construction equipment and machinery at the Site; and incorporate in Work any materials and equipment stored at the Site or for which Owner has paid Design-Build Entity but which are stored elsewhere. Design-Build Entity shall allow Owner, its representatives, agents, employees, and other contractors and Owner's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph. Design-Build Entity shall be responsible for all claims, costs, losses, damages, expenses and liabilities incurred or sustained by Owner in exercising such rights and remedies. A Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to Work and the Contract Sum. If the parties are unable to agree to the amount of an appropriate decrease in the Contract Sum, Owner may deduct from moneys due Design-Build Entity, all claims, costs, losses and damages caused by or resulting from the correction or removal. If Design-Build Entity disagrees with Owner's calculations, Design-Build Entity may make a claim as provided in Article 12 of this Document 00 7253.

9.05 Rights upon Inspection or Correction

A. Design-Build Entity shall not be allowed an extension of Contract Time because of any delay in the performance of Work attributable to the exercise by Owner of its rights and remedies under this Article 9. Where Owner exercises its rights under this Article 9, it retains all other rights it has by law or under the Contract Documents including, but not limited to, the right to terminate Design-Build Entity's right to proceed with the Work under the Contract Documents and/or make a claim or back charge where a Change Order cannot be agreed upon.

B. Inspection by Owner shall not relieve Design-Build Entity of its obligation to have furnished material and workmanship in accordance with Contract Documents. Payment for Work completed through periodic progress payments or otherwise shall not operate to waive Owner's right to require full compliance with Contract Documents and shall in no way be deemed as acceptance of the Work paid therefore. Design-Build Entity's obligation to complete the Work in accordance with Contract Documents shall be absolute, unless Owner agrees otherwise in writing.

9.06 Samples and Tests of Materials and Work

A. Design-Build Entity shall furnish, in such quantities and sizes as may be required for proper examination and tests, samples or test specimens of all materials to be used or offered for use in connection with Work. Design-Build Entity shall prepare samples or test specimens at its expense and furnish them to Owner. Design-Build Entity shall submit all samples in ample time to enable Owner to make any necessary tests, examinations, or analyses before the time it is desired to incorporate the material into the Work.

B. Test samples or specimens of material for testing shall be taken by the Bridging Architect, his or her representative, Project Inspector or representative of the testing agency. In no case shall Design-Build Entity or vendor select the sample.

9.07 Proof of Compliance of Contract Provisions

A. In order that Owner may determine whether Design-Build Entity has complied or is complying with requirements of Contract Documents not readily enforceable through inspection and tests of Work and materials, Design-Build Entity shall at any time, when requested, submit to Owner properly authenticated documents or other satisfactory proofs of compliance with all applicable requirements.

9.08 Acceptance

A. Inspection by Owner or its authorized agents or representatives, any order or certificate for the payment of money, any payment, acceptance of the whole or any part of Work by Owner, any extension of time, any verbal statements on behalf of Owner or its authorized agents or representatives shall not operate as a waiver or modification of any provision of the Contract Documents, or of any power reserved to Owner herein or therein or any right to damages provided in the Contract Documents. Any waiver of any breach of the Contract Documents shall not be held to be a waiver of any other subsequent breach.

ARTICLE 10 – DESIGN-BUILD ENTITY'S ORGANIZATION AND EQUIPMENT

10.01 Design-Build Entity's Legal Address

A. Address given in Design-Build Entity's Proposal is hereby designated as Design-Build Entity's legal address. Design-Build Entity may change its legal address by notice in writing, delivered to Owner, which in conspicuous language advises Owner of a change in legal address, and which Owner accepts in writing. Notice procedures are provided in Agreement.

10.02 Design-Build Entity's Office at the Work Site

A. Design-Build Entity shall maintain an office at the Site, which office shall be headquarters of a Design-Build Entity representative authorized to transmit to and receive from Owner, communications, instructions or Drawings. Communications, instructions, or Drawings given to Design-Build Entity's representative or delivered at the Site office in representative's absence shall be deemed to have been given to Design-Build Entity.

10.03 Design-Build Entity's Superintendents or Forepersons

A. Design-Build Entity shall at all times be represented on Site by one or more superintendents or forepersons authorized and competent to receive and carry out any instructions that Owner may give, and shall be liable for faithful observance of instructions delivered to Design-Build Entity or to authorized representative or representatives on Site.. The obligations of this paragraph are in addition to all matters relating to Design-Build Entity's Project Manager described in Document

00 5200 (Agreement)

10.04 Proficiency in English

A. Supervisors, security guards, safety personnel and employees who have unescorted access to the Site shall possess proficiency in the English language in order to understand, receive and carry out oral and written communications or instructions relating to their job functions, including safety and security requirements.

10.05 Design-Build Entity's And Subcontractors' Employees

A. Design-Build Entity shall employ, and shall permit its Subcontractors to employ, only competent and skillful personnel to do Work. If Owner notifies Design-Build Entity that any of its employees, or any of its Subcontractors' employees on Work is incompetent, unfaithful, disorderly or profane, or fails to observe customary standards of conduct or refuses to carry out any provision of the Contract Documents, or uses threatening or abusive language to any person on Work representing Owner, or violates sanitary rules, or is otherwise unsatisfactory, and if Owner requests that such person be discharged from Work, then Design-Build Entity or its Subcontractor shall immediately discharge such person from Work and the discharged person shall not be re-employed on the Work except with consent of Owner.

10.06 Design-Build Entity to List Trades Working

A. Design-Build Entity shall list the trades working on the Site and their scheduled activities on a daily basis, and provide a copy of that list to Owner.

10.07 Design-Build Entity's Use of the Site

A. Design-Build Entity shall not make any arrangements with any person to permit occupancy or use of any land, structure or building within the limits of the Work, for any purpose whatsoever, either with or without compensation, in conflict with any agreement between Owner and any owner, former owner or tenant of such land, structure or buildings. Design-Build Entity may not occupy Owner-owned property outside the limit of the Work as indicated on the Drawings unless it obtains prior written approval from Owner.

ARTICLE 11 – PROSECUTION AND PROGRESS OF THE WORK

11.01 Design-Build Entity To Submit Required Schedules

A. At the pre-scheduling conference described in Section 01 3200 (Progress Schedules and Reports, para 1.04.B), or as otherwise agreed by the parties, Design-Build Entity shall submit to Owner for review and discussion, and again in final form prior to the first payment application, the following documents:

1. Schedule of Values ("SOV") per Section 01 2000;
2. Progress schedules and reports as required in Section 01 3200, as applicable;
3. Quality Control program and other submittals; and
4. Schedule of submittals per Section 01 3300.

B. No progress payment shall be due or owing to Design-Build Entity until such schedules are submitted to and acceptable to Owner as meeting the requirements of the Contract Documents. Owner's acceptance of Design-Build Entity's schedules will not create any duty of care or impose on Owner any responsibility for the sequencing, scheduling or progress of Work nor will it interfere with or relieve Design-Build Entity from Design-Build Entity's full responsibility therefore.

C. Before commencing any portion of Work, Design-Build Entity shall inform Owner in writing as to time and place at which Design-Build Entity wishes to commence Work, and nature of Work to be done, in order that proper provision for inspection of Work may occur, and to assure measurements necessary for record and payment. Information shall be given to Owner a reasonable time in advance of time at which Design-Build Entity proposes to begin Work, so that Owner may complete necessary preliminary work without inconvenience or delay to Design-Build Entity.

11.02 Design-Build Entity To Supply Sufficient Workers And Materials

A. Unless otherwise required by Owner under the terms of Contract Documents, Design-Build Entity shall at all times keep on the Site materials and employ qualified workers sufficient to prosecute Work at a rate and in a sequence and manner necessary to complete Work within the Contract Time. This obligation shall remain in full force and effect notwithstanding disputes or claims of any type.

B. At any time during progress of Work should Design-Build Entity directly or indirectly (through Subcontractors) refuse, neglect, or be unable to supply sufficient materials or employ qualified workers to prosecute the Work as required, then Owner may require Design-Build Entity to accelerate the Work and/or furnish additional qualified workers or materials as Owner may consider necessary, at no cost to Owner. If Design-Build Entity does not comply with the notice within three Business Days of date of service thereof, Owner shall have the right (but not a duty) to provide materials and qualified workers to finish the Work or any affected portion of Work, as Owner may elect. Owner may, at its discretion, exclude Design-Build Entity from the Site, or portions of the Site or separate work elements during the time period that Owner exercises this right. Owner will deduct from moneys due or which may thereafter become due under the Contract Documents, the sums necessary to meet expenses thereby incurred and paid to persons supplying materials and doing Work. Owner will deduct from funds or appropriations set aside for purposes of Contract Documents the amount of such payments and charge them to Design-Build Entity as if paid to Design-Build Entity. Design-Build Entity shall remain liable for resulting delay, including liquidated damages (if any) and indemnification of Owner from claims of others.

C. Exercise by Owner of the rights conferred upon Owner in this subparagraph is entirely discretionary on the part of Owner. Owner shall have no duty or obligation to exercise the rights referred to in this subparagraph and its failure to exercise such rights shall not be deemed an approval of existing Work progress or a waiver or limitation of Owner's right to exercise such rights in other concurrent or future similar circumstances. (The rights conferred upon Owner under this subparagraph are, like all other such rights, cumulative to Owner's other rights under any provision of the Contract Documents.)

11.03 Design-Build Entity To Protect Underground Facilities

A. Drawings may indicate above and below grade structures and Underground Facilities such as: drainage lines, storm drains, sewers, water, gas, electrical, chemical, hot water, and other similar items and utilities. Design-Build Entity shall locate these known existing installations before proceeding with trenching or other operations that may cause damage. Design-Build Entity shall further locate, by carefully excavating with small equipment, potholing and principally by hand, all such utilities or installations that are to remain and that are subject to damage. If additional utilities whose locations are unknown are discovered, Design-Build Entity shall immediately report to Owner for disposition of the same.

B. Additional utilities whose locations are unknown to Owner are suspected to exist. Design-Build Entity shall be alert to their existence; if they are encountered, Design-Build Entity shall immediately report to Owner for disposition of the same. Design-Build Entity shall also investigate the existence of existing service laterals, appurtenances or other types of utilities,

indicated by the presence of an underground transmission main or other visible facilities, such as buildings, new asphalt, meters and junction boxes, on or adjacent to the Site, even if not shown or indicated in information supplied by Owner or the regional notification center. Design-Build Entity shall immediately secure all such available information and notify Owner and the utility owner, in writing, of its discovery.

C. At all times during construction, all operating Underground Facilities shall remain in operation, unless the Contract Documents expressly indicate otherwise. Design-Build Entity shall maintain such Underground Facilities in service where appropriate; shall repair any damage to them caused by the Work; and shall incorporate them into the Work, including reasonable adjustments to the design location (including minor relocations) of the existing or new installations. Design-Build Entity shall take immediate action to restore any in service installations damaged by Design-Build Entity's operations.

11.04 Design-Build Entity to Locate Underground Utilities

A. Before commencing work of digging trenches or excavation, Design-Build Entity shall also review all information available regarding subsurface conditions, including but not limited to information supplied in Document 00 3132 (Geotechnical Data and Existing Conditions), and subject to the terms and conditions of these documents, Design-Build Entity shall also comply with Government Code Sections 4216 to 4216.9, and in particular Section 4216.2 which provides, in part:

> "Except in an emergency, every person planning to conduct any excavation shall contact the appropriate regional notification center at least two working days, but no more than 14 calendar days, prior to commencing that excavation, if the excavation will be conducted in an area which is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the excavator, and, if practical, the excavator shall delineate with white paint or other suitable markings the area to be excavated. The regional notification center shall provide an inquiry identification number to the person who contacts the center and shall notify any member, if known, who has a subsurface installation in the area of the proposed excavation."

B. Design-Build Entity shall contact USA, and schedule the Work to allow ample time for the center to notify its members and, if necessary, for any member to field locate and mark its facilities. Design-Build Entity is charged with knowledge of all subsurface conditions reflected in USA records. Prior to commencing excavation or trenching work, Design-Build Entity shall provide Owner with copies of all USA records secured by Design-Build Entity. Design-Build Entity shall advise Owner of any conflict between information provided in Document 00 3132 (Geotechnical Data and Existing Conditions), the Drawings and that provided by USA records. Design-Build Entity's excavation shall be subject to and comply with the Contract Documents, including without limitation all applicable requirements set forth in this Document 00 7253 (General Conditions).

C. Additional compensation or extension of time on account of utilities not shown or otherwise brought to Design-Build Entity's attention, including reasonable action taken to protect or repair damage, shall be determined as provided in this Document 00 7253.

1. At no additional cost to Owner, Design-Build Entity shall incorporate into the Work main or trunk line utilities identified in the Contract Documents and other utilities or underground structures known or reasonably discernible and that will remain in service, including reasonable adjustments to the design location (including minor relocations) of the existing or new installations. Design-Build Entity shall take immediate action to restore any in service installations damaged by Design-Build Entity's operations. Should Owner determine that Design-Build Entity has not responded in a timely manner or not diligently pursued completion of the Work, Owner may restore service and deduct the costs of such

action by Owner from the amounts due under the Contract.

2. Consistent with Government Code Section 4215, as between Owner and Design-Build Entity, Owner will be responsible for the timely removal, relocation, or protection of existing main or trunk line utility facilities located on the Site only if such utilities are not identified in the Contract Documents or Document 00 3132 (Geotechnical Data and Existing Conditions). Owner will compensate for the cost of locating and repairing damage not due to Design-Build Entity's failure to exercise reasonable care, removing and relocating such main or trunk line utility facilities not indicated in the Contract Documents or Document 00 3132 (Geotechnical Data and Existing Conditions) with reasonable accuracy, and equipment on the Project necessarily idled during such work.

D. Design-Build Entity shall have full responsibility for: (i.) reviewing and checking all available information and data and information supplied from the regional notification center; (ii.) locating all Underground Facilities shown or indicated in the Contract Documents, available information, or indicated by visual observation including, but not limited to, and by way of example only, engaging qualified locating services and all necessary back hoeing and potholing; (iii.) coordination of the Work with the owners of such Underground Facilities during construction; and (iv.) the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

E. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated in the materials supplied by Owner or in information on file at USA or is otherwise reasonably available to Design-Build Entity, then Design-Build Entity shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby (and in no event later than seven Days), and prior to performing any Work in connection therewith (except in an emergency as required by this Document 00 7253), identify the owner of such Underground Facility and give written notice to that owner and to Owner. During such time, Design-Build Entity shall be responsible for the safety and protection of such Underground Facility.

F. Design-Build Entity shall be allowed an increase in the Contract Sum or an extension of the Contract Time, or both, to the extent that they are attributable to the existence of any Underground Facility that is owned and was built by Owner only where the Underground Facility:
   1. Was not shown or indicated in the Contract Documents or in the information supplied pursuant to Document 00 3132 (Geotechnical Data and Existing Conditions) or in information on file at USA; and
   2. Design-Build Entity did not know of it; and
   3. Design-Build Entity could not reasonably have been expected to be aware of it or to have anticipated it from the information available. (For example, if surface conditions such as pavement repairs, valve covers, or other markings, indicate the presence of an Underground Facility, then an increase in the Contract Price or an extension of the Contract Time will not be due, even if the Underground Facility was not indicated in the Contract Documents, in the information supplied to Design-Build Entity pursuant to Document 00 3132 (Geotechnical Data and Existing Conditions), in information on file at USA, or otherwise reasonably available to Design-Build Entity.)

G. Design-Build Entity shall bear the risk that Underground Facilities not owned or built by Owner may differ in nature or locations shown in information made available by Owner pursuant to Document 00 3132 (Geotechnical Data and Existing Conditions), in information on file at USA, or otherwise reasonably available to Design-Build Entity. Underground Facilities are inherent in construction involving digging of trenches or other excavations and Design-Build Entity is to apply its skill and industry to verify the information available.

11.05 Connections To Or Alterations To Existing Conditions And Facilities

A. In planning and performing the Work, every effort shall be made to minimize the levels of noise, dirt, dust, molds, biological organisms (e.g., aspergillus), fumes, odors and similar items to the

extent possible. Design-Build Entity shall remove, cut, alter, replace and repair existing building infrastructure, including without limitation plumbing, medical gas, fire and life safety equipment, utilities and casework, consistent with Design-Build Entity's coordination and planning responsibilities to not interfere with ongoing Owner operations, as necessary to install new Work. Except as otherwise shown or specified, Design-Build Entity shall not cut, alter or remove any structural Work, and shall not disturb any ducts, plumbing, steam, gas, or electrical Work without approval of Owner.

B. Unless otherwise specified or indicated, Design-Build Entity shall make all connections or alterations to existing facilities, including structures, drain lines, and utilities such as water, sewer, gas, telephone, and electric, necessary to complete the Work of the Contract Documents. In each case, Design-Build Entity shall provide advance notice to and receive permission from Owner or the owning utility prior to undertaking any connection or making any alterations.

C. Design-Build Entity shall restore existing conditions (walls, structures, partitions, floors, mechanical and electrical Work, etc.) disturbed or removed as a result of performing required new Work to the original conditions. Existing conditions or facilities to be altered or extended and found to be defective in any way, shall be reported to Owner before commencing Work. Materials and workmanship used in restoring conditions or facilities shall conform or exceed in type and quality that of original existing construction, except as otherwise shown or specified or required by codes or applicable standards.

11.06 Lines And Grades

A. All Work shall be done to the lines, grades, and elevations indicated on the Drawings.

B. Owner may such provide basic horizontal and vertical control points to be used as datums for the Work, as may be indicated on Drawings and Specifications; however, all further survey, layout, and measurement work shall be performed by Design-Build Entity as a part of the Work.

C. Design-Build Entity shall provide at its cost an experienced, appropriately licensed civil engineer or land surveyor, and all required instrument persons, competent assistants, and such instruments, tools, stakes and other materials required to complete the survey, layout, and measurement of work. In addition, Design-Build Entity shall furnish at its cost competent persons and such tools, stakes, and other materials as Owner may require in establishing or designating control points, or in checking survey, layout, and measurement work performed by Design-Build Entity.

D. Design-Build Entity shall locate control points before commencing construction Work on any Site, preserve all reference points throughout construction, and promptly replace all points which become lost or destroyed.

E. Design-Build Entity shall keep Owner informed, a reasonable time in advance, of the times and places at which it wishes to do Work, so that any checking deemed necessary by Owner may be done with minimum inconvenience to Owner and minimum delay to Design-Build Entity.

F. Design-Build Entity shall remove and reconstruct Work which is improperly located.

11.07 Design-Build Entity To Not Disrupt Owner Operation

A. Design-Build Entity shall schedule and execute all Work in a manner that does not interfere with or disrupt Owner operations, including but not limited to, parking, utilities, noise, vibration, odors/fumes, access by employees and administration, access by vendors and any other person or entity using Owner facilities or doing business with Owner. Design-Build Entity shall produce and supply coordination plans and make timely requests to Owner, following Owner procedures,

for any necessary interference of construction with Owner, with which Owner will reasonably cooperate. At a minimum, Design-Build Entity shall make every effort to minimize the levels of noise, vibration, dirt, dust, molds, biological organisms, fumes, odors and similar items to the extent possible and in accordance with local ordinances or other requirements.

B. Design-Build Entity's use of service areas and equipment and vehicle ingress and egress shall be kept to the minimum essential to its operations. Non-essential vehicles and equipment shall be kept out of such areas. In the event of unavoidable conflict with Owner's operations, and upon request of facility staff or vehicle attendants, Design-Build Entity shall eliminate such conflicting use immediately for emergency services.

C. Design-Build Entity shall produce and supply coordination plans and requests to Owner, following Owner procedures, for all necessary interface of construction with Owner, which Owner will reasonably cooperate with.

11.08 Maintenance, Product Handling, And Protection

A. Design-Build Entity shall transport, deliver, handle, and store materials and equipment at the Site in such a manner as to prevent the breakage, damage or intrusions of foreign matter or moisture, and otherwise to prevent damage. Design-Build Entity shall arrange for Owner right of inspection or observation of all materials and equipment in fabrication, assembly or transport, which right Owner may exercise in its sole unfettered discretion.

B. Design-Build Entity shall provide Owner with copies of the OSHA Material Safety Data Sheets (MSDS) for all products containing a hazardous substance, examples: Adhesives, paints, sealants, and the like.

C. Design-Build Entity shall provide packaged material in manufacturer's original containers with seals unbroken and labels intact until incorporated into the Work.

D. Design-Build Entity shall remove all damaged or otherwise unsuitable material and equipment promptly from the Site.

E. Design-Build Entity shall protect all work in place.

F. Cost of maintenance of systems and equipment prior to either Substantial Completion or Final Completion will be considered as included in Contract prices and no direct or additional payment will be made therefore.

11.09 Electronic Communications and Information Distribution

A. To maximize the efficiency of Project communication, Design-Build Entity agrees to work collaboratively with Owner to implement a common, accessible system for creating and maintaining Project reports, storing and retrieving Project minutes, logs, CAD files, and other critical Project documentation.

B. All communications recognized under the Contract Documents shall be in writing, in the form of a serialized document, by type of communication. For example, RFI's shall be serialized beginning with RFI No. 1; payment applications shall be serialized beginning with Payment Application No. 1, submittals shall be serialized per specification section and transmitted with transmittal sheets beginning with Transmittal No. 1; and correspondence shall be serialized beginning with letter No. 1. Design-Build Entity may propose other record management and identification systems or protocols, intended to facilitate orderly transmittal of project information, storage and retrieval of such information, which Owner will review consistent with these stated objectives, and accept or reject in its sole discretion.

C. All documents requiring signatures for approval prior to implementing action, as stipulated in other portions of these Contract Documents, shall require a manually signed, serialized letter delivered to the other party at its address for notice otherwise specified in the Contract Documents, either personally or by mail. Electronic data transfer of such correspondence will serve to expedite preliminary concurrence of information, only. Receipt of "hard copy" signature on forms is required prior to implementing action or work as the conditions may require. For example, change orders and authorizations for extra cost, require signatures. A party may acknowledge receipt of correspondence by e-mail, but in the absence of such acknowledgment, mail or personal delivery is required.

D. All emails shall be copied to Owner's and Design-Build Entity's Project Representative. Owner reserves the right to preclude e-mail communication, in whole or in part, as Project needs may require.

E. Communication between Owner and Design-Build Entity shall not be via Twitter, Facebook, or other types of instant text message systems. Any such communications shall be inadmissible for any purpose related to this Contract.

11.10 Design-Build Entity to Require, Review, Approve and Submit Submittals and Shop Drawings In Addition To Completed Design Drawings

A. Design-Build Entity's design team must obtain from Design-Build Entity's construction team, and then independently review and approve (and so indicate thereon), all technical submittals, to verify the quality of the Work and its conformance to design intent. Design-Build Entity's technical submittals consist of Shop Drawings, Manufacturer's Data, Samples and Miscellaneous Submittals.

1. Shop Drawings include, but are not limited to, custom prepared data such as fabrication, erection and installation drawings, schedule information, setting diagrams, actual shop work manufacturing instructions, custom templates, special wiring diagrams, coordination drawings, individual system or equipment inspection and test reports, concrete design mixes, Design-Build Entity engineering calculations and specially prepared operating and maintenance instructions, as applicable to the Work.
2. Manufacturer's Data includes, but is not limited to, standard prepared data for manufactured products such as a manufacturer's production specification and installation instructions, printed statements of compliance and applicability, catalogue cuts, product photographs, product operation and maintenance instruction and spare-parts listings, printed product warranties, as applicable to the Work.
3. Samples include, but are not limited to, physical samples of the Work such as sections of manufactured or fabricated Work, cuts or containers of materials, complete units for repetitively used products, paint samples, textile swatches, specimens for coordination of visual effect, graphic symbols and units of Work to be used for independent inspection and testing, as applicable to the Work.
4. Miscellaneous Submittals include, but are not limited to, job-prepared warranties and guaranties, maintenance agreements, project photographs, Design-Build Entity's survey data, excavating/foundation field reports, tradesmen testing/qualifying/certifying reports, list and delivery schedule for Owner-furnished and Design-Build Entity installed equipment, printed industry standards, record drawings, as-built records, collected and bound operating and maintenance manuals, keys and other security, protection and/or safety devices, maintenance tools and spare parts, as applicable to the Work.

B. Design-Build Entity shall coordinate all technical submittals from Subcontractors or otherwise, and review them for completeness and compliance with applicable Contract Documents. Design-Build Entity's design team must independently review and approve (and so indicate thereon), all technical submittals, prior to their coordination and review by Design-Build Entity.

C. Design-Build Entity shall submit submittals to Owner for review in strict accordance with Section

01 3300 (Submittals). Design-Build Entity's submittal of Shop Drawings shall be in addition to Design-Build Entity's Design Documents developed pursuant to the Contract Documents. Submission of a submittal shall constitute Design-Build Entity's representation that all requirements of Section 01 3300 (Submittals) have been complied with. All submittals will be identified as Owner may require and in the number of copies specified in Section 01 3300 (Submittals).

D. Design-Build Entity shall not perform Work that requires submission of a Shop Drawing or Sample or other submittal prior to submission and favorable review of the Shop Drawing or Sample or submittal. Where a Shop Drawing or Sample or other submittal is required by Contract Documents or the final Schedule of Shop Drawing and Sample Submittals accepted by Owner, any related Work performed prior to Owner's approval of the pertinent submittal shall be at the sole expense, responsibility and risk of Design-Build Entity.

11.11 Cost Data

A. Design-Build Entity shall maintain full and correct information as to the number of workers employed in connection with each subdivision of Work, the classification and rate of pay of each worker in form of certified payrolls, the cost to Design-Build Entity of each class of materials, tools and appliances used by Design-Build Entity in Work, and the amount of each class of materials used in each subdivision of Work. Design-Build Entity shall provide Owner with monthly summaries of this information. If Design-Build Entity maintains or is capable of generating summaries or reports comparing actual Project costs with Proposal estimates or budgets, Design-Build Entity shall provide Owner with a copy of such report upon Owner's request and whenever it is generated.

B. Design-Build Entity shall maintain daily job reports recording all significant activity on the job, including the number of workers on Site, Work activities, problems encountered and delays. Design-Build Entity shall provide Owner with copies for each Day Design-Build Entity works on the Project, to be delivered to Owner either the same Day or the following morning before starting work at the Site. Design-Build Entity shall take monthly progress photographs of all areas of the Work. Design-Build Entity shall maintain copies of all correspondence with Subcontractors and records of meetings with Subcontractors.

C. Owner shall have the right to audit and copy Design-Build Entity's books and records of any type, nature or description relating to the Project (including but not limited to financial records reflecting in any way costs claimed on the Project), and to inspect the Site, including Design-Build Entity's trailer, or other job Site office, and this requirement shall be contained in the subcontracts of Subcontractors working on Site. By way of example, Owner shall have the right to inspect and obtain copies of all Contract Documents, planning and design documents, Proposal and negotiation documents, cost records and job cost variance reports, design modification proposals, value engineering or other cost reduction proposals, revisions made to the original design, job progress reports, photographs, and as-built drawings maintained by Design-Build Entity. Owner and any other applicable governmental entity shall have the right to inspect all information and documents maintained under this paragraph 11.11., at any time during the Project and for a period of five years following Final Completion. This right of inspection shall not relieve Design-Build Entity of its duties and obligations under the Contract Documents. This right of inspection shall be specifically enforceable in a court of law, either independently or in conjunction with enforcement of any other rights in the Contract Documents.

11.12 Record Documents

A. Design-Build Entity shall maintain in a safe place at the Site, construction records to include, but not limited to, the following documents to be maintained on a current basis:

1. One record copy of all Drawings, Specifications, Addenda, Contract Modifications, Change

Orders, Work Directives, Force Account orders, and written interpretations and clarifications, organized and in good order and marked to show all as-built changes made during construction.

2. Shop drawings; product data/material data sheets; samples; submittal; purchases; materials; equipment; inspections; applicable handbooks; Title 15; Title 24; the California Uniform Building Code; maintenance and operating manuals and instructions; other related documents and revisions which arise out of the Construction Contracts. Design-Build Entity shall maintain records in duplicate, of principal building layout lines, elevations for the bottom of footings, floor levels, and key site elevations (certified by a qualified surveyor or professional engineer, if necessary).

B. Design-Build Entity shall make all such records available to Owner. At the completion of the Project, Design-Build Entity shall deliver all such records to the Owner to have a complete set of record as-built drawings.

C. Design-Build Entity's failure to comply with recordkeeping requirements under this subparagraph entitles Owner to withhold five percent of any Application for Payment until compliance.

ARTICLE 12 – CLAIMS BY DESIGN-BUILD ENTITY

12.01 General

A. The claim notice and documentation procedure described in this Article 12 applies to all claims and disputes arising under the Contract Documents, including without limitation any claim or dispute by any Subcontractor or material supplier. All Subcontractor and supplier claims of any type shall be brought only through Design-Build Entity as provided in this Article 12. Under no circumstances shall any Subcontractor or supplier make any direct claim against Owner.

B. "Claim" means a written demand or written assertion by Design-Build Entity seeking, as a matter of right, the payment of money, the adjustment or interpretation of Contract Documents terms, or other relief arising under or relating to Contract Documents. In order to qualify as a "claim," the written demand must state that it is a claim submitted under this Article 12. A voucher, invoice, proposed change, Application for Payment, cost proposal, RFI, change order request, or other routine or authorized form of request for payment is not a claim under the Contract Documents. If such request is disputed as to liability or amount, then the disputed portion of the submission may be converted to a claim under the Contract Documents by submitting a separate claim in compliance with claim submission requirements.

C. The provisions of this Article 12 constitute a non-judicial claim settlement procedure, and also step one of a two-step claim presentment procedure by agreement under Section 930.2 of the California Government Code. Specifically, step one is compliance with this contract claims procedure and filing/administering timely contract claims in accordance with the Contract Documents first. Step two is filing a timely Government Code Section 910 claim in accordance with the California Government Code.

D. The provisions of this Article 12 shall survive termination, breach or completion of the Contract Documents. Design-Build Entity shall bear all costs incurred in the preparation and submission of a claim. Pursuant to Government Code Section 930.2, the one-year period in Government Code section 911.2 to file a Government Code Section 910 claim shall be reduced to 150 days. Any Government Code Section 910 claims shall be presented in accordance with the Government Code and shall affirmatively indicate Design-Build Entity's prior compliance with the claims procedure herein and previous dispositions of claims submitted hereunder.

12.02 Mandatory Procedures for Disputed Work

A. Disputed Work and Contract Procedures. Should it appear to Design-Build Entity that the Work

to be performed or any of the matters relative to the Contract Documents are not satisfactorily detailed or explained therein, or should any questions arise as to the meaning or intent of the Contract Documents, or should any dispute arise regarding the true value of any work performed, work omitted, extra work that the Design-Build Entity may be required to perform, time extensions, payment to the Design-Build Entity during performance of this Contract, performance of the Contract, and/or compliance with Contract procedures, Owner decisions or directions, Owner actions or inactions, or should Design-Build Entity otherwise seek extra time or compensation FOR ANY REASON WHATSOEVER (hereafter, "Disputed Work"), then Design-Build Entity shall so advise Owner in writing and complete any applicable procedures set forth in the Contract for addressing and/or resolving such matters (including but not limited to other Articles of this Document 00 7253 and Section 01 2600 [Modification Procedures and Pricing of Changed Work]).

B. Timely Notice and Review of Disputed Work Required. Before commencing any Disputed Work (e.g., disputed RFI responses, Supplemental Instructions, Information Bulletins, decisions, etc.), or within ten (10) Days after Design-Build Entity's first knowledge of the Disputed Work, whichever is earlier, Design-Build Entity shall file a written notice and preliminary good faith cost proposal for the Disputed Work with Owner stating clearly and in detail its objection and reasons for contending the Disputed Work is outside or in breach of the requirements of Contract Documents. It is the responsibility of the Design-Build Entity to substantiate that the Disputed Work is in fact a change from the base scope of Work.

1. The written notice must identify the subcontractors, vendors, suppliers affected, if any, sufficient for Owner to visit the Site to inspect the work and/or conduct a telephonic interview of the persons involved, and/or to photograph the work in question; and Design-Build Entity shall supply digital photographs by email and provide Owner with contact information for all involved subcontractors, suppliers of any tier, to facilitate prompt "in person" review at the next job site meeting.
2. The preliminary cost proposal must provide a good faith preliminary estimate of the labor (workers, crews), equipment and/or materials involved, and a corresponding good faith preliminary estimate of cost.
3. The written notice and preliminary cost proposal for Disputed Work must be placed, by Design-Build Entity, as a specific discussion item on the Agenda for the next weekly meeting, where both Owner and Design-Build Entity shall then make a good-faith effort to review the Disputed Work, involving all Subcontractors, vendors, and other involved parties.
4. If discussions at the weekly meeting do not resolve the Disputed Work, then Design-Build Entity shall update its written notice and preliminary cost proposal based upon the discussions at the weekly meeting, and shall calendar the matter for discussion at the project executive level to occur within 10 days of the weekly meeting unless mutually agreed otherwise. The attendees at the project executive level meeting shall include all appropriate parties to the dispute and, in addition, senior level representatives of the Owner's and Design-Build Entity's Project team who have, or who have been designated with, primary responsibility for administration of the Contract.
5. If the initially required written notice and preliminary cost proposal for Disputed Work is not issued within the time period required herein, or if Design-Build Entity proceeds with the Disputed Work without first having given the notice of the Disputed Work, Design-Build Entity shall be deemed to have waived its rights to further claim on the specific issue.

C. Timely Notice of Potential Claims Required. Owner will review Design-Build Entity's timely notice and preliminary cost proposal for Disputed Work at the Project executive level, and provide a decision. If, after receiving the decision, Design-Build Entity disagrees with it or still considers the Work required of it to be outside of the requirements of Contract Documents, then Design-Build Entity shall so notify Owner, in writing, within ten (10) Days after receiving the decision, by submitting a notice of potential claim, stating that a formal claim will be issued. (If for any reason Owner should fail to act or provide a decision on a notice and preliminary cost proposal within thirty (30) days, then Design-Build Entity shall submit a notice of potential claim within ten days

following the thirtieth (30th) day, i.e., or by the 40th day following the notice and preliminary cost proposal.) In all cases, Design-Build Entity shall continue to prosecute the Disputed Work to completion.

D. Claim Negotiations Required. Upon receipt of Design-Build Entity's notice of potential claim, Design-Build Entity and Owner shall negotiate the claim, again, once at the Project level, and a second time at the executive level, if necessary, to try and reach agreement. If Design-Build Entity and Owner fail or are unable to schedule or complete such negotiations, then the notice of potential claims shall be deemed denied.

E. Quarterly Claims Required. At the end of each calendar year quarter (March 31, June 30, September 30 and December 31) of each year, for each and every notice of potential claim that Design-Build Entity may have submitted in that quarter, Design-Build Entity shall submit a formal claim in the form specified herein. Design-Build Entity may file a single consolidated claim each quarter, or may file separate claims each quarter, as Design-Build Entity sees fit, provided Design-Build Entity complies with the requirements below. (Design-Build Entity may defer until the next reporting period the filing of a formal claim for any notices of potential claim timely issued within the last 21 days of the prior quarter.) The formal claim(s) shall include all arguments, justification, cost or estimates, schedule analysis, and detailed documentation supporting Design-Build Entity's position, for each notice of potential claim that Design-Build Entity intends to pursue as a formal claim (further described below).

F. Claim Updates Required. If Disputed Work persists longer than a single calendar quarter, then Design-Build Entity shall, every quarter until the Disputed Work ceases, submit to Owner a document titled "Claim Update" that shall update and quantify all elements of the claim as completely as possible. Design-Build Entity's failure to submit a Claim Update or to quantify costs every quarter shall result in waiver of the claim for that period. Claims or Claim Updates stating that damages, total damages (direct and indirect), schedule impact and/or any time extension will be determined at a later date shall not comply with this subparagraph and shall result in Design-Build Entity waiving its claim(s). Design-Build Entity shall also maintain a continuing "claims log" that shall list all outstanding claims and their value, and provide such log to Owner quarterly.

12.03 Action on Claims

A. Final Decision. Upon receipt of Design-Build Entity's formal claim(s) including all arguments, justifications, cost or estimates, schedule analysis, and documentation supporting its position as required herein, and if the claims negotiations are unsuccessful, Owner or its designee will review the issue and render a final determination. If Owner should fail to provide a decision, then such claims shall be deemed denied after 45 days following their receipt.

B. Mediation. All Design-Build Entity formal claims shall, as a condition precedent to litigation thereon, first be mediated. Mediation shall be confidential, non-binding and utilize the services of a mediator mutually acceptable to the parties and, if the parties cannot agree, a mediator selected by the American Arbitration Association from its panel of approved mediators trained in construction industry mediation. All statutes of limitation shall be tolled from the date of the demand for mediation until a date two weeks following the mediation's conclusion. All unresolved Design-Build Entity claims shall be submitted to the same mediator. The cost of mediation shall be equally shared by all parties to the mediation.

12.04 Claim Format

A. Design-Build Entity shall submit the formal claim(s) with a cover letter and certification of the accuracy of the formal claim.

B. The formal claim(s) shall list separately each notice of potential claim that Design-Build Entity intends to pursue as a formal claim(s), and for each such item separately, Design-Build Entity shall provide the following:
   1. Summary of the claim, including underlying facts, entitlement, schedule analysis, quantum calculations, contract provisions supporting relief;
   2. List of documents relating to claim including Specifications, Drawings, clarifications/requests for information, schedules, notices of delay, and any others;
   3. Chronology of events and correspondence;
   4. Analysis of claim merit;
   5. Analysis of claim cost; and
   6. Attach supporting cost and schedule documents as required in this Article and elsewhere in the Contract Documents (e.g., Section 01 3200 [Progress Schedules and Reports]).

C. For each notice of potential claim that Design-Build Entity intends to pursue as a formal claim, Design-Build Entity shall establish in the formal claim a direct causal link between the separate item of cost/time requested, the separate notices of potential claim timely issued, and the specific changed Work asserted. Total cost claims shall not be allowed.

D. Claims shall be calculated in the same manner as Change Orders per Section 01 2600 (Modification Procedures and Pricing of Changed Work).

12.05 Subcontractor Claims

A. Design-Build Entity shall require each Subcontractor, sub-Subcontractor and supplier to comply with this claims procedure, to provide Design-Build Entity with timely notice and documentation of all claims; and Design-Build Entity shall present as its claims, all Subcontractor, sub-Subcontractor and supplier claims of any type, and prove them under the terms of the Contract Documents. Owner shall not be directly liable to any Subcontractor, any supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages or extra costs of any type arising out of or resulting from the Project.

12.06 Waiver and Substantial Compliance

A. If Design-Build Entity fails to comply with this Article 12 as to any claim or Disputed Work, then Design-Build Entity shall waive its rights to such claim. All claim(s), Disputed Work items or issue(s) not raised in a timely notice, timely notice of potential claim and then timely claim submitted under this Article 12, may not be asserted in any subsequent arbitration, litigation or legal action, and any award (or portion thereof) issued contrary to this preclusion shall be vacated to the extent contrary.

B. Design-Build Entity may request an extension of time to comply with the claims procedure herein, but must do so in advance of time periods expiring and Owner must give its approval in writing (which approval may be withheld in Owner discretion.) As to any other feature of the claim procedure herein (and its claims waiver feature), it may not be waived or altered absent a written Change Order signed by both parties and accepted as to form by their legal counsel.

C. Owner in its sole discretion, may consider Design-Build Entity's substantial compliance with the required initial notice and cost proposal, provided Design-Build Entity demonstrates good faith and a manifest lack of prejudice to Owner from late written notice, for example, contemporaneous Owner/Design-Build Entity discussions and review of Disputed Work with full opportunity to investigate and verify costs and work performed. Under no circumstances may substantial compliance by considered when the required written notice is more than 21 calendar days late.

D. Owner shall not be deemed to waive or alter any provision under this Article 12, if at Owner's sole discretion, a claim is administered in a manner not in accord with this Article 12.

12.07 Intent

A. The claim notice and documentation procedure described in this Article 12 is intended to require notice and sufficient documentation of claims, potential claims, disputes and disagreements, to permit discussions and negotiations of the matters in question, between and among all parties involved, prior to and contemporaneously with the matters in question, in sufficient time for the parties to make informed decisions, mitigate and document costs and potential costs.

B. Under no circumstances may this procedure be interpreted, modified or viewed to permit, claims, potential claims or change order requests for Disputed Work that has been performed, covered up or otherwise become unavailable for reasonable contemporaneous verification and negotiation with involved parties (e.g., Design-Build Entity, Subcontractor, suppliers, Owner, Bridging Architect, etc.).

ARTICLE 13 – LEGAL AND MISCELLANEOUS

13.01 Laws and Regulations

A. Design-Build Entity shall keep fully informed of and shall comply with all laws, ordinances, regulations and orders of any properly constituted authority affecting the Contract Documents, Work and persons connected with Work, and shall to the greatest extent permitted by law, protect and indemnify Owner and its officers, employees, consultants and agents against any claim or liability, including attorney's fees, arising from or based on violation of law, ordinance, regulation or order, whether by Design-Build Entity or by Subcontractors, employees or agents. Authorized persons may at any time enter upon any part of Work to ascertain compliance of all applicable laws, ordinances, regulations and orders.

B. Whenever Bridging Documents require larger sizes or higher standards than are required by any applicable law, ordinance, regulation or order, Bridging Documents shall govern. Whenever Bridging Documents require something that will violate such laws, ordinances, regulations or orders, then such laws, ordinances, regulations or orders shall govern.

C. Design-Build Entity shall comply with applicable portions of Title 15 and Title 24, California Code of Regulations (Uniform Building Code) (most recent edition), Public Contract Code. Whenever Contract Documents require larger sizes or higher standards than are required by any applicable law, ordinance, regulation or order, Contract Documents shall govern. Whenever Contract Documents require something that will violate such laws, ordinances, regulations or orders, then such laws, ordinances, regulations or orders shall govern.

D. Design-Build Entity shall maintain in the Project Office a current copy of Title 15 and 24 of the California Code of Regulations at all times during construction.

13.02 Permits and Taxes

A. Design-Build Entity shall procure all permits and licenses applicable to the Work (including environmental matters to the extent applicable), pay all charges and fees, including fees for street opening permits, comply with, implement and acknowledge effectiveness of all permits, initiate and cooperate in securing all required notifications or approvals therefore, and give all notices necessary and incident to due and lawful prosecution of Work, unless otherwise provided herein. Owner will pay applicable building permits, school, sanitation and water fees, except as otherwise provided in the Contract Documents. If, under federal excise tax law, any transaction hereunder constitutes a sale on which a federal excise tax is imposed, and the sale is exempt from such excise tax because it is a sale to a state or local government for its exclusive use, the Owner, upon request, will execute a certificate of exemption which will certify (1) that the Owner is a political subdivision of the state for the purpose of such exemption, and (2) that the sale is for

the exclusive use of the Owner. No excise tax for such materials shall be included in any bid price. Design-Build Entity shall pay all sales and/or use taxes levied on materials, supplies, or equipment purchased and used on or incorporated into Work, and all other taxes properly assessed against equipment or other property used in connection with Work, without any increase in the Contract Sum. Design-Build Entity shall make necessary arrangements with proper authorities having jurisdiction over roads, streets, pipelines, navigable waterways, railroads, and other works in advance of operations, even where Owner may have already obtained permits for the Work.

13.03 Concealed or Unknown Conditions

A. If either of the following conditions is encountered at Site when digging trenches or other excavations that extend deeper than four feet below the surface, Design-Build Entity shall give a written Notice of Differing Site Conditions to Owner promptly before conditions are disturbed, except in an emergency as required by this Document 00 7253, and in no event later than seven Days after first observance of:
   1. Subsurface or Latent physical conditions which differ materially from those indicated in the Contract Documents; or
   2. Unknown physical conditions of an unusual nature or which differ materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents.

B. In response to Design-Build Entity's Notice of Differing Site Conditions under this paragraph, Owner will investigate the identified conditions, and if they differ materially and cause increase or decrease in Design-Build Entity's cost of, or time required for, performance of any part of the Work, Owner will issue either a Proposal Form or a Construction Change Directive under the procedures described in the Contract Documents, including without limitation Section 01 2600 (Modification Procedures and Pricing of Changed Work). If Owner determines that physical conditions at the Site are not latent or are not materially different from those indicated in Contract Documents or that no change in terms of the Contract Documents is justified, Owner will so notify Design-Build Entity in writing, stating reasons. Design-Build Entity shall in all cases continue to prosecute the Work.

C. Design-Build Entity shall not be entitled to any adjustment in the Contract Sum or Contract Time regarding claimed Latent or materially different Site conditions (whether above or below grade) if:
   1. Design-Build Entity knew of the existence of such conditions at the time Design-Build Entity submitted its Proposal; or
   2. Design-Build Entity should have known of the existence of such conditions as a result of having complied with the requirements of Contract Documents; or
   3. The information or conditions claimed by Design-Build Entity to be Latent or materially different consist of information, conclusions, opinions or deductions of the kind that this Document 00 7253 precludes reliance upon; or
   4. Design-Build Entity was required to give written Notice of Differing Site Conditions and failed to do so within the time required.

D. If Owner and Design-Build Entity are unable to agree on entitlement to or as to the amount or length of any adjustment in the Contract Sum or Contract Time required under this paragraph, Design-Build Entity may make a claim as provided in Article 12 of this Document 00 7253.

13.04 Notice of Hazardous Waste or Materials Conditions

A. Design-Build Entity shall give a written Notice of Hazardous Materials Condition to Owner promptly, before any of the following conditions are disturbed (except in an emergency as required by this Document 00 7253), and in no event later than 24 hours after first observance of any:

1. Material that Design-Build Entity believes may be hazardous waste or hazardous material, as defined in Section 25117 of the Health and Safety Code (including, without limitation, asbestos, lead, PCBs, petroleum and related hydrocarbons, and radioactive material) that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law ("hazardous material"); or
2. Other material that may present an imminent substantial danger to persons or property exposed thereto in connection with Work at the Site ("other materials").

B. Except as otherwise provided in the Contract Documents or as provided by applicable law, Design-Build Entity shall not be required to give any notice for the disturbance or observation of any such hazardous materials or other materials where such matter is disturbed or observed as part of the scope of Work under the Contract Documents (such as hazardous waste or hazardous material investigation, remediation or disposal activities which are identified as the subject of Work under the Contract Documents), where Design-Build Entity complies with all requirements in the Contract Documents and applicable law respecting such materials.

C. Design-Build Entity's Notice of Hazardous Materials Condition shall indicate whether the hazardous materials or other materials were shown or indicated in the Contract Documents to be within the scope of Work, and whether the hazardous materials or other materials were brought to the Site by Design-Build Entity, its Subcontractors, suppliers, or anyone else for whom Design-Build Entity is responsible.

D. Design-Build Entity shall not be entitled to any adjustment in the Contract Sum or Contract Time regarding claimed hazardous waste or materials if:
1. Design-Build Entity knew of the existence of such hazardous materials or other materials at the time Design-Build Entity submitted its Proposal; or
2. Design-Build Entity should have known of the existence of such hazardous material or other materials as a result of its having the responsibility to obtain additional or supplementary examinations, investigation, explorations, tests, studies, and data concerning the conditions at or contiguous to the Site prior to submitting its Proposal;
3. Design-Build Entity failed to give the written notice within the time required by this Document 00 7253; or
4. Design-Build Entity failed to give advance written notice, at least sixty (60) days prior to date when removal was required, of hazardous materials known to exist and required to be removed prior to execution of the Work.

E. If Owner determines that conditions involve hazardous materials or other materials and that a change in Contract Document terms is justified, Owner will issue either a Proposal Form or Construction Change Directive under the procedures described in the Contract Documents, including without limitation Section 01 2600 (Modification Procedures and Pricing of Changed Work). If Owner determines that conditions do not involve hazardous materials or other materials or that no change in Contract Document terms is justified, Owner will notify Design-Build Entity in writing, stating the reasons for its determination.

F. If Owner and Design-Build Entity are unable to agree on entitlement to or as to the amount or length of any adjustment in the Contract Sum or Contract Time required, Design-Build Entity may make a claim as provided in Article 12 of this Document 00 7253.

G. In addition to the parties' other rights under this Document 00 7253, if Design-Build Entity does not agree to resume Work based on a reasonable belief that it is unsafe, or does not agree to resume Work under special conditions, Owner may order the disputed portion of Work deleted from the Work, or performed by others, or Owner may invoke its right to terminate Design-Build Entity's right to proceed under the Contract Documents in whole or in part, for convenience or for cause as the facts may warrant. If Design-Build Entity does not agree with Owner's determination of any adjustment in the Contract Sum or Contract Time as a result, Design-Build Entity may make a claim as provided in Article 12 of this Document 00 7253.

13.05 Suspension of Work

A. Owner may, without cause, order Design-Build Entity in writing to suspend, delay or interrupt Work in whole or in part for such period of time as Owner may determine. An adjustment shall be made for increases in cost of performance of Work of the Contract Documents caused by any such suspension, delay or interruption, calculated using the measures set forth in Section 01 2600 (Modification Procedures and Pricing of Changed Work). No adjustment shall be made to extent that:

1. Performance is, was or would have been so suspended, delayed or interrupted by another cause for which Design-Build Entity is responsible or otherwise not entitled to compensation under the Contract Documents; or
2. An change order is made or denied under any other provision of Contract Documents; or
3. The suspension of Work was the direct or indirect result of Design-Build Entity's failure to perform any of its obligations hereunder. Adjustments made in cost of performance may have a mutually agreed fixed or percentage fee; if the parties cannot agree, Design-Build Entity may file a claim under Article 12 of this Document 00 7253.

13.06 Termination of Contract for Cause

A. Owner may declare Design-Build Entity in default of Contract Documents and Owner may terminate Design-Build Entity's right to proceed under the Contract Documents for cause:

1. Should Design-Build Entity make an assignment for the benefit of creditors; admit in writing its inability to pay its debts as they become due; file a voluntary petition in bankruptcy; be adjudged a bankrupt or insolvent; be the subject of an involuntary petition in bankruptcy which is not dismissed within 60 Days; file a petition or answer seeking for itself any reorganization, arrangement, composition, readjustment, liquidation, dissolution, or similar relief under any present or future statute, law, or regulation; file any answer admitting or not contesting the material allegations of a petition filed against Design-Build Entity in any such proceeding; or seek, consent to, or acquiesce in, the appointment of any trustee, receiver, custodian or liquidator of Design-Build Entity or of all or any substantial part of its properties or if Design-Build Entity, its directors or shareholders, take action to dissolve or liquidate Design-Build Entity; or
2. Should Design-Build Entity commit a material breach of the Contract Documents; If Owner declares Design-Build Entity in default due to material breach, however, Owner must allow Design-Build Entity an opportunity to cure such breach within ten Days of the date of notice from Owner to Design-Build Entity providing notice of the default; or, if such breach is curable but not curable within such ten-Day period, within such period of time as is reasonably necessary to accomplish such cure. (In order for Design-Build Entity to avail itself of a time period in excess of ten Days, Design-Build Entity must provide Owner within the ten-Day period with a written plan acceptable to Owner to cure said breach which includes, for example, evidence of necessary resources, Subcontractor commitments, schedules and recovery schedules meeting Contract Document requirements and showing a realistic and achievable plan to cure the breach. Design-Build Entity must then diligently commence and continue such cure according to the written plan); or
3. Should Design-Build Entity violate or allow (by a Subcontractor or other person or entity for which Design-Build Entity is responsible) a violation of any valid law, statute, regulation, rule, ordinance, permit, license or order of any governmental agency applicable to the Project or Work and does not cure (or cause to be cured) such violation within ten Days of the date of the notice from Owner to Design-Build Entity demanding such cure; or, if such violation is curable but not curable within such ten-Day period, within such period of time as is reasonably necessary to accomplish such cure. (In order for Design-Build Entity to avail itself of a time period in excess of ten Days, Design-Build Entity shall provide Owner within the ten-Day period with a written plan to cure said violation acceptable to Owner, and then diligently commence and continue performance of such cure according to the written plan.)

B. If Owner at any time reasonably believes that Design-Build Entity is or may be in default under the Contract Documents as provided above, Owner may in its sole discretion notify Design-Build Entity of this fact and request written assurances from Design-Build Entity of performance of Contract Documents and a written plan from Design-Build Entity to remedy any potential default under the terms of Contract Documents which Owner may advise Design-Build Entity of in writing. Design-Build Entity shall, within 10 Days of Owner's request, deliver a written cure plan which meets the requirements of the written plan deliverable under this subparagraph above. Failure of Design-Build Entity to provide such written assurances of performance and the required written plan, within ten Days of request, will constitute a material breach of Contract Documents sufficient to justify termination for cause.

C. In event of termination for cause, Owner will immediately serve written notice thereof upon Surety and Design-Build Entity. Surety shall have the rights and obligations set forth in Document 00 6113.13 (Construction Performance Bond). Subject to the Surety's rights under the Performance Bond (which rights are waived upon a default thereunder), Owner may take over the Work and prosecute it to completion by contract or by any other methods it may deem advisable.

D. In the event of termination by Owner:
   1. Owner will compensate Design-Build Entity for the value of the Work delivered to Owner upon termination as determined in accordance with the Contract Documents, subject to all rights of offset and back charges, and provided that Design-Build Entity provides Owner with updated as-builts and Project Record Documents showing the Work performed up to the date of termination. However, Owner will not compensate Design-Build Entity for its costs in terminating the Work or any cancellation charges owed to third parties.
   2. Design-Build Entity shall deliver to Owner possession of the Work in its then condition including, but not limited to, all designs, architectural and engineering, Project records, Project Record Documents, cost data of all types, Bridging Documents and contracts with vendors and Subcontractors, all other documentation associated with the Project, and all construction supplies and aids dedicated solely to performing the Work which, in the normal course of construction, would be consumed or only have salvage value at the end of the construction period. Design-Build Entity shall remain fully liable for the failure of any Work completed and materials and equipment provided through the date of such termination to comply with the provisions of the Contract Documents. The provisions of this subparagraph shall not be interpreted to diminish any right which Owner may have to claim and recover damages for any breach of Contract Documents or otherwise, but rather, Design-Build Entity shall compensate Owner for all loss, cost, damage, expense, and/or liability suffered by Owner as a result of such termination and failure to comply with Contract Documents.
   3. Owner's rights under this paragraph shall be specifically enforceable to the greatest extent permitted by law. Owner shall, to the extent applicable, have all other rights and remedies set forth in the Contract Documents.

E. Owner may terminate portions or parts of the Work for cause, provided these portions or parts (1) have separate geographic areas from parts or portions of the Work not terminated or (2) are limited to the work of one or more specific trades or Subcontractors. In such case, Design-Build Entity shall cooperate with a completing Design-Build Entity as required under Article 6 of this Document 00 7253.

F. In the event a termination for cause is later determined to have been made wrongfully or without cause, then the termination shall be treated as a termination for convenience, and Design-Build Entity shall have the recovery rights as specified below. Any Design-Build Entity claim arising out of a termination for cause, however, shall be made in accordance with Article 12 of this Document 00 7253. No other loss cost, damage, expense or liability may be claimed, requested or recovered by Design-Build Entity.

13.07 Termination of Contract for Convenience

A. Owner may terminate performance of the Work under the Contract Documents for convenience in accordance with this clause in whole, or from time to time in part, whenever Owner shall determine that termination is in Owner's best interest. Termination shall be effected by Owner delivering to Design-Build Entity notice of termination specifying the extent to which performance of the Work under the Contract Documents is terminated and the effective date of the termination.

B. After receiving a notice of termination for convenience, and except as otherwise directed by Owner, Design-Build Entity shall:
   1. Stop Work under the Contract Documents on date and to extent specified in notice of termination;
   2. Place no further orders or subcontracts for materials, services, or facilities except as necessary to complete portion of Work under the Contract Documents which is not terminated;
   3. Terminate all orders and subcontracts to extent that they relate to performance of Work terminated by the notice of termination;
   4. Assign to Owner in manner, at times, and to extent directed by Owner, all right, title, and interest of Design-Build Entity under orders and subcontracts so terminated. Owner shall have the right, in its sole discretion, to settle or pay any or all claims arising out of termination of orders and subcontracts;
   5. Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with approval or ratification of Owner to extent Owner may require. Owner's approval or ratification shall be final for purposes of this paragraph;
   6. Transfer title to Owner, and deliver in the manner, at the times, and to the extent, if any, directed by Owner, all fabricated or unfabricated parts, Work in process, completed Work, supplies, and all other material produced as part of, or acquired in connection with performance of, Work terminated by the notice of termination, and completed or partially completed drawings, drawings, specifications, information, and other property which, if the Project had been completed, would have been required to be furnished to Owner;
   7. Use its best efforts to sell, in manner, at times, to extent, and at price or prices that Owner directs or authorizes, any property of types referred to in this subparagraph, but Design-Build Entity shall not be required to extend credit to any purchaser, and may acquire any such property under conditions prescribed and at price or prices approved by Owner. Proceeds of transfer or disposition shall be applied to reduce payments to be made by Owner to Design-Build Entity under the Contract Documents or shall otherwise be credited to the price or cost of Work covered by Contract Documents or paid in such other manner as Owner may direct;
   8. Complete performance of the part of the Work which was not terminated by the notice of termination; and
   9. Take such action as may be necessary, or as Owner may direct, to protect and preserve all property related to Contract Documents which is in Design-Build Entity's possession and in which Owner has or may acquire interest.

C. After receipt of a notice of termination for convenience under this subparagraph, Design-Build Entity shall submit to Owner its termination claim, in form and with all certifications required by Article 12 of this Document 00 7253. Design-Build Entity's termination claim shall be submitted promptly, but in no event later than 6 months from effective date of the termination. Design-Build Entity and Owner may agree upon the whole or part of the amount or amounts to be paid to Design-Build Entity because of a total or partial termination of Work. If Design-Build Entity and Owner fail to agree on the whole amount to be paid to Design-Build Entity because of the termination for convenience of the Work under this subparagraph, Owner's total liability to Design-Build Entity by reason of the termination shall not exceed the total (without duplication of any items) of:
   1. The reasonable cost to Design-Build Entity, without profit, for all Work performed prior to the effective date of the termination, including Work done to secure the Project for

termination. Reasonable cost may not exceed the applicable percentage completion values derived from the progress schedule and the schedule of values. Deductions shall be made for cost of materials to be retained by Design-Build Entity, cost of Work defectively performed, amounts realized by sale of materials, and for other appropriate credits against cost of Work. Reasonable cost will include reasonable allowance for Project overhead and general administrative overhead not to exceed a total of ten percent of direct costs of such Work. When, in Owner's opinion, the cost of any item of Work is excessively high due to costs incurred to remedy or replace defective or rejected Work, reasonable cost to be allowed will be the estimated reasonable cost of performing the Work in compliance with requirements of Contract Documents and excessive actual cost shall be disallowed.

2. A reasonable allowance for profit on cost of Work performed as determined under this subparagraph, provided that Design-Build Entity establishes to Owner's satisfaction that Design-Build Entity would have made a profit had the Project been completed, and provided further that the profit allowed shall not exceed 5 percent of cost.
3. Reasonable costs to Design-Build Entity of handling material returned to vendors, delivered to Owner or otherwise disposed of as directed by Owner.
4. A reasonable allowance for Design-Build Entity's internal administrative costs in preparing termination claim.
5. Except as provided in this subparagraph, Owner shall not be liable for costs incurred by Design-Build Entity or Subcontractors after receipt of a notice of termination. Such non-recoverable costs include, but are not limited to, anticipated profits on Work not performed as of the date of termination, post-termination employee salaries, post-termination general administrative expenses, post-termination overhead or unabsorbed overhead, costs of preparing and submitting Design-Build Entity's Proposal, attorney's fees of any type, and all costs relating to prosecution of claim or lawsuit.
6. Owner shall have no obligation to pay Design-Build Entity under this subparagraph unless and until Design-Build Entity provides Owner with updated and acceptable as-builts and Project Record Documents for Work completed prior to termination.

D. In arriving at the amount due Design-Build Entity under this clause, there shall be deducted in whole (or in the appropriate part[s] if the termination is partial:
   1. All unliquidated advances or other payments on account previously made to Design-Build Entity, including without limitation all payments applicable to the terminated portion of Contract Documents;
   2. Any claim which Owner may have against Design-Build Entity in connection with Contract Documents; and
   3. The agreed price for, or proceeds of sale of, any materials, supplies, or other things kept by Design-Build Entity or sold under provisions of this Document 00 7253, and not otherwise recovered by or credited to Owner.

13.08 Contingent Assignment of Subcontracts and Design Agreements

A. Design-Build Entity hereby assigns to Owner each Subcontract for a portion of the Work and each Design agreement, provided that:
   1. The assignment is effective only after Owner's termination of Design-Build Entity's right to proceed under the Contract Documents (or portion thereof relating to that Subcontract or Designer) for cause or for convenience, under Document 00 7253.
   2. The Assignment is effective only for the Subcontracts and Design agreements which Owner expressly accepts by notifying the Subcontractor or Designer in writing;
   3. The assignment is subject to the prior rights, if any, of the Surety, obligated by Document 00 6113.13 (Construction Performance Bond) provided under the Contract Documents, where the Surety exercises its rights to complete the Contract;
   4. After the effectiveness of an assignment, Design-Build Entity shall, at its sole cost and expense, sign all instruments and take all actions reasonably requested by Owner to evidence and confirm the effectiveness of the assignment in Owner; and

5. Nothing in this paragraph shall modify or limit any of Design-Build Entity's obligations to Owner arising from acts or omissions occurring before the effectiveness of any Subcontract or Design agreement assignment, including but not limited to all defense, indemnity and hold-harmless obligations arising from or related to the assigned Subcontract or Design agreement.

13.09 Remedies and Contract Integration

A. Subject to Contract Documents provisions regarding Design-Build Entity claims, claim review, and claim resolution, and subject to the limitations therein, the exclusive jurisdiction and venue for resolving all claims, counter-claims, disputes and other matters in question between Owner and Design-Build Entity arising out of or relating to Contract Documents, any breach thereof or the Project, shall be the applicable court of competent jurisdiction identified in Document 00 5200 (Agreement). All Owner remedies provided in the Contract Documents shall be taken and construed as cumulative and not exclusive; that is, in addition to each and every other remedy herein provided; and in all instances Owner shall have any and all other equitable and legal rights and remedies which it would have according to law.

B. The Contract Documents, any Contract Modifications and Change Orders shall represent the entire and integrated agreement between Owner and Design-Build Entity regarding the subject matters hereof and thereof and shall constitute the exclusive statement of the terms of the parties' agreement. The Contract Documents, and any Contract Modifications and Change Orders, shall supersede any and all prior negotiations, representations or agreements, written or oral, express or implied, that relate in any way to the subject matter of the Contract Documents or written modifications. Owner and Design-Build Entity represent and agree that, except as otherwise expressly provided in the Contract Documents, they are entering into the Contract Documents and any subsequent written modification in sole reliance upon the information set forth or referenced in the Contract Documents or Contract Modifications and the parties are not and will not rely on any other information.

C. In any proceeding to enforce the Contract Documents, Design-Build Entity and Owner agree that the finder of fact shall receive detailed instructions on the meaning and operation of the Contract Documents, including their conditions, limitations of liability and remedies clauses, claims procedures and any other provisions impacting major defenses and theories of liability of the parties. Detailed findings of fact shall be requested, to verify Contract enforcement.

D. Either party's waiver of any breach or failure to enforce any of the terms, covenants, conditions or other provisions of the Contract Documents at any time shall not in any way affect, limit, modify or waive that party's right thereafter to enforce or compel strict compliance with every term, covenant, condition or other provision hereof, any course of dealing or custom of the trade or oral representations notwithstanding.

13.10 Patents

A. Fees or claims for any patented invention, article or arrangement that may be used upon or in any manner connected with performance of the Work or any part thereof shall be included in the Proposal price for doing the Work. To the greatest extent permitted by law, Design-Build Entity shall defend, indemnify and hold harmless Owner and each of its officers, employees, consultants and agents, including, but not limited to, the Board, Bridging Architect and each Owner representative, from all damages, claims for damages, costs or expenses in law or equity, including attorney's fees, arising from or relating to any claim that any article supplied or to be supplied under the Contract Documents infringes on the patent rights, copyright, royalties, trade name, trademark, service mark, trade secret or other intellectual property right of any person or persons or that the person or entity supplying the article does not have a lawful right to sell the same. Such costs or expenses for which Design-Build Entity agrees to indemnify and hold

harmless the above indemnities include but are not limited to any and all license fees, whether such fees are agreed by any indemnitee or ordered by a court or administrative body of any competent jurisdiction.

13.11 Substitution for Patented and Specified Articles

A. Except as noted specifically in Bridging Documents, whenever in Bridging Documents, material or process is designated by patent or proprietary name or by name of manufacturer, such designation shall be deemed to be used for purpose of facilitating description of material and process desired, and shall be deemed to be followed by the words "or equal." Design-Build Entity may offer any substitute material or process that Design-Build Entity considers equal in every respect to that so designated and if material or process offered by Design-Build Entity is, in opinion of Owner, equal in every respect to that so designated, its use will be approved. However, Design-Build Entity may utilize this right only by timely submitting Document 00 6325 (Substitution Request Form) as provided in Document 00 0119 (Instructions to Proposers), or as otherwise provided in Contract Documents. A substitution will be approved only if it is a true "equal" item in every aspect of its design and quality, including but not limited to its dimensions, weights, service requirements, durability, functioning, and impact on contiguous construction elements, overall schedule and design.

13.12 Interest of Public Officers

A. No representative, officer, or employee of Owner, no member of the governing body of the locality in which the Project is situated, no member of the locality in which Owner was activated, and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the Project, during the tenure of the official or for one year thereafter, shall, as principal, agent, attorney or otherwise, be directly or indirectly interested, in the Contract Documents or the proceeds thereof.

13.13 Limit of Liability

A. OWNER, AND EACH OF ITS OFFICERS, BOARD MEMBERS, EMPLOYEES, CONSULTANTS AND AGENTS INCLUDING, BUT NOT LIMITED TO, BRIDGING ARCHITECT AND EACH OTHER OWNER REPRESENTATIVE, SHALL HAVE NO LIABILITY TO DESIGN-BUILD ENTITY FOR SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, EXCEPT TO THE LIMITED EXTENT THAT THESE CONTRACT DOCUMENTS OR APPLICABLE PUBLIC CONTRACTING STATUTES MAY SPECIFY THEIR RECOVERY.

13.14 Severability

A. Any provisions or portions thereof of Contract Documents that are prohibited by, unlawful, or unenforceable under any applicable law of any jurisdiction shall as to such jurisdiction be ineffective without affecting other provisions or portions thereof in the Contract Documents.

13.15 Ownership of Results/Works for Hire

A. The architectural and/or engineering analysis, Design Development Documents and Construction Documents, that are prepared pursuant to the Contract Documents are and shall remain the property of Owner. Design-Build Entity hereby does and shall cause all Subcontractors and others who prepared such design documents for the Project to transfer, convey, and assign to Owner all rights throughout the world in the nature of copyright and trademark in and to all versions of such design documents, including but not limited to the Contract Documents, but only to the extent such materials apply to Owner and/or to the Project. (Owner shall not have the copyright in an architect's or engineer's standard details, however, other than a license as necessary for this Project). Owner shall have the right to distribute, copy or to cause the

distribution and copying of such Construction Documents to third parties as may reasonably be necessary in connection with the Project.

B. Any and all artwork, copy, posters, billboards, photographs, videotapes, audiotapes, systems designs, software, reports, diagrams, surveys, source codes or any original works of authorship created by Design-Build Entity or its Subcontractors or designers in connection with services performed under the Contract Documents shall be works for hire as defined under Title 17 of the United States Code, and all copyrights in such works are the property of Owner. In the event that it is ever determined that any works created by Design-Build Entity or its Subcontractors or designers under this Contract are not works for hire under U.S. law, Contractor hereby assigns all copyrights to such works to Owner. With the prior written approval of Owner, Design-Build Entity may retain and use copies of such works for reference and as documentation of its experience and capabilities.

13.16 Free Of Liens

A. Design-Build Entity shall at all times keep the Site and all areas where Work is to be performed free and clear of all liens, claims and encumbrances arising by or through Design-Build Entity, including without limitation any lien arising by virtue of any labor or materials provided by any laborer, materialman, mechanic, employee, supplier or other ("Lien"). Should Design-Build Entity not either pay or cause to be released (pursuant to a mechanics lien release bond or otherwise) any Lien by any date within five business days after notice from Owner, Owner may, at its sole election, either pay the Lien in an amount determined by Owner in its sole discretion, or (ii) purchase a release bond for the Lien in the required statutory amount, in either case with funds obtained by setting off any amounts otherwise due or to become due Design-Build Entity, and reduce the Contract Sum by such amount. If funds are insufficient, Design-Build Entity shall promptly pay the deficiency to Owner.

ARTICLE 14 – MODIFICATIONS OF CONTRACT DOCUMENTS

14.01 Alterations, Modifications and Force Account Work

A. No modification or deviation from the Owner approved Drawings and Specifications will be permitted except by written addenda, written Change Order or written Supplemental Instruction. As appropriate or otherwise required by law, Change Orders are subject to approval by the Owner.

B. Owner may, without notice to the sureties, make alterations, deviations, additions to, or deletions from Contract Documents; increase or decrease the quantity of any item or portion of the Work; expand, contract or otherwise change the Contract Time; delete any item or portion of the Work; and require extra Work. Design-Build Entity shall perform such Work under applicable provisions of the Contract Documents, unless specifically provided otherwise at the time the change is ordered. In the case of any ordered extra Work, Owner reserves the right to furnish all or portions of associated labor, material, and equipment, which Design-Build Entity shall accept and use without payment for costs, markup, profit, or otherwise for such Owner-furnished labor, materials, and equipment.

C. Owner may make changes to the Work during the course of construction to bring the Work into compliance with environmental requirements or standards established by state and federal statutes and regulations enacted after the Contract has been awarded. Design-Build Entity shall be compensated for changes affecting the Contract Time or Contract Sum of the Work as set forth in this Article 14 and in Section 01 2600 (Modification Procedures and Pricing of Changed Work).

D. Changes affecting the Contract Time or Contract Sum of the Work shall be set forth in a written

Change Order that shall specify:

1. The Work performed in connection with the change to be made;
2. The amount of the adjustment of the Contract Sum, if any, and the basis for compensation for the Work ordered; and
3. The extent of the adjustment in the Contract Time, if any.

E. A Change Order will become effective when signed by Owner and Design-Build Entity. If Owner exercises its right to decide disputed issues pertaining to changed Work as set forth in Articles 12 and 14 of this Document 00 7253, then the resulting Change Order shall be effective when signed by Owner, notwithstanding that Design-Build Entity has not signed it.

F. Changes not affecting the Contract Time or Contract Sum of the Work, in Owner's discretion, may be set forth in a written RFI-Reply executed by Owner. Execution of such an RFI-Reply constitutes Design-Build Entity's agreement to make the specified change without change to the Contract Sum or the Contract Time.

G. Changes or deviations from Contract Documents affecting the Contract Time or Contract Sum of the Work shall not be made without the authority of an effective Change Order or Construction Change Directive as provided in Section 01 2600 (Modification Procedures and Pricing of Changed Work), except in cases of emergency discussed in Article 16 of this Document 00 7253.

H. If changes ordered in design, workmanship or materials are of such a nature as to increase or decrease the cost of any part of the Work, the price fixed in the Contract Documents shall be increased or decreased by the amount that Design-Build Entity and Owner may agree upon as a reasonable and proper allowance for the cost increase or decrease. If an agreement cannot be reached, then Owner will reach a determination, which shall be final, subject to Design-Build Entity's rights under Article 12 of this Document 00 7253. In all cases Design-Build Entity shall perform the changed Work as directed by Owner subject to Design-Build Entity's rights under Article 12 of this Document 00 7253.

I. Design-Build Entity shall, upon Owner's request, permit inspection of the original unaltered Proposal estimate, subcontract agreements, purchase orders relating to the change, and documents substantiating all costs associated with its cost proposal or claims arising from changes in the Work.

J. Changes in the Work made pursuant to this Article 14 and extensions of Contract Time necessary by reason thereof shall not in any way release the guaranties and warranties given by Design-Build Entity pursuant to provisions of the Contract Documents, nor shall such changes in the Work relieve or release the Sureties of bonds executed pursuant to said provisions. The Sureties, in executing such bonds, shall be deemed to have expressly agreed to any such change in the Work and to any extension of time made by reason thereof.

K. Procedures for Modifications of Contract Documents and for calculating the cost of extra Work are given in Section 01 2600 (Modification Procedures and Pricing of Changed Work). Regarding delay and impact costs of any nature, Design-Build Entity may not seek delay compensation for on-Site or off-Site costs based on formulas, e.g., "Eichleay" or other formula. Rather, Design-Build Entity shall prove actual costs resulting from such delays. If Design-Build Entity requests compensation for delay to the construction, then Design-Build Entity shall prove and document actual costs plus markup per the cost categories and procedures in Section 01 2600 (Modification Procedures and Pricing of Changed Work) in order to request, claim or prove compensation for delay.

L. Change Orders in excess of Owner's approved limit must be approved by Owner's Board and a performance bond rider covering the changed Work executed before proceeding with the changed Work. Design-Build Entity is charged with knowledge of Owner's approved Change Order limits and procedures in effect at the applicable time.

ARTICLE 15 – TIME ALLOWANCES

15.01 Entitlement to Change of Contract Time

A. The Contract Time may only be changed by Change Order or by Contract Modification, and all time limits stated in the Contract Documents are of the essence of Contract Documents.

B. The Contract Time will be adjusted in an amount equal to the time lost due to:
   1. Changes in the Work ordered by Owner;
   2. Acts or neglect by Owner, Bridging Architect, any Owner representative, utility owners or other contractors performing other work, in breach of their responsibilities established in the Contract Documents, provided that Design-Build Entity has fully and completely performed its responsibilities under the Contract Documents; or
   3. Fires, floods, epidemics, abnormal weather conditions beyond the parameters otherwise set forth in this subparagraph, earthquakes, civil or labor disturbances, strikes or acts of God, provided damages resulting therefrom are not the result of Design-Build Entity's failure to protect the Work as required by Contract Documents.

C. The Contract Time shall not be extended for any cause identified above, however, unless:
   1. Design-Build Entity actually has been prevented from completing any part of the Work within the Contract Time due to delay that is beyond Design-Build Entity's control and due to reasons for which Design-Build Entity is not responsible (delays attributable to and within the control of a Subcontractor, or its subcontractors, or supplier shall be deemed to be delays within the control of Design-Build Entity);
   2. A claim for delay is made as provided herein; and
   3. Design-Build Entity submits a Time Impact Evaluation as required under Section 01 3200 (Progress Schedules and Reports) that demonstrates actual delay to critical Work activities that actually delay the progress of the Work in the amount of time requested.

D. Where Design-Build Entity is prevented from completing any part of the Work within the Contract Time due to delay beyond the control of both Owner and Design-Build Entity (including, but not limited to, adverse weather of all types and acts of other contractors or utilities), an extension of Contract Time, in an amount equal to the time lost due to such delay (without compensation), shall be Design-Build Entity's sole and exclusive remedy for such delay.

E. Delays due to abnormal or adverse weather conditions shall not exceed 36 calendar days per year. Adverse weather delays may be allowed only if the number of workdays of adverse weather exceeds these parameters on a monthly basis, and Design-Build Entity proves that adverse weather actually caused delays to work that is on the critical path. Design-Build Entity shall give written notice of intent to claim an adverse weather day within one Day of the adverse weather day occurring.

F. In order to qualify as an adverse weather delay with respect to the foregoing parameters, daily rainfall must exceed .25 of an inch or more as measured by the National Oceanic & Atmospheric Administration weather station closest to the Project.

G. Adverse weather delay for precipitation shall be recognized for the actual period of time Design-Build Entity proves it was delayed by precipitation exceeding the specified parameters. For example, and not by way of limitation, if precipitation exceeding the specified parameters does not in fact delay Design-Build Entity's progress on the critical path, then no time extension shall be recognized; and conversely, if Design-Build Entity proves to Owner's satisfaction that precipitation exceeding the specified parameters causes delay to Design-Build Entity for a period longer than the number of precipitation days incurred (e.g., if it rains or snows during grading work), then Design-Build Entity shall be entitled to a time extension equal to the actual period of such delay.

H. Design-Build Entity shall include the foregoing precipitation parameters as a monthly activity in its progress schedule. As Work on the critical path is affected by precipitation, Design-Build Entity shall notify Owner and request that the days be moved to the affected activities. Any adverse weather days remaining shall be considered Project float.

I. Design-Build Entity shall take reasonable steps to mitigate potential weather delays, such as dewatering the Site, and covering Work and material that could be affected adversely by weather. Failure to do so shall be cause for Owner to not grant a time extension due to adverse weather, where Design-Build Entity could have avoided or mitigated the potential delay by exercising reasonable care.

15.02 Notice of Delay

A. Within seven Days of the beginning of any delay, Design-Build Entity shall notify Owner in writing, by submitting a notice of delay, of all anticipated delays resulting from the delay event in question. Within seven (7) additional days, Design-Build Entity shall provide a written schedule document that demonstrates delay to the critical path using a Time Impact Evaluation as specified in Section 01 3200 (Progress Schedules and Reports). Owner will determine all claims and adjustments in the Contract Time. No claim for an adjustment in the Contract Time will be valid and such claim will be waived if not submitted in accordance with the requirements of this paragraph.

15.03 Time Extensions and/or Damages Entitlements for Delays

A. Design-Build Entity may receive a time extension and be compensated for delays caused directly and solely by Owner.

B. Design-Build Entity may receive a time extension without compensation for delays resulting in whole or in part from causes beyond the reasonable control of Design-Build Entity and Owner, e.g. adverse weather conditions exceeding Contract Documents parameters, earthquakes, Acts of God and epidemics. In such cases, a time extension without compensation shall constitute Design-Build Entity's sole and exclusive remedy for such delays.

C. Design-Build Entity shall not be entitled to any time-related damages or compensation including, but not limited to, extended field or home office overhead, field supervision, costs of capital, interest, escalation charges, acceleration costs or other impacts for any delays caused in whole or in part by Design-Build Entity's failure to perform its obligations under the Contract Documents, or during periods of delay concurrently caused by Design-Build Entity and either Owner or others.

D. Design-Build Entity shall not be entitled to damages for delay to the Work caused by the following reasons:
   1. Owner's right to sequence the Work in a manner which would avoid disruption to Owner's tenants and their contractors or other prime contractors and their respective subcontractors, exercised as a result of Design-Build Entity's failure to perform its cooperation and coordination responsibilities required by Contract Documents; Owner's enforcement of any government act or regulation; or the provisions of the Contract Documents;
   2. For changed Site conditions that are beyond the parties' contemplation, except that Owner may approve direct costs associated with unknown conditions (but not costs or damages which result from such delays); and
   3. Extensive requests for clarifications to Contract Documents or Contract Modifications thereto, provided such clarifications or Contract Modifications are processed by Owner or its consultants in a reasonable time commensurate with Contract Documents requirements.

15.04 Liquidated Damages

A. Time is of the essence. Execution of Contract Documents by Design-Build Entity shall constitute acknowledgement by Design-Build Entity that Design-Build Entity understands, has ascertained and agrees that Owner will actually sustain damages in the amount fixed in the Contract Documents for each and every Day during which completion of Work required is delayed beyond expiration of time fixed for completion or extensions of time allowed pursuant to provisions hereof. Design-Build Entity and Owner agree that specified measures of liquidated damages shall be presumed to be the damages actually sustained by Owner as defined below, and that because of the nature of the Project, it would be impracticable or extremely difficult to fix the actual damages.

B. Liquidated damages shall be considered not as a penalty but as agreed monetary damage sustained by Owner for increased Project administration expenses, including extra inspection, construction management and architectural and engineering expenses related to the Project and Contract Documents because Design-Build Entity failed to perform and complete Work within time fixed for completion or extensions of time allowed pursuant to provisions hereof. Liquidated damages shall not be deemed to include within their scope additional damages or administrative costs arising from Defective Work, lost revenues, interest expenses, cost of completion of the Work, cost of substitute facilities, claims and fines of regulatory agencies, damages suffered by others or other forms of liability claimed against Owner as a result of delay (e.g., delay or delay related claims of other contractors, subcontractors or tenants), and defense costs thereof. Design-Build Entity shall be fully responsible for the actual amount of any such damages it causes, in addition to the liquidated damages otherwise due Owner.

C. Owner in its sole discretion may deduct from any money due or to become due to Design-Build Entity subsequent to time for completion of entire Work and extensions of time allowed pursuant to provisions hereof, a sum representing then-accrued liquidated damages. Should Design-Build Entity fall behind the approved Progress Schedule, Owner may deduct liquidated damages based on its estimated period of late completion. Owner need not wait until Final Completion to withhold liquidated damages from Design-Build Entity's progress payments. Should money due or to become due to Design-Build Entity be insufficient to cover aggregate liquidated damages due, then Design-Build Entity forthwith shall pay the remainder of the assessed liquidated damages to Owner.

ARTICLE 16 – WORKING CONDITIONS AND PREVAILING WAGES

16.01 Use of Site/Sanitary Rules

A. All portions of the Work shall be maintained at all times in neat, clean and sanitary condition. Design-Build Entity shall furnish toilets for use of Design-Build Entity's and Subcontractors' employees on the Site where needed, and their use shall be strictly enforced. All toilets shall be properly secluded from public observation, and shall be located, constructed and maintained subject to Owner's approval.

B. Design-Build Entity shall confine construction equipment, the storage of materials and equipment and the operations of workers to the Site and land areas identified in and permitted by Contract Documents and other land and areas permitted by applicable laws and regulations, rights of way, permits and easements or as designated by Owner, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. Design-Build Entity shall assume full responsibility for any damage to any such land or area, any improvement located thereon, or to the owner or occupant thereof resulting from the performance of Work.

C. During the progress of the Work, Design-Build Entity shall keep the Site and the Project free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work, Design-Build Entity shall remove all waste materials, rubbish and debris from and about the Site as well as all tools, appliances, construction equipment and machinery

and surplus materials. Design-Build Entity shall leave the premises clean and ready for occupancy by Owner at Substantial Completion of Work. Design-Build Entity shall restore to original condition all property not designated for alteration by Contract Documents.

D. Design-Build Entity shall not load nor permit any part of any structure or pavement to be loaded in any manner that will endanger the structure or pavement, nor shall Design-Build Entity subject any part of Work or adjacent property to stresses or pressures that will endanger it. Design-Build Entity shall conduct all necessary existing conditions investigation regarding structural, mechanical, electrical or any other system existing, shall perform Work consistent with such existing conditions, and shall have full responsibility for insufficiencies or damage resulting from insufficiencies of existing systems, equipment or structures to accommodate performing the Work.

16.02 Protection of Work, Persons, Property and Operations

A. Design-Build Entity shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with Work. Design-Build Entity shall comply with all safety requirements specified in any safety program established by Owner, or required by state, federal or local laws and ordinances. Design-Build Entity shall be responsible for all damage to Work, property or structures, all injuries to persons, and all damage and interruptions to Owner's operations, arising from the performance of Work of the Contract Documents. Except as otherwise expressly approved by Owner in writing, Design-Build Entity shall at all times perform all Work in a manner which does not interrupt, damage or otherwise adversely impact any facilities, operations, or real or personal property of Owner, its officers, employees, agents, invitees, licensees, lessees or contractors.

B. Design-Build Entity shall comply with all applicable laws and regulations of any public body having jurisdiction for safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Design-Build Entity shall notify owners of adjacent property and of Underground Facilities and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property.

C. Design-Build Entity shall remedy all damage, injury, loss or interruption to any property or operations referred to above, caused, directly or indirectly, in whole or in part, by Design-Build Entity, any Subcontractor, supplier, or any other person or organization directly or indirectly employed by any of them to perform or furnish any Work or anyone for whose acts any of them may be liable. Design-Build Entity's duties and responsibility for safety and for protection of Work shall continue until such time as all the Work is completed and Final Acceptance of the Work. Owner and its agents do not assume any responsibility for collecting any indemnity from any person or persons causing damage to Design-Build Entity's Work.

D. Design-Build Entity shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

E. Owner may, at its option, retain such moneys due under the Contract Documents as Owner deems necessary until any and all suits or claims against Design-Build Entity for injury to persons, property or operations shall be settled and Owner receives satisfactory evidence to that effect.

16.03 Responsibility for Safety and Health

A. Design-Build Entity shall ensure that its and each tier of Subcontractors' employees, agents and invitees comply with applicable health and safety laws while at the Site. These laws include the

Occupational Safety and Health Act of 1970 and rules and regulations issued pursuant thereto, and Owner's safety regulations as amended from time to time. Design-Build Entity shall comply with all Owner directions regarding protective clothing and gear.

B. Design-Build Entity shall be fully responsible for the safety of its and its Subcontractors' employees, agents and invitees on the Site. Design-Build Entity shall notify Owner, in writing, of the existence of hazardous conditions, property or equipment at the Site that are not under Design-Build Entity's control. Design-Build Entity shall be responsible for taking all the necessary precautions against injury to persons or damage to the property of Design-Build Entity, Subcontractors or persons from recognized hazards until the responsible party corrects the hazard. Design-Build Entity shall provide protective clothing and gear to all visitors to the Site.

C. Design-Build Entity shall confine all persons acting on its or its Subcontractors' behalf to that portion of the Site where Work under the Contract Documents is to be performed: Owner designated routes for ingress and egress thereto and any other Owner designated area. Except those routes for ingress and egress over which Design-Build Entity has no right of control, within such areas, Design-Build Entity shall provide safe means of access to all places at which persons may at any time have occasion to be present.

(next pg) Section E

16.04 Emergencies

A. In emergencies affecting the safety or protection of persons or Work or property at the Site or adjacent thereto, Design-Build Entity, without special instruction or authorization from Owner, is obligated to act to prevent threat and damage, injury or loss, until directed otherwise by Owner. Design-Build Entity shall give Owner prompt written notice if Design-Build Entity believes that any significant changes in Work or variations from Contract Documents have been caused thereby. If Owner determines that a change in the Contract Documents is required because of the action taken by Design-Build Entity in response to such an emergency, a Change Order or Construction Change Directive will be issued to document the consequences of such action. Emergency contact names & phone numbers, where Design-Build Entity's Superintendent and Project Manager can be reached at any time, are to be provided to the Owner, within 10 days after issuance of a Notice to Proceed for any construction.

16.05 Use of Roadways and Walkways

A. Design-Build Entity shall not unnecessarily interfere with use of any roadway, walkway or other facility for vehicular or pedestrian traffic. Before beginning any interference and only with Owner's prior concurrence, Design-Build Entity may provide detour or temporary bridge for traffic to pass around or over the interference, which Design-Build Entity shall maintain in satisfactory condition as long as interference continues. Unless otherwise provided in the Contract Documents, Design-Build Entity shall bear the cost of these temporary facilities.

16.06 Nondiscrimination

A. No person or entity shall discriminate in the employment of persons upon public works because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sexual preference, or gender of such persons, except as provided in Section 12940 of the Government Code. Every Design-Build Entity for public works violating the provisions of Section 1735 of the Labor Code is subject to all the penalties imposed for a violation of Chapter 1, Part 7, Division 2 of the Labor Code.

16.07 Prevailing Wages, Monitoring and Enforcement

A. This Project is subject to the requirements of Division 2, Part 7, Chapter 1 of the Labor Code (Public Works), Design-Build Entity shall pay to persons performing labor in and about Work

provided for in the Contract Documents an amount equal to or more than the general prevailing rate of per diem wages for (1) work of a similar character in the locality in which the Work is performed and (2) legal holiday and overtime work in said locality. The per diem wages shall be an amount equal to or more than the stipulated rates contained in a schedule that has been ascertained and determined by the Director of the State Department of Industrial Relations and Owner to be the general prevailing rate of per diem wages for each craft or type of workman or mechanic needed to execute this Contract. Design-Build Entity shall also cause a copy of this determination of the prevailing rate of per diem wages to be posted at each Site.

B. Design-Build Entity shall forfeit, as a penalty to Owner, Two Hundred Dollars ($200.00) for each worker employed in performing labor in and about the Work provided for in the Contract Documents for each Day, or portion thereof, that such worker is paid less than the said stipulated rates for any work done under the Contract Documents by him or her or by any Subcontractor under him or her, in violation of Articles 1 and 2 of Chapter 1 of Part 7 of Division II of the California Labor Code. The sums and amounts which shall be forfeited pursuant to this paragraph and the terms of the Labor Code shall be withheld and retained from payments due to Design-Build Entity under the Contract Documents, pursuant to this Document 00 7253 and the Labor Code, but no sum shall be so withheld, retained or forfeited except from the final payment without a full investigation by either the State Department of Industrial Relations or by Owner. The Labor Commissioner pursuant to Labor Code Section 1775 shall determine the final amount of forfeiture.

C. Design-Build Entity shall insert in every subcontract or other arrangement which Design-Build Entity may make for performance of work or labor on Work provided for in the Contract, provision that Subcontractor shall pay persons performing labor or rendering service under subcontract or other arrangement not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the Work is performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work fixed in the Labor Code.

D. Design-Build Entity stipulates that it shall comply with all applicable wage and hour laws, including without limitation Labor Code Section 1813. Failure to so comply, including without limitation Labor Code Section 1776, shall constitute a default under this Contract.

E. Design-Build Entity and its Subcontractors shall be responsible for compliance with Labor Code Section 1776.
   1. Design-Build Entity and Subcontractors must keep accurate payroll records, showing the name, address, social security number, Work classification, straight time and overtime hours worked each Day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the Work of the Contract documents. Each payroll record shall contain or be verified by a written declaration as required by Labor Code Section 1776.
   2. The payroll records enumerated above must be certified and shall be available for inspection at all reasonable hours at the principal office of Design-Build Entity as required by Labor Code Section 1776.
      a. (X) Design-Build Entity shall inform Owner of the location of records enumerated above, including the street address, city and county, and shall, within five working Days, provide a notice of a change of location and address.
      b. (Y) Design-Build Entity or Subcontractor has 10 Days in which to comply subsequent to receipt of a written notice requesting the records enumerated above. In the event that Design-Build Entity or Subcontractor fails to comply with the ten-Day period, he or she shall, as a penalty to Owner on whose behalf the contract is made or awarded, forfeit $100.00 for each calendar Day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. Design-Build Entity is not subject to a penalty assessment pursuant to this paragraph due to the failure of

a Subcontractor to comply with this paragraph.

3. Design-Build Entity shall also deliver certified payrolls to Owner with each Application for Payment as described in Section 00 2000 (Measurement and Payment).

F. Owner has not established a labor compliance program. Therefore, this Contract is subject to Public Contract Code Section 20133(b)(3)(B), which requires Owner to reimburse the Department of Industrial Relations (DIR) for certain costs of performing prevailing wage monitoring and enforcement on this Project, and the requirements of Title 8. Division 1, Chapter 8. Subchapter 4.5 of California Code of Regulations (Compliance Monitoring and Enforcement by Department of Industrial Relations). Design-Build Entity will be fully responsible for reporting to and providing all documentation and other information required by the DIR, and for paying all resulting penalties, fines, and other amounts due on account of any prevailing wage or other labor, wage or hour violation. Without limiting the foregoing, Design-Build Entity will forward certified payroll records directly to the Labor Commissioner in accordance with 8 CCR.

G. Pursuant to 8 CCR 16451, Design-Build Entity shall post on the Project Site a Notice containing the following language:

"This public works project is subject to monitoring and investigative activities by the Compliance Monitoring Unit (CMU) of the Division of Labor Standards Enforcement, Department of Industrial Relations, State of California. This Notice is intended to provide information to all workers employed in the execution of the contract for public work and to all contractors and other persons having access to the job site to enable the CMU to ensure compliance with and enforcement of prevailing wage laws on public works projects.

The prevailing wage laws require that all workers be paid at least the minimum hourly wage as determined by the Director of Industrial Relations for the specific classification (or type of work) performed by workers on the project. These rates are listed on a separate job site posting of minimum prevailing rates required to be maintained by the public entity which awarded the public works contract. Complaints concerning nonpayment of the required minimum wage rates to workers on this project may be filed with the CMU at any office of the Division of Labor Standards Enforcement (DLSE).

Local Office Telephone Number: ***[Design-Build Entity to provide]***

Complaints should be filed in writing immediately upon discovery of any violations of the prevailing wage laws due to the short period of time following the completion of the project that the CMU may take legal action against those responsible.

Complaints should contain details about the violations alleged (for example, wrong rate paid, not all hours paid, overtime rate not paid for hours worked in excess of 8 per day or 40 per week, etc.) as well as the name of the employer, the public entity which awarded the public works contract, and the location and name of the project.

For general information concerning the prevailing wage laws and how to file a complaint concerning any violation of these prevailing wage laws, you may contact any DLSE office. Complaint forms are also available at the Department of Industrial Relations website found at www.dir.ca.gov/dlse/PublicWorks.html."

H. Design-Build Entity shall assist Owner in conducting the pre-job conference required by 8 CCR 16454.

I. Design-Build Entity and all Subcontractors shall keep accurate payroll records in accordance with Labor Code Section 1776. Such records shall be furnished to the Compliance Monitoring Unit each month, no later than the time Design-Build Entity submits each Application for Payment as

described in Section 00 2000 (Measurement and Payment). And within 10 days of any separate request by the Compliance Monitoring Unit. Payroll records shall be furnished in a format prescribed by section 16401 of Title 8 of the California Code of Regulations, with use of the current version of DIR's "Public Works Payroll Reporting Form" (A-1-131) and "Statement of Employer Payments" (DLSE Form PW26) constituting presumptive compliance with this requirement, provided the forms are filled out accurately and completely. If the Compliance Monitoring Unit has provided for and requires the electronic submission of certified payroll reports in lieu of paper forms, Design-Build Entity shall comply with the electronic submission requirements. Design-Build Enmity shall provide Owner with a concurrent electronic copy of any electronic payroll report submission.

J. If directed by the Labor Commissioner, Owner shall withhold Contract payments when payroll records are delinquent or inadequate.

16.08 Environmental Controls

A. Design-Build Entity shall comply with all rules, regulations, ordinances, and statutes that apply to any work performed under the Contract Documents including, without limitation, any toxic, water and soil pollution controls and air pollution controls specified in Government Code, Section 11017 and as required by applicable Air Quality Management District, California Water Quality Control Board, SWPPP, and Best Management Practices. Design-Build Entity shall be responsible for insuring that Design-Build Entity's employees, Subcontractors and the public are protected from exposure to airborne hazards or contaminated water, soil or other toxic materials used during or generated by activities on the Site or associated with the Project.

16.09 Shoring Safety Plan

A. At least five Days in advance of excavating any trench five feet or more in depth, Design-Build Entity shall submit to Owner a detailed plan showing the shoring, bracing and sloping design and other provisions to be made for worker protection from the hazard of caving ground during the excavation, as required by Labor Code Section 6705. A civil or structural engineer registered in California shall prepare and sign any plan that varies from the shoring system standards established by the State Construction Safety Orders.

B. During the course of Work, Design-Build Entity shall be responsible for determining where sloping, shoring, and/or bracing is necessary and the adequacy of the design, installation, and maintenance of all shoring and bracing for all excavation, including any excavation less than five feet in depth. Design-Build Entity will be solely responsible for any damage or injuries that may result from excavating or trenching. Owner's acceptance of any drawings showing the shoring or bracing design or work schedule shall not relieve Design-Build Entity of its responsibilities under this paragraph.

C. Cal/OSHA Permit. Design-Build Entity shall comply with Labor Code 6500 and shall obtain, as applicable, a permit as required by Cal/OSHA for each of the following:

1. Construction of trenches or excavations that are five feet or more in depth and into which a person is required to descend.
2. Construction or demolition of any building, structure, or scaffolding for falsework more than three stories high, or the equivalent height (36 feet).
3. Erection or dismantling of vertical shoring systems more than three stories high, or the equivalent height (36 feet).
4. The underground use of diesel engines in mines or tunnels.

END OF DOCUMENT

DOCUMENT 00 7316

SUPPLEMENTARY CONDITIONS - INSURANCE AND INDEMNIFICATION
(Design-Build)

1 DBE PROVIDED INSURANCE

1.1 General

1.1.1 DBE shall procure and maintain for the duration of this Contract at its sole cost and expense, insurance against claims which may arise from, or in connection with, the performance of the Work by, or on behalf of (whether directly or indirectly), the DBE.

1.1.2 Each insurance policy required by this Contract shall be endorsed to state that coverage shall not be suspended, voided, canceled, or reduced in coverage or in limits except after thirty (30) days' prior written notice has been given to the Owner, except that ten (10) days' prior written notice shall apply in the event that cancellation for non-payment of premium.

1.2 Builder's Risk/Course of Construction.

1.2.1 DBE shall procure and maintain in effect a Builders' Risk (course of construction) insurance for completed value of the Work. No deductible shall exceed $100,000, per occurrence. Builder's Risk Policies shall contain the following provisions:

(1) Owner shall be named as loss payee; and

(2) Coverage shall contain a waiver of subrogation in favor of the Owner, it officials, employees, agents, and design or engineering professionals.

1.3 Contractor's Pollution Insurance

1.3.1 Contractor's Pollution Liability Insurance on an occurrence basis, with limits of at least $10,000,000 per occurrence and $10,000,000 policy term aggregate for bodily injury, property damage, cleanup costs and claim expenses, arising at or emanating from the Project Site arising from all operations performed on behalf of the Owner.

1.3.2 Such insurance shall provide liability coverage for both sudden and gradual releases arising from the Work. CPL policy shall name Owner, Design-Build Entity and all Subcontractors of all tiers as insureds.

1.3.3 Contractor shall be responsible at its own expense for an obligation for each loss payable under this insurance that is attributable to the Design-Build Entity's acts, errors, or omissions, or the acts, errors, or omissions of any of its Subcontractors, or any other entity or person for whom Design-Build Entity may be responsible. The amount of the obligation shall be based on the amount of the initial Contract Price, as follows:

1.3.4 The portion of the obligation applying to the Design-Build Entity or Subcontractor shall be the responsibility of the Design Build Entity and shall remain uninsured. Design Build Entity shall promptly pay its charge pertaining to any loss. The Owner, in addition to its other remedies, may back charge Design-Build Entity for the obligation and deduct the back-charged amount from Design-Build Entity's next progress payment or final payment.

1.4 Professional Liability Errors and Omission insurance for all professional services

1.5 Waivers

1.5.1 Owner and Design-Build Entity waive all rights against each other and any of their consultants (including without limitation Construction Manager, Bridging Architect and their consultants), separate contractors, if any, Subcontractors, Designers, agents and employees, each of the other, and any of their contractors, subcontractors, agents and employees, for damages caused by fire or other causes of loss to the extent covered by Builder's Risk insurance obtained pursuant to paragraph 1.2 above, or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by the Owner in good faith. Owner or Design-Build Entity, as appropriate, shall require of the separate contractors, if any, and the Subcontractors, Designers, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to any individual or entity even if such individual or entity (a) would otherwise have a duty of indemnification, contractual or otherwise, (b) did not pay the insurance premium directly or indirectly, and (c) whether or not such individual or entity had an insurable interest in the property damaged. The only exceptions to this waiver of subrogation are for claims that may be covered by any Professional Liability insurance to the extent that insurance responds to any loss.

1.5.2 Owner waives subrogation rights under the Contractor's Pollution Liability Policy, to the greatest extent permitted by law, against all other project participants, including Design-Build Entity and Subcontractors of any tier.

2 RESPONSIBILITY OF DESIGN-BUILDER AND INDEMNIFICATION

2.1 Design-Build Entity's Responsibility for the Work.

2.1.1 Except for damage caused by the sole negligence, willful misconduct or active negligence of Owner or its agents, Design-Build Entity shall be solely responsible for any loss or damage that may happen to any part of the Work, materials or other things used in performing the work, injury, sickness, disease, or death of any person as a result of the Work, or resulting damage to property.

2.1.2 Owner and each of its officers, employees, departments, officials, representatives, inspectors, consultants and agents including, but not limited to the Board, Construction Manager, Bridging Architect and each Owner Representative, (all together, **Owner Parties**), shall not be liable or accountable in any manner for loss or damage that may happen to any part of the Work; loss or damage to materials or other things used or employed in performing the Work; injury, sickness, disease, or death of any person as a result of the Work; or damage to property resulting from any cause whatsoever except their sole negligence, willful misconduct or active negligence, and Design-Build Entity releases all of the foregoing persons and entities from any and all such claims.

2.1.3 With respect to third-party claims against Design-Build Entity, Design-Build Entity waives any and all rights to any type of express or implied indemnity against each of the Owner Parties.

2.2 Claims Arising From the Work.

2.2.1 To the furthest extent permitted by law (including without limitation California Civil Code Section 2782), Design-Build Entity shall assume defense of, and indemnify and hold harmless, each of the Owner Parties, from and against claims, suits, actions, losses and liability of every kind, nature and description, including but not limited to claims and fines of regulatory agencies and attorney's fees and consultant's fees, directly or indirectly arising out of, connected with or resulting from performance of the Work, failure to perform the Work, or condition of the Work which is caused in whole or part by any act or omission of Design-Build

Entity, Subcontractors, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

2.2.2 Design-Build Entity's indemnity obligation shall not apply to any indemnified party to the extent of its sole negligence or willful misconduct; nor shall it apply to Owner or other indemnified party to the extent of its active negligence.

2.2.3 In the event that a court of competent jurisdiction determines that California Civil Code Section 2782.8 applies to Design-Build Entity's indemnity and defense obligations under this paragraph 3.2, as to the design-related services provided by Design-Build Entity or its Subcontractors, then, with respect to such design-related services only, Design-Build Entity shall assume defense of, and indemnify and hold harmless, each of the Owner Parties, from and against claims, suits, actions, losses and liability of every kind, nature and description, including but not limited to claims and fines of regulatory agencies and attorney's fees and consultant's fees, that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of Design-Build Entity or its Subcontractors in connection with the Work, Contract, or Project. However, irrespective of the applicability of California Civil Code Section 2782.8 as to design-related services, with respect to any non-design-related services (including without limitation construction services), Design-Build Entity shall assume defense of, and indemnify and hold harmless, each of the Owner Parties, in accordance with the other provisions of this paragraph 3.2.

2.3 Scope of Indemnification Obligation.

2.3.1 Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of Design-Build Entity, its Subcontractors of any tier, or the officers or agents of any of them. In the event of loss, however, Design-Build Entity shall give all required notices to all insurance carriers, and shall require its subcontractors to do the same. Owner may, in its discretion, request evidence of such notices from Design-Build Entity.

2.4 Scope of Contract Limitations of Liability.

2.4.1 To the furthest extent permitted by law (including, without limitation, Civil Code Section 2782), the indemnities, releases of liability and limitations of liability, claims procedures, and limitations of remedy expressed throughout Contract Documents shall apply even in the event of breach of contract, negligence (active or passive), fault or strict liability of the party(is) indemnified, released, or limited in liability, and shall survive the termination, rescission, breach, abandonment, or completion of the Work or the terms of the Contract Documents.

END OF DOCUMENT

DOCUMENT 00 7380

APPRENTICESHIP PROGRAM

ARTICLE 1 - COMPLIANCE REQUIRED

1.01 Design-Build Entity and Subcontractors shall comply with the requirements of California Labor Code §§1776, 1777.5, and 1777.6 concerning the employment of apprentices by Design-Build Entity or Subcontractors. Willful failure to comply may result in penalties, including loss of the right to Bid on or receive public works contracts.

ARTICLE 2 - CERTIFICATION OF APPROVAL

2.01 California Labor Code §1777.5, as amended, and Public Contract Code Section 20133 requires any Design-Build Entity or Subcontractor employing tradespersons in any apprenticeable occupation to apply to the joint apprenticeship committee nearest the site of a public works project and which administers the apprenticeship program in that trade for a certification of approval. The certificate shall also fix the ratio of apprentices to journeypersons that will be used in performance of the Contract. The ratio of work performed by apprentices to journeypersons in such cases shall not be less than one *hour* of apprentices work for every five *hours* of labor performed by journeypersons (the minimum ratio for the land surveyor classification shall not be less than one apprentice for each five journeypersons), except:

A. When unemployment for the previous three month period in the area exceeds an average of 15 percent;

B. When the number of apprentices in training in the area exceeds a ratio of one to five;

C. When a trade can show that it is replacing at least 1/30 of its membership through apprenticeship training on an annual basis state-wide or locally; or

D. Assignment of an apprentice to any work performed under a public works contract would create a condition which would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large or if the specific task to which the apprentice is to be assigned is of such a nature that training cannot be provided by a journeyperson.

ARTICLE 3 - FUND CONTRIBUTIONS

3.01 Design-Build Entity is required to make contributions to funds established for administration of apprenticeship programs if Design-Build Entity employs registered apprentices or journeypersons in any apprenticeable trade on such contracts and if other contractors on the public works site are making such contributions.

ARTICLE 4 - APPRENTICESHIP STANDARDS

4.01 Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of the California Department of Industrial Relations, or from the Division of Apprenticeship Standards and its branch offices.

END OF DOCUMENT

DOCUMENT 00 9113

ADDENDA

PROJECT NUMBER PC008

COUNTY OF SAN MATEO

SKYLONDA FIRE STATION No. 58 REPLACEMENT PROJECT

WOODSIDE, CA

[DOCUMENT TO BE COMPLETED AS ADDENDA ARE ISSUED DURING PROPOSAL PERIOD]

[If a conformed copy is created, delete bracketed line above and replace with the following:]

The following Addenda were issued, modifying the Project Manual:

Addendum No. 1, issued on **[date]**
Addendum No. 2, issued on **[date]**
[continue as appropriate]

(Addenda have been incorporated into the conformed Project Manual.)

END OF DOCUMENT

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 1100

SUMMARY OF WORK
(Design-Build)

PART 1 – GENERAL

1.01 Summary

A. Section includes Summary of construction Work and Work Restrictions including:
   1. Work Covered By Contract Documents
   2. Negotiated Contract Items, Allowances and Alternates
   3. Work Under Other Contracts
   4. Future Work
   5. Work Sequence
   6. Work Days and Hours
   7. Shutdown for Discovery of Cultural Resources
   8. Cooperation of Design-Build Entity and Coordination with Other Work
   9. Partial Occupancy/Utilization Requirements
   10. Design-Build Entity Use of Site
   11. Air Quality Standards
   12. Construction Staking and Monument Protection
   13. Protection of Existing Structures and Underground Facilities
   14. Permits
   15. Actual Damages for Permit Violations

1.02 Construction Work Covered By Contract Documents

Construction Work consists of the construction of a new Skylonda Fire Station No. 58, a new structure(s) that will be located on Skyline Blvd in Woodside, California, as defined in Bridging Documents,. The existing fire station will remain occupied and operational during construction of the Project. Contract Documents (including without limitation final approved Construction Documents required by All Agencies having Jurisdiction) fully describe the Work.

A. The Work of this Contract comprises construction of all the Work indicated, described in the Bridging Documents, or otherwise required by the Contract Documents. Unless provided otherwise in the Contract Documents, all risk of loss to Work covered by Contract Documents shall rest with Design-Build Entity until Final Acceptance of the Work. Cost of maintenance of systems and equipment prior to Final Acceptance will be considered as included in prices set forth in the Contract Documents and no direct or additional payment will be made therefore.

B. For all Contract items, furnish and install all Work, including connections to existing systems, indicated and described in Specifications and all other Contract Documents. Work and requirements applicable to each individual Contract item, or unit of Work, shall be deemed incorporated into the description of each Contract item. Any Contract item may be deleted from the Work and Contract Sum, in total or in part, prior to or after award of Contract without compensation in any form or adjustment of other Contract items or prices therefore.

1.03 Negotiated Contract items, Allowances and Alternates

A. Allowances
   1. Not Used

B. Alternates

1. Not Used

1.04 Work under Other Contracts
NOT USED

1.05 Future Work
NOT USED

1.06 Work Sequence
NOT USED

1.07 Work Days and Hours

A. Work Days and hours: Monday-Friday inclusive, **7:00 a.m.-5:00 p.m.** local time unless Design-Build Entity requests otherwise from Owner in writing at least 48 hours in advance and Owner approves in its sole discretion.

B. Work at the Site on weekends or holidays is not permitted, unless Design-Build Entity requests otherwise from Owner in writing at least 48 hours in advance and Owner approves in its sole discretion. For approved worktime outside of designated times, the Design-Build Entity must pay or reimburse Owner for Owner's additional costs, including, but not limited to Construction Management and Owner staff.

1.08 Shutdown for Discovery of Cultural Resources

A. If discovery is made of items of historical archaeological or paleontological interest, immediately cease all Work in the area of discovery. Archaeological indicators may include, but are not limited to, dwelling sites, locally darkened soils, stone implements or other artifacts, fragments of glass or ceramics, animal bones, human bones, and fossils. After cessation of excavation, immediately contact Owner. Do not resume Work until authorization is received from Owner. When resumed, excavation or other activities shall be as directed by Owner.

1.09 Cooperation of Design-Build Entity and Coordination with Other Work

A. Coordinate with Owner and any Owner forces, or other contractors and forces, as required by Document 00 7253 (General Conditions).

1.10 Partial Occupancy / Utilization Requirements

A. Allow Owner to take possession of and use any completed or partially completed portion of the Work during the progress of the Work as soon as is possible without interference to the Work.

B. Possession, use of Work, and placement and installation of equipment by Owner shall not in any way evidence the completion of the Work or any part of it.

C. Design-Build Entity shall not be held responsible for damage to the occupied part of the Work resulting from Owner occupancy.

D. Make available, in areas occupied, on a 24 hour per day and 7 day per week basis if required, any utility services, heating, and cooling in condition to be put in operation at the time of occupancy.
1. Responsibility for operation and maintenance of said equipment shall remain with Design-Build Entity.

2. Make, and Owner shall certify, an itemized list of each piece of equipment so operated with the date operation commences.
3. Itemized list noted above shall be basis for commencement of warranty period for equipment.
4. Owner shall pay for utility cost arising out of occupancy by Owner during construction.

E. Use and occupancy by Owner prior to acceptance of Work does not relieve Design-Build Entity of its responsibility to maintain insurance and bonds required under the Contract until entire Work is completed and accepted by Owner.

F. Prior to date of Final Acceptance of the Work by Owner, all necessary repairs or renewals in Work or part thereof so used, not due to ordinary wear and tear, but due to Defective materials or workmanship or to operations of Design-Build Entity, shall be made at expense of Design-Build Entity, as required in Document 00 7253 (General Conditions).

G. Use by Owner of Work or part thereof as contemplated by this Section 01 1100 shall in no case be construed as constituting acceptance of Work or any part thereof. Such use shall neither relieve Design-Build Entity of any responsibilities under Contract, nor act as waiver by Owner of any of the conditions thereof.

H. Owner may specify in the Contract Documents that portions of the Work, including electrical and mechanical systems or separate structures, shall be substantially completed on dates described in this Section 01 1100, if any, prior to Substantial Completion of all of the Work. Notify Owner in writing when Design-Build Entity considers any such part of the Work ready for its intended use and Substantially Complete and request Owner to issue a Certificate of Substantial Completion for that part of the Work.

1.11 Design-Build Entity Use of Site

A. This Project is defined in the Bridging Documents. In exercising its control over the site, Design-Build Entity shall, without limitation:
1. Confine operations at Site to areas permitted by Contract Documents, permits, ordinances, laws, and areas which do not affect the operational use of the existing facility. Do not unreasonably encumber Site with materials or equipment.
2. Assume full responsibility for protection and safekeeping of products stored on premises. Move any stored products that interfere with operations of Owner or other contractor.
3. Coordinate parking, storage, staging, and Work areas with Owner and in accordance with the Bridging Documents. Owner will not provide a storage area for Design-Build Entity's equipment and materials beyond the “site” areas described in this paragraph 1.11.

B. Prior to commencement of Work or excavation, Design-Build Entity and Owner shall jointly survey the area adjacent to the Project area making permanent note and record of such existing damage such as cracks, sags or other similar damage. This record shall serve as a basis for determination of subsequent damage to structures, conditions or other existing improvements due to Design-Build Entity's operations. All parties making the survey shall sign the official record of existing damage. Cracks, sags or damage of any nature to the adjacent Project area, not noted in the original survey but subsequently noted, shall be reported immediately to Owner.

C. The Design-Build Entity shall follow all County ordinances in force during the duration of this Contract and obtain all required permits. The Design-Build Entity shall follow all City/State ordinances in force during the duration of this Contract when working in the City/State right-of-way (ROW). It is essential that the Design-Build Entity obtain all required permits prior to performing Work in the ROW within another jurisdiction. Work shall be performed with as little interference and disturbance as possible to the surrounding streets.

D. When suspect materials, outside the scope of Work, are encountered during the Work or restoration process, the Design-Build Entity shall immediately contact the County's Owner Rep. or their designee for evaluation and approval of the methods for dealing with the material.

1.12 Air Quality Standards

A. Ensure that idling time for all heavy equipment is minimized to reduce on-Site emissions.

B. Maintain equipment in good mechanical condition.

C. Cover trucks hauling dirt.

D. Limit dust emissions during periods of high winds (greater than 15 miles per hour).

E. Replace ground cover in disturbed areas as soon as possible.

F. Enclose, cover, water, or apply soil binders to exposed stockpiles.

G. Remove earth tracked onto neighboring paved roads at least once daily.

H. Limit equipment speed to 10 miles per hour in unpaved areas.

I. Compliance with CEQA mitigation requirements, as required.

1.13 Construction Staking and Monument Protection

A. Notify Owner a minimum of 3 Business Days prior to the need for initial staking. Owner will provide engineering surveys to establish construction stakes that in Owner's judgment are necessary to enable Design-Build Entity to proceed with the Work.

B. If Design-Build Entity finds any additional staking necessary, notify Owner in writing 2 Business Days in advance. Owner shall have no liability for any inadequacy unless Design-Build Entity notifies Owner and Owner fails to cure within 3 Business Days of such notice.

C. Design-Build Entity shall be responsible for laying out the Work, shall protect and preserve the established construction stakes and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Whenever Design-Build Entity knows or reasonably should know that any Work activity is likely to damage or destroy any construction stakes or property monuments, or require relocation because of necessary changes in grades or locations, provide at least 2 Business Days advance notice to Owner. In any event, notify Owner whenever any construction stakes or property monuments are lost or destroyed or require relocation because of necessary changes in grades or locations. Owner shall replace or repair construction stakes or property monuments at Design-Build Entity's expense.

D. Perform brush clearing and traffic control, as necessary, in Owner's sole judgment.

E. Illegible survey requests or requests for surveys without proper (at least 3 Business Days) notification, may result in delayed surveys. No extension of Contract Time will be allowed due to such delays.

F. If Owner's survey crews are not available to perform the survey staking following proper notification, Design-Build Entity shall provide its own survey staking. Provide Owner with Design-Build Entity's survey staking information in writing within 3 Business Days after it becomes available to Design-Build Entity.

1.14 Geotechnical Data and Existing Conditions

A. Available Documentation: In accordance with, and subject to, the provisions of Document 00 3100 (Available Project Information) and Document 00 3132 (Geotechnical Data and Existing Conditions), the following documentation is available for review. This information is not part of the Contract Documents. The Geotechnical report and as-built information provided are for conceptual purposes only. The DBE is required to engage its own geotechnical engineer and verify existing and as-built conditions.

1. Refer to Document 00 3100 (Available Project Information) and Document 00 3132 (Geotechnical Data and Existing Conditions).

1.15 Protection of Existing Structures and Underground Facilities

A. The Bridging Documents may indicate existing above- and below-grade structures, drainage lines, storm drains, sewers, water lines, gas lines, electrical lines, hot water lines, and other similar items and Underground Facilities that are known to Owner. Notify the County at least 2 Business Days, or as otherwise noted, prior to commencement of excavation.

B. Where overhead service to a structure, known to receive service, does not exist, then underground service shall be assumed to exist.

C. Attention is also directed to the existence of overhead power and telephone lines.

D. Perform pot-holing by hand within 24 inches (in any direction) of the Underground Facilities. This may be done on an area-by-area basis, but shall be accomplished at least 7 Days in advance of the date of construction within such area.

E. In addition to reporting, if a utility is damaged, Design-Build Entity must take appropriate action as provided in Document 00 7253 (General Conditions).

F. Additional compensation or extension of time on account of utilities not indicated or otherwise brought to Design-Build Entity's attention including reasonable action taken to protect or repair damage shall be determined as provided in Document 00 7253 (General Conditions).

1.16 Permits

A. Permits, agreements, or written authorizations that are known by Owner to apply to this Project are listed below:

1. Storm Water Pollution Prevention
2. Cal/OSHA Permit. Obtain, as applicable, permit(s) as required by Cal/OSHA for the following:
   a. Construction of trenches or excavations that are five feet or more in depth and into which a person is required to descend.
   b. Construction or demolition of any building, structure, or scaffolding for falsework more than three stories high, or the equivalent height (36 feet).
   c. Erection or dismantling of vertical shoring systems more than three stories high, or the equivalent height (36 feet).
3. Architectural Review
4. Cal Trans for work in the Right-of-Way

B. All other permits that may be required, such as electrical, fire prevention, irrigation, grading, etc., have not been applied for and shall be obtained by Design-Build Entity. Applicable permit fees shall be paid by Design-Build Entity unless specified otherwise in Document 00 7253 (General Conditions).

1.17 Actual Damages for Permit Violations

A. In addition to damages which are impracticable or extremely difficult to determine, for which liquidated damages will be assessed as described in Document 00 5200 (Agreement) and Document 00 7253 (General Conditions), Owner may incur actual damages, including fines imposed by any regulatory agency, resulting from failure to obtain proper permits or violation of legal or regulatory requirements where the violations result from Design-Build Entity's activities.

B. Design-Build Entity shall be liable for and shall pay Owner the amount of any actual losses in addition to liquidated damages or other remedies provided by the Contract Documents.

C. The amount of liquidated damages provided in Document 00 5200 (Agreement) and Document 00 7253 (General Conditions) is not intended to include, nor does the amount include, any damages incurred by Owner for reasons other than those listed in that paragraph. Any money due or to become due to Design-Build Entity may be retained by Owner to cover both the liquidated and the actual damages described above and, should such money not be sufficient to cover such damages, Owner shall have the right to recover the balance from Design-Build Entity or its sureties.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 1101

SUMMARY OF WORK – DESIGN-BUILD DESIGN SERVICES

PART 1 – GENERAL

1.01 Summary

A. This section includes specific Design-Build Entity design obligations including:

1. Preliminary Design Services
2. Construction Documents and Construction Phase Design Services
3. Project Close–Out Phase Services
4. Design-Build Entity's Responsibility for Finished Construction

B. Unless specifically excluded from the Contract, Design-Build Entity shall provide Owner with all professional architectural, engineering and design services, including without limitation all civil, electrical, fire protection, mechanical, structural engineering, landscape, and cost estimating services necessary to perform Design-Build Entity's design obligations under this Section 01 1101 and other provisions of Contract Documents, including Bridging Documents, and to complete the Project.

1.02 Deliverables Required Under This Section – Generally

A. All deliverables required under this Section shall be submitted in full compliance with the Contract Documents, shall be submitted in at least triplicate (or such greater number as the Owner may reasonably request) and, when contained on electronic media, shall be submitted in printed form as well as on electronic media when requested by Owner.

B. Deficiencies in deliverables and modifications to conform to Project requirements and modifications to achieve acceptability of deliverables to Owner, shall be promptly performed, and the cost thereof included in the Contract Price.

1.03 Incremental Design Packages

A. Design-Build Entity shall submit designs and deliverables meeting the requirements of this Section 01 1101. Design-Build Entity may, in its sole discretion, elect to create incremental packages of major building components or activities it deems advantageous towards scheduling or permitting efficiencies, and if it so elects shall comply with the requirements of this Section for each increment separately. Design-Build Entity shall be fully responsible for all consequences of electing incremental packages, including satisfying all Project milestones and deadlines.

1.04 Consistency with Bridging Documents

A. Design-Build Entity shall perform all design services consistent with the Project Bridging Documents for all stages of design. Design-Build Entity shall perform all design services in accordance with Document 00 5201 (Bridging Documents) and Document 00 7253 (General Conditions – Design-Build).

B. Bridging Documents set forth Owner's minimum design and construction requirements for the Project that Design-Build Entity must meet. Design-Build Entity shall prepare designs to meet these

requirements and submit deliverables as described in this Section 01 1101. In the event of any conflict between the Bridging Documents and any other provision of Contract Documents, the more stringent requirement providing Owner with the greater scope of work shall control and have precedence. The requirements of this Section 01 1011 supplement, but do not supersede, the requirements of the Bridging Documents.

C. Bridging Documents may be amended or supplemented to include elements or ideas from Design-Build Entity's Proposal or other proposals, but only to the extent Owner expressly agrees in writing. Design-Build Entity is solely responsible for confirming the extent of any changes to the Bridging Documents.

1.05 Designers and Designer Agreements

A. Design-Build Entity shall perform its design services using the Designers listed in its Proposal and may substitute Designers only with Owner's prior written consent, which may be withheld or delayed in Owner's discretion.

B. Design-Build Entity shall fully coordinate all architectural and engineering disciplines and Designers involved in completing the Work. All Designers shall fully coordinate with Design-Build Entity and all architectural and engineering disciplines and Designers involved in completing the Work.

C. To the extent of the Services to be performed by a Designer, Design-Build Entity shall require each Designer's written agreement (1) to be bound to the terms of Contract Documents and (2) to assume vis-à-vis Design-Build Entity all the obligations and responsibilities that Design-Build Entity assumes toward Owner under the Contract Documents. (These agreements include for example, and not by way of limitation, all ownership and copyrights in Designer working and work product, warranties, claims procedures and rules governing submittals of all types to which Design-Build Entity is subject under the Contract Documents.

D. Owner shall be deemed to be an intended third-party beneficiary of all Design agreements, and each such agreement shall so provide.

E. At Owner's request, Design-Build Entity shall provide Owner with a complete copy of all executed agreements between Designers and Design-Build Entity or between Designers (of any tier).

F. Owner at all times shall have the right (but not the duty) to obtain and review Design-Build Entity's design services, whether performed by Design-Build Entity or a Designer, and whether in a final or preliminary form, to determine progress and conformance to the requirements of Bridging Documents and other Contract Documents. In the event Owner should ever dispute the conformance of any design services (at any stage) with the intent of the Contract Documents, then Owner's determination shall control and Design-Build Entity and/or its Designers shall perform the disputed design services to completion in accord with Owner's determination. Design-Build Entity shall, however, retain its rights under the procedure in Document 00 7253 (General Conditions) Article 12 for claims and disputes, and Design-Build Entity may under that procedure, in its name, advance any claim of any Designer.

PART 2 – DESIGN SERVICES

2.01 Preliminary Design Phases

a. Basis of Design-specific analysis of codes, ordinances and regulations
b. Three-dimensional line plans or plans
c. Initial construction phasing recommendations
d. Tabulation of both gross and assignable floor areas including a comparison to the initial program area requirements.

1. Criteria. Reports, plans and exhibits shall incorporate all Bridging Documents requirements and any other Owner program requirements, and shall include structural concepts, site utilization plans, floor plans, elevations, sections, study perspectives and other plans necessary to describe the Project. Basis of Design Phase reports and exhibits shall indicate clearly the considerations involved, including but not limited to applicable requirements of governmental authorities having jurisdiction or private licensing, patent, easements, or other legal restrictions, as well as an exposition of how the design reflects the Owner's program objectives. Reports and exhibits shall indicate any alternative solutions available to Owner and set forth Design-Build Entity's findings and recommendations.

2. Design-Build Entity shall identify, analyze and conform to the requirements of governmental and private authorities having jurisdiction to approve the design of the Project and participate in consultations with such authorities.

3. Basis of Design Basis Report. Design-Build Entity shall provide a draft narrative report by each design discipline describing its proposed design philosophy with a description of, and the rationale for: the proposed structural systems, mechanical systems, electrical, electronics and security systems, types of equipment, materials and finishes, and site development and landscaping as required by the Project. The rationale shall include initial costs, lifecycle costs, and life expectancy and maintenance considerations. The final approved narrative report shall incorporate all aspects of the project criteria.

B. Basis of Design Phase

1. Period of Service.

   a. After acceptance by Owner of Design-Build Entity's Basis of Design Phase deliverables, and upon written authorization from Owner, Design-Build Entity shall proceed with the performance of the services called for in the Design Development Phase. The intent of Design-Build Entity's Design Development Phase submittal is to obtain Owner approval for design revisions, refinements, and concept elaborations produced by Design-Build Entity during Design Development prior to Construction Document production.

   b. Design-Build Entity shall submit the deliverables required by the Design Development Phase.

   c. Design-Build Entity shall at the outset of this Phase make full written disclosure to Owner, and obtain Owner's express written approval of any proposed innovative, unique, proprietary, or sole source design features. Owner retains full discretion to disapprove such features.

   d. All items that are inconsistent with approved Basis of Design Documents, or (unless previously approved) Bridging Documents, other Owner program requirements, or other prior Owner directions, acceptances or approvals, shall be expressly and separately identified and submitted for approval.

2. Design Development Documents. Design-Build Entity shall prepare and submit to Owner draft design development documents. Design-Build Entity shall revise these documents consistent with the requirements and criteria established by Owner and shall meet with Owner and involved subconsultants as required, or a minimum of twice monthly, to review and verify until Owner gives its written confirmation of an approved final Design Development Document. These documents shall include the following:

   a. Final Design Criteria Plans (architectural, civil, electrical, mechanical and structural) sufficient to fix and illustrate project's scope and character in all essential design elements, including but not limited to, site plans, architectural, structural, mechanical, electrical and plumbing floor and equipment connection plans, elevations; cross sections and other mutually agreed upon plans deemed necessary to describe the developed design; single line electrical and mechanical plans, and

structural plans with Basis of sizing of major structural elements.

b. A tabulation of both gross and assignable floor, pavement and/or yard areas in a comparison to the approved conceptual program area requirements and to the initial program area requirements.

c. As indicated, Design-Build Entity shall provide to Owner for its approval, a color and materials board, samples of textures and finishes of all materials proposed in the Work.

d. Recommendations for scheduling and phasing of construction.

e. Outline specifications for each technical specification section, following Construction Specification Institute 2010 conventions, with Part 2 Products of each section completed, describing the size, character and quality of the entire Project in its essentials as to kinds and locations of materials; equipment selections; and types of structural, mechanical and electrical systems. For major equipment and system specifications, Design-Build Entity shall also submit first cost and lifecycle cost analysis, with comparative analysis for the selected equipment/system item and two other alternative equipment/system items considered by Design-Build Entity but not selected.

f. Confirmation that Design-Build Entity has prepared Basis of engineering calculations for all disciplines, including realistic loads, that are sufficiently complete for work on Construction Documents to proceed. To the extent required by County Fire Marshal, -or any other authority having jurisdiction, prepare for acceptance updated written design criteria for mechanical, electrical and plumbing systems (for example, temperature, humidity, lighting levels and floor live load design shall be stated for general and special occupancy areas).

g. A grading and drainage plan and a site plan from architectural information showing a final development of the site. This Drawing will also include a horizontal and vertical control plan and utility connections to the infrastructure plan. The services described in this subparagraph shall be provided by a professional civil engineer under an agreement with Design-Build Entity.

3. Additional Data or Services. Design-Build Entity shall advise Owner in writing if additional data or services of the following types are necessary and obtain such data and services as directed in writing by Owner:

   a. Borings, probings and subsurface explorations, hydrographic surveys, laboratory tests and inspections of samples, materials and equipment;

   b. Appropriate professional interpretations of the foregoing; and

   c. Other special data or consultations necessary or useful in completion of the Project.

4. Report on Additional Permits or Reports. Advise in writing if any of the following are required:

   a. Governmental permits of any type; and

   b. Reports of any type to governmental agencies.

5. Review with Owner. Prepare, for review by Owner for compliance with Bridging Documents, written design criteria for mechanical, security, and electrical systems.

6. County Fire Marshal Coordination and other Authorities Having Jurisdiction. Design-Build Entity shall be fully responsible for obtaining and coordinating all necessary County Fire Marshal approvals, and all approvals from all other authorities having jurisdiction.

2.02 Construction Documents and Construction Phases Design Services

A. Construction Documents Phase

1. Period of Service.

a. After acceptance by Owner of the Design Development Documents and any other required deliverables in the Design Development Phase, and upon written authorization from Owner, Design-Build Entity shall proceed with the performance of the services called for in the Construction Documents Phase.

b. Design-Build Entity shall submit the deliverables required by the Construction Documents Phase within the stipulated period required in the Project Schedule.

c. All items that are inconsistent with approved Design Development Documents, or (unless previously approved) Basis of Phase Design Documents, Bridging Documents, other Owner program requirements, or other prior Owner directions, acceptances or approvals, shall be expressly and separately identified and submitted for approval.

2. Construction Documents. On the basis of the Owner-approved Design Development Documents, Design-Build Entity shall prepare final Drawings and Specifications (together, "Construction Documents") to show the work to be furnished and performed by Design-Build Entity. Construction Documents shall set forth in detail the requirements for construction of all Work to be performed, and shall be Contract Documents, but shall not supersede other Contract Documents (including Bridging Documents) where other Contract Documents contain a more stringent requirement.

3. Construction Documents shall be prepared in accordance with industry standards. Construction Documents Specifications shall be prepared in conformance with the fifty division Master Format of the Construction Specification Institute (CSI) and paragraph 2.02A.5 below. Design-Build Entity shall have complete responsibility to secure timely review by all authorities with jurisdiction.

4. The same architectural and engineering team (and team personnel) that prepared the Design Development Documents shall complete the Construction Documents and do all final coordination and quality review of the Construction Documents, including without limitation, following revisions requested or final comments made by authorities with jurisdiction. Where Drawings and Specifications are submitted to the County Fire Marshal or other regulatory agencies and/or other authorities with jurisdiction, then the same architectural and engineering team (and team personnel) that prepared the submittal shall complete the Drawings and Specifications. If the submittal is incomplete in any manner, then Design-Build Entity shall continue working on Drawings and Specifications after the submittal in order to complete it, including completing all Designer services, fully coordinating the Drawings, and doing a quality control review. All Drawings shall be brought to ninety-five percent level of completion at either the submittal, or shortly thereafter, and then coordinated and checked. The purpose of this paragraph is to require Design-Build Entity to finish the design, so far as practical, either at the time of the submittal or shortly thereafter, to retain continuity in the design team and their familiarity with the Project. For good cause, Design-Build Entity may request relief from this paragraph. Owner may, but is not required to, conduct a peer review on the completed Drawings.

5. Format of Technical Specifications. Design-Build Entity shall prepare and transmit to Owner final technical specifications in conformance with the current conventions of the Construction Specification Institute. Design-Build Entity shall cooperate with Owner in coordinating the Drawings and technical specifications with Owner's Divisions 0 and 1 General standard specifications included in Contract Documents.

6. Auto CAD and Other Electronic Data. Provide AutoCAD or Revit (Release 14) files of all Drawings including as-bid, as-built, and all record Drawings, in electronic formats as requested by Owner. Prepare electronic record sets and sets of reproducible record prints or Drawings showing those changes made during the construction process, based on the marked-up prints, marked-up Technical Specifications, Drawings and other data furnished by Design-Build Entity to Owner. Electronic data shall be generated in AutoCAD Release 14 or Revit Release 14 and shall conform to Owner standards package (to be supplied.)

7. Compliance with Codes, Regulations and Requirements. All Drawings, Specifications, structural design calculations, site data, and cost estimates required by State or Federal law shall comply with State and federal standards. Design-Build Entity shall comply with any other requirements of authorities with jurisdiction over the Project or the Plans and Specifications. Design-Build Entity shall comply with the applicable standard of care when preparing Drawings and Specifications to comply with current applicable building codes, ordinances, statutes, laws, standards, governmental regulations and private restrictions, applicable to the Services, including, but not limited to, those listed in Contract Documents, all environmental, energy conservation, and disabled access requirements, regulations and standards of the County Fire Marshal or other authorities having jurisdiction over the Project.

8. Supply of Design Calculations. Design-Build Entity shall provide Owner with copies of all final electrical, mechanical and structural design calculations, organized by specification. Design-Build Entity shall provide Owner with a final update on the final design criteria utilized.

9. Make full written disclosure to Owner, and obtain Owner's express written approval of any proposed innovative, unique, proprietary, or sole source design features.

10. Warranty. Design-Build Entity warrants to Owner that the final design, as expressed in the Construction Documents:

    a. Will be constructible, workable, watertight, and within Design-Build Entity's detailed Project schedule (per Section 01 3200);

    b. Will comply in all respects with the requirements of the Contract Documents (including without limitation Bridging Documents);

    c. Will not call for the use of hazardous or banned materials; and

    d. Will fully comply with applicable building codes, ordinances, standards, governmental regulations, and private restrictions applicable to the Work.

11. Design-Build Entity shall prepare and submit draft Construction Documents at the 60% level of completion to Owner for review. Each submittal shall include an updated transmittal log, identifying all items included within the submittal and which items have been changed, as well as all other items required by Section 01 3300 (Submittals). Bridging Architect, on behalf of Owner, shall conduct such review as necessary on the 60% Construction Documents and shall advise Design-Build Entity of any necessary modifications, amendments and additions as reasonably required by Owner. Following receipt of Owner's comments, Design-Build Entity shall complete final Construction Documents. Such complete Construction Documents shall be deemed the Construction Documents for the Project.

12. Design-Build Entity shall take all steps to secure County Fire Marshal approvals and all other required reviews and approvals of the design documents.

13. Upon completion of Construction Documents, Design-Build Entity shall submit such Drawings and Specifications for acceptance to Owner's representatives (as Owner shall designate) and any other applicable agency, and obtain necessary permits for the construction of the Project as specified in the Construction Documents. During the same time period, Design-Build Entity shall submit to Owner three (3) complete sets of Construction Documents for final acceptance.

14. Following County's approval of final Construction Documents, and before issuance of Document 00 5500 (Notice to Proceed with Construction), Design-Build Entity shall provide a list of Bridging Documents and Construction Documents listing all final Drawings and Specifications.

15. Permits. To the extent not otherwise provided in Section 01 1101 (Summary of Work – Design-Build Contractor Services) or other provisions of Contract Documents, Design-Build

Entity shall assist Owner in securing all necessary permits and approvals, by identifying all necessary permits and approvals, securing necessary forms, and either applying for such permits and approvals in Design-Build Entity's name or by providing Owner with signature-ready completed forms for Owner's review and execution. This duty includes, but is not limited to, providing technical criteria, written descriptions and design data for use in filing applications for permits with or obtaining approvals of such governmental authorities as have jurisdiction to approve the design of the Project, and engage in consultations with appropriate authorities.

B. Substitutions

1. Design-Build Entity must base its design on products and systems specified in the Contract Documents or listed by name in Addenda.
2. Design-Build Entity may submit requests for substitutions (including without limitation "or equal" substitutions—see Document 00 7253 General Conditions paragraph 13.11) no later than 14 days before submission of final Construction Documents to County for approval.
3. Submittals of substitutions shall contain all required information set forth in Document 00 6325 (Substitution Request Form) and Specification Section 01 6000 (Product Requirements). Insufficient information shall be grounds for rejection of substitution.
4. Subject to the foregoing, Owner may consider Specifications/Bridging Documents final upon Contract award, however, and will consider substitutions following award in its sole discretion.

C. Construction Phase

1. Following Owner's written approval and acceptance and State Fire Marshal approval of Design-Build Entity's Construction Documents (or applicable portion thereof), Design-Build Entity may commence construction of the Project (or applicable portion thereof).
2. General Administration of Construction. Design-Build Entity's Designers shall make regular visits to the site at intervals appropriate to the various stages of construction as necessary to assure that construction conforms to the final design as approved.
3. Quality Control and Reporting. Design-Build Entity's Designers shall participate fully in Design-Build Entity's required quality control program and shall advise Design-Build Entity and Owner in writing of any observations of defective work, work not in conformance with Drawings and Specifications or other Contract Documents, and lack of progress consistent with the schedule of work in areas associated with their Services.
4. Coordination of Inspections. Design-Build Entity is responsible to coordinate inspections by County or authority having jurisdiction (AHJ) and to implement any corrections required by County or AHJ.

2.03 Design-Build Entity's Responsibility for Finished Construction

A. Owner's right to review Design-Build Entity's design and deliverables, including without limitation Design Development Documents, Construction Documents, shop drawings, samples and Submittals, as specified in the Contract Documents, including any review by Bridging Architect or other Owner advisor, shall not relieve Design-Build Entity of its responsibility for a complete design and construction complying with the requirements of the Contract Documents; but rather, such review shall be in furtherance of Owner's monitoring and accepting the design as developed and issued by Design-Build Entity, consistent with these Contract Documents. Design-Build Entity's responsibility to design and construct the Project in conformance with the Contract Documents including, but not limited to, the applicable performance standards and any fully executed change orders, shall be absolute. Such duty may not be altered or diminished by any

action other than a signed Change Order.

B. See Section 01 7839 (Project Record Documents) for certain markup and record documents requirements.

END OF SECTION

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 1102

SUMMARY OF WORK – DESIGN-BUILD CONTRACTOR SERVICES

PART 1 – INTRODUCTION

1.01 Design-Build Contractor Entity Services

A. Design-Build Entity shall provide Owner with professional construction and design-build general contractor services in connection with the Project.

B. Services under this Section 01 1102 include:

1. Existing Conditions Review and Verification
2. Construction Progress Planning
3. Securing of Necessary Permits and Approvals for Design-Build Entity's Work – Verification and Assistance
4. Public Relations Activities
5. Operations and Safety Program
6. Federal, State and Local Coordination/Processing
7. Recommendations for Professional Consultants
8. Subcontractor Procurement Plan
9. Master Project Schedule
10. Monthly Project Reports
11. Recordkeeping Requirements

C. Services under this Section 01 1102 shall proceed concurrently with other Contract Documents services, including without limitation design services under Section 011 1101 Summary of Work – Design Services. Identifying and numbering of Tasks in this Section shall not control Design-Build Entity in its planning, sequencing or execution of the Work or otherwise relieve Design-Build Entity of its all-inclusive design-build responsibilities or any other responsibilities under Contract Documents, including without limitation requirements relating to Contract Modifications and claims.

PART 2 – PROJECT PLANNING TASKS

2.01 Task #1: Existing Conditions Review and Verification.

A. Consistent with the standard of care of an experienced design-build contractor building a similar size and nature facility in the geographic locale of the Project, Design-Build Entity shall conduct a comprehensive review of Project site conditions and contiguous site conditions, sufficient to successfully perform all aspects of the Work, including, but not limited to:

1. Site logistics, site access restrictions or requirements, traffic, noise restrictions, hourly work restrictions, requirements of public and/or private authorities with jurisdiction, and any other restriction or consideration that may affect Design-Build Entity's Work.
2. Existing conditions information provided by Owner including, but not limited to, review and study of all available as-built information, geotechnical reports, engineering studies, previous contracts, measurements, surveys, documents and materials described and/or provided in the series 00 3100 Documents.
3. Any other investigations deemed necessary by Design-Build Entity to fully acquaint itself with existing conditions for purposes of its Work.

B. Design-Build Entity shall perform the investigations promptly after contract award and report to Owner in writing, any additional information Design-Build Entity needs, lacks, or would assist Design-Build Entity in assessing existing conditions. Owner and Design-Build Entity shall work collaboratively to secure any further, additional information required by Design-Build Entity, to the extent reasonably available.

C. Design-Build Entity's performance of this Task #1 is intended to supplement, not replace, its pre-Proposal investigations, and Design-Build Entity remains fully responsible for any deficiencies in its pre-Proposal investigations.

2.02 Task #2: Construction Progress Planning.

A. For the Owner's planning purposes, Design-Build Entity shall provide Owner with a report on specific requirements to maintain construction progress. Requirements shall specifically include, but are not limited to, the following:

1. Required Owner Coordination for Early Procurement – Approvals, Selections, Planning. Design-Build Entity will advise Owner regarding materials or equipment that require early procurement to maintain the Project schedule, and steps, approvals, reviews or other Owner actions, that Design-Build Entity may require to maintain this part of the schedule. Design-Build Entity will provide Owner with a written report evaluating early procurement requirements and identifying the dates by which decisions must be made.
2. Logistics. Design-Build Entity will advise Owner regarding the effect of site logistics on schedule, specific requirements or requirements to manage such logistics with the expected construction and construction progress, and will make recommendations for improving site or other logistics to reduce the potential for interferences or increased costs. All recommendations must consider functionality, the effect of logistics on the operation of Owner's facilities, and Design-Build Entity's contract commitment to manage and execute the Project in a manner that meets the requirements of the Contract Documents, including but not limited to, non-interference with continuing Owner operations on and adjacent to the Site.

2.03 Task #3: Securing of Necessary Permits and Approvals for Design-Build Entity's Work – Verification and Assistance

A. Federal, State and County Requirements. Design-Build Entity will provide all necessary information, applications, documents and forms, as may be required by City, County, and other regulatory and permitting agencies, necessary to secure the necessary approvals and permits, necessary to perform the Work. Design-Build Entity shall provide Owner with a listing of all information, approvals, and/or consents, required from Owner, to perform this requirement. Design-Build Entity shall provide Owner with such listing significantly in advance of the required information, approvals and/or consents, to permit Owner reasonable time for compliance.

B. Permits. Design-Build Entity shall apply County requirements, as well as other federal, state, local, and special district or other regulatory requirements.

C. Fees and Assessments. Design-Build Entity shall verify that each applicant for a permit required for construction, has paid applicable fees and assessments, and filed necessary reports and or materials, and that responsible parties have secured such permits. Design-Build Entity shall assist and coordinate efforts of Owner and other consultants in connection with Design-Build Entity's responsibility for filing documents required for approvals of City/County and other applicable public regulatory authorities having jurisdiction.

D. Utilities. Design-Build Entity shall take primary responsibility to assist, manage and (if necessary) verify that Owner has applied for any applicable utility permits (if such permits must be in Owner's

name), and that any such applicable fees and assessments are paid. Design-Build Entity shall take primary responsibility to assist Owner in obtaining approvals and securing such utility permits from public and/or private authorities having jurisdiction over the Project. Design-Build Entity shall coordinate any on-site activities of utility companies, materials and soils testing engineering and regulatory agencies, utility outages or other connections or re-routing of services.

E. Statutory Approvals. Design-Build Entity shall obtain statutory approvals or local approvals, for example, County Fire Marshal, City Fire and Department of Public Works, and County Building Departments or other authorities having jurisdiction.

2.04 Task #4: Public Relations Activities

A. Design-Build Entity shall designate a Design-Build Entity representative to attend, and will assist Owner in, all public relations matters including, but not limited to, preparing Project information and attending internal, permitting, and public meetings as required including site meetings and meetings with County, City , and other authorities having jurisdiction.

B. A designated Owner representative shall be the point of contact for the entire community during all phases of construction in regards to any complaints, questions, safety issues, noise problems, dust problems, and the like, except for such specific areas Owner's representative delegates to Design-Build Entity.

2.05 Task #5: Operations and Safety Program.

A. Design-Build Entity will be responsible for developing and implementing an Operations and Public Safety Program ("Operations and Safety Program"), which shall be a specific written deliverable provided by Design-Build Entity to Owner and that Design-Build Entity shall implement once Owner has completed its review. The Operations and Safety Program shall specifically include, but is not limited to:

1. Project-specific measures for coordination of the Project with on-going Owner operations and other businesses or operations at or contiguous to the Site, to assure that such operations shall continue unimpeded (without adversely affecting safety) during the Work. These measures include coordination of construction operations including, but not limited to, noise, traffic, vibration, and any other issues that may be foreseeable with such operations.
2. Temporary measures including, but not limited to, covered walkways, barriers and walls, pavement, directional signage, lighting, and ventilation. Design-Build Entity shall provide these temporary measures to maintain the continued, uninterrupted operation of Owner facilities, Owner operations, adjacent businesses and structures, including traffic flow, during the Construction phase of the Work. The first priority for all such temporary measures shall be the continued, uninterrupted operations of the Owner, the safety of the general public, and substantially unimpeded vehicular and pedestrian traffic flow.
3. Coordination of construction, delivery, installation, commissioning, testing and turnover, of products, equipment, and systems, with responsible Owner and/or other authorities with jurisdiction, including the identification of organizational responsibility and authority for decisions, consents or approvals, to ensure performance of such work without delays resulting from lack of required consents.
4. For any Work within an existing facility, a clear identification of the physical boundaries in which all Work is to take place.
5. Design-Build Entity shall be exclusively responsible for determining the requirements and assignment of safety responsibilities included in the Contract Documents.

2.06 Task #6: Federal, State and Local Coordination/Processing.

A. Design-Build Entity, in cooperation with Owner, shall have primary responsibility for the coordination and processing of all necessary applications, permits, changes, paperwork, approvals, instruction bulletins, accommodating meetings and inspections, and close-out documents with the City/County and any other applicable public agency.

2.07 Task #7: Recommendations for Professional Consultants.

A. Design-Build Entity shall advise Owner of any need for additional, professional services of surveyors, special consultants and testing laboratories, not foreseen at the time of contracting. Design-Build Entity shall then, to the extent such consultants are not covered in Design-Build Entity's scope of work under this Contract, assist the Owner, if required, in selecting and retaining such consultants, and coordinate their services, as and if necessary for the Project or for Design-Build Entity to perform its services

2.08 Task #8: Subcontractor Procurement Plan.

A. Design-Build Entity shall develop and submit to Owner a Subcontractor Procurement Plan which is consistent and complies with Subcontractor procurement requirements in Document 00 7253 General Conditions.

B. See Document 00 7253 (General Conditions) paragraph 4.03 regarding various Subcontractor procurement requirements, including providing Owner with additional versions of Document 00 4330 (Subcontractors List).

PART 3 – SCHEDULING, REPORTING AND RECORD KEEPING

3.01 Task #9: Master Project Schedule.

A. By no later than the first payment application, Design-Build Entity will develop a Master Project Schedule, subject to review and acceptance by Owner, which will contain key milestones to be accomplished by the Project participants for design, construction and project management.

B. The Master Project Schedule shall also include:

1. The Master Project Schedule shall meet the requirements of Section 01 3200, Progress Schedule, and will reflect the detail and progress of the Project Schedule appropriate to the stage of planning, design, and construction.
2. Preconstruction and construction services under this Section 01 1102, at the top of the schedule.
3. The first level of detail from Subcontractors, Design-Build Entity's design team, inspectors and other parties interfacing with the Project, including necessary reviews, approvals, permitting and authorization milestones.
4. Long lead item procurement.
5. Subcontractor packages and critical construction milestones.
6. Owner review and approval requirements
7. Schedule of Shop Drawings and Sample Submittals, as described in Section 013300 (Submittal Procedures).

3.02 Task #10: Monthly Project Reports.

A. Design-Build Entity shall provide Owner with monthly written reports covering the Project and that address the general status, problems, concerns, and progress of the Project and a 90-day look ahead schedule.

B. A progress summary shall be the first page of the Monthly Project Report. The report shall indicate in column format (i.) the original and forecast cost and dates of completion; (ii.) the original and adjusted contract sums; (iii.) pending change order requests and claims; and (iv.) the original and projected completion dates.

C. The Monthly Project Report shall include construction progress and updates.

1. Construction progress: generally since prior report, and percentage completion. Design-Build Entity shall include a narrative of the work performed and an updated task list and identify areas of concern, actions and approvals needed.
2. Design-Build Entity schedule: work progress against schedule. The report shall clearly identify actual performance with respect to the current approved version of the schedule. The narrative shall include any problems or delays encountered, causes of delays, proposed ways to work around any problems that arise and schedule assessment.
3. Monthly report shall include progress photos as identified in Division 1, Section 3232, Photographic Documentation.

D. Design Status. The Monthly Project Report shall include a section on design status for the Project. The report shall also include a list of any Contract deliverables and identification of areas of concern, actions and approvals needed, and recommendations regarding ongoing design work with respect to value engineering, constructability coordination of design services with other Project items, and any and all design changes affecting appearance, size, function, usage or cost of the Project or any Subproject.

E. Subcontractor Procurement. The Monthly Project Report shall include a section on subcontractor procurement. The narrative shall include progress on and changes to the original Subcontractor Procurement Plan.

F. Design-Build Entity's Safety Program. The Monthly Project Report shall include a section on the Design-Build Entity's Safety Program. The narrative shall include incident reports and statistics and other Design-Build Entity recommended information to demonstrate and promote the effectiveness of its Safety Program.

G. Disputes and claims. The Monthly Project Report shall include a section on disputes and claims. For the Project and each Subproject, the narrative shall include a discussion on disputes, potential claims, and claims made.

H. Look Ahead Task List. The Monthly Report shall include a 90-day look ahead/task listing for Owner planning purposes, of Owner-specific activities, inspections, approvals, tie-ins, connections, consents, and decisions, necessary from the Owner to facilitate Design-Build Entity's progress.

I. Daily log (electronic copy only). Design-Build Entity shall keep a daily log containing a record of weather, contractor activities, and subcontractors working on the site, number of workers, work accomplished, problems encountered, impacts on the Work and specific activities, and other relevant data or such additional data as Owner may require. Design-Build Entity shall maintain the log electronically in a format acceptable to Owner, with each data-point maintained separately for separate sorting, charting or study by Owner if necessary. Design-Build Entity shall submit such electronic file monthly, with the Monthly Progress Report.

3.03 Task #11: Recordkeeping Requirements

A. Design-Build Entity shall maintain construction records to include, but not limited to, the following documents to be maintained on a current basis and available on site: a record copy of the Contract Documents, drawings, specifications, addenda, change orders, change modifications and other modifications, organized, in good order and marked to record all as-built changes made during construction; shop drawings; product data/material data sheets; samples; submittal; purchases; materials; equipment; inspections; applicable State and local titles, regulations publications, handbooks or manuals of requirements and codes applicable to the design and construction of the facility; maintenance and operating manuals and instructions; other related documents and revisions which arise out of the Construction Contracts. Design-Build Entity shall maintain records in duplicate, of principal building layout lines, elevations for the bottom of footings, floor levels, and key site elevations (certified by a qualified surveyor or professional engineer, if necessary).

B. Design-Build Entity shall make all such records available to Owner. At the completion of the Project, Design-Build Entity shall deliver all such records to the Owner to have a complete set of record as-built drawings.

C. Design-Build Entity's failure to comply with recordkeeping requirements under this subparagraph entitles Owner to withhold five percent of any Application for Payment until compliance.

END OF DOCUMENT

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 2000

MEASUREMENT AND PAYMENT

PART 1 – GENERAL

1.01 Summary

A. Section includes description of requirements and procedures for determining amount of Work performed and for obtaining payment for Work performed.

1.02 References

A. California Public Contract Code.

B. Code of Civil Procedures.

C. Government Code.

1.03 Composition and Scope of Contract Sum

A. Scope of Contract Sum
   1. The Contract Sum for performance of the Work under the Contract Documents, or under any allowance or Alternate, shall include full compensation for all Work required under the Contract Documents, including without limitation, all design, architecture, professional services, labor, materials, taxes, transport, handling, storage, supervision, administration, and all other items necessary for the satisfactory completion of the Work, whether or not expressly specified or indicated, incidental work and unexpected expenses, and all terms, conditions, requirements and limitations set forth in the Contract Documents.
   2. Contract Sum may be expressed as lump sum or GMP,. The Contract Sum, whether lump sum, or otherwise, shall be deemed to include all costs necessary to complete required Work, including Design-Build Entity overhead and profit, all costs (if any) for loss or damage arising from nature of Work or prosecution of the Work, and from action of elements.
   3. Unless Contract Documents expressly provide otherwise, the Contract Sum shall be deemed to include:
      a. Any and all costs arising from any unforeseen difficulties which may be encountered during, and all risks of any description connected with, prosecution of Work or any Work item (whether lump sum or unit price) until acceptance by Owner;
      b. All expenses incurred due to suspension, or discontinuance of Work or any Work item, as provided in Contract Documents;
      c. Escalation to allow for cost increases between time of Contract Award and completion of Work or any Work item.

B. Lump Sum Items
   1. When estimated quantity for specific portion of Work is not indicated and/or Work is designated as lump sum, payment will be on a lump sum basis for Work satisfactorily completed in accordance with Contract Documents.
   2. Payment for lump sum Work, or items of Work subject to a lump sum (e.g. without limitation, change order work), shall be made on the basis of satisfactory completion of such Work or work item, earned in progressive stages in accordance with the Contract Documents, up to but not exceeding the Design-Build Entity's percentage completion of the

Work or item.

3. Lump sum items shall be paid based upon the approved Schedule of Values, which shall be used to measure progressive payments based upon satisfactory progress towards completion of the item.

1.04 Payment Procedures

A. Schedule of Values

1. Within ten Days after Document 00 5100 (Conditional Notice of Award) becomes unconditional, and prior to the Design-Build Entity's first Application for Payment, Design-Build Entity will participate in a meeting with the Owner to review and confirm Schedule of Values.
2. Within ten days following the Schedule of Values meeting, Design-Build Entity shall submit a detailed breakdown of the Contract Sum specified in Document 00 its Proposal by scheduled Work items and/or activities, including, but not limited to, all design phases (Schematic, Design Development and Construction Documents), coordination responsibilities, and Project Record Documents responsibilities. Where more than one Designer or Subcontractor comprises the work of a Work item or activity, the Schedule of Values shall show a separate line item for each design agreement or subcontract. Design-Build Entity shall furnish such breakdown of the total Contract Sum by assigning dollar values (cost estimates) to each applicable Progress Schedule network activity, which cumulative sum equals the total Contract Sum. This breakdown may be referred to as the Schedule of Values.
3. Design-Build Entity's overhead, profit, insurance, cost of bonds (except to the extent expressly identified in a Contract item) and/or other financing, as well as "general conditions costs," (e.g., Site cleanup and maintenance, temporary roads and access, off-Site access roads, temporary power and lighting, security, and the like), shall be prorated through all activities so that the sum of all the Schedule of Values line items (including all allowances unless otherwise equals Design-Build Entity's total Contract Sum. Scheduling, record documents and quality assurance control shall be separate line items.
4. Owner will review the breakdown in conjunction with the Progress Schedule to ensure that the dollar amounts of this Schedule of Values are, in fact, reasonable cost allocations for the Work items listed. Upon favorable review by Owner, Owner will accept this Schedule of Values for use. Owner shall be the sole judge of fair market cost allocations.
5. Owner will reject any attempt to increase the cost of early activities, i.e., "front loading," resulting in a complete reallocation of moneys until such "front loading" is corrected. Repeated attempts at "front loading" may result in suspension or termination of the Work for default, or refusal to process progress payments until such time as the Schedule of Values is acceptable to Owner.
6. Schedule of Values shall be revised to reflect Change Orders, subject to Owner approval.

B. Design-Build Entity's Requests for Progress Payments

1. If requested by Design-Build Entity, progress payments will be made monthly, under the following conditions:
2. On or before the 25th Day of each month, Design-Build Entity shall submit to Owner an electronic copy of an Application for Payment for the cost of the Work put in place during the period from the last Day of the previous month to the end of the current month, along with one copy of an updated Progress Schedule. Such Applications for Payment shall be for the expected total value of activities completed or partially completed, based upon Schedule of Values prices of all labor and materials incorporated in the Work up until midnight of the last Day of that one month period, less the aggregate of previous payments. Accumulated retainage shall be shown as separate item in payment summary. Owner and Design-Build Entity will reconcile any differences in the field, based on the reconciled monthly report sheets. If Design-Build Entity is late submitting its Application for

Payment, that Application may be processed at any time during the succeeding one-month period, resulting in processing of Design-Build Entity's Application for Payment being delayed for more than a Day for Day basis.

3. No progress payment will be processed prior to Owner receiving all requested, acceptable schedule update information and confirmation that certified payrolls have been submitted to the Laborer Commissioner or Compliance Monitoring Unit of the Department of Industrial Relations, , and in Owner's sole and absolute discretion, Owner may deny the entire Application for Payment for noncompliance.
4. Each Application for Payment shall list each Change Order and Change Directive ("CD") executed prior to date of submission, including the Change Order/CD Number, and a description of the Work activities, consistent with the descriptions of original Work activities. Design-Build Entity shall submit a monthly Change Order/CD status log to Owner.
5. If Owner requires substantiating data, Design-Build Entity shall submit information requested by Owner, with cover letter identifying Project, Application for Payment number and date, and detailed list of enclosures. Design-Build Entity shall submit one copy of substantiating data and cover letter for each copy of Application for Payment submitted.
6. If Design-Build Entity fails or refuses to participate in monthly Work reconciliations or other construction progress evaluation with Owner, Design-Build Entity shall not receive current payment until Design-Build Entity has participated fully in providing construction progress information and schedule update information to Owner.

C. Owner's Review of Progress Payment Applications

1. Owner will review Design-Build Entity's Application for Payment following receipt and during the Progress Schedule and Billing Meeting. If adjustments need to be made to percent of completion of each activity, Owner will make appropriate notations and return to Design-Build Entity. Design-Build Entity shall revise and resubmit. All parties shall update percentage of completion values in the same manner, i.e., express value of an accumulated percentage of completion to date.
2. If Owner determines that portions of the Application for Payment are not proper or not due under the Contract Documents, then Owner may approve the other portions of the Application for Payment, and in the case of disputed items or Defective Work not remedied, may withhold up to 150 percent of the disputed amount from the progress payment.
3. Pursuant to California Public Contract Code §20104.50, if Owner fails to make any progress payment within 30 Days after receipt of an undisputed and properly submitted Application for Payment from Design-Build Entity, Owner shall pay interest to the Design-Build Entity equivalent to the legal rates set forth in subdivision (a) of Section 685.010 of the California Code of Civil Procedure. The 30-Day period shall be reduced by the number of Days by which Owner exceeds the seven-Day return requirement set forth herein.
4. As soon as practicable after approval of each Application for Payment for progress payments, Owner will pay to Design-Build Entity in manner provided by law, an amount equal to 95 percent of the amounts otherwise due as provided in the Contract Documents, or a lesser amount if so provided in Contract Documents, provided that payments may at any time be withheld if, in judgment of Owner, Work is not proceeding in accordance with Contract, or Design-Build Entity is not complying with requirements of Contract, or to comply with stop notices or to offset liquidated damages accruing or expected. In Owner's sole discretion, if Design-Build Entity has failed to comply with either its Progress Schedule update or project record documents requirements, Owner may retain an additional 5% of any earned amounts until such requirements are satisfied.
5. Before any progress payment or final payment is due or made, Design-Build Entity shall submit satisfactory evidence that Design-Build Entity is not delinquent in payments to employees, Subcontractors, suppliers, or creditors for labor and materials incorporated into Work. This specifically includes, without limitation, conditional lien release forms for the current progress payment and unconditional release forms for past progress payments.

This also includes affidavit affirming that certified payroll has been received by the DIR from Design-Build Entity and subcontractors for the current payment period.

D. Payment for Material and Equipment Not Yet Incorporated Into the Work
   1. No payment shall be made for materials or equipment not yet incorporated into the Work, except as specified elsewhere in the Contract Documents or as may be agreed to by Owner in its sole discretion. Where Design-Build Entity requests payment on the basis of materials and equipment not incorporated in the Work, Design-Build Entity must satisfy the following conditions:
   2. The materials and/or equipment shall be delivered and suitably stored at the Site or at another local location agreed to in writing, for example, a mutually acceptable bonded and insured warehouse.
   3. Full title to the materials and/or equipment shall vest in Owner at the time of delivery to the Site, warehouse or other storage location. Obtain a negotiable warehouse receipt, endorsed over to Owner for materials and/or equipment stored in an off-site warehouse. No payment will be made until such endorsed receipts are delivered to Owner.
   4. Stockpiled materials and/or equipment shall be available for Owner inspection, but Owner shall have no obligation to inspect them and its inspection or failure to inspect shall not relieve Design-Build Entity of any obligations under the Contract Documents. Materials and/or equipment shall be segregated and labeled or tagged to identify these specific Contract Documents.
   5. After delivery of materials and/or equipment, if any inherent or acquired defects are discovered, defective materials and/or equipment shall be removed and replaced with suitable materials and/or equipment at Design-Build Entity's expense.
   6. At Design-Build Entity's expense, insure the materials and/or equipment against theft, fire, flood, vandalism, and malicious mischief, as well as any other coverages required under the Contract Documents. No payment will be made until proper evidence of such insurance, including certificates identifying Owner as loss payee, is delivered to Owner.
   7. Design-Build Entity's Application for Payment shall be accompanied by a bill of sale, invoice or other documentation warranting that Owner has received the materials and equipment free and clear of all liens and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect Owner interest therein, all of which must be satisfactory to Owner. This documentation shall include, but not be limited to, conditional releases of mechanics' liens and stop notices from all those providing materials and equipment as to which the Application for Payment relates, as well as unconditional releases of the same from the same as to the previous Application for Payment for which they have not already been provided. Amounts previously paid for materials and equipment prior to incorporation into the Work shall be deducted from amounts otherwise due Design-Build Entity as they are incorporated.

1.05 Final Payment and Release of Retention

A. Final Payment and release of retention to DBE shall be released, as set forth below:

   1. As soon as all required Work is completed in accordance with Contract Documents, including but not limited to punchlist, testing, record documents, warranties, and Design-Build Entity maintenance after Final Acceptance, Design-Build Entity shall submit its Application for Final Payment. Final payment shall be paid not less than 10 days after Owner's representative issues the final Certificate for Payment.
   2. Provided Design-Build Entity has met all conditions required for Final payment, Owner shall release retention to DBE 35 days after the filing and recordation of the Notice of Completion.

B. Final Accounting
   1. Prior progress payments and change orders shall be subject to audit and correction in the

final payment.

2. Design-Build Entity and each assignee under an assignment in effect at time of final payment shall execute and deliver at time of final payment, and as a condition precedent to final payment, Document 00 6530 (Agreement and Release of Claims).

1.06 Substitution of Securities

A. Public Contract Code Section 22300. In accordance with the provisions of Public Contract Code Section 22300, substitution of securities for any moneys withheld under Contract Documents to ensure performance is permitted under following conditions:

1. At request and expense of Design-Build Entity, securities listed in Section 16430 of the Government Code, bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by Design-Build Entity and Owner which are equivalent to the amount withheld under retention provisions of Contract shall be deposited with Controller or with a state or federally chartered bank in California, as the escrow agent, who shall then pay such moneys to Design-Build Entity. Upon satisfactory completion of Contract, securities shall be returned to Design-Build Entity.
2. Alternatively, Design-Build Entity may request and Owner shall make payment of retentions earned directly to the escrow agent at the expense of Design-Build Entity. At the expense of Design-Build Entity, Design-Build Entity may direct the investment of the payments into securities and receive the interest earned on the investments upon the same terms provided for securities deposited by Design-Build Entity. Upon satisfactory completion of the work of the Contract Documents, Design-Build Entity shall receive from escrow agent all securities, interest, and payments received by the escrow agent from Owner. Design-Build Entity shall, upon approval from Owner, then pay to each Subcontractor, not later than 20 Days after receipt of the payment, the respective amount of interest earned, net of costs attributed to retention withheld from each Subcontractor, on the amount of retention withheld to insure the performance of Design-Build Entity.
3. Design-Build Entity shall be beneficial owner of securities substituted for moneys withheld and shall receive any interest thereon.
4. Design-Build Entity may enter into an escrow agreement, form included in Contract Documents, as authorized under Public Contract Code Section 22300, specifying amount of securities to be deposited, terms and conditions of conversion to cash in case of default of Design-Build Entity, and termination of escrow upon completion of Contract Documents.
5. Public Contract Code Section 22300, in effect upon Design-Build Entity's execution of Document 00 5200 (Agreement), is hereby incorporated in full by this reference and shall supersede anything inconsistent therewith.

1.07 Basis And Effect Of Payment

A. Payment will be made by Owner, based on Owner review of Design-Build Entity prepared plans and specifications, observations at the Site and the data comprising the Application for Payment. Payment will not be a representation that Owner has:

1. Made exhaustive or continuous on-Site inspections to check the quality or quantity of Work;
2. Thoroughly checked Design-Build Entity prepared Design Development and/or Contract Documents for compliance with Bridging Documents, code and other agency requirements;
3. Reviewed construction means, methods, techniques, sequences, or procedures;
4. Reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by Owner to substantiate Design-Build Entity's right to payment; or
5. Made examination to ascertain how or for what purpose Design-Build Entity has used money previously paid on account of the Contract Sum.

B. Owner does not expressly, or by implication, agree, warrant, or represent in any manner, that actual amount of Work will correspond with amount shown or estimated and reserves right to increase or decrease amount of any class or portion of Work, to leave out entire Work Item or Items, or to add work not originally included in Design-Build Entity's Proposal or Contract Documents, when in its judgment such change is in best interest of Owner. No change in Work shall be considered a waiver of any other condition of Contract Documents. No claim shall be made for anticipated profit, for loss of profit, for damages, or for extra payment whatever, except as otherwise expressly provided for in Contract Documents, because of any differences between the amount of work actually done and estimated amount as set forth herein, or for elimination of Work Items.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 3200

PROGRESS SCHEDULES AND REPORTS

PART 1 – GENERAL

1.01 Summary

A. Section includes administrative and procedural requirements for documenting the progress of design and construction during performance of the Work, including the following:
   1. Preliminary Baseline Design/Construction Schedule.
   2. Design-Build Entity's Detailed Final Baseline Design/Construction Schedule.
   3. Submittal Schedule.

1.02 Definitions

A. Activity:
   1. A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a design or construction schedule consume time and resources.
   2. Critical activities are activities on the critical path. They must start and finish on the planned early start and finish times, have no float and are on the longest path through the schedule.
   3. Predecessor Activity: An activity that precedes another activity in the network.
   4. Successor Activity: An activity that follows another activity in the network.

B. Cost-loading:
   1. The allocation of the Schedule of Values for the completion of an activity as scheduled. The sum of costs for all activities must equal the total Lump Sum, unless otherwise approved by the Owner.

C. CPM:
   1. Critical Path Method (CPM): A method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of the Skylonda Fire Station .

D. Critical Path:
   1. The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Skylonda Fire Station duration and contains no float.

E. Event:
   1. The starting or ending point of an activity.

F. Float:
   1. The measure of leeway in starting and completing an activity.
   2. Float time is not for the exclusive use or benefit of either Owner or Design-Build Entity, but is a jointly owned, expiring Skylonda Fire Station resource available to both parties as needed to meet schedule milestones and Contract completion dates. Design-Build Entity's use of float must be pre-approved by the Owner prior to use.
   3. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
   4. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Skylonda Fire Station completion date.

G. Fragnet
   1. A partial or fragmentary network that breaks down activities into smaller activities for greater detail.

H. Major Area:
   1. A story of construction, a separate building, or a similar significant construction element.

I. Milestone:
   1. A key or critical point in time for reference or measurement.

J. Network Diagram:
   1. A graphic diagram of a network schedule, showing activities and activity relationships.

1.03 Submittals

A. Qualification Data:
   1. Submit qualifications for a DBE Scheduling Manager. See 1.04.A and 1.06.D below.

B. Submittal Schedule:
   1. Submit three copies of the Submittal Schedule. Arrange the following information in a tabular format:
      a. Scheduled date for first submittal.
      b. Final Specification Section number and title, cross-referenced to Performance Specifications in the Bridging Documents.
      c. Submittal category (action or informational).
      d. Name of subcontractor.
      e. Description of the Work covered.
      f. Scheduled date for the Owner's final release or approval.

C. Preliminary Baseline Design/Construction Schedule:
   1. Submit two opaque copies, large enough to show entire network for entire design and construction periods. Show logic ties for activities.

D. Design-Build Entity's Detailed Final Baseline Design/Construction Schedule
   1. Submit two opaque copies of initial schedule, large enough to show entire schedule for entire design and construction periods.
   2. Submit an electronic copy of schedule, using software, and labeled to comply with requirements for submittals. Include type of schedule (Initial, Master or Updated) and date on label.

E. CPM Reports:
   1. Concurrent with CPM schedule, submit three copies of each of the following computer-generated reports. Format for each activity in reports must contain activity number, activity description, cost and resource loading, original duration, remaining duration, Early Start Date, early finish date, late start date, late finish date, and total float in calendar days.
      a. Activity Report: List of all activities sorted by activity number and then Early Start Date, or Actual Start Date if known.
      b. Activity Report: List of all activities sorted by Early Start Date or Actual Start Date if known.
      c. Logic Report: List of preceding and succeeding activities for all activities, sorted in ascending order by activity number and then Early Start Date, or Actual Start Date if known.
      d. Total Float Report: List of all activities sorted in ascending order of total float.
      e. Earnings Report: Compilation of Design-Build Entity's total earnings from the Notice to Proceed (NTP) until most recent Application for Payment.

1.04 Quality Assurance

A. Scheduling Manager Qualifications:
   1. An individual experienced in CPM scheduling and reporting, with capability of producing CPM reports and diagrams within forty-eight (48) hours of the Owner's request. Scheduling Manager must show at least eight (8) years in scheduling similar projects and expertise in the use of all scheduling software required by this Section 01 3200, including, but not limited to, Primavera P6 Enterprise Project Portfolio Management, version 8 or later, as required in 2.03.A below.

B. Pre-scheduling Conference:
   1. Conduct conference at Skylonda Fire Station site to comply with requirements in [TBD]. Review methods and procedures related to the Preliminary Design/Construction Schedule and Design-Build Entity's Design/Construction Schedule, including, but not limited to, the following:
      a. Review software limitations and content and format for reports.
      b. Verify availability of qualified personnel needed to develop and update schedule.
      c. Discuss constraints, including phasing, work stages, area separations, interim milestones, and partial Owner occupancy.
      d. Review anticipated review times, including County and State Fire Marshal.
      e. Review delivery dates for Owner-furnished products.
      f. Review time to acquire, set up and occupy the field office(s).
      g. Review dates established in the Owner's Skylonda Fire Station Milestone Schedule and other milestones of important events.
      h. Review dates of all mobilization activities on site, including notices and permits.
      i. Review dates detailing the planned design schedule, including submittals and reviews.
      j. Review schedule for work of Owner's separate contracts.
      k. Review time required for review of other submittals and resubmittals.
      l. Review requirements for tests and inspections by independent testing and inspecting agencies.
      m. Review time required for completion and startup procedures.
      n. Review and finalize list of construction activities to be included in schedule.
      o. Review submittal requirements and procedures.
      p. Review procedures for updating schedule.

1.05 Coordination

A. General:
   1. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
   2. Coordinate Design-Build Entity's Design/Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.
   3. Secure time commitments for performing critical elements of the Work from parties involved.
   4. Coordinate each design and construction activity in the network with other activities and schedule them in proper sequence.

1.06 General Scheduling Requirements

A. The Design-Build Entity will develop and maintain the Design/Construction Schedule for the scope of work contained in the Contract. The purpose of the Design/Construction Schedule will be to:
   1. Assure adequate planning, scheduling, and reporting during execution of the design, construction and related activities so they may be prosecuted in an orderly and expeditious

manner, within the Contract Time and the Milestones stipulated by the Agreement or other Contract Documents;
2. Assure coordination of the work of the Design-Build Entity and the various Designers, subcontractors and suppliers at all tiers;
3. Assist in the preparation and evaluation of the Design-Build Entity's monthly progress payments;
4. Assist in monitoring the progress of the work and evaluating proposed changes to the Contract and the Construction Schedule; and,
5. Assist in detecting problems for the purpose of taking corrective action and to provide a mechanism or tool for determining and monitoring such corrective actions.

B. The Work will be prosecuted such that it will insure meeting the specified Contract Time. By execution of the Agreement, the Design-Build Entity represents that he has analyzed the work, the requirements of design, the materials and methods involved, the systems of the building, availability of qualified professional personnel and labor, restrictions of the site, constraints imposed, their own workload and capacity to perform the work, and agrees that the specified times are reasonable considering the existing conditions prevailing in the locality of the work, including weather conditions, and other factors, with only the allowance for variations from average or ideal conditions otherwise permitted in Contract Documents.

C. The work under this Contract will be planned, scheduled, executed and reported using the Precedence Diagraming Technique of the Critical Path Method (hereinafter referred to as CPM).

D. The Design-Build Entity must employ the full-time services of at least one Scheduling Manager (not the Project Manager, Project Engineer, Foreman or Superintendent) fully qualified in critical path scheduling of projects of similar size and scope for the duration of the Contract.

E. Any and all milestones listed in these specifications, or elsewhere in the Contract Documents, represent only certain major items of design or construction work. The milestone completion dates indicated are considered essential to the satisfactory performance of this Contract and to the coordination of all work on the Skylonda Fire Station. The Owner reserves the right to require the Design-Build Entity to prosecute the work in accordance with the specified milestone dates.

PART 2 - SCHEDULING SUBMITTALS

2.01 Submittal Schedule

A. Preparation:
1. Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, re-submittals, ordering, manufacturing, fabrication, and delivery when establishing dates.
2. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Design-Build Entity's Construction Schedule.
3. Initial Submittal: Submit concurrently with Preliminary Baseline Design/Contraction Schedule. Include submittals required during the first 120 calendar days of design and construction. List those required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
4. Final Submittal: Submit concurrently with the first complete submittal of Design-Build Entity's Detailed Final Baseline Design/Construction Schedule.

2.02 Design-Build Entity's Design/ Construction Schedules, General

A. Procedures:
1. Comply with procedures contained herein.

B. Time Frame:
1. Extend schedule from date established for the NTP to date of Completion.

2. Contract completion date will not be changed by submission of a schedule that shows an early or late completion date, unless specifically authorized by Change Order.

C. Activities:
   1. Treat each story or separate area as a separate numbered activity for each principal element of the Work.
   2. Activity Duration: Define activities so no activity is longer than fifteen (15) working days, unless specifically allowed by the Owner.
   3. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than sixty (60) calendar days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
   4. Submittal Review Time: Include review and re-submittal times required in Section 01 3300, Submittal Procedures, in the schedule. Coordinate submittal review times in Design-Build Entity's Construction Schedule with Submittals Schedule.
   5. Startup and Testing Time: Include not less than ten (10) working days for startup and testing.
   6. Completion: Indicate completion in advance of date established for Completion, and allow time for the Owner's administrative procedures necessary for the Owner to issue a Certification of Completion.

D. Constraints:
   1. Include constraints and work restrictions required in the Contract Documents (including Bridging Documents, preliminary design phase documents (if any) and final Construction Documents) and as follows in schedule, and show how the sequence of the Work is affected.
      a. Phasing: Arrange the list of activities on the schedule by phase. Include the major phasing required such as Design and Construction Phases with sub-phases of work below them.
      b. Work by the Owner: Include a separate activity for each portion of work performed by the Owner.
      c. Products Ordered in Advance: Include a separate activity for each product. Include the earliest possible delivery dates.
      d. The Owner-Furnished Products: Include a separate activity for each product.

E. Work Restrictions: Show the effect of the following items on the schedule:
   1. Coordination with existing construction.
   2. Limitations of continued occupancies.
   3. Uninterruptible services.
   4. Partial occupancy before Completion.
   5. Use of premises restrictions.
   6. Provisions for future construction.
   7. Environmental control.

F. Work Stages: Indicate important stages of design and construction for each major portion of the Work, including, but not limited to, the following:
   1. Construction Documents and other design phases under Section 01 1101 (Summary of Work – Design-Build Design Services)
   2. Subcontract awards.
   3. Submittals.
   4. Purchases.
   5. Mockups.
   6. Fabrication.
   7. Sample testing.
   8. Deliveries.
   9. Installation.
   10. Tests and inspections.
   11. Commissioning

12. Adjusting.
13. Curing.
14. and placement into final use and operation.

G. Area Separations: Identify each major area of construction for each major portion of the construction Work. Indicate where each construction activity within a major area must be sequenced or integrated with other construction activities to provide for the following:
   1. Structural completion.
   2. Permanent space enclosure.
   3. Completion of mechanical installation.
   4. Completion of electrical installation.
   5. Completion.

H. Milestones:
   1. Incorporate key milestones in the schedule, including, but not limited to the Skylonda Fire Station Milestones identified in the Agreement, and as follows:
      a. Notice to Proceed
      e. Complete Basis of Design Documents Phase (Show all Incremental Design Packages with Submittal and Review Dates)
      f. Complete 65% Construction Documents Phase (Show all Incremental Design Packages with Submittal and Review Dates)
      g. Complete 100% Construction Documents Phase (Show all Incremental Design Packages with Submittal and Review Dates)
      h. Submit All Stamped and Approved City of Redwood City, County, and required by other Authorities having Jurisdiction. 100% Construction Documents
      i. Start Construction
      j. Complete Construction
      k. Start Furnishings, Fixtures and Equipment (FFE) Installation
      l. Completion of Work
      m. Start Occupancy
      n. Complete Commissioning

I. Cost Correlation:
   1. At the front of the schedule, provide a cost correlation line, indicating planned and actual costs. On the line, show dollar volume of the Work performed as of dates used for preparation of payment requests.
   2. Refer to Section 01 2000, (Measurement and Payment), for cost reporting and payment procedures.
   3. Design-Build Entity will assign cost to construction activities on the CPM schedule. Costs must be assigned to each submittal activity line item on the Schedule of Values. Costs must be listed under the required principal subcontracts for testing and commissioning activities, operation and maintenance manuals, punch list activities, Skylonda Fire Station Record Documents, and demonstration and training.
   4. Each activity cost will reflect an accurate value subject to approval by the Owner.
   5. Total cost assigned to activities must equal the total Lump Sum.

J. Contract Modifications:
   1. For each proposed Contract modification and concurrent with its submission, prepare a time-impact analysis using fragnets to demonstrate the effect of the proposed change on the overall project schedule.

2.03 Preliminary Baseline Design/Construction Schedule

A. The Design-Build Entity must use Primavera P6 Enterprise Project Portfolio Management, version 8 or later on this Skylonda Fire Station Project. With each schedule submittal, Design-Build Entity will provide compact disks with back-up files of the entire schedule in the scheduling software program. PDF's are acceptable for historical record only.

B. Within thirty (30) calendar days after the date of the NTP, the Design-Build Entity must submit for the Owner's review and acceptance a Preliminary Baseline Schedule. This schedule must show the general plan for the work to be completed in the first one hundred and twenty (120) calendar days of the Contract. Indicate each significant activity separately and identify the first workday of each week with a continuous vertical line. Include a Summary Bar diagram for the remainder of the Work showing major milestones and summary activities with a cash requirement prediction based on required activities.

C. The Preliminary Baseline Schedule must define milestones for the Skylonda Fire Station. The milestones must include but are not limited to the Skylonda Fire Station Milestones identified in the Agreement, and as follows:
   1. Design Schedule Milestones (show milestones for each Incremental Design Package as appropriate and for each Agency reviewing them):
      a. Notice to Proceed
      b. Complete Survey and Confirmation of Existing Utilities, Services and Geotechnical Explorations
      c. Complete Management Plans
      d. Partnering Session(s) e.Complete Code Analysis/Life Safety Plan
      f. Complete Site Mobilization, Lay Down Areas and Parking Plans
      g. Complete Design and Construction Package Phasing Plan
      h. Start Schematic Design Documents
      i. Submit Schematic Design Documents CDs for Review
      j. Schematic Design Documents Approved
      k. Complete Schematic Design Documents
      l. Start Basis of Design Documents
      m. Submit Basis of Design Documents for Review
      n. Basis of Design Documents accepted
      o. Complete Basis of Design Documents
      p. Start 65% CDs
      q. Submit 65% CDs for Review
      r. 65% CDs accepted
      s. Complete 65% CDs
      t. Start 100% CDs
      u. Submit 100% CDs for Review
      v. 100% CDs accepted
      w. Complete 100% CDs
   2. Construction Schedule Milestones (including but not limited to:)
      a. Start Construction (per Incremental Package Phase)
      b. Approve Construction Schedule
      c. Obtain Licenses, Fees, Permits
      d. Temporary Power Available
      e. Start Owner's On-Site Field Office
      f. Complete Owner's On-Site Field Office (Occupancy)
      g. Facility Watertight
      h. Permanent Power Available
      i. Other Utilities (Gas, Water, Fire Service, Sewer, Phone, etc.) Available
      j. Start Functional Testing
      k. Start Training and Demonstrations
      l. Complete Construction (per Incremental Package Phase)

m. Start FEE Installation
n. Completion of Work (Including receipt of all licenses.)
o. Certification of Completion
r. Complete Demobilization
s. Complete Commissioning

3. Key Personnel Staffing Schedule. The Preliminary Baseline Schedule shall include a staffing schedule that provides a separate task for each Key Personnel (as defined in Document 00 1119 paragraph 3.02.A) that shall parallel the Project's design and construction activities. For each Key Personnel, the schedule shall indicate the start time, anticipated duration of commitment to work on the Project, and for all portions of the duration the time percentage of commitment to work on the Project. If a Key Personnel's commitment to the Project will vary over the course of the Project, additional tasks shall be provided for that Key Personnel to clearly identify the commitment variances and their relationship to the Project's design and construction schedule.

B. Proposed Procurement Activities to be accomplished during the first one hundred and twenty (120) calendar days of the Contract.
   1. Procurement activities must include mobilization, major shop drawing and sample submittals and the fabrication and delivery of key and long lead procurement elements and must indicate intended submittal, review and approval, and realistic delivery dates for fabrication and delivery activities.
   2. Procurement activities will later be incorporated into the Detailed Design/Construction Schedule (discussed hereinafter) including all requested revisions.

C. Proposed Design/Construction Activities to be accomplished during the first one hundred and twenty (120) calendar days of the Contract.
   1. Activity durations must be in units of whole working days and must be limited to a maximum of fifteen (15) working days twenty-one (21) calendar days for each activity.
   2. Design/Construction activities will later be incorporated into the Detailed Design/Construction Schedule (discussed hereafter) including all requested revisions.

D. Summary Activities not included above which are necessary to properly indicate:
   1. The approach to scheduling the remaining work areas or phases of the work. The work for each phase or area must be represented by at least one summary activity such that they cumulatively indicate the entire Design/Construction Schedule.
   2. The approximate cost and duration for each summary activity must be shown on the Preliminary Baseline Schedule.
      a. The Preliminary Baseline Schedule must conform with the requirements outlined in the "Technical Requirements for Design-Build Entity-submitted Schedules" in this specification section.
      b. The Cost-loaded Preliminary Baseline Schedule will be the basis for progress payments during the first one hundred and twenty (120) calendar days of the Contract while the Detailed Final Baseline Design/Construction Schedule (discussed hereafter) is being developed and accepted.
      c. The Preliminary Baseline Schedule must be updated on a monthly basis while the Detailed Final Baseline Design/Construction Schedule is being developed. The monthly updating of the Preliminary Baseline Schedule must be consistent with the procedures and requirements described in the "Schedule Updating" section of this specification section.
      d. The Preliminary Baseline Schedule must be used for the preliminary review of time extension request(s) during the first one hundred and twenty (120) calendar days of the Contract while the Detailed Final Baseline Design/Construction Schedule is being developed.
      e. Within fourteen (14) calendar days after receipt by the Owner of the Preliminary Baseline Schedule, the Owner will make recommendations to the Design-Build Entity as to

adjustments to the Preliminary Baseline Schedule. These recommendations, if accepted by both the Owner and Design-Build Entity, will be incorporated into the development of the Detailed Final Baseline Design/Construction Schedule. The Design-Build Entity must provide a response to the concerns of the Owner, to the satisfaction of the Owner, before the submittal of the Detailed Design/Construction Schedule.

2.04 Detailed Final Baseline Design/Construction Schedule

A. Within ninety (90) calendar days following Notice to Proceed, Design-Build Entity will submit to the Owner a proposed Detailed Final Baseline Design/Construction Schedule in CPM format for the Design-Build Entity's design and construction work scope.

B. The proposed Detailed Design/Construction Schedule must conform with the requirements outlined in the "Technical Requirements for Design-Build Entity-Submitted Schedules" in this specification section.

C. The proposed Detailed Final Baseline Design/Construction Schedule will be reviewed in the following manner:
   1. Within fourteen (14) calendar days after receipt by the Owner of the proposed Detailed Final Baseline Design/Construction Schedule, the Owner must notify the Design-Build Entity of any concerns the Owner may have in regard to the Schedule.
   2. If the Owner questions the Design-Build Entity's proposed activities, logic, durations, manpower, or cost loading, the Design-Build Entity must, within seven (7) calendar days after receipt of the Owner's request, provide a satisfactory revision to, or adequate justification for, these activities, logic, durations, manpower, or Cost-loading to the satisfaction of the Owner.
   3. In the event the Design-Build Entity fails to define any element of work, activity or logic and the Owner review does not detect this omission or error, such omission or error, when discovered by the Design-Build Entity or Owner, must be corrected by the Design-Build Entity at the next monthly Schedule Update and or weekly progress meeting, (discussed hereinafter) and will not affect the Contract Time.

D. Upon the acceptance of the changes to the proposed Detailed Final Baseline Design/Construction Schedule by the Owner, the Design-Build Entity and Owner will demonstrate their mutual acceptance by signing the front of the Detailed Final Baseline Design/Construction Schedule. The Owner's acceptance is subject to J below.

E. Upon acceptance, the design/construction schedule will be utilized as a BASELINE SCHEDULE for evaluation of all work yet to be performed.

F. No accepted activity will be deleted from the Detailed Design/Construction Schedule. In the event that an activity is no longer appropriate to the plan, either by change order or otherwise, it will be statused with "zero duration" as of the date such determination is made and offsetting cost adjustment made as required to balance within the activity's cost account.

G. Redistribution of costs between Contract bid line items will not be allowed.

H. Acceptance by the Owner of the Design-Build Entity's Detailed Final Baseline Design/Construction Schedule will be a condition precedent to the making of any progress payments under the Contract after the first one hundred and twenty (120) calendar days of the Contract.

I. Upon acceptance of the Detailed Final Baseline Design/Construction Schedule by the Owner, the cost-loaded values of the Schedule will be used as a basis for determining progress payments based on work completed to date, in conjunction with the Schedule of Values. Monthly progress payments will be based upon information developed at the monthly Schedule Update. The

computer-produced Cost Report will be structured to directly roll up to the accepted billing summary and utilized by the Owner for verification of the Application for Payment submitted by the Design-Build Entity.

J. Acceptance by the Owner of the Design-Build Entity's Detailed Final Baseline Design/Construction Schedule does not relieve the Design-Build Entity of any of Design-Build Entity's responsibility whatsoever for the accuracy or feasibility of the Detailed Design/Construction Schedule, or of the Design-Build Entity's ability to meet the Contract completion date or milestone dates, nor does such acceptance acknowledge or admit the reasonableness of the activities, logic, durations, manpower, or Cost-loading of the Design-Build Entity's Detailed Design/Construction Schedule.

K. General:
   1. Prepare network diagrams using AON (activity-on-node) format.
   2. Preliminary Baseline Design/Construction Schedule: Submit schedule within 30 calendar days of date established for the Notice to Proceed. Outline significant construction activities for the first one hundred and twenty (120) calendar days of design and construction. Include summary bar diagrams for the remainder of the Work and a cash requirement prediction based on required activities.
   3. CPM Schedule:
      a. Prepare Design-Build Entity's Detailed Final Baseline Design/Construction Schedule using a computerized, cost- and resource-loaded, time-scaled CPM network analysis diagram for the Work.
      b. Develop network diagram in sufficient time to submit CPM schedule so it can be accepted for use no later than ninety (90) calendar days after date established for the Notice to Proceed. A CPM network that incorporates all activities with descriptions, sequence, logic relationships, duration estimates, resource-loading, cost loading and other information defined for all design, pre-construction and construction activities. Each activity will have a minimum of one predecessor and one successor, with the exception of the first and last milestone activities. The first milestone activity must be the "Notice to Proceed" and the last activity will be denoted as "Final Completion. Both are Contract Milestones.
      c. Failure to include any work item required for performance of this Contract will not excuse Design-Build Entity from completing all work within applicable completion dates, regardless of the Owner's approval of the schedule.
      d. Conduct educational workshops to train and inform key Skylonda Fire Station personnel, including subcontractors' personnel, in proper methods of providing data and using CPM schedule information.
      e. Establish procedures for monitoring and updating CPM schedule and for reporting progress. Coordinate procedures with progress meeting and payment request dates.
      f. Use "one workday" as the unit of time. Include list of nonworking days and holidays incorporated into the schedule as a calendar. However, the Contract time is in calendar days.
   4. CPM Schedule Preparation:
      a. Prepare a list of all activities required to complete the Work. Using the preliminary network diagram, prepare a network to identify probable critical paths.
      b. Activities: Indicate the estimated time duration, sequence requirements, and relationship of each activity in relation to other activities. Include estimated time frames for the following activities:
      c. Preparation and processing of submittals.
      d. Mobilization and demobilization.
      e. Purchase of materials.
      f. Delivery.
      g. Fabrication.
      h. Utility interruptions.
      i. Temporary facilities

j. Installations.
k. Work by the Owner that may affect or be affected by Design-Build Entity's activities.
l. Testing and commissioning.

L. Critical Path Activities: Identify critical path activities, including those for interim completion dates. Scheduled start and completion dates must be consistent with Article 2 of the Agreement.

M. Processing: Process data to produce output data on a computer-drawn, time-scaled network. Revise data, reorganize activity sequences, and reproduce as often as necessary to produce the CPM schedule within the limitations of the Contract Time.
1. Format:
a. Identify and mark the critical path. Locate the critical path near center of network; locate paths with most float near the edges.
b. Sub-networks on separate sheets are permissible for activities clearly off the critical path.

N. Initial Issue of Schedule:
1. Prepare initial network diagram from a list of straight "early start-total float" sort. Identify critical path activities. Prepare tabulated reports showing the following:
a. Design-Build Entity or Designer or subcontractor and the Work or activity.
b. Description of activity.
c. Principal events of activity.
d. Immediate preceding and succeeding activities.
e. Early and late start dates.
f. Early and late finish dates.
g. Activity duration in workdays.
h. Total float or slack time.
i. Average size of workforce.
j. Dollar value of activity (coordinated with the Schedule of Values).

O. Schedule Updating:
1. Concurrent with making revisions to schedule, prepare a narrative with each update and tabulated reports showing the following:
a. Identification of activities that have changed.
b. Changes in early and late start dates.
c. Changes in early and late finish dates.
d. Changes in activity durations in workdays.
e. Changes in the critical path.
f. Changes in total float or slack time.
g. Changes in the Contract Time.

P. Value Summaries:
1. Prepare two cumulative value lists, sorted by finish dates.
2. In first list, tabulate activity number, early finish date, dollar value, and cumulative dollar value.
3. In second list, tabulate activity number, late finish date, dollar value, and cumulative dollar value.
4. In subsequent issues of both lists, substitute actual finish dates for activities completed as of list date.
5. Prepare list for ease of comparison with payment requests; coordinate timing with progress meetings.
a. In both value summary lists, tabulate "actual percent complete" and "cumulative value completed" with total at bottom.
b. Submit value summary printouts 2 business days before each regularly scheduled progress meeting.

2.06 Milestones

A. The Design-Build Entity must adhere to the following Milestone submittal dates in accomplishing the work unless such dates are modified in writing by the Owner:

EVENT	MILESTONE DATE
Preliminary Baseline Design/Construction Schedule Submittal	NTP + 30 Days
Proposed Detailed Final Baseline Design/ Construction Schedule Submittal	NTP + 90 Days

PART 3 – TECHNICAL REQUIREMENTS

3.01 Technical Requirements for Design-Build Entity Schedules

A. The Design-Build Entity will consider the following guidelines in the development of the Construction schedule:
   1. The Schedule must be developed utilizing the Precedence Diagramming Method.
   2. Milestone dates must be adhered to and will be clearly identified on the Schedule.
      a. Milestone dates may not be changed without the written consent of the Owner.
      b. Contract Start Milestones will be constrained by "Start No Earlier Than" constraints.
      c. Contract Completion Milestones will be constrained by "Finish No Later Than" constraints.
      d. "Mandatory", "Start On", and "Finish On" constraints will not be allowed.
   3. The Schedule must clearly identify the activities illustrating accomplishment of the time(s) for completion of the Skylonda Fire Station set forth in the Agreement. If the Schedule indicates earlier completion time(s) than that set forth in the Agreement, the difference between the Schedule and the Agreement dates will be considered to be part of the total float available. This float is a resource available to both the Owner and the Design-Build Entity, as provided in 1.02.F.2 above and Part 5 below. If the Design-Build Entity presents a schedule with an early completion date, the Owner reserves the right to issue a Contract change order revising the Contract Completion Date and associated milestones to those indicated in the Design-Build Entity's schedule. However, the Contract time will not be revised unless a Contract change order has been issued and executed by both parties.
   4. In developing the Schedule, the Design-Build Entity will be responsible for assuring that subcontractor work at all tiers, as well as Design-Build Entity's own work, is included in the Schedule.
   5. The Schedule must show the sequence and interdependence of activities required for complete performance of the work. The Design-Build Entity will be responsible for assuring all work sequences are logical and the Schedule shows a coordinated plan of the work.
   6. The schedule must only contain two (2) open ended activities. NTP with no predecessor relationship and Skylonda Fire Station Complete with no successor relationship.
   7. Failure by the Design-Build Entity to include any element of work required for performance of the Contract or failure to properly sequence the work will not excuse the Design-Build Entity from completing all work within the Contract Time.
   8. The level of detail of the Design-Build Entity's Schedule will be a function of the complexity of the work involved. The total number of activities will be subject to approval by the Owner. Construction activities must represent the continuous work of a single crew in a defined work area or location and have a duration of not longer than fifteen (15) workdays, without prior acceptance of the Owner. Non-construction/non-design activities (such as procurement, fabrication, etc.) may have durations in excess of 15 work days.
   9. Normal weather conditions will be considered and included in the planning and scheduling of all work influenced by high or low ambient temperatures, wind, and/or precipitation to ensure completion of all work within the Contract Time. Expected weather delays will be added as

an activity to the back of the schedule and treated as weather float. The use of this weather float must be requested by the Design-Build Entity and approved by the Owner in advance of adjusting the schedule. The duration of the weather float activity will be based on the number of weather days provided in Document 00 7253 (General Conditions), paragraph 15.01.

a. Work will be planned to minimize the impact of rain and include the grading of the work area, installation of dewatering pumps and provision of covers.
c. Keep drainage and dewatering systems operable 24 hours and 7 days each week throughout construction.
d. No "Rain Days" will be allowed for rain less than <0.10" per day as measured at the NOAA weather station nearest the jobsite.

10. Schedule activities must meet the following criteria:
    a. Activity descriptions must be clear and concise. All activity ends must be tied into the schedule by logical restraints.
11. Proposed durations assigned to each activity will be the Design-Build Entity's best estimate of time required to complete the activity considering the scope and resources planned for the activity. Resources and Labor (Manhours) allocated to each activity must be consistent with activity duration and supported by the Design-Build Entity's estimate and industry standard estimating/productivity guides such as "Means" and/or "Walker's".
12. Responsibility for each activity must be identified with a single performing organization, typically the Subcontractor name. WBS structure must be utilized by the Design-Build Entity as agreed by the Owner.
13. Schedule activities will be cost-loaded in whole dollars and the assigned dollar value (cost-loading) of each activity of the Network must cumulatively equal the Total –Stipulated Sum Amount. The tasks and amounts in the cost-loaded schedule will be utilized as the Schedule of Values for progress payment purposes. Mobilization, bond and insurance costs may be shown separately; however, other General Conditions costs, overhead, profit, etc., will be prorated throughout all activities. For any items that the Design-Build Entity intends to bill for stored materials, these items need to be shown as separate "material procurement" activities in the schedule and the material dollars only placed on these activities. Billing for stored materials on any other schedule activities not broken out in this manner will not be allowed.
14. Design-Build Entity will assign manpower-loading for each activity of the Network. In addition, the Design-Build Entity will prepare and submit a separate manpower summary analysis in graphic format depicting manpower by subcontractor and aggregate. The graph(s) must show the number of man-days of effort, by month, over the duration of the Construction Schedule.
15. For all major equipment and materials fabricated or supplied for this Skylonda Fire Station Project, the network must show a sequence of activities including:
    a. Preparation of shop drawings and sample submissions. Any accepted costs associated with submittal preparation will be assigned to the approval of the particular submittal.
    b. Review and approval of shop drawings and samples: allow 30 calendar days for review of major submittals and samples, and 14 calendar days for review of all other submittals).
    c. Shop fabrication and delivery (including transit time). Advanced purchases such as mill orders or other major equipment purchases will be carried as separate Cost-loaded activities.
    d. Erection or installation.
16. Field Testing of Equipment and Materials. Testing and Inspection will be cost- and labor-loaded to the extent of the effort necessary in the field.
    a. The schedule must include a detailed plan for preparation, submittal, review, re-submittal, if required, and acceptance for detailed MEPS/Structural/Architectural Coordination Documents prepared by the individual trade subcontractors utilizing CAD backgrounds supplied by the Architect of Record.
    b. If requested by the Owner, the Design-Build Entity will furnish a written narrative of the Design-Build Entity's determination of durations for critical activities. Such explanation must include the number of crews, crew composition, number of shifts per day, number of hours in a shift and the number of work days per week. The Design-Build Entity will provide a list of the major items of construction equipment intended for use on this

Project's operations including types, number of units, unit capacities and the proposed time each piece of equipment will be on the job, keyed to the activities on which the equipment will be used.

17. For each Construction Schedule submittal, as well as for each Schedule Update, the Design-Build Entity will provide the following to the Owner as specified in the "Required Reports section of this specification:
    a. Compact Disc containing the Construction Schedule in the native format of the scheduling software. All schedules, graphics and reports in PDF format.
    b. Three(3) color prints of all schedules, graphics, and reports.
18. Other activities must consider indicating the start and finish dates for Skylonda Fire Station design, engineering, preparation of basis of design and construction documents, government agency plan check and Owner agency document review.
19. Activities to be integrated and shown in the CPM network must include all milestones representing the Design-Build Entity's submittal dates and activities representing the Owner's review period of each submittal; Design-Build Entity's procurement of materials and equipment; submittals; manufacture and/or fabrication, testing and delivery to the jobsite of special material and major equipment; equipment installation and preliminary, final and performance testing of equipment or systems.
20. Activities showing the start and finish dates for all temporary works; all construction of mock–ups, and prototypes and/or samples.
21. Activities showing start and finish dates of owner-furnished items and interface requirement dates with other contractors; regulatory agency approvals; and permits required for the performance of the work.
22. Activities showing start and finish of modular system furniture.
23. Activities related to commissioning and close-out.
24. The schedule must consider all foreseeable factors or risks affecting, or which may affect the performance of the work, including historical and predicted weather conditions, applicable laws, regulations or collective bargaining agreements pertaining to labor, transportation, traffic, air quality, noise and any other applicable regulatory requirements.
25. The Design-Build Entity will not use any "float suppression" techniques such as preferential sequencing or logic, special led/lag constraints or unjustifiably over-estimating activity durations in preparing its schedule.
26. The Design-Build Entity will not use negative lag.
27. All activities requiring time to complete must be included in the schedule as an activity (Cure time, etc.). The Design-Build Entity will not consume time by the use of finish-to-start relationships with positive lag.
28. The Design-Build Entity must attach a narrative report which explains assumptions used for activity durations, its assumptions regarding crew sizes, equipment requirements and production rates, any potential areas of concern or specific areas requiring coordination it may have identified and any long-lead time materials or equipment in the work.
29. The Design-Build Entity's Scheduling Manager will formally present the detailed time-scaled CPM network for the duration of the Contract time, demonstrating compliance with -Article 2 of the Agreement and other requirements to the Owner clearly showing the critical path(s) of the SKYLONDA FIRE STATION through completion.

PART 4 - REPORTS

4.01 Required Scheduling Reports

A. As a part of the Detailed Design/Construction Schedule submittals, as well as for each Schedule Update, the Design-Build Entity must submit the following reports and graphics as indicated:
    1. Graphics:
        a. Detailed CPM Network with critical path highlighted sorted by Early Start Dates.
        b. Detailed Gantt chart grouped by WBS and sorted by Early Start ascending, Early Finish ascending. (Initial Submittal and When Revised).

c. Short-interval Gantt chart showing 1 week of history and 3 weeks of future work (Weekly).
d. Cost curve and histogram (Initial Submittal and When Revised.)
e. Manpower curve and histogram (Initial Submittal and When Revised.)
f. Milestones only.

2. Computerized schedule reports:
   a. Activity listing report showing all schedule activities, sorted by activity number. (Initi Submittal.)
   b. Milestone Summary Report listing all milestones.
   c. Precedence report showing activity predecessors and successors, including relationship type and lag, sorted by activity number. (Initial Submittal and When Revised.)
   d. Total float report, sorted by total float from low to high. (Initial Submittal and When Revised.)
   e. Early start report, grouped and sorted by Early Start Date.
   f. Cost report showing activity dollar value, dollar value of work in place to-date, and dollar value for current period. (Initial Submittal and When Revised.)
   g. Resource report showing manday allocations by specific trade on each activity. (Initial Submittal and When Revised.)
   h. Variance report comparing current dates to target dates. (Monthly Updates.)
   i. Cash flow report showing monthly projections of expenditures. (Initial Submittal and When Revised.)
3. Narrative schedule report including:
   a. Description of the actual work accomplished during the reporting period. (Monthly Updates)
   b. Description of any problem areas. (Initial Submittal and Monthly Updates.)
   c. Description of current and anticipated delays with recommended corrective actions to mitigate such delays. (Monthly Updates.)
   d. A list of major construction equipment used on the work during the reporting period and any construction equipment idle during the reporting period. (Monthly Updates.)
   e. A total number of men by craft actually engaged on the work during the reporting period, with such total Stated separately as to office, supervisory, and direct labor. (Monthly Updates.)
   f. A list of Design-Build Entity-supplied permanent materials, long lead items and equipment indicating current availability and anticipated job site delivery date. (Initial Submittal and When Revised.)
   g. A list and explanation of proposed modifications, additions, deletions, and changes in logic to the approved construction schedule. If modifications are proposed a when Revised schedule demonstrating the effects of such modifications is to be submitted. (Monthly Updates.)

PART 5 - FLOAT

5.01 Float Time

A. Float is not for the exclusive use or benefit of either the Design-Build Entity or the Owner. Float time will be apportioned according to the needs of the Skylonda Fire Station as approved by the Owner.

B. Pursuant to the float sharing requirements as set forth in paragraph 5.01A, use of float suppression techniques such as preferential sequencing, special lead/lag logic restraints, extended activity durations, or constrained dates may be cause for rejection of the Construction Schedule and any revisions or updates.

PART 6 – SCHEDULE MEETINGS

6.01 Pre-Construction Conference:

A. The Design-Build Entity will schedule and conduct a schedule preconstruction conference. Design-Build Entity must be prepared to review and discuss the schedule and sequence of operations plus cost and manpower loading methodology. The conference will be attended by:
   1. Design-Build Entity's Project Manager, Superintendent, and Scheduler.
   2. Any other Design-Build Entity's key personnel (including without limitation all Key Personnel referenced in paragraph 2.03.C.3 above), Subcontractor's representatives, and major supplier's representatives that the Design-Build Entity deems advisable to attend.
   3. Representatives from the Owner and other agencies will also be invited to attend.

B. Procedures will be reviewed for the following:
   1. Development of the Detailed Design/Construction Schedule by the Design-Build Entity.
   2. Periodic updating of schedule activities and method of determining schedule percent complete.
   3. Organizational / WBS / Account Code Structures required for the Skylonda Fire Station.
   4. Cost-loading of activities.
   5. Manpower loading of activities.
   6. Procedures for making modifications to the schedule.
   7. Procedures for assessing schedule impacts, schedule delays, and time extensions.
   8. Development of recovery schedules.
   9. Data exchange and communications.

6.02 Schedule Progress Meeting:

A. As part of the weekly project meetings and on a day mutually agreed to by the Owner and the Design-Build Entity, Design-Build Entity must submit a progress schedule listing the activities completed and in progress for the previous week and the activities scheduled for the succeeding 3 weeks. A bar chart directly derived from the Detailed Design/Construction Schedule will be used to generate the three week window. All activities shown in this short interval schedule will be identified by the same activity numbers and descriptions as shown in the Construction Schedule. The Design-Build Entity may add further details to monitor this Short Interval Schedule.

B. If deemed necessary by the Owner, the Owner may at its option schedule or require more frequent schedule review meetings.

PART 7 – SCHEDULE UPDATING AND PROGRESS PAYMENTS

7.01 Schedule Updating

A. A meeting will be held on approximately the 25th of each month to review the Schedule update submittal and progress payment application. This updating process will be performed by the Owner and Design-Build Entity making an assessment of schedule activity progress during a joint job-site walk through. Use of a Schedule Update Report to log this activity progress is recommended. Information to be recorded consists of activity actual start and finish dates, activity percents complete, and (if applicable) dollar amounts earned for each activity.

B. Once this information has been recorded, this data will be processed by computer by the Design-Build Entity, and will be used as the basis for the Design-Build Entity's monthly Application for Payment. Allowable billing amounts for each activity will be the activity's budgeted cost amount times the updated percent complete.

C. Upon finalization of the computerized schedule update, the Design-Build Entity must submit the required schedule reports, as detailed in the "Required Reports" section, to the Owner for the processing of the Design-Build Entity's payment application.

D. In addition to these monthly updates, interim updates may be performed on the Design/Construction Schedule at the discretion of the Owner. While these interim updates will not be for Payment Application purposes, Design-Build Entity will be expected to contribute update data to the Owner as required to complete these updates.

E. Monthly update/status of electronic database must include recording of all Actual Start Dates and Actual Finish Dates and status of activities in progress.

F. Review of "Planned" versus "Actual" work force allocations and progress for the preceding month.

G. Review of revisions, added or deleted work and how those activities are being integrated into the Design-Build Entity's work plan.

H. Review of Design-Build Entity's interface and coordination with other work on the Skylonda Fire Station site.

I. Review of all impacts to the work during the preceding month and to date, Design-Build Entity evaluation of those impacts and any recovery plans or remedial actions required to comply with the Contract schedule.

7.02 Progress Payments

(Also see 4523)

A. The submission and acceptance of progress updates and the cost reports calculating the value of work done for any given pay period for each activity, based on the percentage complete for that activity, will be the basis for monthly progress payments. The Design-Build Entity will be entitled to progress payments only as determined from the current updated and approved Schedule Cost Report generated as a result of the monthly progress update.

B. The monthly updating of the Design/Construction Schedule must be an integral part and basic element of the estimate upon which progress payments will be made. If, in the judgment of the Owner, the Design-Build Entity fails or refuses to provide information required to accomplish a complete Design/Construction Schedule Update or revision as specified hereinafter, the Design-Build Entity will be deemed to have not provided the required estimate upon which progress payments may be made, and will not be entitled to progress payments until it has furnished the information necessary for a complete Schedule Update to the satisfaction of the Owner.

PART 8 - SCHEDULE MODIFICATIONS

8.01 Revisions to the Design/Construction Schedule

A. If, as a result of the monthly Schedule Update, it appears the Design/Construction Schedule no longer represents the actual prosecution and progress of the work, the Owner may require the Design-Build Entity to submit a revision to the Design/Construction Schedule. Such revisions to the Schedule must not alter any of the Contract milestone constraints.

B. The Design-Build Entity may also request revisions to the Construction Schedule in the event the Design-Build Entity's planning for the work is revised. If revisions to the Construction Schedule are contemplated, the Design-Build Entity must notify the Owner in writing at least fourteen (14) calendar days prior to the next Schedule Update meeting. The Design-Build Entity must submit fragnets of the proposed changes along with a written narrative of the proposed changes. Such revisions to the Schedule must not alter any of the Skylonda Fire Station Milestone dates. If accepted by the Owner, these fragnets will be incorporated into the Construction Schedule.

C. Updating the Design/Construction Schedule to reflect actual progress will not be considered a revision to the Design/Construction Schedule.

D. Schedule revision must be submitted utilizing a copy of the updated construction schedule as modified with proposed changes; a narrative explanation of the change(s); and a copy of a detailed comparison with the current updated schedule detailing all changes.

E. Upon acceptance of a revision, the revised current Design/Construction Schedule must be the basis for evaluating future status, impacts, and/or changes.

PART 9 - PROGRESS

9.01 Schedule Impacts, Schedule Delays, Time Extensions

A. During the course of the Skylonda Fire Station Project, it may be appropriate to revise the Schedule to incorporate impacts or delay issues into the Skylonda Fire Station Schedule. If the Design-Build Entity feels it has encountered schedule impacts that it feels may warrant a time extension, it will present an Impacted Schedule to the Owner supporting his claim.

B. The procedure for incorporating impacts into the schedule is as follows:
   1. Create a schedule activity (or activities) that represent the scope of the change or delay.
   2. Assign durations and cost/manpower resources to these new activities.
   3. Determine appropriate logic ties for these new activities. Assign predecessors and successors so that these activities can tie into the existing schedule activities. Every effort to mitigate the potential delay by either isolating the impact of the delay or planning "work-around" approaches to the work will be considered and incorporated where deemed effective.
   4. These impact activities should be loaded into a copy of the updated schedule that immediately preceded the impact issue's time frame. For instance, if an impact issue occurs during mid-April, the new activities should be input into the March 31 (status date) update.
   5. After the Schedule is recalculated with these impact activities in place, the affect they have on the Skylonda Fire Station Milestones will determine if any time extension is merited.

C. The Impacted Schedule, along with the Time Impact Evaluation ("TIE") and other backup data describing the new schedule activities and logic ties which comprise the impact/delay issues, must be submitted to the Owner for review and approval. If approved, these impact/delay issues will become a permanent part of the Skylonda Fire Station Schedule. The Design-Build Entity will not unilaterally make changes to the Skylonda Fire Station Schedule to justify schedule impacts without the approval of the Owner.

D. Activity delays will not automatically mean that an extension of the Contract Time is warranted or due the Design-Build Entity. It is possible that an impact or delay will not affect existing critical activities or cause non-critical activities to become critical. An impact or delay may result in only absorbing a part of the available total float that may exist within an activity chain of the Network, thereby not causing any effect on the Contract Completion Date or other Contract Milestone dates.

E. Float is not for the exclusive use or benefit of either the Owner or the Design-Build Entity. Contract time extensions will be granted only to the extent that equitable time adjustments to the activity or activities affected by the impact or delay exceeds the total float along the critical path of activities at the time of the delay.

F. Impacts which may entitle Design-Build Entity to a Contract Time extension are provided in Document 00 7253 (General Conditions) Article 15.

G. The Owner will not have any obligation to consider any time extension request unless the requirements of Document 00 7253 Article 15 and of this specification section are complied with. The Owner will not be responsible or liable to Design-Build Entity for any design or constructive acceleration due to failure of the Owner to grant time extensions under the Contract Documents

should Design-Build Entity fail to comply with the submission requirements and the justification requirements of this Contract for time extension requests.

H. Design-Build Entity is responsible for all costs associated with the preparation of TIE's, and the process of incorporating TIE's into the current schedule update.

I. In the event the Design-Build Entity fails to submit a TIE prior to the completion of impacted work, the impact of delays will be limited to that portion of actual delay attributable to those legitimate impacts enumerated herein.

9.02 Recovery Schedule

A. The Design-Build Entity must furnish such manpower, materials, facilities and equipment and will work such hours, including shift work and overtime, as may be necessary to insure the progress and completion of the work in accordance with the approved and currently updated Construction Schedule. If work falls behind schedule due to Design-Build Entity actions to the extent that any of the Milestone dates or completion dates will not be met, the Design-Build Entity agrees that he will, as necessary, and within 48 hours of written notice, take some or all of the following actions at no additional cost to the Owner, as required to substantially eliminate, in the judgment of the Owner, the backlog of work:
   1. Increase manpower in quantities and crafts necessary;
   2. Increase the number of working hours per shift, shifts per working day, working days per week, the amount of equipment, or any combination of the foregoing, and/or
   3. Reschedule activities to achieve maximum practical concurrency of accomplishment.

B. The Design-Build Entity must also submit to the Owner a supplementary recovery schedule in the form of a fragnet which displays how the Design-Build Entity intends to reschedule activities to regain compliance with the construction schedule's milestone dates.

C. The obligations of this paragraph 9.02 supplement, and do not replace, Owner's rights and Design-Build Entity's obligations under Document 00 7253 paragraph 11.02.

D. Failure of the Design-Build Entity to substantially comply with these requirements may be considered grounds for a determination by the Owner that the Design-Build Entity is failing to prosecute the work with sufficient diligence to ensure its completion within the Contract time. Upon making this determination, the Owner may pursue any of the remedies described in Document 00 5200 (Agreement) and Document 00 7253 (General Conditions).

END OF SECTION

(next pg)

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 3232

PHOTOGRAPHIC DOCUMENTATION

PART 1 - GENERAL

1.01 Summary

A. Section includes description of requirements and procedures for documenting progress of Construction of the SKYLONDA FIRE STATION project.

1.02 Submittals

A. Digital Video Record:
   1. Prior to start of construction, in the presence of the Owner's Representative, Design-Build Entity must video survey (digitally record) buildings and grounds affected by this SKYLONDA FIRE STATION Project and submit itemized list of defects, e.g. broken glass, window screens, salvage items, paving, walks, etc. Design-Build Entity must make a copy of the Digital Video Disc (DVD) record for Design-Build Entity's use and deliver the original to the Owner for use at SKYLONDA FIRE STATION closeout. At completion of SKYLONDA FIRE STATION, defects not noted on that list or not verifiable on the original DVD must be corrected or replaced by Design-Build Entity at no cost to the Owner.
   2. Submit two copies of each DVD with protective case within seven days of recording. Prevent accidental re-recording ("locked format").
   3. On each copy, provide an applied label with the following information:
      a. Name of County Emergency Dispatch and Response (SKYLONDA FIRE STATION) Project.
      b. Name of Design-Build Entity.
      c. Date digital recording was made.
      d. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
      e. Weather conditions at time of recording.
   4. Transcript: Prepared on 8-1/2-by-11-inch paper, punched and bound in heavy-duty, 3-ring, vinyl-covered binders. Mark appropriate identification on front and spine of each binder. Include a cover sheet with same label information as corresponding video. Include name of SKYLONDA FIRE STATION Project and date of video on each page.

B. Key Plan:
   1. With each set of photographs, submit a key plan of the SKYLONDA FIRE STATION site and building(s) with vantage points marked for location and direction of each photograph. Indicate elevation or story of construction. Include same label information as corresponding set of photographs.

C. Construction Photographs for Monthly SKYLONDA FIRE STATION Progress Report:
   1. See also Section 01 1102 "Summary of Work – Design-Build Contractor Services".
   2. Submit one electronic copy each of a minimum of six (6) photographic views in each electronic copy of the Monthly SKYLONDA FIRE STATION Report.
   3. Format: digital project photos.
   4. Identification: On each print, provide the following information:
      a. Name of SKYLONDA FIRE STATION.
      b. Name of Design-Build Entity.
      c. Date photograph was taken if not date stamped by digital camera. San Mateo County Communications Emergency Dispatch and Response (SKYLONDA FIRE STATION), Redwood City, CA, San Mateo County Contract Number.

d. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
e. Unique sequential identifier.

D. Digital Photographic Images:
1. Submit a complete set of digital images as a SKYLONDA FIRE STATION Record Document. Identify as per Monthly Report identification requirements.
2. Submit a complete set of digital image electronic files as a SKYLONDA FIRE STATION Record Document on CD-ROM. Identify electronic media with date photographs were taken. Provide index information necessary to link key plan as described in paragraph 1.02.A.1. Submit images that have same aspect ratio as the sensor, uncropped.

E. Periodic Construction Digital Images
1. See paragraph 1.02.C.2 for similar format and identification requirement. Photos must be distributed to Owner via shared web-based SKYLONDA FIRE STATION management system or CD/DVD.

1.03 Coordination

A. If a professional photographer is utilized, cooperate with photographer, including access to SKYLONDA FIRE STATION site and use of temporary facilities, including temporary lighting required to produce clear, well-lit photographs without obscuring shadows.

1.04 Usage Rights

A. General:
1. Obtain and transfer copyright usage rights from photographer to the Owner for unlimited reproduction of photographic documentation.

PART 2 - PRODUCTS

2.01 Photographic Media

A. Digital Images:
1. Provide images in uncompressed .TIFF format, produced by a digital camera with minimum sensor size of 4.0 megapixels, and at an image resolution of not less than 1600 by 1200 pixels.

B. Digital Video Format:
1. Provide high-quality color recording in DVD format.
2. Quality must be adequate to create photographic prints to be made from individual frames.

PART 3 - EXECUTION

3.01 Construction Photographs

A. General:
1. Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work. Photographs with blurry or out-of-focus areas will not be accepted.
2. Maintain key plan with each set of construction photographs that identifies each photographic location.

B. Digital Images:
1. Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.

2. Date and Time: Include date and time in filename for each image.
3. Field Office Images: Maintain one set of images on CD-ROM or DVD in the field office at SKYLONDA FIRE STATION site, available at all times for reference. Identify images same as for those submitted to Construction Manager.

C. Periodic Construction Photographs: Take a minimum of 25 digital photographs weekly, with timing each month adjusted to coincide with the cutoff date associated with each Application for Payment. Select vantage points to show status of construction and progress since last photographs were taken.

D. Owner-Directed Construction Photographs: From time to time, the Owner will instruct photographer about number and frequency of digital photographs and general directions of vantage points. Select actual vantage points and take photographs to show the status of construction and progress since last photographs were taken.

F. Emergency Situation/Accident Photographs: Accidents and/or emergency situations must be documented and shared with the Owner and investigative agencies.

G. Completion Construction Photographs: Take twenty-four (24) color photographs after date of Completion for submission as SKYLONDA FIRE STATION Record Documents. Consult the Owner regarding desired vantage points.

3.02 Digital Training Videos

A. Refer Section 01 7900 Demonstration and Training.

END OF SECTION

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 3300

SUBMITTALS

PART 1 - GENERAL

1.01. Summary

A. Section Includes:
   1. Administrative and procedural requirements for submitting required submittals.
   2. Procedures for substitutions.

1.02. Definitions

A. Action Submittals:
   1. Written and graphic information that requires Owner responsive action.
      a. Action Submittals that require Owner approval.
   2. Within twenty (20) days after Notice to Proceed (NTP), Design-Build Entity shall provide Owner a comprehensive list of all Action Submittals for review for compliance with the Bridging Documents.
      a. Items indicated to be for approval by Owner.

B. Informational Submittals:
   1. Written information that does not require Owner's responsive action. Submittals may be rejected for not complying with requirements.
   2. Within twenty 20 days after NTP, Design-Build Entity shall provide Owner a comprehensive list of all Informational Submittals for review for compliance with the Bridging Documents.

1.03. Submittal Procedures

A. General:
   1. Submittals may be forwarded entirely via electronic means, or if requested by Owner submit hard copies. Owner has not determined or established a standard web based program/software for purposes of electronic communication. The Design-Build Entity can use its existing web based program or recommend to Owner a web based program/software for purposes of communicating information via a network based system. Design-Build Entity will be responsible for uploading data into the web based system for all Design-Build Entity initiated communications, including, but not limited to drawings, submittals, RFI's, change requests, reports, certifications, guarantees, warranties, O&M manuals and commissioning documents. Design Build Entity shall also be responsible to ensure the web based program/software selected for use is once which is compatible with County systems or procure and provide sufficient number of licenses to ensure Owner's ability to communication information via web based program.
   2. Partial submittals are not acceptable, will be considered non-responsive, and will be returned without review.
   3. Submittals not required by the Contract Documents may not be reviewed and may be discarded.
   4. The specific content and format requirements for the standard submittals are detailed herein and in the individual Specifications. The submittals will be submitted in no less than both hard copy and electronic form. The electronic form will be compiled in the most current form of Adobe Acrobat Pro, Release 10.0 or better. The electronic file will be bookmarked according to its Table of Contents, but will contain no less than the book marking identification in descending order of section, system, subsystem, equipment, component,

etc., where applicable. The goal is to make the submittals both manageable and user friendly for Owner's use.

5. Drawing submittals must be in both Computer Aided Design (CAD) format and in PDF.
6. Prior to the implementation of the design work and prior to the formal submittal process, provide a list and cut sheets of all major mechanical and electrical equipment (to Owner for review and approval) along with the preliminary system calculations that together will drive the mechanical and electrical design and layout.

B. Coordination:
   1. Coordinate preparation and processing of submittals with performance of design and construction activities.
   2. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
   3. Coordinate multidiscipline design phase submittals and construction documents prepared by Design-Build Entity's design professionals of record.
   4. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
      a. Owner reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

C. Submittals Schedule:
   1. Comply with requirements in Section 01 3200 Progress Schedules and Reports for submittal schedule requirements for scheduled performance of related construction activities.
   2. Submit all Basis of Design submittals together for all disciplines and prior to the start of any demolition and/or construction activity. Subsequent Construction Document submittals can be submitted in phases prior to construction activity related to that phase.

D. Processing Time:
   1. Allow enough time for submittal review, including time for resubmittals, as follows. Time for review will commence on receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
   2. Initial Review: Allow at least twenty-one (21) days for initial review of each submittal. Allow an additional ten (10) days of time if coordination with subsequent submittals is required from the receipt of the subsequent submittal.
   3. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
   4. Resubmittal Review: Allow ten (10) working days for review of each resubmittal.

E. Identification:
   1. Place a permanent label or title block on the front page of each submittal for identification. Multi-page submittals shall require the submittal number on sheets which do not have a submittal page number.
   2. Indicate name of firm or entity that prepared each submittal on label or title block.
   3. Provide a space approximately 6 by 8 inches on label or beside title block to record Design-Build Entity's review and approval markings and action taken by Owner.
   4. Include the following information on coversheet for processing and recording action taken:
      a. San Mateo County Skylonda Fire Station
      b. Date.
      c. Name of Owner.
      d. Name and address of Design-Build Entity.
      e. Name and address of subcontractor, including design professionals for design phase submittals.
      f. Name and address of supplier.
      g. Name and address of manufacturer.

h. Submittal number or other unique identifier, including revision identifier.
   1) Submittal number must use Performance Specification Section number followed by a decimal point and then a sequential number (e.g., 06100.01). Resubmittals must include an alphabetic suffix after another decimal point (e.g., 06100.01.A).

i. Number and title of appropriate Performance Specification Section.
j. Drawing number and detail references, as appropriate.
k. Location(s) where product is to be installed, as appropriate.
l. Other necessary identification.

F. Deviations/Options:
   1. Encircle, use arrows, or otherwise specifically mark deviations or options from the Contract Documents and/or Bridging Documents (as applicable) on submittals (highlighting may be used, but in conjunction with one of the identifying markers). See also Section 01 1101 Summary of Work – Design-Build Design Services for specific design submittal requirements involving variances from Bridging Documents or previously approved design documents

G. Copies
   1. Action Submittals, if not submitted electronically or Owner has requested hard copies:
      a. General: Submit 6 Copies to Owner. Owner will return 2 Copies
      b. Samples: Submit 3 full sets. Owner will return 2 sets.
      c. Operation and Maintenance Manuals: See Section 01 7823
      d. Project Record Documents: See Section 01 7839
      e. Demonstration and Training: See Section 01 7900
   2. Information Submittals:
      a. General: Submit 3 Copies to Owner. Owner may return one (1) copy.

H. Additional Copies:
   1. Unless additional copies are required for final submittal, or unless Owner observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.

I. Transmittal:
   1. Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Owner will return submittals, without review, received from sources other than Design-Build Entity.
   2. Transmittal Form: Owner-approved form indicating the following information:
      a. Name.
      b. Date.
      c. Destination (To :).
      d. Source (From :).
      e. Names of subcontractor, manufacturer, and supplier.
      f. Category and type of submittal.
      g. Submittal purpose and description.
      h. Performance Specification Section number and title.
      i. Drawing number and detail references, as appropriate.
      j. Transmittal number, numbered consecutively.
      k. Submittal and transmittal distribution record.
      l. Remarks.
      m. Signature of transmitter.
   3. On an attached separate sheet, prepared on Design-Build Entity's letterhead, record relevant information, requests for data, revisions other than those requested by Owner on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same label information as related submittal.

4. For design-phase submittals, item 2.a is names of applicable Designers and item 2.h is Performance Specifications (Bridging Documents) number and title.

J. Resubmittals:
1. Make resubmittals in same form and number of copies as initial submittal.
2. Note date and content of previous submittal.
3. Note date and content of revision in label or title block and clearly indicate extent of revision.
4. Resubmit submittals until they are marked with Owner's approval notation.

K. Distribution:
1. Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers and authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

L. Use for Construction:
1. Use only final submittals with mark indicating approval by Owner.

M. Record Documents: Retain a final copy of all submittals as a SKYLONDA FIRE STATION RECORD DOCUMENT.

1.04. Submittal Classifications

A. General:
1. Submittals for the SKYLONDA FIRE STATION are classified as follows:
   a. Proposal submittals. For requirements for these submittals, refer to Document 00 1119 Request for Proposals, and other Proposal Requirements.
   b. Criteria compliance typical.
   c. Construction Documents –Design Phase Submittals.
   d. Construction Submittals.
   e. Closeout Submittals.
   f. Commissioning Submittals.

1.05. Preliminary Design Phase Submittals

A. General:
1. Submit these items during the Preliminary Design Phase.
2. For the requirements for these Submittals, refer to the Bridging Documents/Performance Criteria, and Section 01 1101 Summary of Work – Design-Build Design Services

1.06. Construction Document Phase Submittal

A. General:
1. Submit these items during the period of preparation of the Construction Documents.
2. For the general requirements for these Submittals, refer to the Bridging Documents/Performance Criteria, and Section 01 1101 Summary of Work – Design-Build Design Services.
3. Organize these submittals in accordance with the Bridging Documents/Performance Specification, using the same title numbers and titles.
4. Submit electronic files of submittals as directed in Section 1.03 and hard copies of submittals to Owner.
5. Submittals in this Phase are as follows:
   a. Action Submittals:
      1) Criteria Documents
      2) 65% Construction Documents.
      3) 100% construction Documents.
   b. Information Submittals: Manufacturer's Certificates, Product Certifications.

1.07. Construction Phase Submittals

A. General:
   1. Prepare and submit Submittals required for the SKYLONDA FIRE STATION conditions and Design by individual Performance Specification Sections.
   2. For the general requirements for these Submittals, refer to the Performance Criteria.
   3. Submit submittals prior to fabrication, purchasing and installation.
   4. Submit electronic submittals as directed in Section 1.03.

B. Action Submittals:
   1. Action Submittals include Samples, Schedules, and Applications for Payment, Subcontracts List, and others as applicable to the SKYLONDA FIRE STATION.
   2. Mechanical/Electrical equipment and systems submittals for those systems to be commissioned for review by Commissioning Authority.
   3. Items submitted as substitutions or as "equal" to listed manufacturer(s).

C. Informational Submittals:
   1. Prepare and submit Informational Submittals required by Performance Specification Sections.
   2. Informational Submittals Include Quality Assurance Submittals, Schedules, Applications for Payment, Insurance Certificates and Bonds, Construction Photographs and Video record, and others as applicable to the SKYLONDA FIRE STATION.
   3. Design-Build Entity's subcontractor Design professionals of Record will review and stamp all construction submittals for conformance with the construction documents prepared and signed by the California Registered Design Professionals.
   4. Shop drawings and equipment submittals not directly related to commissioning or required for review by commissioning authority.
   5. Retain copies of all submittals at job site.
   6. Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and certifications must be signed by an officer or other individual authorized to sign documents on behalf of that entity.
   7. Test and Inspection Reports: Comply with requirements specified in Division 01 Section 01 4000 "Quality Requirements."
      a. Informational Submittals: Coordination Drawings, Qualification Data, Quality Assurance Certifications, Field Testing Reports, Compatibility Reports, and others as applicable to the SKYLONDA FIRE STATION.

1.08. Project Closeout Submittals

A. General:
   1. Comply with requirements specified in Sections 01 7700 "Closeout Procedures", 01 7823 "Operations and Maintenance Data", 01 7839 "Project Record Documents", and 01 9100 "General Commissioning Requirements".

1.09. Not Used.

1.10. Commissioning Submittals

A. General
   1. Comply with all commissioning requirements.

1.11. Requirements for Each Submittal Category

A. Product Schedule or List:

1. As required in individual Performance Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
   a. Type of product. Include unique identifier for each product.
   b. Number and name of room or space.
   c. Location within room or space.

B. Product Data:
1. Collect information into a single submittal for each element of construction and type of product or equipment.
2. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
3. Mark each copy of each submittal to show which products and options are applicable.
4. Include the following information, as applicable:
   a. Manufacturer's written recommendations.
   b. Manufacturer's product specifications.
   c. Manufacturer's installation instructions.
   d. Standard color charts.
   e. Manufacturer's catalog cuts.
   f. Wiring diagrams showing factory-installed wiring.
   g. Printed performance curves.
   h. Operational range diagrams.
   i. Mill reports.
   j. Standard product operation and maintenance manuals.
   k. Compliance with specified referenced standards.
   l. Testing by recognized testing agency.
   m. Application of testing agency labels and seals.
   n. Notation of coordination requirements.
5. Submit Product Data before or concurrent with Samples for Initial Selection.

C. Samples for Initial Selection:
1. Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
2. Number of Samples: Submit three full sets of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Owner will return two submittals with options selected.

D. Manufacturer Certificates:
1. Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.

E. Shop Drawings:
1. Prepare SKYLONDA FIRE STATION-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
2. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
   a. Dimensions.
   b. Identification of products.
   c. Fabrication and installation drawings.
   d. Roughing-in and setting diagrams.
   e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
   f. Shop work manufacturing instructions.
   g. Templates and patterns.
   h. Schedules.
   i. Design calculations.

j. Compliance with specified standards.
k. Notation of coordination requirements.
l. Notation of dimensions established by field measurement.
m. Relationship to adjoining construction clearly required.
n. Seal and signature of professional engineer if specified.
o. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.

3. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at minimum 8-1/2 by 11 inches but no larger than 30 by 40 inches.

F. Samples:
1. Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
2. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
3. Identification: Attach label on unexposed side of Samples that includes the following:
a. Generic description of Sample.
b. Product name and name of manufacturer.
c. Sample source.
d. Number and title of appropriate Performance Specification Section.
4. Disposal: Maintain sets of approved Samples at Project Site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
a. If approved by Owner, certain Samples may be incorporated into the Work. Such Samples must be in an undamaged condition at time of use.
b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Design-Build Entity.
5. Samples for Verification:
a. Submit full-size units or Samples of size required, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
b. Number of Samples: Submit three sets of Samples. Owner will retain two Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a SKYLONDA FIRE STATION Record Sample.
1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.

G. Design-Build Entity's Design and Construction Schedule:
1. Comply with Section 01 3200 Progress Schedules and Reports.

H. Submittals Schedule:
1. Comply with Section 01 3200 Progress Schedules and Reports.

I. Application for Payment:
1. Comply with Section 01 2000 Measurement and Payment.

J. Schedule of Values:
   1. Comply with Section 01 2000 Measurement and Payment.

K. Subcontract List:
   1. Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
   2. Name, address, and telephone number of entity performing subcontract or supplying products.
   3. Number and title of related Specification Section(s) covered by subcontract.
   4. Drawing number and detail references, as appropriate, covered by subcontract.
   5. See also Task #8 under Section 01 1102 Summary of Work Design-Build Contractor Services.

M. Qualification Data:
   1. Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of project architects and owners, and other information specified.

N. Welding Certificates:
   1. Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.

O. Installer Certificates:
   1. Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific SKYLONDA FIRE STATION Project.

P. Product Certificates:
   1. Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.

Q. Material Certificates:
   1. Prepare written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.

R. Material Test Reports:
   1. Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.

S. Product Test Reports:
   1. Prepare written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

T. Research/Evaluation Reports:
   1. Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for SKYLONDA FIRE STATION. Include the following information:
      a. Name of evaluation organization.
      b. Date of evaluation.

c. Time period when report is in effect.
d. Product and manufacturers' names.
e. Description of product.
f. Test procedures and results.
g. Limitations of use.

U. Schedule of Tests and Inspections:
1. Comply with Section 01 4523 Quality Requirements.

V. Preconstruction Test Reports:
1. Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with Performance Specifications in the Contract Documents.

W. Compatibility Test Reports:
1. Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.

X. Field Test Reports:
1. Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.

Y. Maintenance Data:
1. Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements specified in Section 01 7823 Operations and Maintenance Data."

Z. Design Data:
1. Prepare written and graphic information, including, but not limited to, performance and Design Requirements, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and Design Requirements and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

AA. Manufacturer's Instructions:
1. Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer. Include the following, as applicable:

a. Preparation of substrates.
b. Required substrate tolerances.
c. Sequence of installation or erection.
d. Required installation tolerances.
e. Required adjustments.
f. Recommendations for cleaning and protection.

BB. Manufacturer's Field Reports:
1. Prepare written information documenting factory-authorized service representative's tests and inspections. Include the following, as applicable:
a. Name, address, and telephone number of factory-authorized service representative making report.

b. Statement on condition of substrates and their acceptability for installation of product.
c. Statement that products at SKYLONDA FIRE STATION site comply with requirements.
d. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
e. Results of operational and other tests and a statement of whether observed performance complies with requirements.
f. Statement whether conditions, products, and installation will affect warranty.
g. Other required items required in individual Performance Specification Sections.

CC. Insurance Certificates and Bonds:
1. Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.

DD. Construction Photographs and Digital Recordings (DVD's):
1. Comply with requirements specified in Section 01 3232 Photographic Documentation.

EE. Regulatory Agency:
1. Submit licenses, permits, certifications, and proof of fee payments for all regulatory agencies.

1.12. Design-Build Entity Review

A. General:
1. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents (including where applicable Bridging Documents). Note corrections and field dimensions. Mark with approval stamp before submitting to Owner.

B. Approval Stamp:
1. Stamp each submittal with a uniform, approval stamp. Include SKYLONDA FIRE STATION name and location, submittal number, Specification Section title and number, name of reviewer, date of Design-Build Entity's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

2. The Design-Build Entity's licensed design professional Designers must review and stamp all Construction submittals. Designers must review Construction submittals for conformance to final Construction Documents prepared by the registered design professionals of record for the SKYLONDA FIRE STATION.

C. Design Phase Submittals
1. Review each submittal and check for coordination with other submittals of the same design phase and for conformance with approved design-submittals from prior phases. Note all deviations as required in paragraph 1.03.F above.

1.13. Owner's Action

A. General:
1. Where action is required by Owner, Owner will not review submittals that do not bear Design-Build Entity's approval stamp and will return them without action.

B. Action Submittals:
1. Owner will review each submittal, make marks to indicate corrections or modifications required, and return it to the Design-Build Entity.

C. Informational Submittals:
   1. Owner will review each submittal but is not obligated to return it to the Design-Build Entity stamped appropriately with comments.

PART II - PRODUCTS

2.01. Progress Schedule

A. Prepare and submit Progress Schedule of operations as required by Section 01 1102 Summary of Work Design-Build Contractor Services and Section 01 3200 Progress Schedules and Reports.

B. Relate Progress Schedule to entire SKYLONDA FIRE STATION. Indicate dates for submission of required submittals.

C. Submit Schedule of Values with Progress Schedule. Refer to Section 01 2000 Measurement and Payment and Section 01 3200 Progress Schedules and Reports for additional cost breakdown requirements.

2.02. Product Certifications

A. Where specifically indicated by pertinent Specification Sections, submit proper certification by recognized producer or association. Certifications must attest to product's compliance with requirements of Contract Documents.

2.03. Shop Drawings

A. Submittals must be made in electronic and hard copy form (see also Part 1.03 herein) and include one reproducible document of each original and 6 prints of each document, name and location of Project, name of Design-Build Entity, and cross references to Contract documents. Number shop drawings consecutively. Make drawings legible and complete in every respect. Electronic drawing submittals must be in both AutoCAD format and PDF.

B. If Shop Drawings show variations from Contract requirements because of standard shop practice or other reason, make specific mention of such variations in letter of transmittal, as well as on drawings, in order that (if acceptable) suitable action may be taken for proper adjustment of Contract. Unless specific changes have been noted and accepted, no deviations from Contract Documents will be permitted.

C. Documents will be returned to Design-Build Entity for Design-Build Entity's reproduction and use. Owner will make prints for its own use.

2.04. Product Data/Material List

A. Manufacturer's Standard Schematic Drawings:
   1. Modify drawings to delete information which is not applicable to SKYLONDA FIRE STATION.
   2. Supplement standard information to provide additional information applicable to SKYLONDA FIRE STATION.

B. Manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data:
   1. Clearly mark each copy to identify pertinent materials, products or models.
   2. Show dimensions and clearances required.
   3. Show performance characteristics and capacities.
   4. Show wiring diagrams and controls.

5. Include calculations when applicable.

C. Material Safety Data Sheets (MSDS): Include for materials which require manufacturer's warnings and application instructions listed on MSDS provided by the product manufacturer.

2.05. Samples

A. Physical examples to illustrate materials, equipment or workmanship, and to establish standards by which completed work is judged.

B. Where size of samples is not specified, office samples should be of sufficient size and quantity to clearly illustrate:
   1. Functional characteristics of product or material, with integrally related parts and attachment devices.
   2. After review, samples may be used in construction of SKYLONDA FIRE STATION.

C. Field Samples and Mockups:
   1. Erect at SKYLONDA FIRE STATION site at location acceptable to Owner, unless otherwise approved.
   2. Construct each sample or mockup complete, including work of all trades required in finished work.
   3. Required Mock-ups:

074000	Wall Cladding	Section 1.5
079200	Joint Sealants	Section 1.4 G
084113	Glazed Aluminum-framed Assemblies	Section 1.5
086300	Metal-Framed Skylights	Section 1.5

SKYLONDA FIRE STATION (MWA to identify and list)

2.06. Substitutions

A. Owner's written acceptance is required for implementation or utilization of any substitution.

1. Contract is based on materials, equipment and methods described in Bridging Documents and approved Construction Documents.
2. Do not use alternative materials, equipment or methods unless such substitution has been specifically accepted for this work in writing by Owner.
3. Refer to Section 01 6000, Product Requirements for requirements and additional related information.

PART 3 – EXECUTION NOT USED

END OF SECTION

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 4100

REGULATORY REQUIREMENTS

PART 1 – GENERAL

1.01 Summary

A. Section includes:
1. Regulatory requirements applicable to Contract Documents
2. Required provisions under Local Agency Disputes Act
3. Required references under federal law

1.02 General

A. Compliance with Laws.
1. Conform to all applicable codes, laws, ordinances, rules and regulations, which shall have full force and effect as though printed in full in these Specifications. Codes, laws, ordinances, rules, regulations and ordinances ("Regulatory Requirements") are not furnished to Design-Build Entity, because Design-Build Entity is assumed to be familiar with these requirements.
2. Any listing of Regulatory Requirements for hazardous waste abatement Work in the Contract Documents is supplied to Design-Build Entity as a courtesy and shall not limit Design-Build Entity's responsibility for complying with all applicable Regulatory Requirements having application to the Work. Where conflict among the Regulatory Requirements or with these Specifications occurs, the most stringent requirements shall be used.
3. Specific reference in the Specifications to codes and regulations or requirements of regulatory agencies shall mean the latest printed edition of each adopted by the regulatory agency in effect at the time Design-Build Entity executes Document 00 5200 (Agreement), except as may be otherwise specifically stated in the Contract Documents.

B. Precedence.
1. Where specified requirements differ from Regulatory Requirements, the more stringent requirements shall take precedence. Where Drawings or Specifications require or describe products or execution of better quality, higher standard or greater size than required by Regulatory Requirements, then Drawings and Specifications shall take precedence so long as such increase is legal. Where no requirements are identified on Drawings or in Specifications, comply with all Regulatory Requirements of governing authorities having jurisdiction.
2. Should any conditions develop not covered by the Contract Documents wherein the finished Work will not comply with current codes, a Change Order detailing and specifying the required Work shall be submitted to and approved by Owner before proceeding with the Work.

1.03 Regulatory Requirements

A. Applicable Codes.
1. Codes that apply to Contract Documents include all Codes applicable to construction are generally listed in the Bridging Documents.

B. Applicable Laws, Statutes, Ordinances, Rules, and Regulations.
1. During prosecution of Work to be done under Contract Documents, Design-Build Entity

shall comply with applicable laws, ordinances, rules and regulations, including, but not limited to, the following:

a. Federal:
   1) Americans With Disabilities Act of 1990
   2) 29 CFR, Section 1910.1001, Asbestos
   3) 40 CFR, Subpart M, National Emission Standards for Asbestos
   4) Executive Order 11246
   5) Clean Water Act

b. State of California:
   1) California Code of Regulations, Titles 5, 8, 15, 17, 19, 21, 22, 24 and 25
   2) California Public Contract Code
   3) California Health and Safety Code
   4) California Government Code
   5) California Labor Code
   6) California Civil Code
   7) California Code of Civil Procedure
   8) CPUC General Order 95, Rules for Overhead Electric Line Construction
   9) CPUC General Order 128, Rules for Construction of Underground Electric Supply and Communications Systems
   10) Cal/OSHA
   11) OSHA: Hazard Communications Standards
   12) SB785

c. State of California Agencies:
   1) State and Consumer Services Agency
   2) All Air Quality Management Districts with jurisdiction
   3) All Regional Water Quality Control Boards with jurisdiction

d. All Local Agencies with jurisdiction (cities, counties, fire departments)

C. Change Orders and Claims.
   1. The California Public Contract Code, including but not limited to Section 7105(d)(2), and the California Government Code Section 930.2 et seq., apply to all contract procedures for changes, time extensions, change orders (time or compensation) and claims. Federal law (*U.S. v. Holpuch* 326 U.S. 234) shall supplement California law on the enforceability of these requirements.
   2. Any change, waiver, or omission to implement contract change order and claim procedures shall have no legal effect unless expressly permitted in a fully executed change order approved by Design-Build Entity and Owner and approved as to form by their respective legal counsel.

D. Required Provisions on Contract Claim Resolution.
   1. The California Public Contract Code specifies required provisions on resolving contract claims less than $375,000, which are set forth below, and constitute a part of this Contract.
   2. For the purposes of this section, "Claim" means a separate demand by Design-Build Entity of $375,000 or less for (1) a time extension, (2) payment or money or damages arising from Work done by or on behalf of Design-Build Entity arising under the Contract Documents and payment of which is not otherwise expressly provided for or the Claimant is not otherwise entitled to, or (3) an amount the payment of which is disputed by Owner. In order to qualify as a Claim, the written demand must state that it is a Claim submitted under paragraph 12 of Document 00 7253 (General Conditions) and be submitted in compliance with all requirements of Document 00 7253 (General Conditions), Article 12. Separate Claims which total more than $375,000 do not qualify as a "separate demand of $375,000 or less," as referenced above, and are not subject to this section.
   3. A voucher, invoice, payment application, or other routine or authorized form of request for

payment is not a Claim for purposes of this section. If such request is disputed as to liability or amount, then the disputed portion of the submission may be converted to a Claim under this section by submitting a separate claim in compliance with Contract Documents claim submission requirements.

4. Caution. This section does not apply to tort claims and nothing in this section is intended nor shall be construed to change the time periods for filing tort claims or actions specified by Chapter 1 and Chapter 2 of Part 3 of Division 3.6 of Title 1 of the California Government Code.
5. Procedure:
   a. The Claim must be in writing, submitted in compliance with all requirements of Document 00 7253 (General Conditions), Article 12, including, but not limited to, the time prescribed by and including the documents necessary to substantiate the Claim, pursuant to Document 00 7253 (General Conditions), Article 12. Claims must be filed on or before the day of final payment. Nothing in this section is intended to extend the time limit or supersede notice requirements for the filing of claims as set forth in Document 00 7253 (General Conditions), Article 12 or elsewhere in the Contract Documents.
   b. For Claims of fifty thousand dollars ($50,000) or less, Owner shall respond in writing within forty-five (45) days of receipt of the Claim, or Owner may request in writing within thirty (30) days of receipt of the Claim, any additional documentation supporting the Claim or relating to any defenses or claims Owner may have against Claimant. If additional information is thereafter required, it shall be requested and provided in accordance with this section upon mutual agreement of Owner and Claimant. Owner's written response to the Claim, as further documented, shall be submitted to Claimant within fifteen (15) days after receipt of further documentation or within a period of time no greater than taken by Claimant in producing the additional information, whichever is greater.
   c. For Claims over Fifty Thousand Dollars ($50,000) and less than or equal to $375,000: Owner shall respond in writing within sixty (60) days of receipt of the Claim, or Owner may request in writing within thirty (30) days of receipt of the Claim, any additional documentation supporting the Claim or relating to any defenses or claims Owner may have against Claimant. If additional information is thereafter required, it shall be requested and provided in accordance with this section, upon mutual agreement of Owner and Claimant; Owner's written response to the Claim, as further documented, shall be submitted to Claimant within thirty (30) days after receipt of further documentation or within a period of time no greater than taken by Claimant in producing the additional information, whichever is greater.
   d. Meet and Confer: If Claimant disputes Owner's written response, or Owner fails to respond within the time prescribed above, Claimant shall notify Owner, in writing, either within fifteen (15) days of receipt of Owner's response or within fifteen (15) days of Owner's failure to timely respond, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon demand Owner will schedule a meet and confer conference within thirty (30) days for settlement of the dispute.
   e. Following the meet and confer conference, if the Claim or any portion remains in dispute, Claimant may file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the California Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time Claimant submits its written claim as set forth herein, until the time that Claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.

E. Compliance with Americans with Disabilities Act.
   1. Design-Build Entity acknowledges that, pursuant to the Americans with Disabilities Act (ADA), programs, services and other activities provided by a public entity to the public,

whether directly or through a Design-Build Entity, must be accessible to the disabled public. Design-Build Entity shall provide the services specified in the Contract Documents in a manner that complies with the ADA and any and all other applicable federal, state and local disability rights legislation. Design-Build Entity agrees not to discriminate against disabled persons in the provision of services, benefits or activities provided under the Contract Documents and further agrees that any violation of this prohibition on the part of Design-Build Entity, its employees, agents or assigns shall constitute a material breach of the Contract Documents.

F. Compliance with IRCA.

1. Design-Build Entity acknowledges that Design-Build Entity, and all subcontractors hired by Design-Build Entity to perform services under this Agreement, are aware of and understand the immigration Reform and Control Act ("IRCA"). Design-Build Entity is and shall remain in compliance with the IRCA and shall ensure that any subcontractors hired by Design-Build Entity to perform services under this Agreement are in compliance with the IRCA. In addition, Design-Build Entity agrees to indemnify, defend and hold harmless Owner, its agents, officers and employees, from any liability, damages or causes of action arising out of or relating to any claims that Design-Build Entity's employees, or employees of any subcontractor hired by Design-Build Entity, are not authorized to work in the United States for Design-Build Entity or its subcontractor and/or any other claims based upon alleged IRCA violations committed by Design-Build Entity or Design-Build Entity's subcontractors.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 4200

REFERENCES AND DEFINITIONS
(Design-Build)

PART 1 – GENERAL

1.01 Summary

A. Section Includes:

1. Reference standards, abbreviations, symbols, and definitions used in Contract Documents.
2. Full titles are given in this Section for standards cited in other Sections of Specifications.

1.02 Reference to Standards and Specifications of Technical Societies; Reporting and Resolving Discrepancies

A. References.

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard, specification, manual, code, or laws or regulations in effect at the time Design-Build Entity executes Document 00 5200 (Agreement), except as may be otherwise specifically stated in the Contract Documents.
2. If during the performance of the Work, Design-Build Entity discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any such law or regulation applicable to the performance of the Work or of any such standard, specification, manual, or code or of any instruction of any supplier, Design-Build Entity shall report it in writing at once to Owner's Representative and Bridging Architect, and Design-Build Entity shall not proceed with the Work affected thereby until consent to do so is given by Owner.

B. Precedence.

1. Except as otherwise specifically stated in the Contract Documents or as may be provided by Change Order, CD, or Supplemental Instruction, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
    a. The provisions of any such standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
    b. The provisions of any such laws or regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such law or regulation).
2. No provision of any such standard, specification, manual, code, or instruction shall be effective to change the duties and responsibilities of Owner, Owner's Representative, Bridging Architect or Design-Build Entity, or any of their subcontractors, consultants, agents, or employees, from those set forth in the Contract Documents, nor shall it be effective to assign to Owner, Bridging Architect, or any of their consultants, agents, representatives or employees any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

C. Referenced Grades, Classes, and Types.
   1. Where an alternative or optional grade, class, or type of product or execution is included in a reference but is not identified in Drawings or in Specifications, provide the highest, best, and greatest of the alternatives or options for the intended use and prevailing conditions.

D. Edition Date of References.
   1. When an edition or effective date of a reference is not given, it shall be understood to be the current edition or latest revision published as of the date Design-Build Entity executes Document 00 5200 (Agreement).
   2. All amendments, changes, errata and supplements as of the effective date shall be included.

E. ASTM and ANSI References. Specifications and Standards of the American Society for Testing and Materials (ASTM) and the American National Standards Institute (ANSI) are identified in the Drawings and Specifications by abbreviation and number only and may not be further identified by title, date, revision, or amendment. It is presumed that Design-Build Entity is familiar with and has access to these nationally- and industry-recognized specifications and standards.

1.03 Definitions

A. Meaning of Words and Phrases. Wherever any of the words or phrases defined below, or a pronoun used in place thereof, is used in any part of the Contract Documents, it shall have the meaning here set forth. Where abbreviations and symbols are used, such abbreviations and symbols shall be given their common meaning in the construction industry. In the Contract Documents, the neuter gender includes the feminine and masculine, and the singular number includes the plural.

B. While Owner has made an effort to identify all defined terms with initial caps, the following definitions shall apply regardless of case unless the context otherwise requires:
   1. Addenda: Written or graphic instruments issued prior to Design-Build Entity's execution of Document 00 5200 (Agreement), which clarify, correct, or change the Request for Proposal requirements or the Contract Documents. Addenda shall not include the minutes of any Pre-Proposal Conference and/or Site Visit unless otherwise expressly indicated.
   2. Agreement (Document 00 5200): Agreement is the basic Contract Document that binds the parties to construction Work. Agreement defines relationships and obligations between Owner and Design-Build Entity and by reference incorporates Conditions of Contract, Bridging Documents, final Drawings, and final Specifications and contains Addenda and all Modifications subsequent to execution of Contract Documents.
   3. Alternate: Work element identified as such in Proposal which, shall be added to or deducted from Work, if accepted by Owner following Contract award as provided in Contract Documents
   4. Application for Payment: Written application for monthly or periodic progress or final payment made by Design-Build Entity complying with the Contract Documents.
   5. Approved Equal: Approved in writing by Owner as being of equivalent quality, utility and appearance.
   6. Architect/Engineer: Bridging Architect.
   7. Asbestos: Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by OSHA or Cal/OSHA.
   8. Bid: Proposal
   9. Bidder: Proposer.
   10. Board: The governing body of the Owner.

11. Bridging Architect. A person (or that person's firm) holding a valid California State Architect's or Engineer's license that prepared some or all of the Bridging Documents, and represents the Owner in the administration of certain aspects of Contract Documents. Bridging Architect may be an employee of or an independent consultant to Owner. When Bridging Architect is referred to within the Contract Documents and not an employee of Owner, Bridging Architect shall be construed to include employees, consultants and subconsultants of Bridging Architect. When Bridging Architect is an employee of Owner, his or her authorized representatives on the Project will be included under the term Bridging Architect. If Bridging Architect is an employee of Owner, Bridging Architect is the beneficiary of all Design-Build Entity obligations to Owner, including without limitation, all releases and indemnities. Bridging Architect may also be referred to as Architect/Engineer, Architect or Engineer.
12. Bridging Documents: The Performance Criteria, Concept Drawings and other items included, referenced or described in Document 00 5201 Bridging Documents.
13.
14. Business Day: Any Day other than Saturday, Sunday, and the following days that have been designated as holidays by Owner. If a holiday falls on a Saturday, the preceding Friday will be the holiday. If a holiday falls on a Sunday, the following Monday will be the holiday.
    a. New Year's Day, January 1; (What about December 31st?)
    b. Martin Luther King Jr.'s Birthday, third Monday in January;
    c. Presidents' Day, third Monday in February;
    d. Memorial Day, last Monday in May;
    e. Independence Day, July 4;
    f. Labor Day, first Monday in September;
    g. Veterans' Day, November 11;
    h. Thanksgiving Day, as designated by the President;
    i. The Day following Thanksgiving Day;
    j. Christmas Day, December 25; and (What about Christmas Eve?)
    k. Each day appointed by the Governor of California and formally recognized by the Board as a day of mourning, thanksgiving, or special observance.
15. By Owner: Work that will be performed by Owner or its agents at the Owner's expense.
16. By Others: Work that is outside scope of Work to be performed by Design-Build Entity under this Contract, which will be performed by Owner, other contractors, or other means.
17. Change Directive ("CD"): See Construction Change Directive:
18. Change Order: A written instrument prepared by Owner and signed by Owner and Design-Build Entity, stating their agreement upon all of the following:
    a. a change in the Work;
    b. the amount of the adjustment in the Contract Sum, if any; and
    c. the amount of the adjustment in the Contract Time, if any.
19. Change Proposal Request ("CPR"): Design-Build Entity-initiated change order document. (if used)
20. City: The City in which the Project is located or otherwise has jurisdiction over some element of the Project.
21. Code Inspector: A local or state agency responsible for the enforcement of applicable codes and regulations.
22. Concealed: Work not exposed to view in the finished Work, including within or behind various construction elements.
23. Construction Change Directive ("CCD"): A written order prepared and signed by Owner, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both.
24. Construction Documents: Final Drawings and Specifications. See Section 01 1101.
25. Construction Manager: If used elsewhere in the Contract Documents, the person or entity so identified in the Agreement or otherwise in writing by Owner, with such rights and responsibilities as may be set forth in Contract Documents. The term Construction

Manager shall be construed to include employees of Construction Manager and/or employees that Construction Manager supervises. When the designated Construction Manager is an employee of Owner, his or her authorized representatives on the Project will be included under the term Construction Manager. If Construction Manager is an employee of Owner Construction Manager is the beneficiary of all Design-Build Entity obligations to Owner, including without limitation, all releases and indemnities.

26. Contract Amount: a change order price, line item price, Contract Sum, or other price assigned to a scope of work.
27. Contract Conditions or Conditions of the Contract: Consists of two parts: General Conditions and Supplementary Conditions.
    a. General Conditions are general clauses that are common to Owner design-build contracts, including Document 00 7253 (General Conditions).
    b. Supplementary Conditions modify or supplement General Conditions to meet specific requirements for Contract Documents, and are Documents generally numbered 00 7300 to 00 7399, including without limitation Document 00 7316 (Supplementary Conditions – Insurance and Indemnification).
28. Contract Documents and Contract: Contract Documents and Contract shall consist of the documents identified as the Contract Documents in the Agreement, plus all changes, Addenda, and modifications thereto.
29. Contract Modification: Either:
    a. a written amendment to Contract signed by Design-Build Entity and Owner; or
    b. a Change Order; or
    c. a Construction Change Directive; or
    d. a written directive for a minor change in the Work issued by Owner.
30. Contract Sum: The sum stated in the Agreement and, including authorized adjustments, the total amount payable by Owner to Design-Build Entity for performance of the Work and the Contract Documents. The Contract Sum is also sometimes referred to as the Contract Price or the Contract Amount.
31. Contract Time: The number or numbers of Days or the dates stated in the Agreement to achieve Substantial Completion of the Work or designated Milestones; and/or to achieve Final Completion of the Work so that it is ready for final payment and is accepted.
32. Contractor: Design-Build Entity.
33. Design-Build Entity ("DBE"). The person or entity identified as such in the Agreement and referred to throughout the Contract Documents as if singular in number and neutral in gender. The term "Design-Build Entity" means the Design-Build Entity or its authorized representative.
34. Design-Build Entity's Employees: Persons engaged in execution of Work under Contract as direct employees of Design-Build Entity, as Subcontractors, or as employees of Subcontractors.
35. Designers: The qualified, licensed architects, engineers and other design professionals retained or employed by Design-Build Entity or a Subcontractor (of any tier) to furnish design services required by Section 01 1101 and other provisions of Contract Documents.
36. County: the County in which the Project is located.
37. Day: One calendar day of 24 hours measured from midnight to the next midnight, unless the word "day" is specifically modified to the contrary.
38. Defective: An adjective which, when modifying the word "Work," refers to Work that is unsatisfactory or unsuited for the use intended, faulty, or deficient, that does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents (including but not limited to approval of Samples and "or equal" items), or has been damaged prior to final payment (unless responsibility for the protection thereof has been assumed by Owner). Unapproved substitutions are defective. Owner is the judge of whether Work is Defective.
39. Design-Build Entity. The person or entity identified as such in the Agreement and referred to throughout the Contract Documents as if singular in number and neutral in

gender. The term "Design-Build Entity" means the Design-Build Entity or its authorized representative. Also referred to as "Design Builder" and "DBE."

40. DOF: California Department of Finance, or successor
41. Drawings: The graphic and pictorial portions of Contract Documents, wherever located and whenever issued, including without limitation prepared by Design-Build Entity, Subcontractors or their Designers showing the final design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams. However, unless the context clearly requires otherwise, Drawings do not include any Bridging Documents.
42. Enhancement: Work identified as such in the Proposal which is added to or deducted from the Work in the base Proposal as indicated in the Proposal form.
43. Equal: Equal in opinion of Owner. Burden of proof of equality is responsibility of Design-Build Entity.
44. Exposed: Work exposed to view in the finished Work, including behind louvers, grilles, registers and various other construction elements.
45. Final Acceptance or Final Completion: Owner's acceptance of the Work as satisfactorily completed in accordance with Contract Documents. Requirements for Final Acceptance/Final Completion include, but are not limited to:
    a. Final cleaning is completed.
    b. All systems having been tested and accepted as having met requirements of Contract Documents.
    c. All required instructions and training sessions having been given by Design-Build Entity.
    d. All Project Record Documents having been submitted by Design-Build Entity, reviewed by Owner, and accepted by Owner.
    e. All punch list Work, as directed by Owner, having been completed by Design-Build Entity.
    f. Generally all Work, except Design-Build Entity maintenance after Final Acceptance/Final Completion, having been completed to satisfaction of Owner.
46. Force Account: Work directed to be performed without prior agreement as to lump sum or unit price cost thereof, and which is to be billed at cost for labor, materials, equipment, taxes, and other costs, plus a specified percentage for overhead and profit.
47. Furnish: Supply only, do not install.
48. Indicated: Shown or noted on the Drawings.
49. IOR: Inspector of Record engaged by Owner.
50. Install: Install or apply only, do not furnish.
51. Skylonda Fire Station: Project
52. Latent: Not apparent by reasonable inspection, including but not limited to, the inspections and research required as a condition to proposing or performing construction work under Document 00 7253 (General Conditions).
53. Law: Unless otherwise limited, all applicable laws including without limitation all federal, state, and local laws, statutes, standards, rules, regulations, ordinances, and judicial and administrative decisions.
54. Material: This word shall be construed to embrace machinery, manufactured articles, materials of construction (fabricated or otherwise), and any other classes of material to be furnished in connection with Contract, except where a more limited meaning is indicated by context.
55. Milestone: A principal event specified in Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all Work.
56. Modification: Same as Contract Modification.
57. Not in Contract or "NIC": Work that is outside the scope of Work to be performed by Design-Build Entity under Contract Documents.
58. Notice of Completion: Shall have the meaning provided in California Civil Code §3093, and any successor statute.
59. Off Site: Outside geographical location of the Project.
60. Owner: Owner is defined in Document 00 5200 (Agreement).

61. Owner-Furnished, Design-Build Entity Installed: Items furnished by Owner at its cost for installation by Design-Build Entity at its cost under Contract Documents.
62. Owner's Representative(s): See Document 00 5200 (Agreement).
63. Partial Utilization: Use by Owner of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all of the Work.
64. PCBs: Polychlorinated biphenyls.
65. Phase: A specified portion of the Work (if any) specifically identified as a Phase in Document 00 5200 (Agreement) or Document 01 1100 (Summary).
66. Product Data: That information (brochures, catalog sheets, manufacturer's cut sheets, etc.) supplied by vendors having technical and commercial characteristics of the supplied equipment or materials and accompanying commercial terms such as warranties, instructions, and manuals.
67. Proposal: The offer or proposal of the Proposer submitted on the prescribed form(s) setting forth the prices for the Work to be performed.
68. Proposer: One who submits a Proposal.
69. Proposal Documents: All documents comprising the Project Manual (including all documents and Specification Sections listed in Document 00 0110 [Table of Contents]), including documents supplied for proposal purposes only and Contract Documents (excluding Drawings and Specifications).
70. Progress Report: A periodic report submitted by Design-Build Entity to Owner with progress payment invoices accompanying progress schedule. See Document 00 7253 (General Conditions).
71. Project: Total design and construction of which Work performed under Contract Documents may be whole or part.
72. Project Manager: If used elsewhere in the Contract Documents, "Project Manager" shall mean a person representing a party in the administration of the Contract Documents. Any Owner Project Manager may be an employee of or an independent consultant to Owner. When Owner's Project Manager is referred to within the Contract Documents and Owner has not designated a Project Manager, then the matter shall be referred to Owner. If Owner's Project Manager is an entity, then for Owner the term Project Manager shall be construed to include employees of Project Manager and/or employees that Project Manager supervises. When Owner's designated Project Manager is an employee of Owner, his or her authorized representatives on the Project will be included under the term Project Manager. If Project Manager is an employee of Owner Project Manager is the beneficiary of all Design-Build Entity obligations to Owner, including without limitation, all releases and indemnities.
73. Project Manual: Project Manual consists of Proposal Requirements, Agreement, Bonds, Certificates, Contract Conditions, Bridging Documents, Drawings, and Specifications.
74. Project Record Documents: All Project deliverables required under the Contract Documents, including without limitation, as built drawings; Installation, Operation, and Maintenance Manuals; and Machine Inventory Sheets.
75. Provide: Furnish and install.
76. Request for Information ("RFI"): A document prepared by Design-Build Entity requesting information regarding the Project or Contract Documents. The RFI system is also a means for Owner to submit Contract Document clarifications or supplements to Design-Build Entity.
77. Request for Proposals ("RFP"): A document issued by Owner to Design-Build Entity whereby Owner may initiate changes in the Work or Contract Time as provided in Contract Documents.
78. Request for Substitution ("RFS"): A document prepared by Design-Build Entity requesting substitution of materials as permitted and to the extent permitted in Contract Documents.
79. RFI-Reply: A document consisting of supplementary details, instructions, or information issued by Owner that clarifies or supplements Contract Documents, and with which Design-Build Entity shall comply. RFI-Replies do not constitute changes in Contract Sum

or Contract Time except as otherwise agreed in writing by Owner. RFI-Replies will be issued through the RFI administrative system.

80. Samples: Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
81. Services: As defined in Document 00 7253 General Conditions.
82. Shop Drawings: All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Design-Build Entity (other than Drawings and Specifications) and submitted by Design-Build Entity to illustrate some portion of the Work.
83. Shown: As indicated on Drawings.
84. Site: The particular geographical location of Work performed pursuant to the Contract Documents.
85. Specifications: The written portion of the Contract Documents consisting of requirements for materials, equipment, construction systems, standards, and workmanship for the Work; performance of related services. However, unless the context clearly requires otherwise, Specifications do not include any Bridging Documents.
86. Specified: As written in Specifications.
87. SMCDPW. San Mateo County Department of Public Works, or successor.
88. State Fire Marshall. An office of the California Department of Forestry and Fire Protection responsible for preparing and adopting, and in certain cases, enforcing, building standards relating to fire and panic safety in certain types of public facilities, including the Project.
89. Subcontractor: A person or entity that has a direct contract with Design-Build Entity to perform a portion of the Work at the Site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and neutral in gender and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a separate Design-Build Entity or subcontractors of a separate Design-Build Entity. Also, while the term "Subcontractor" includes design-assist and design-build subcontractors (of any tier), unless the context clearly requires otherwise it does not include Designers.
90. Substantial Completion: The Work (or a specified part thereof) has progressed to the point where, in the opinion of Owner as evidenced by a notice or certificate of Substantial Completion, the Work is sufficiently complete, in accordance with Contract Documents, so that Owner may occupy or utilize the Work (or specified part) for the purposes for which it is intended, and unperformed or incomplete work elements are minor in nature; or if no such certificate is issued, when the Work (or specified part) is complete and ready for final payment as evidenced by written recommendation of Owner for final payment. The terms "Substantially Complete" and "Substantially Completed" as applied to all or part of the Work refer to Substantial Completion thereof.
91. Supplemental Instruction: A written directive from Owner to Design-Build Entity ordering alterations or Modifications that do not result in change in Contract Sum or Contract Time, and do not substantially change Drawings or Specifications.
92. Testing and special inspection agency: An independent entity engaged to inspect and/or test the workmanship, materials, or manner of construction of buildings or portions of buildings, to determine if such construction complies with the Contract Documents and applicable codes.
93. Underground Facilities: All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities that have been installed underground to furnish any of the following services or materials: Electricity, gases, chemicals, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems, or water.
94. Work: The entire completed design and construction, or the various separately identifiable parts thereof, required to be furnished under the Contract Documents within the Contract Time (including without limitation Services). Work includes and is the result

of performing or furnishing labor and furnishing and incorporating materials and equipment into the construction, and performing or furnishing design and other services and furnishing documents, all as required by the Contract Documents including, once approved by Owner as provided in Contract Documents, everything shown in the Drawings and set forth in the Specifications. Wherever the word "work" is used, rather than the word "Work," it shall be understood to have its ordinary and customary meaning.

C. Other Defined Terms. The following terms are not necessarily identified with initial caps; however they shall have the meaning set forth below

1. Wherever words "as directed," "as required," "as permitted," or words of like effect are used, it shall be understood that direction, requirements, or permission of Owner is intended. Words "sufficient," "necessary," "proper," and the like shall mean sufficient, necessary, or proper in judgment of Owner. Words "approved," "acceptable," "satisfactory," "favorably reviewed," or words of like import, shall mean approved by, or acceptable to, or satisfactory to, or favorably reviewed by Owner.
2. Wherever the word "may" or "ought" is used, the action to which it refers is discretionary. Wherever the word "shall" or "will" is used, the action to which it refers is mandatory.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 4523

QUALITY REQUIREMENTS

PART I - GENERAL

1.01. SUMMARY OF QUALITY REQUIREMENTS

A. Section Includes:

1. Administrative and procedural requirements for quality assurance and quality control.
2. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Design-Build Entity of responsibility for compliance with the Contract Document requirements.
3. Specific quality-assurance and control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
4. Specified tests, inspections, and related actions do not limit Design-Build Entity's other quality-assurance and control procedures that facilitate compliance with the Contract Document requirements.
5. Requirements for Design-Build Entity to provide quality-assurance and control services required by the Owner, or authorities having jurisdiction are not limited by provisions of this Section.

1.02. DESCRIPTION

A. Establish and maintain a Quality Assurance/Quality Control (QA/QC) program as described in this section. The QA/QC program must cover construction operations on-site and off-site and must be keyed to the proposed construction sequence and serve as the foundation on which the Commissioning Plan will be built and executed for the mechanical and electrical systems.

B. The process of assuring quality and compliance for SKYLONDA FIRE STATION Project will take place in two ways. QA/QC must implement a program to monitor, verify, and accept the work of SKYLONDA FIRE STATION Design-Build Package during the construction installation, especially the equipment and the system components. The QA/QC program will coordinate with the Commissioning of SKYLONDA FIRE STATION Design-Build Package and dovetail the monitoring and requirements for systems and equipment identified under both programs. The Commissioning program will plan, monitor, verify, and accept the operation and the performance of the equipment and systems. In particular, the operation and performance of the mechanical and electrical systems will only be available for verification and acceptance upon the successful execution of the QC/QA program with regard to their installation.

1.03. REQUIREMENTS

A. QA/QC Program Requirements - The QA/QC program consists of a QA/QC Organization, a Quality Control (QC) Plan, attending a QA/QC Plan meeting with the Owner, attending a Coordination and Mutual Understanding Meeting with the Owner, conducting QA/QC meetings on site, performing three phases of control: performing submittal review, ensuring testing is performed, and preparing QC certifications and documentation necessary to provide materials, equipment, workmanship, fabrication, construction and

operations which comply with the requirements of this Contract. In addition this Section consists of the coordination of the QA/QC program with the Commissioning program.

1.04. DEFINITIONS

A. Quality Assurance Services:

1. Activities, actions, and procedures performed at a level above Quality Control to assure the work performed has in effect a quality control procedure and process performed by those doing the Work to guard against defects and deficiencies and assure that proposed construction will comply with requirements. Includes submittals, certifications, and other actions to assure that the proposed products and services will meet the Contract requirements. Services do not include Contract enforcement activities performed by the Owner.

B. Quality Control Services:

1. Tests, inspections, procedures, and related actions at the level where the work is performed, during and after execution of the Work, to evaluate that actual products and completed construction comply with all Contract requirements.

C. Mockups:

1. Full-size, physical assemblies that are constructed on-site. Mockups are used to verify selections made under sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation; they are not Samples. Approved mockups establish the standard by which the Work will be judged.

D. Laboratory Mockups:

1. Full-size, physical assemblies that are constructed at a testing facility to verify performance characteristics.

E. Preconstruction Testing:

1. Tests and inspections that are performed specifically for the SKYLONDA FIRE STATION Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.

F. Product Testing:

1. Tests and inspections that are performed by a Nationally Recognized Testing Laboratory (NRTL), an National Voluntary Laboratory Accreditation Program (NVLAP), or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with industry standards.

G. Source Quality Control Testing:

1. Tests and inspections that are performed at the source, i.e., Plant, mill, factory, or shop.

H. Field Quality Control Testing:

1. Tests and inspections that are performed on-site for installation of the Work and for completed Work.

I. Testing Agency: Third Party Testing (inspection) services (Work Authorization or separate agreement?) County?

1. An entity engaged by the Owner or Owner's Construction Manager to perform specific tests, inspections, or both. Testing laboratory will mean the same as testing agency. The testing agency will be under the control of the Owner's Construction Manager.

J. Installer/Applicator/Erector:

1. Design-Build Entity or another entity engaged by Design-Build Entity as an employee, Subcontractor, or Sub-subcontractor experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for SKYLONDA FIRE STATION, whose work has resulted in construction with a record of successful in-service performance
2. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to trades people of the corresponding generic name.

K. Experienced:

1. When used with an entity, "experienced" means having successfully completed a minimum of five previous projects similar in size and scope to SKYLONDA FIRE STATION; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

L. Test:

1. All tests to be performed in the presence of the Owner.

M. Manufacturer Qualifications:

1. A firm experienced in manufacturing products or systems similar to those indicated for SKYLONDA FIRE STATION and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

N. Fabricator Qualifications:

1. A firm experienced in producing products similar to those indicated for SKYLONDA FIRE STATION and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

O. Professional Architect/Engineer Qualifications:

1. A professional Architect/Engineer who is legally qualified and licensed to practice in California and who is experienced in providing Architecture and Engineering services of the kind indicated. Architect/Engineering services are defined as those performed for installations of the system, assembly, or product that are

similar to those indicated for SKYLONDA FIRE STATION in material, design, and extent.

P. Specialists:

1. Certain sections of the Specifications require that specific construction activities will be performed by entities that are recognized experts in those operations. Specialists must satisfy qualification requirements indicated and must be engaged for the activities indicated.
2. Requirement for specialists must not supersede building codes and regulations governing the Work.

Q. Testing Agency Qualifications:

1. An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to America Society for Testing of Materials (ASTM) E 548; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.
2. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
3. NVLAP: A testing agency accredited according to National Institute of Standards and Technology's (NIST) NVLAP.

R. Factory-Authorized Service Representative Qualifications:

1. An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for SKYLONDA FIRE STATION.

S. Preconstruction Testing:

1. Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods.

1.05. REGULATORY REQUIREMENTS

A. General:

1. All applicable federal, County and local requirements will govern the construction and completion of the Work; all must be current enforced editions.

B. Copies of Regulations:

1. Copies of the applicable regulations and codes, federal, County and local to be retained at SKYLONDA FIRE STATION site to be available for reference by parties who have a reasonable need.

C. Enforcement:

1. References in the Contract Documents to "code" or to "building code" not otherwise identified will mean the foregoing specified codes, together with the additions, changes, amendments and interpretations adopted by the enforcing agency, and in effect on the date the Contract is executed.
2. Nothing on the Contract Documents will be interpreted as requiring or permitting work that is contrary to these rules, regulations and codes.

3. Where other codes or standards are referenced in the Contract Documents, the affected work must meet or exceed the applicable requirements of such codes and standards.
4. The code, specification or standard referred to will have full force and effect as though printed in the Contract Documents, except as modified.
5. Where the Contract Documents call for or describe materials, work quality or construction of a better quality, higher standard or larger size than is required by said laws, codes, rules and regulations, the provisions of the Contract Documents will take precedence over said laws, codes, rules and regulations.

D. Other Applicable Laws and Regulations:

1. Applicable federal, County, and local laws, and the rules and regulations of governing utility districts and the various other authorities having jurisdiction over the construction and completion of SKYLONDA FIRE STATION, including the latest rules and regulations of the California Labor Code, will apply to the Contract throughout, and they will be deemed to be included in the Contract the same as though printed in the Contract Documents.
2. If laws, ordinances, rules, regulations or orders of public agency having jurisdiction require work to be inspected, tested or approved by some authority other than the Owner or Design-Build Entity, the Design-Build Entity must give required notices and make arrangements, deliver to the Owner the certificates of inspection, test, or approval of such public agency, and pay costs therefore unless otherwise provided in the Contract Documents.

1.06. CONFLICTING REQUIREMENTS

A. General:

1. 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 Owner for a decision before proceeding.

B. Minimum Quantity or Quality Levels:

1. The quantity or quality level shown or specified must 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. Refer uncertainties to Owner for a decision before proceeding.

1.07. QUALITY ASSURANCE/QUALITY CONTROL ON INSTALLATION

A. Monitoring - Monitor quality control over suppliers, manufacturers, products, services, site conditions and workmanship to produce work of the specified quality.

B. Compliance - Comply fully with manufacturers' instructions including each step in sequence and comply fully with the Contract documents inclusive of the entirety of the intent of the Design Criteria.

C. Conflicts - Should manufacturers' instructions conflict with the Contract Documents, request clarification from Owner's Representative before proceeding.

D. Standards:

1. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, code, or specified requirements indicate higher standards or more precise workmanship.

2. Perform Work by persons qualified to produce workmanship of specified quality.

E. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, code, or specified requirements indicate higher standards or more precise workmanship.

F. Coordination of all above-ceiling work is mandatory prior to any installation.

1. Documentation of such coordination will be required prior to applicable installation taking place in the specific area concerned.

1.08. VERIFICATION OF CONDITIONS

A. Prior to installing any portion of the Work, Design-Build Entity must inspect the work already in place to receive the work to be installed and arrange for correction of defects in the existing workmanship, material or conditions that may adversely affect work to be installed. Such inspections must include test applications of the materials to be installed as required to establish the correct condition of surfaces involved. Where the specifications require a material to be installed under the supervision or inspection of the material manufacturer or its representative, Design-Build Entity must ensure that the manufacturer or its representative also inspects the work in place and issues a letter of approval to the Owner.

1.09. REFERENCES

A. The publications listed below form a minimum part of this specification to the extent referenced. The current editions of the publications are referred to in the text by the basic designation only.

1. ASTM A 880 - Criteria for Use in Evaluation of Testing Laboratories and Organizations for Examination and Inspection of Steel, Stainless Steel, and Related Alloys
2. ASTM C 1077 Laboratories Testing Concrete and Concrete Aggregates for Use In Construction and Criteria for Laboratory Evaluation
3. ASTM D 3666 (Rev. A) - Evaluating and Qualifying Agencies Testing and Inspecting Bituminous Paving Materials
4. ASTM D 3740 - Evaluation of Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
5. ASTM E 329 - Evaluation of Testing and Inspection Agencies as Used in Construction
6. ASTM E 543 (Rev. A) - Determining the Qualification of Non-Destructive Testing
7. ASHRAE – American Society of Heating, Refrigeration, and Air Conditioning Engineers
8. AWS – American Welding Society
9. SMACNA – Sheet Metal and Air Conditioning Contractors National Association
10. ACI – American Concrete Institute
11. AABC – American Air Balance Council
12. NETA – International Electrical Test and Acceptance Association

13. IEEE – Institute of Electrical and Electronic Engineers
14. All other standards as referenced throughout this set of Specifications

1.10. SUBMITTALS

A. Quality Assurance/Quality Control (QA/QC) Plan: Submit a QA/QC Plan for the Owner's review within thirty (30) days prior to commencement of construction.

B. Schedule of Tests and Inspections:

1. Prepare in tabular form and include the following, as applicable:

a. Specification Section number and title.
b. Description of test and inspection.
c. Identification of applicable standards.
d. Identification of test and inspection methods.
e. Number of tests and inspections required.
f. Time schedule or time span for tests and inspections.
g. Entity responsible for performing tests and inspections.
h. Requirements for obtaining samples.
i. Unique characteristics of each quality control service.

C. Reports:

1. QA/QC Reports.

a. Daily Inspection Reports.
b. Public Utility Acceptance Reports.
c. State of California Inspection Reports
d. Visitor Observation Reports.
e. Product Manufacturers Inspection Reports (roofing, waterproofing, etc.).

2. Prepare and submit certified written reports that include the following:

a. Date of issue.
b. SKYLONDA FIRE STATION title and number.
c. Name, address, and telephone number of testing agency.
d. Dates and locations of samples and tests or inspections.
e. Names of individuals making tests and inspections.
f. Description of the Work and test and inspection method.
g. Identification of product and Specification Section.
h. Complete test or inspection data.
i. Test and inspection results and an interpretation of test results.
j. Record of temperature and weather conditions at time of sample taken and testing and inspecting.
k. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
l. Recommendations on retesting and reinspecting.

D. Permits, Licenses, and Certificates:

1. For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

E. Testing Agency Responsibilities:

1. Submit a certified written report of each test, inspection, and similar quality-assurance service to the Owner, with copy to Design-Build Entity. Interpret tests and inspections in each report whether tested and inspected work complies with or deviates from the Contract Documents.

F. Design-Build Entity Responsibilities:

1. Include the following:

   a. Provide test specimens representative of proposed products and construction.
   b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
   c. Provide sizes and configurations of test assemblies, mockups, and laboratory mockups to adequately demonstrate capability of products to comply with performance specifications.
   d. Build site-assembled test assemblies and mockups using installers who will perform same tasks for SKYLONDA FIRE STATION.
   e. Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
   f. When testing is complete, remove test specimens, assemblies, mockups, and laboratory mockups; do not reuse products on SKYLONDA FIRE STATION.
   g. Provide a full-time QA/QC Manager committed to SKYLONDA FIRE STATION.

G. Mockups – MWA input needed on this section, if needed or included

1. Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:

2. Build mockups in location and of size indicated or, if not indicated, as directed by the Owner.

3. Notify the Owner seven (7) days in advance of dates and times when mockups will be constructed.

4. Demonstrate the proposed range of aesthetic effects and workmanship.

5. Obtain the Owner's approval of mockups before starting work, fabrication, or construction. Allow seven days for initial review and each re-review of each mockup.

6. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.

7. When directed, demolish and remove mockups.

H. Laboratory Mockups - MWA

1. Comply with requirements of pre-construction testing and those specified in individual Sections and Divisions.

1.11. QA/QC Organization

A. QA/QC Manager:

1. Duties: The QA/QC Manager's duties on SKYLONDA FIRE STATION are limited to the responsibility of managing and implementing the QA/QC program on a full-time basis. The QA/QC Manager is required to attend the QA/QC Plan meeting, attend the Coordination and Mutual Understanding Meeting, conduct the QA/QC meetings, perform submittal review, ensure testing is performed and prepare QA/QC certifications and documentation required in this Contract. The QA/QC Manager is responsible for managing and coordinating the three phases of control and documentation performed by the QA/QC specialists. No Work or testing may be performed unless the QA/QC Manager or the Designated Alternate QA/QC Manager is on the SKYLONDA FIRE STATION site. The QA/QC Manager must report directly to an officer of the Design-Build Entity's Entity and must not be the same individual as, nor be subordinate to, the SKYLONDA FIRE STATION Superintendent or the Design-Build Entity's Project Manager. The QA/QC Manager will coordinate the QA/QC activities with the Owner and the IOR, insuring a consistent and progressive verification of the mechanical and electrical systems from the installation Quality Control program through the operation and performance acceptance of the SKYLONDA FIRE STATION Project.

2. Commissioning program. The QA/QC Manager must assure that inspections by the Design-Build Entity's work force have occurred prior to calling on the Owner's Inspectors for an inspection. This will minimize the failed inspections recorded and documented by the Owner.

3. Qualifications: A graduate of a four-year, accredited college program in one of the following disciplines: Engineering, Architecture, Construction Management, Engineering Technology, Building Construction, or Building Science with a minimum of ten (10) years experience as an inspector, QA/QC Manager, project manager, or construction manager on major and complex projects of similar size and scope. Or other experience and qualifications, as may be approved by the County. Submit qualifications for review and acceptance by the Owner. Show examples where candidate performed similar duties and responsibilities. Examples should describe QA/QC Programs of similar type Projects, including health facilities.

B. Alternate QA/QC Manager Duties and Qualifications: Designate an alternate for the QA/QC Manager at the SKYLONDA FIRE STATION site to serve in the event of the designated QA/QC Manager's absence. The educational and experience requirements for the Alternate QA/QC Manager will be similar to those for the QA/QC Manager. This individual must also act as an alternate to the SKYLONDA FIRE STATION QA/QC and will serve in the event of the designated QA/QC's absence.

C. QA/QC Specialists Duties and Qualifications: Provide a QA/QC specialist at the SKYLONDA FIRE STATION site for each of the areas of responsibilities specified below, who will assist and report to the QA/QC Manager, and who will have no duties other than performing the three phases of control and preparing documentation required in this Contract. Pertinent QA/QC specialists are required to attend the Coordination and Mutual Understanding Meeting, QA/QC meetings, and perform the three phases of control and prepare documentation for each definable feature of Work in their area of responsibility at

the frequency specified below. The mechanical and electrical specialists will also assist in the commissioning activities, specifically the monitoring of the Start Up and Functional Performance Tests (FPT).

TABLE A

QUALIFICATION EXPERIENCE IN AREA OF RESPONSIBILITY	AREA OF RESPONSIBILITY	(FREQUENCY)
Plumbing, fire protection and/or piping installation contractor, mechanic, or superintendent with 10 years experience.	Installation and testing of piping systems; assist in the monitoring of the Start Up and FPT's.	Full-time during roughing plumbing and piping installations
Sheet metal contractor, mechanic, or superintendent with 10 years experience.	Installation & testing all ductwork systems; assist in the monitoring of the Start Up and FPT's.	Full-time during ductwork installation
Building controls manufacturer's representative with 5 years experience.	Operation and performance of the controls system, review controls submittals	Part-time during the submittal and installation stage. Full time during the point-by-point evaluation of the system, refer to Division 1 and Division 15
Electrical contractor/journeyman w/ CA license as electrician and a fire alarm contractor/journeyman or vendor.	Installation & testing normal and essential power systems; assist in the monitoring of the Start Up and FPT's.	Full-time during installation, wiring, connection, etc. & testing; refer to Division 1 and Division 16 Part- time during submittal, raceway rough in
Roofing Manufacturer's representative with 5 years minimum.	Installation and testing of the roofing systems	Full-time during roofing operations
Waterproofing consultant/manufacturer's Technical Representative.	Installation & testing of waterproofing systems	Full-time during waterproofing operations

D. Submittal Review Duties and Qualifications:

1. Submittal Assistant: Provide a full-time Submittal Assistant at the SKYLONDA FIRE STATION site until 95 percent of the submittals have been approved. Sole duty of the Submittal Assistant will be to assist the QA/QC Manager in processing, certifying QC compliance and maintaining files for submittals. Submittal Assistant must have a minimum of (3) years experience as a project engineer, scheduler or construction- related worker.

1.12. QA/QC PLAN

A. Requirements: Provide for review by the Owner, a QA/QC Plan that covers both on-site and off-site Work, and includes the following:

1. A chart showing the QA/QC organizational structure and its relationship to the production side of the organization.

2. Names and qualifications, in resume format, for each person in the QA/QC organization.

3. Duties, responsibilities and authorities of each person in the QA/QC organization.

4. Documentation procedures, including proposed report formats for all reports required herein.

5. A letter signed by an officer of the firm appointing the QA/QC Manager and stating that he/she is responsible for managing and implementing the QA/QC program as described herein, and that the QA/QC Manager reports to an officer of the firm, someone other than Design-Build Entity's Project Manager. Include in this letter the QA/QC Manager's authority to direct the stopping, removal and replacement of non- conforming Work.

6. Procedures for reviewing, approving and managing submittals. Provide the name(s) of the person(s) in the QA/QC organization authorized to review and certify submittals prior to approval.

7. A Testing Plan and Log that includes the tests required, referenced by the specification paragraph number requiring the test, test procedures, the frequency, schedule activity number and the person responsible for each test.

8. [omitted]

9. Procedures to identify, record, track and complete rework items, including schedule activity numbers.

10. A listing of outside organizations such as, architectural and consulting engineering firms that will be employed by Design-Build Entity and a description of the services and resumes of personnel these firms will provide.

11. A list of the definable features of work. A definable feature of work is a task that is separate and distinct from other tasks and requires separate control requirements. As a minimum, unless otherwise accepted by the Owner, consider each section of the specifications as a definable feature of work. However, there may be more than one definable feature of work in each section of the specifications.

12. A personnel matrix showing, for each section of the specification, who will review and approve submittals, who will perform and document the three phases of control, and who will perform and document the testing.

13. Provide procedures describing mandatory above ceiling coordination prior to the execution of any above ceiling work.

B. Preliminary Work Authorized Prior to Review and Acceptance: The only work that is authorized to proceed prior to the acceptance of the QA/QC Plan is mobilization of storage and office trailers and surveying, the preparation of excavation shoring systems, and removal of hazardous materials. Design-Build Entity must not proceed on other activities without written authorization from the Owner.

C. Acceptance of conformance with Bridging Documents: Acceptance of the QA/QC Plan for conformance to the Bridging Documents is required before the start of construction. Owner reserves the right to require changes in the QA/QC Plan and operations as necessary to ensure the specified quality of Work. Owner reserves the right to interview any member of the QA/QC organization at any time in order to verify his/her submitted qualifications.

D. Notification of Changes: Submit written notification to Owner of any proposed change, including changes in the QA/QC organization personnel, a minimum of seven (7) days prior to a proposed change. Design-Build Entity must receive Owner approval prior to implementing such proposed changes.

1.13. QUALITY ASSURANCE

A. General:

1. Qualifications paragraphs in this Article establish the minimum qualification levels required; see this Section, Part 3 – Execution. Individual Specification Sections specify additional requirements.

B. Design-Build Entity's Records

1. Maintain accurate, current records on an appropriate form for all inspections and tests performed, instructions received from the Owner, firm or individual performing test, and actions taken as a result of those instructions.

2. These records must include evidence that the required inspections or tests have been performed (including type and number of inspections or tests, nature of defects, causes for rejection, etc.), proposed or directed remedial action, and corrective action taken.

3. Document inspections and tests as required by each Specification Section

C. Design Quality Program

1. The Design-Build Entity's Quality Control Program must include, but not limited to, Design-Build Entity's procedures for thoroughly reviewing the Design Documents for:

a. Functionality
b. Design Excellence

c. Sustainability
d. Maintainability
e. Coordination among disciplines
f. Constructability
g. Value Engineering
h. Quality Engineering
i. Life Cycle
j. Energy Efficiency
k. Fire Life Safety
l. Code Compliance

D. Construction Quality Control Plan

1. The Design-Build Entity's Quality Control Program must include, but not limited to, Design-Build Entity's procedures to review construction through completion of the SKYLONDA FIRE STATION with emphasis on the following:

a. Installation of construction site security and monitoring.
b. Maintenance of fire & life safety program.
c. Coordination.
d. Mitigation for noise, dust, runoff during construction and all California Environmental Quality Act (CEQA) Mitigation issues.
e. Payment of all fees permits and licenses.
f. Monitoring for construction and employee, parking, deliveries and storage.
g. Protection of the Public and their use of the right of way surrounding the construction site.
h. Protection of archaeological resources (if applicable).
i. Protection of the plants and trees.
j. Protection, reinstatement of existing utilities and services.
k. Staging and shoring of all excavations.
l. Excavation of sub-grade and placement of compacted fill.
m. Excavation, placement, backfill and compaction of utilities and services.
n. Testing, inspections, certifications and placement of concrete foundations and structures.
o. Testing, inspections, certifications, erection and assembly of structural components.
p. Testing, inspection, certifications of all electrical services, transformers, switchgear and equipment
q. Testing, inspection, certifications of all pipelines, valves and equipment, including but not limited to:
    1) Diesel and gas
    2) Steam and condensate
    3) Cooling water, supply and return
    4) Water reticulation, including domestic and well systems
    5) Filtration and conditioning systems
    6) Sewer and storm drainage systems
    7) Testing, inspection, and certification of all machinery, mechanisms and equipment.
r. Testing, inspection, certification of upgrade and integration of controls systems.
s. Not Used
t. Testing, inspection of all architectural features and finishes.
u. Commissioning, occupancy, post occupancy and handover including but not limited to:

1) Landscape and gardens
2) Buildings and structures
3) Plant machinery, mechanisms, and equipment
4) Utilities and services
5) Controls and security systems

1.14. TESTING LABORATORY SERVICES

A. Testing Responsibility:

1. The Owner's Construction Manager will employ and pay for services of an independent testing laboratory to perform specified testing per CCR Title 24, and any other testing specifically indicated in the Contract Documents to be the Owner's responsibility.

   a. The Owner will furnish Design-Build Entity with names, addresses, and telephone numbers of the independent testing laboratory and the Owner Representative responsible for monitoring the testing.
   b. Design-Build Entity must cooperate with laboratory to facilitate execution of its required services.

2. Design-Build Entity will employ and pay for services related to testing, adjusting, and balancing of systems as specified under individual sections.

B. Required Tests and Inspection

1. Testing and inspection services are required to verify compliance with the Contract Documents. These services will, in no way, relieve the Design-Build Entity from its obligations to perform the work of the Contract.

   a. Required testing and inspection services for specific construction and/or material production activities are referenced in individual Sections, as applicable.
   b. Specified tests, inspections, and related activities do not preclude Design-Build Entity's quality control procedures that facilitate compliance with the Contract Document requirements.

C. Design-Build Entity's Responsibilities

1. Cooperate with laboratory personnel and Owner representative; provide access to work and to manufacturer's operations.

2. Provide laboratory with adequate quantities of representational samples of materials proposed to be used which require testing.

3. Provide to laboratory preliminary design mix proposed to be used for concrete, and other material mixes which require control by testing laboratory.

4. Furnish copies of products tests reports as required.

5. Furnish incidental labor and facilities:

   a. To provide access to work to be tested.
   b. To obtain and handle samples at the SKYLONDA FIRE STATION site or at source of product to be tested.

c. To facilitate inspections and tests.
d. For storage and curing of test samples.

6. Notify Owner representative 48 hours in advance of operations to allow for laboratory assignment of personnel and scheduling of tests and/or inspections. When tests or inspections cannot be performed after such notice due to any factors for which Design-Build Entity is responsible, Design-Build Entity must reimburse the Owner for all laboratory personnel labor and travel expenses incurred.

   a. Notifications must include:

      1) Specification section number and title.
      2) Description of test and/or inspection.
      3) Identification of all applicable standards.
      4) Identification of test and inspection methods.
      5) Number of tests and inspections required.
      6) Time schedule or time span for tests and inspections.
      7) Requirements for obtaining samples.
      8) Any unique characteristics or required test or inspection.

7. Retesting or additional inspection required due to nonconformance with the Contract Documents must be performed by the Owner's Construction Managers independent testing laboratory at the Design-Build Entity's expense.

8. Testing and inspection requested by Design-Build Entity and not required by the Contract Documents are Design-Build Entity's responsibility.

9. When additional testing services are needed for Design-Build Entity's convenience, Design-Build Entity will employ and pay for the services of a separate, equally qualified independent testing laboratory or make arrangements with Owner's laboratory and pay for such additional samples and tests.

10. The Owner Representative will have the right to reject materials and workmanship which are defective or to require correction. Rejected workmanship must be satisfactorily corrected and rejected materials must be removed from the premises without charge to the Owner. If Design-Build Entity does not correct such rejected work within a reasonable time, fixed by written notice, the Owner may correct same and charge the expense to Design-Build Entity.

11. Should it be considered necessary or advisable by the Owner at any time before Acceptance of the Work to make examination of work already completed by removing or tearing out same, Design-Build Entity must, on request, promptly furnish necessary facilities, labor and materials. If such work is found to be defective in any respect due to fault of Design-Build Entity or subcontractor, will defray all expenses of such examinations and of satisfactory reconstruction. If, however, such work is found to meet requirements of the Contract Documents, additional cost of labor and material necessary involved in the examination and replacement will be allowed the Design-Build Entity.

1.15. TEST AND INSPECTION LOG.

A. General:

1. Prepare a record of tests and inspections. Include the following:

a. Date test or inspection was conducted.
b. Description of the Work tested or inspected.
c. Date test or inspection results were transmitted to Owner.
d. Identification of testing agency or special inspector conducting test or inspection.

2. Maintain log at SKYLONDA FIRE STATION site. Post changes and modifications as they occur. Provide access to test and inspection log for the Owner's reference during normal working hours.

3. As a minimum, Design-Build Entity must obtain the following tests and/or inspections:

a. Soils:
   1) Test and analyze fill and backfill materials.
   2) Test compaction of fill and backfill materials.
   3) Inspect bearing surfaces of foundation excavation.
   4) Test compaction trench backfill.
   5) Test compaction aggregate under asphalt concrete paving.
   6) Test compaction aggregate under site concrete.
b. Asphalt concrete:
   1) Test asphalt.
   2) Test compaction of asphalt.
c. Concrete:
   1) Test identified reinforcing steel.
   2) Test cement.
   3) Test aggregate for suitability.
   4) Review concrete mix design.
   5) Perform continuous batch Plant inspection.
   6) Test concrete for air content.
   7) Inspect concrete placement.
   8) Perform shrinkage tests.
   9) Make slump tests.
   10) Cast compression test cylinders. Test cylinders at 7 and 28 days.
d. Post-tensioning:
   1) Continual post-tension inspections.
   2) Test identified strands.
e. Structural steel:
   1) Review mill certificates for shapes and plates.
   2) Visually inspect shop and field welding.
   3) Test full penetration welds.
f. Metal fabrications:
   1) Visually inspect shop and field welding.
   2) Test full penetration welds.
g. Exterior and interior stone veneer:
   1) Modulus of rupture, flexure, and other tests.
   2) Accelerated aging tests.
   3) Production testing.
h. Fireproofing:
   1) Test fireproofing.
   2) Test thickness and density.

1.16. QA/QC PLAN MEETING

A. Prior to submission of the QA/QC Plan, meet with Owner and IOR to discuss the QA/QC Plan requirements of this Contract. The purpose of this meeting is to develop a mutual

understanding of the QA/QC Plan requirements prior to plan development and submission.

1.17. COORDINATION AND MUTUAL UNDERSTANDING MEETING

A. After submission of the QA/QC Plan, but prior to the start of construction, meet with Owner to discuss the QA/QC program required by this Contract. The purpose of this meeting is to develop a mutual understanding of the QA/QC details, including forms to be used for documentation, administration for on-site and off-site Work, and the coordination of Design-Build Entity's management, production and QA/QC personnel with the Owner. As a minimum, Design-Build Entity's personnel required to attend must include the project manager, project superintendent, QA/QC Manager, and QA/QC specialists. Minutes of the meeting must be prepared by the QA/QC Manager and signed by both Design-Build Entity and Owner.

1.18. QA/QC MEETINGS ON SITE

A. After the start of construction, the QA/QC Manager must conduct weekly QA/QC meetings at the SKYLONDA FIRE STATION site with the project superintendent (not "superintendent staff") and QA/QC specialists. The QA/QC Manager must prepare the minutes of the meeting and provide a copy to Owner within two working days after the meeting. Owner may attend these meetings. The QA/QC Manager must notify Owner at least (2) working days in advance of each meeting. As a minimum, the following must be accomplished at each meeting:

1. Review the minutes of the previous meeting;

2. Review the schedule and the status of Work:
   a. Work or testing accomplished since last meeting
   b. Rework items identified since last meeting
   c. Rework items completed since last meeting
   d. Review the mandatory coordination of all above-ceiling work

3. Review the status of submittals:
   a. Submittals reviewed and approved since last meeting b. Submittals required in the near future

4. Review the Work to be accomplished in the next fourteen (14) days and documentation required. Schedule the three phases of control and testing:
   a. Establish completion dates for rework items
   b. Preparatory Phases required
   c. Initial phases required
   d. Follow-up phases required
   e. Testing required
   f. Status of off-site Work or testing
   g. Documentation required

5. Resolve QA/QC and production problems

6. Address items that may require revising the QA/QC Plan:
   a. Changes in QA/QC organization personnel
   b. Changes in procedures.

1.19. THREE PHASES OF CONTROL

A. The QA/QC Manager must perform three phases of control to ensure that Work complies with requirements of the Performance Criteria, and the Specifications. The three phases of control must adequately cover both on-site and off-site Work and must include the following for each definable feature of Work: a definable feature of Work is a task which is separate and distinct from other tasks and requires separate control requirements as defined in Paragraph 1.12.A.11 herein.

1. Preparatory Phase: This phase is defined as: The QA/QC control phase, which occurs before the specific Work. During this phase the QA/QC team gathers information, prepares preliminary documentation and meets to discuss the work condition and process. Notify Owner at least (2) working days in advance of each Preparatory Phase meeting. Conduct a Preparatory Phase meeting with the QA/QC specialists, the Superintendent, subcontractor and the foreman responsible for the definable feature. The Preparatory Phase meeting must be conducted a minimum of five (5) working days and a maximum of ten (10) working days prior to the scheduled start of work for the definable feature. Owner may attend these meetings. The Commissioning Authority (CA) will attend these meetings. The QA/QC Manager must prepare minutes of the Preparatory Phase meetings and provide a copy to Owner within two (2) working days after each meeting. Document the results of Preparatory Phase actions in the daily Design-Build Entity Quality Control Report. Perform the following tasks and submit a completed Preparatory Phase check off report to Owner within two (2) working days prior to beginning work on each definable feature of work:
   a. Review each paragraph of the applicable specification sections;
   b. Review the Contract Document documents including the Design Criteria;
   c. Verify that appropriate shop drawings and submittals for materials and equipment have been submitted and approved. Verify receipt of approved factory test results, when required;
   d. Review the testing plan and testing schedule and ensure that provisions have been made to provide the required QA/QC testing. The testing plan must list the parts of the testing process, application, phasing, pass/fail and remedy.
   e. Examine the work area to ensure that the required preliminary work has been completed;
   f. Examine the required materials, equipment and sample Work to ensure that they are on hand and conform to the approved shop drawings and submitted data;
   g. Review the safety plan and appropriate activity hazard analysis to ensure that applicable safety requirements are met, and that required Material Safety Data Sheets (MSDS) are submitted;
   h. Discuss construction methods and construction methods form.
   i. Confirm above ceiling coordination is reconciled and that the intended systems' installations will be accessible for servicing. Provide written documentation that this coordination has, in fact, been completed prior to any installation taking place in the specific area concerned.

2. Initial Phase: This phase is defined as: The QA/QC control phase, which occurs as the specific Work begins. Notify Owner at least two (2) working days in advance of each Initial Phase. When construction crews are ready to start work on a definable feature of work, conduct the Initial Phase with the QA/QC Specialists, the Superintendent, and the foreman responsible for that definable feature of work. Observe the initial segment of the definable feature of Work to ensure that the Work complies with Contract requirements. Document the results of the Initial Phase in the daily Design-Build Entity Quality Control Report. Repeat

the Initial Phase for each new crew to work on-site, or when quality falls below specified acceptable levels. Perform the following for each definable feature of Work:

a. Each system being tested at one time
b. The test procedure reference
c. The pass/fail criteria
d. The schedule for tests
e. Confirm the quality of Workmanship required
f. Resolve potential conflicts
g. Review the Safety Plan and the appropriate activity hazard analysis to ensure that applicable safety requirements are met
h. Ensure that testing is performed by the approved laboratory

3. Follow-Up Phase: This phase is defined as: The QA/QC control phase which occurs as the specific Work continues to progress until its completion. Perform the following for on-going work daily, or more frequently, as necessary, until the completion of each definable feature of Work. Document in the daily Design-Build Entity Quality Control Report:
   a. Ensure the work is in compliance with Contract requirements, including final sign off by the Inspector of Record (IOR)
   b. Verify the quality of workmanship required
   c. Ensure that testing is performed by the approved laboratory
   d. Ensure that rework items are being corrected

4. Notification of Three Phases of Control for Off-Site Work: Notify Owner at leas fourteen (14) days prior to the start of the Preparatory and Initial phases.

(Also see Sect 3080)

1.20. QA/QC CERTIFICATIONS

A. Design-Build Entity Quality Control Report Certification: Each Design-Build Entity Quality Control Report must contain the following Statement: "On behalf of Design-Build Entity, I certify that this report is complete and correct and equipment and material used and work performed during this reporting period is in compliance with the Contract Documents to the best of my knowledge, except as noted in this report."

B. Invoice Certification: Furnish a certificate to Owner with each Application for Payment, signed by the QA/QC Manager, attesting that Record Drawings are current and attesting that the work for which payment is requested, including stored material, is in compliance with Contract requirements.

C. Completion Certification: Upon completion of all or a designated portion of the Work, furnish a certificate to Owner, signed by the QA/QC Manager, attesting that "the work has been completed, inspected, tested and is in compliance with the Contract requirements".

1.21. DOCUMENTATION

A. Maintain current and complete records of on-site and off-site QA/QC program operations and activities, as well as Owner testing.

1. Design-Build Entity Daily Report: Reports are required for each day that Work is performed and must be attached to Design-Build Entity Quality Control Report prepared for the same day. Account for each day throughout the life of the Contract. The reporting of Work must be identified by terminology (activity number and description) consistent with the Construction Schedule. Design-Build Entity Daily Reports must be prepared, signed and dated by Design-Build Entity's Project Superintendent and must include the following information:

a. Date of report, name of Design-Build Entity, title and location of Contract and Superintendent present.
b. Weather conditions in the morning and in the afternoon including maximum and minimum temperatures.
c. A list of Design-Build Entity and subcontractor personnel on the SKYLONDA FIRE STATION site, their trades, employer, work location, description of work performed (keyed to schedule activity numbers) and hours worked.
d. A list of job safety actions taken and safety inspections conducted. Indicate that safety requirements have been met including the results on the following:
    1) Was a job safety meeting held? (If YES, attach a copy of the meeting minutes.)
    2) Were there any lost time accidents? (If YES, attach a copy of the completed OSHA report.)
    3) Was trenching/scaffold/high voltage electrical/high work done? (If YES, attach a statement or checklist showing inspection performed.)
    4) Was hazardous material/waste released into the environment? (If YES, attach report of actions taken.)
    5) Meetings held.
e. [omitted]
f. Include a "remarks" section in this report which must contain pertinent information including directions received, problems encountered during construction and delays, conflicts or errors in the drawings, specifications or coordinated drawings, field changes, safety hazards encountered, instructions given and corrective actions taken, delays encountered and a record of visitors to the SKYLONDA FIRE STATION site.

2. Design-Build Entity Quality Control Report: Reports are required for each day that Work is performed and for every seven (7) consecutive days of no-work and on the last day of a no-work period. Account for each day throughout the life of the Contract. The reporting of Work must be identified by terminology and activity codes consistent with the construction schedule. Design-Build Entity Quality Control Reports must be prepared, signed and dated by the QA/QC Manager and must contain the following information:

    a. Identify the control phase (Preparatory, Initial, and Follow-up) and the definable feature of work.
    b. Results of the Preparatory Phase meetings held including the location of the definable feature of work and a list of personnel present at the meeting. Indicate in the report that for this definable feature of work, the drawings and specifications have been reviewed, submittals have been approved, materials comply with approved submittals, materials are stored properly, preliminary work was done correctly, the testing plan has been reviewed, and work methods and schedule have been discussed.
    c. Results of the Initial Phase meetings held including the location of the definable feature of work and a list of personnel present at the meeting. Indicate in the report that for this definable feature of work the preliminary work was done correctly, samples have been prepared and approved, the workmanship is satisfactory, test results are acceptable, work is in compliance with the Contract requirements, and the required testing has been performed and include a list of who performed the tests.
    d. Results of the Follow-up Phase inspections held including the location of the definable feature of work. Indicate if the report for this definable

feature of Work that the work complies with the Contract requirements as approved in the Initial Phase, and that required testing has been performed and include a list of who performed the tests.

e. Results of the three Phases of Control for off-site work, if applicable, including actions taken.

f. List the rework items identified, but not corrected by close of business.

g. List the rework items corrected from the rework items list along with the corrective action taken.

h. Include a "remarks" section in this report which must contain pertinent information including directions received, quality control problem areas, deviations from the QA/QC Plan, construction deficiencies encountered, QA/QC meetings held, acknowledgement that as-built drawings have been updated, corrective direction given by the QC Organization and corrective action taken by Design-Build Entity.

i. Design-Build Entity Quality Control Report certification.

3. Reports from the QC Specialist(s): Reports are required for each day that Work is performed in their area of responsibility. QC specialist reports must include the same documentation requirements as Design-Build Entity Quality Control Report for their area of responsibility, QC specialist reports must be prepared, signed and dated by the QC specialists and must be attached to Design-Build Entity Quality Control Report prepared for the same day.

4. Testing Plan and Log: As tests are performed, the QA/QC Manager must record on the "Testing Plan and Log" the date the test was conducted, the date the test results were forwarded to IOR, remarks and acknowledgement that an accredited or approved testing laboratory was used. Attach a current updated copy of the "Testing Plan and Log" to the last daily Design-Build Entity Quality Control Report of each month.

5. Rework Items List: The QA/QC Manager must maintain a list of work that does not comply with the Contract requirements, identifying what items need to be reworked, the date the item was originally discovered, and the date the item was corrected. Attach the current copy of the "Design-Build Entity Rework Items List" to the last daily Design-Build Entity Quality Control Report of each month. Design-Build Entity will be responsible for including on this list items needing rework including those identified by Owner.

6. Record Drawings: The QA/QC Manager is required to review the Record Drawings to ensure that the drawings are kept current on a daily basis and marked to show precise locations of items, or any deviations, which have been made from the Construction Drawings. The QA/QC Manager, or QC Specialist assigned to an area of responsibility, must initial each deviation and each revision. Upon completion of Work, the QA/QC Manager must furnish a certificate attesting to the accuracy of the Record Drawings and verification by the IOR prior to submission to Owner.

7. Report Forms:
   a. The reporting format must contain the following information:
      1) Design-Build Entity Daily Report
      2) Design-Build Entity Quality Control Report and Separate Continuation Sheets
      3) Testing Plan and Log
      4) Rework Items List
      5) Construction Methods Form
      6) QA/QC Manager's Preparatory Phase Check-off Report

b. Report forms must be transmitted via a method acceptable to Owner. All original documents, reports, completed forms, etc. must be forwarded to the Owner.

1.22. REPAIR AND PROTECTION

A. General:

1. Repair and protection are Design-Build Entity's responsibility, regardless of the assignment of responsibility for quality control services. Comply with Section 01 73 29, Cutting and Patching.
2.
3. On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes. Protect construction exposed by or for quality control service activities.

4. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.

PART II - PRODUCTS NOT USED

PART III - EXECUTION

3.01. Quality Control Team and Qualifications

A. The Design-Build Entity must employ the services an American Society for Quality (ASQ) - certified engineer, or equivalent or better. He will comply with Paragraph 1.11, have a four-year degree, at least three (3) years' experience in QA/QC (10 years' experience overall), and a complete understanding of the following fundamentals:

1. Liaison with construction management staff, trades and subcontractors, Plant operational staff, fire and life safety officers, security officers to ensure continued seamless execution of site development from mobilization thru to post occupancy.

2. Quality philosophies, principles, systems, methods, tools, standards, organizational and team dynamics, customer expectations and satisfaction, supplier relations and performance, leadership, training, interpersonal relationships, improvement systems and professional ethics.

3. Quality system and its development, documentation and implementation to domestic and international standards or requirements.

4. Audit process including types of audits, planning, preparation, execution, reporting results and follow-up.

5. Implementation of quality programs, including tracking, analyzing, reporting and problem solving.

6. Be able to plan, control and assure product and process quality in accordance with quality principles, which include planning processes, material control, acceptance- sampling and measurement systems.

7. Have basic knowledge of reliability, maintainability, and risk management, including key terms and definitions, modeling, systems design, assessment tools and reporting.

8. Have a thorough understanding of problem-solving and quality improvement tools and techniques. This includes knowledge of management and planning tools, quality tools, preventive and corrective actions, and how to overcome barriers to quality improvements.

9. Be able to acquire and analyze data using appropriate standard quantitative methods across a spectrum of business environments to facilitate process analysis and improvements.

END OF SECTION

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 5600

SITE SECURITY AND SAFETY

PART 1 – GENERAL

1.01 Submittals

A. See Section 01 3300 (Submittals).

B. See Document 00 2110 (Operational Security and Safety Procedures)

C. Site Security.

D. Safety Program

1.02 Protection

A. Continuously maintain protection as necessary to protect the Work, as a whole and in part, and adjacent property and improvements from accidents, injuries or damage.

B. Properly protect the Work:
1. With lights, guard rails, temporary covers and barricades.
2. Enclose excavations with proper barricades.
3. Brace and secure all parts of the Work against storm and accident.
4. Provide such additional forms of protection that may be necessary under existing circumstances.

C. Provide and maintain in good condition all protective measures required to adequately protect the public from hazards resulting from the Work and to exclude unauthorized persons from the Work. When regulated by Building Code, Cal OSHA, or other authority, such legal requirements for protection shall be considered as minimum requirements. Be responsible for the protection in excess of such minimum requirements as required.

1.03 Site Security

A. As part of the Work included within the Contract Sum, Design-Build Entity shall take and be fully responsible for all reasonably required measures to protect and maintain the security of persons, existing facilities and property at the Site, including without limitation preventing theft, loss, vandalism and improper concealment of personal property of the Owner and all persons lawfully present on the Site, and including times where workers are not present on the Site. Design-Build Entity's measures shall include, at a minimum, maintaining a log of all persons entering and leaving the Site and who they represent, what they are delivering and to whom.

B. No claim shall be made against Owner by reason of any act of an employee or trespasser, and Design-Build Entity shall repair all damage to Owner's property resulting from Design-Build Entity's failure to provide adequate security measures.

C. Design-Build Entity shall maintain a lock on the Construction access gate at all times. Design-Build Entity shall appoint one person to let people through the gate and maintain the sign-in/out list, with person's name, company, reason for entering, what they are delivering, time and date. Alternatively, Design-Build Entity shall provide a full-time guard at the gate at all times to control

access and maintain the sign-in/out list. The sign in/out list shall be available to Owner at anytime upon request. If Owner determines that the gate has been left unlocked, Design-Build Entity shall if requested by Owner provide a full time guard at no additional expense to the Owner.

D. Design-Build Entity shall supply additional security fencing, barricades, lighting, and other security measures as required to protect and control the Site.

1.04 Safety Program

A. Within 15 days after Notice to Proceed, submit a Safety Program that has been reviewed and approved by an Industrial Hygienist certified by the American Board of Industrial Hygiene or a Certified Safety Professional. The Safety Program shall include the name, certification number, and certification seal of the Industrial Hygienist or Certified Safety Professional. Comply with the Safety Program and all applicable federal, state, and local regulation codes, rules, law and ordinances.

B. Receipt and/or review of the Safety Program by Owner, Engineer or Owner's representative shall not relieve Design-Build Entity of any responsibility for complying with all applicable safety regulations.

C. It is essential that Design-Build Entity and each Subcontractor implement an effective and vigorous Safety and Health Program to cover their respective portions of the Work. Subject to Design-Build Entity's overall responsibility for Project safety, it shall be understood that the full responsibility for providing a safe place to work with respect to their respective portions of the Work rests with Design-Build Entity and each individual Subcontractor.

D. Safety Program components:
   1. Injury and Illness Prevention Program (IIPP): Conforming to the General Industrial Safety Orders (CCR Title 8, Division 1, Chapter 4, Subchapter 7, Section 3203), and the California Labor Code (Section 6401.7).
   2. Site-Specific Safety and Health Plan (SSHP): Describing health and safety procedures that shall be implemented during the Work in order to ensure safety of the public and those performing the Work. Follow the guidelines for a SSHP listed in CCR Title 8, Division 1, Chapter 4, Subchapter 7, and Section 5192, Item (b) (4) f.
   3. Confined Space Program: The Site contains permit- and non-permit-confined spaces. Owner will provide Design-Build Entity with any available information regarding permit space hazards, entry operations, and safety information relating to work in the permit spaces as set forth in the General Industrial Safety Orders (CCR Title 8, Division 1, Chapter 4, Subchapter 7, and Section 5157). Permit space entry is allowed only through compliance with a permit space program meeting the requirements of Section 5157 of the General Industrial Safety Orders. During entry operations, or at the conclusion of entry operations, verbally notify Engineer of the permit space program followed and of any hazards confronted or created in permit spaces during entry operations.

E. The wearing of hard hats shall be mandatory at all times for personnel on Site. Supply sufficient hard hats to equip properly all employees and visitors.

F. Whenever an exposure exists, appropriate personal protective equipment (PPE) shall be used by all affected personnel. Supply PPE to all personnel under Design-Build Entity's direction.

1.05 Safety Requirements

A. Standards. Maintain the Project in accordance with state and local safety and insurance standards.

B. Hazards Control.
   1. Store volatile wastes in covered metal containers and remove from premises daily.
   2. Prevent accumulation of wastes that create hazardous conditions.
   3. Provide adequate ventilation during use of volatile or noxious substances.

C. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
   1. Do not burn or bury rubbish or waste material on the Site.
   2. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
   3. Do not dispose of wastes into streams or waterways.

D. Provide accident information on the forms provided by Design-Build Entity. This information shall be provided on the same day as the occurrence of said incident.

1.06 Site Safety Officer

A. Designate one of Design-Build Entity's staff as "Site Safety Officer" whose duties shall include the responsibility for enforcing the environmental protection provisions of the Contract Documents including safety and health, the requirements of the Occupational Safety and Health Act, and other applicable federal, state and local standards. Submit for review by Owner Design-Build Entity's intended traffic flow plan, security plan, program for temporary structures, housecleaning plan, demolition program, and environmental safety and health plan. After review by Owner, the implementation and enforcement of these plans shall become the responsibility of the Site Safety Officer. Any changes in the plans shall be requested by Design-Build Entity through the Site Safety Officer for written concurrence by Owner.

B. Owner's risk management representative(s) shall be allowed access to accident/injury and illness reports, inspection reports, scheduling and construction meetings, and safety meetings.

1.07 Additional Safety Controls

A. According to industry practices, it is the responsibility of Design-Build Entity and Subcontractors of every tier to exercise reasonable care to prevent work-related injuries, property and equipment damage at the Project site, as well as minimize risk to the public and third-party property. Design-Build Entity and Subcontractors shall undertake loss control prevention practices according to those requirements set by federal, state and city laws, statutes and specific project procedures developed for this project.

B. Design-Build Entity and Subcontractor participating in the Project will be expected to comply with the following safety and loss control requirements:
   1. All Subcontractors shall identify their contact person(s) to the Design-Build Entity.
   2. Owner procedures regarding dealing with the media.
   3. All construction employees will be required to be attired in workpants, shirt and appropriate boots or closed toe shoes.
   4. Controlling access to the construction site will be a very high priority, and Design-Build Entity will be required to take whatever preventative measure, such as barriers, fencing, etc., as outlined in the contract specifications.
   5. Design-Build Entity will be required to respond to any Owner complaints about objectionable levels of dust or noise and will be required to provide the appropriate abatement as quickly as possible.
   6. Fall protection is mandatory on all projects in accordance with CAL OSHA, OSHA and any other appropriate code.
   7. A site specific Injury and Illness Prevention Program shall be available on site with the Design-Build Entity. All Design-Build Entity and Subcontractor employees shall abide by this program.

8. Personal radios, headsets, walkmans and CD players are not allowed on the job-site.
9. All Design-Build Entity and Subcontractor employees must attend the pre-construction safety meeting.
10. No sexual reference or preference shall be permitted on any piece of clothing or the hardhat. Any employee observed disregarding this policy shall be removed from the job site until further notice.
11. All Design-Build Entity's employees shall park in accordance with the Bridging Documents.
12. All Design-Build Entity's employees shall control the break time activities of the employees to assure the cleanup of all soda cans, food wrappers, plastic bottles, or food containers from the break area. Such areas shall be cleaned immediately after the break and all waste placed in trash receptacles. No glass containers are permitted on the site.
13. Theft or willful damage to any property of the Owner, or other Contractors will be prosecuted fully.

C. Design-Build Entity and Subcontractors participating in the Skylonda Fire Station project will further be expected to comply with the following safety and loss control requirements:
1. The Design-Build Entity shall assume overall responsibility for project safety compliance.
2. The Emergency Response Plans (with particular emphasis on access and egress routes).
3. The Design-Build Entity will agree to conduct and fund post-injury drug screening of their employees. Those employees failing the test will be removed permanently from the job site.
4. The Owner Representative has the right to instruct the Design-Build Entity to correct an unsafe act or condition. If the Design-Build Entity fails to correct the unsafe act or condition within the requested time frame, the Owner or its representative may have the condition corrected and bill the non-compliant Design-Build Entity for the costs associated with the correction.
5. The County Representative may require a follow-up meeting or contact if there is a death, serious and willful claim, serious disabling injury, adverse loss experience, major fire, or serious third party claim.
6. Any Design-Build Entity, Subcontractor employee displaying, in the opinion of the Design-Build Entity or Owner representative, a repeated disregard for safety can be removed from the job-site.

D. The Design-Build Entity will advise those non-English speaking employees in their native language either in a written format or via an interpreter of these policies.

PART 1 – PRODUCTS - NOT USED

PART 2 – EXECUTION - NOT USED

END OF SECTION

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 5813

TEMPORARY PROJECT SIGNAGE (NEEDS COUNTY INPUT AND CONFIRMATION)

PART 1 – GENERAL

1.01 Summary

A. Section includes requirements for temporary Project signage.

1.02 Project Sign (With Rendering)

A. Provide four (2) 8 foot wide x 8 foot high x 3/4" thick project signs of exterior grade "B" or better Douglas Fir veneer permanently factory surface with a smooth, resin fiber coating and wood frame construction, painted with exhibit lettering by professional sign painter, to Owner's design and colors. Building rendering as provided. Install on three (3) 4 x 4 x 8 foot redwood posts with bottom 4 feet above finish grade and locate on site per Owner's instructions.

B. List title of Project, names of County Board of Supervisors, County Department Heads, Bridging Architect/Construction Manager, Design-Build Entity and other information specified by Owner.

C. Signs to be installed at specific locations directed by, and at time approved by and coordinated with, appropriate Skylonda Fire Station personnel. Subject to their approval, Design-Build Entity should anticipate erecting signs within five (5) working days after issuance of Document 00 5500 Notice to Proceed With Construction.

D. No other signs are allowed except those required by law.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 6000

PRODUCT REQUIREMENTS

PART 1 – GENERAL

1.01 Section includes

A. Products.

B. Product Options and Substitutions.

C. Product Delivery Requirements.

D. Shipping Requirements.

E. Product Storage and Handling Requirements.

1.02 Products

A. Products: New material, machinery, components, equipment, fixtures, and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.

B. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.

C. For similar components, provide interchangeable components of the same manufacturer.

1.03 Product Options and Substitutions

A. Summary. This paragraph describes procedures for selecting products and requesting substitutions of unlisted materials in lieu of materials named in the Specifications or Bridging Documents or approved for use in Addenda that were not already the subject of a Document 00 6325 (Substitution Request Form) submittal. For "or equal" items, it is the Design-Build Entity's responsibility to demonstrate that the items meet all of the requirements by following the Request for Substitution process.

B. "Or Equal" Substitutions. Owner will consider substitution requests only for "or equal" items. If Design-Build Entity wishes to use any "or equal" item, it must submit Request for Substitution (RFS), including all information contained in this Section 01 6000 (Product Requirements) and a fully executed Document 00 6325 (Substitution Request Form), no later than the date indicated in Section 01 1101 (Summary of Work – Design-Build Design Services). After that date, Owner will not accept "or equal" substitution requests. To assess "or equal" acceptability of product or system, submittals of substitutions shall contain the information required in Document 00 6625 and set forth in this Section 01 6000. Insufficient information will be grounds for rejection of substitution. Owner shall, within a reasonable period of time after having received a Request for Substitution, issue in writing its decision as to whether the proposed substitute item is an Equal item. Owner's decision shall be conclusive on Design-Build Entity.

C. Design-Build Entity's Options.

1. For products specified only by reference standard: Select any product meeting that standard.
2. For products specified by naming one or more products or manufacturers:
   a. Select products of any named manufacturer meeting Specifications or Bridging Documents.
   b. If product becomes unavailable due to no fault of Design-Build Entity, submit RFS.

D. Substitutions.

1. Owner will consider Design-Build Entity's substitution requests only when product becomes unavailable due to no fault of Design-Build Entity.
2. Requests for review of proposed substitute items will not be accepted from anyone other than Design-Build Entity. The RFS shall state the extent, if any, to which the evaluation and acceptance of the proposed substitute will prejudice Design-Build Entity's achievement of Substantial Completion on time, and whether or not acceptance of the substitute for use in the Work will require a change in any of the Specifications, Bridging Documents or other Contract Documents (or in the provisions of any other direct contract with Owner for work on the Project).
3. Submit separate RFS (and five copies) for each product and support each request with:
   a. Product identification.
   b. Manufacturer's literature.
   c. Samples, as applicable.
   d. Name and address of similar projects on which product has been used, and dates of installation.
   e. Name, address, and telephone number of manufacturer's representative or sales engineer.
   f. For construction methods: Detailed description of proposed method; drawings illustrating methods.
4. Where required, itemize a comparison of the proposed substitution with product specified and list significant variations including, but not limited to dimensions, weights, service requirements, and functional differences. If variation from product specified is not pointed out in submittal, variation will be rejected even though submittal was favorably reviewed. Identify all variations of the proposed substitute from that specified in the RFS and indicate available maintenance, repair, and replacement service.
5. State whether the substitute will require a change in any of the Contract Documents (or provisions of any other direct contract with Owner for work on the Project) to adapt the design of the proposed substitute, and whether or not incorporation or use of the substitute in connection with Work is subject to payment of any license fee or royalty. Submit data relating to changes in construction schedule.
6. Include accurate cost data comparing proposed substitution with product and amount of net change in Contract Sum including, but not limited to, an itemized estimate of all costs or credits that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors, Designers and Subcontractors affected by the resulting change, all of which will be considered by Owner in evaluating the proposed substitute. Owner may require Design-Build Entity to furnish additional data about the proposed substitute.
7. Owner will not consider substitutions for acceptance (or, in Owner's sole discretion, Owner may make Design-Build Entity solely responsible for all resulting costs, expenses and other consequences) when a substitution:
   a. Results in delay meeting design or construction Milestones or completion dates.

b. Is indicated or implied on submittals, including without limitation any design submittals, without formal request from Design-Build Entity.
c. Is requested directly by a Designer, Subcontractor or supplier.
d. Acceptance will require substantial revision of Contract Documents.
e. Disrupts Design-Build Entity's job rhythm or ability to perform efficiently.

8. Substitute products shall not be ordered without written acceptance of Owner.
9. Owner will determine acceptability of proposed substitutions and reserve right to reject proposals due to insufficient information.
10. Accepted substitutions will be evidenced by a Change Order. All Contract Documents requirements apply to Work involving substitutions.

E. Design-Build Entity's Representation and Warranty.
1. Design-Build Entity's RFS constitute a representation and warranty that Design-Build Entity.
a. Has investigated proposed product and determined that it meets or exceeds, in all respects, specified product.
b. Will provide the same warranty for substitution as for specified product.
c. Will coordinate installation and make other changes that may be required for Work to be complete in all respects.
d. Waives claims for additional costs which may subsequently become apparent.
e. Will compensate Owner for additional redesign costs associated with substitution.
f. Will be responsible for Construction Schedule slippage due to substitution.
g. Will be responsible for Construction Schedule delay due to late ordering of available specified products caused by requests for substitution that are subsequently rejected by Owner.
h. Will compensate Owner for all costs; including extra costs of performing Work under Contract Documents, extra cost to other contractors, Designers and Subcontractors , and any claims brought against Owner, caused by late requests for substitutions or late ordering of products.

F. Owner's Duties.
1. Review Design-Build Entity's RFS with reasonable promptness.
2. Notify Design-Build Entity in writing of decision to accept or reject requested substitution.

G. Administrative Requirements.
1. Specified products, materials, or systems for Project may include engineering or on-file standards required by the regulatory agency. Design-Build Entity's substitution of products, materials or systems may require additional engineering, testing, reviews, approvals, assurances, or other information for compliance with regulatory agency requirements or both. Provide all agency approvals or other additional information required and pay additional costs for required Owner services made necessary by the substitution at no increase in Contract Sum or Contract Time, and as a part of substitution proposal.

1.04 Product Delivery Requirements

A. Deliver products in accordance with manufacturer's instructions.

B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

1.05 Shipping Requirements

A. Preparation for Shipment. All equipment shall be suitably packaged to facilitate handling and to protect against damage during transit and storage. All equipment shall be boxed, crated, or otherwise completely enclosed and protected during shipment, handling, and storage. All equipment shall be protected from exposure to the elements and shall be kept dry at all times.
   1. Painted and coated surfaces shall be protected against impact, abrasion, discoloration, and other damage. Painted and coated surfaces which are damaged prior to acceptance of equipment shall be repainted to the satisfaction of Owner.
   2. Grease and lubricating oil shall be applied to all bearings and similar items.

B. Shipping. Before shipping each item of equipment shall be tagged or marked as identified in the delivery schedule or on the Shop Drawings. Complete packing lists and bills of material shall be included with each shipment.

1.06 Product Storage and Handling Requirements

A. Store products only in staging area per provisions of Section 01 100 (Summary of Construction Work).

B. Handle, store, and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate-controlled enclosures.

C. For exterior storage of fabricated products, place on appropriate supports, above ground.

D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.

E. Store loose granular materials on solid flat surfaces in a well-drained area.

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

G. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.

H. Without limiting the foregoing:
   1. Design-Build Entity shall bear the responsibility for delivery of equipment, spare parts, special tools, and materials to the Site and shall comply with the requirements specified herein and provide required information concerning the shipment and delivery of the materials specified in Contract Documents. These requirements also apply to any subsuppliers making direct shipments to the Site. Acceptance of the equipment shall be made only after it is installed, tested, placed in operation and found to comply with all the specified requirements.
   2. All items shall be checked against packing lists immediately on delivery to the Site for damage and for shortages. Damage and shortages shall be remedied with the minimum of delay.
   3. No metalwork (miscellaneous steel shapes and reinforcing steel) shall be stored directly on the ground. Masonry products shall be handled and stored in a manner to hold breakage, chipping, cracking, and spalling to a minimum. Cement, lime, and similar products shall be stored off the ground on pallets and shall be covered and kept completely dry at all times. Pipe fittings and valves may be stored out of doors, but must be placed on wooden blocking. PVC pipe, geomembranes, plastic liner, and other plastic materials shall be stored off the ground on pallets and protected from direct sunlight.

4. Electrical equipment, and all equipment with antifriction or sleeve bearings shall be stored in weathertight structures maintained at a temperature above 60°F. Electrical equipment, controls, and insulation shall be protected against moisture and water damage. All space heaters furnished in equipment shall be connected and operated continuously.
5. Equipment having moving parts such as gears, bearings, and seals, shall be stored fully lubricated with oil, grease, etc., unless otherwise instructed by the manufacturer. Manufacturer's storage instructions shall be carefully followed by Design-Build Entity.
6. When required by the equipment manufacturer, moving parts shall be rotated a minimum of twice a month to ensure proper lubrication and to avoid metal to metal "welding". Upon installation of the equipment, Design-Build Entity shall, at the discretion of Owner, start the equipment at one-half load for an adequate period of time to ensure that the equipment does not deteriorate from lack of use.
7. When required by the equipment manufacturer, lubricant shall be changed upon completion of installation and as frequently as required thereafter during the period between installation and acceptance. New lubricants shall be put into the equipment by Design-Build Entity at the time of acceptance.
8. Equipment and materials shall not show any pitting, rust, decay, or other deleterious effects of storage when installed in the Work.
9. In addition to the protection specified for prolonged storage, the packaging of spare units and spare parts shall be for export packing and shall be suitable for long-term storage in a damp location. Each spare item shall be packed separately and shall be completely identified on the outside of the container.
10. Handling. Stored items shall be laid out to facilitate their retrieval for use in the Work. Care shall be taken when removing the equipment for use to ensure the precise piece of equipment is removed and that it is handled in a manner than does not damage the equipment.

PART 2 – PRODUCTS - NOT USED.

PART 3 – EXECUTION - NOT USED.

END OF SECTION

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 7400

CLEANING

PART 1 GENERAL DESCRIPTION

1.01 CLEANING

A. Perform cleaning and disposal work as specified, complete. This Section forms a part of all other Sections of the specifications and will be coordinated with such additional cleaning and disposal requirements as may be specified in other Sections.

1.02 CLEANING IN GENERAL

A. Design-Build Entity must at all times keep premises free from accumulations of waste material or rubbish caused by Design-Build Entity's employees or work, or employees or work of subcontractors, and must remove rubbish from and about areas of Work and Design Builder's and subcontractors' tools, scaffolding and surplus materials and must leave the Work "broom clean", or its equivalent, except as hereinafter specified. In case of dispute between Design-Build Entity and subcontractors employed on or about the work areas, as to responsibility for removal of rubbish, etc., or in case debris is not promptly removed as herein required, the County may remove rubbish, etc., and back charge the Design-Build Entity.

B. At all times, Skylonda Fire Station Project working area and site must be kept clean and orderly. Dirt, debris, waste, rubbish and disused implements and equipment must be removed frequently and not allowed to accumulate more than 24 hours. Flammable and toxic materials must not be stored in structures.

1.03 PROGRESS CLEANING

A. General:
   1. Clean Skylonda Fire Station site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.

   2. Comply with requirements in National Fire Protection Association (NFPA) 241 for removal of combustible waste materials and debris.

   3. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80 deg F.

   4. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.

B. Site:
   1. Maintain project site free of waste materials and debris.

C. Work Areas:
   1. Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.

   2. Remove liquid spills promptly.

3. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.

D. Installed Work:
1. Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

E. Concealed Spaces:
1. Remove debris from concealed spaces before enclosing the space.

F. Exposed Surfaces in Finished Areas:
1. Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Completion.

G. Waste Disposal:
1. Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.

H. Progress Cleaning:
1. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Completion.

2. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

I. Limiting Exposures:
1. Supervise construction operations to assure that no part of the construction completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

1.05 FINAL CLEANING

A. Within Agreement limits, clean interior and exterior surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
1. Clean equipment and fixtures to sanitary condition, clean or replace filters of mechanical equipment.

2. Clean roofs, gutters, downspouts and drainage systems.

3. Glass: Clean all glass, interior and exterior, affected by Work of Skylonda Fire Station; including removal of foreign material from glass.

B. Clean site: Sweep paved areas, rake clean other surfaces.

C. Remove waste and surplus materials, rubbish and construction facilities from Skylonda Fire Station and from site.

D. Dust, dirt, stains, hand marks, paint spots, and like defects must be completely removed from surfaces. Metal surfaces must be cleaned, using only non- corrosive and non-abrasive materials.

E. Final Inspection: Deficient cleaning operations, as determined by the County, must be immediately corrected as directed.

1.05 DISPOSAL

A. Under no circumstances will rubbish or waste material be disposed of in site fills or backfills. Debris, rubbish, and waste or surplus material must be removed from the County and City premises and disposed of at a legally authorized waste management and disposal location.

END OF SECTION

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 7700

CLOSEOUT PROCEDURES

PART 1 GENERAL

1.01 Summary

A. Section Includes: Administrative and procedural requirements for Contract closeout, including, but not limited to, the following:
   1. Design-Build Entity Punch list
   2. Owner Punch list
   3. Completion
   4. Acceptance

1.02 Design-Build Entity Punch list

A. Design-Build Entity must prepare its compressive punch list and declare the Work is complete prior to requesting punch list inspection by the Owner. Design-Build Entity must submit three paper copies and one electronic copy of its punch list to the Owner.

   1. Punch list must identify items noted by each of the Design-Build Entity's engineering and architectural disciplines.
   2. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Design-Build Entity that are outside the limits of construction.
   3. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
   4. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
   5. Include the following information at the top of each page:
      a. Project name.
      b. Date.
      c. Name of Construction Manager.
      d. Name of Design-Build Entity.
      e. Page number, of total pages.

1.03 Owner Punch List

A. Design-Build Entity must submit a request for Final Inspection. The Owner will review the work, and all reports, documents, warranties, guarantees, certificates, and releases. Design-Build Entity must make the following deliverables available for review prior to Completion. Upon review and approval by the Owner, the Design-Build Entity must submit the approved final deliverables in the required amounts as Stated in the Contract Documents.
   1. Daily Inspection Reports.
   2. Independent Laboratory's Test and Inspection Reports.
   3. Public Utility Acceptance Reports.
   4. State Inspection Reports, including but not limited to acceptance by the Regional Air Quality Management District.
   5. County Inspection Reports, including but not limited to acceptance by the City of Redwood City Fire Marshall.
   6. Visitor Observation Reports.
   7. Product Manufacturers Inspection Reports.
   8. Design-Build Entity Punchlist including status of correction.

9. Advise Owner of pending insurance changeover requirements.
10. Submittal of binders for all warranties, workmanship bonds, maintenance service agreements, certifications, and similar documents.
11. Submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases and Project Design Build Record Documents.
12. Submit damage or settlement surveys, property surveys, and similar record information.
13. Deliver tools, spare parts, extra materials/stock, and similar items to location designated by the Owner. Label with manufacturer's name and model number where applicable.
14. Changeover in security provisions.
15. Completion startup testing of systems log.
16. Submit test/adjust/balance records.
17. Submit commissioning and functional testing logs.
18. Changeover in heat and other utilities.
19. Submit information for use, operation, and maintenance of area and equipment.
20. Submit pest-control inspection report and warranty.
21. Submit Section 01 7900 Demonstration and Training Manuals, DVD's and copies of attendance certificates.
22. Submit Section 01 3232 Photographic Documentation.
23. Submit Section 01 7839 Project Record Documents.

B. The Owner will perform the Final Inspection and issue a Punchlist. When all work has been completed as identified on the Design-Build Entity and or Owner Punch lists, Design-Build Entity will request a re-inspection. The results of the re-inspection will form the basis of requirements for Completion.

C. Re-inspection procedure: The Owner will re-inspect the work upon receipt of notice that the Work, including inspection list items from earlier inspections, have been completed, except items for which completion has been delayed because of circumstances acceptable to the Owner.

1. Upon completion of re-inspection, the Owner will prepare a Certificate of Acceptance, or advise the Design-Build Entity of work that is incomplete or of obligations that have not been fulfilled but are required for Acceptance.
2. If necessary, re-inspection will be repeated.

1.04 Completion

A. Preliminary procedures: Before requesting inspection for Completion, complete the following. List all exceptions in the request.
1. In the application for payment that coincides with, or first follows the date Completion is claimed, show 100 percent completion for the portion of the work claimed as complete. Include supporting documentation for completion as indicated in the Contract Documents and a Statement showing an accounting of changes to the Stipulated Sum.
   a. If 100 percent completion cannot be shown, include a list of incomplete items, the value of incomplete construction, and reasons why the Work is not complete.
2. Advise Owner of pending insurance change-over requirements.
3. Submit drafts of all warranties, workmanship bonds, maintenance agreements, final certifications and similar documents to the Owner before execution. Such items shall not detract from or confuse requirements or interpretations of Contract Documents. Final warranties shall be signed by manufacturers and, where specified, be countersigned by applicable installers and Subcontractors.
4. Obtain and submit releases so the Owner can have unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates and similar releases.

5. Submit record documents, maintenance manuals, final Project photographs, damage or settlement survey, property survey, and similar final record information per Section 01 7839 Project Record Documents.
6. Make final change-over of permanent locks and transmit keys to the Owner. Advise the Owner's personnel of change-over in security provisions.
7. Complete start-up testing of systems, and instruction of the Owner's operating and maintenance personnel. Discontinue or change over and remove temporary facilities from the site, along with construction tools, mock-ups, materials, equipment and similar elements.
8. Repair damage caused by installation or use of temporary facilities, and restore permanent facilities used during construction to specified condition.
9. Complete final clean-up per Section 01 7400 Cleaning.
10. Touch-up, including touch-up painting and otherwise repair and restore marred exposed finishes.

B. Inspection procedures: Upon receipt of a request for inspection, the Owner will either proceed with inspection or advise the Design-Build Entity of unfulfilled requirements. The Owner will prepare the Certificate of Final Completion following inspection, or advise the Design-Build Entity of construction that must be completed or corrected before the certificate will be issued.
   1. The Owner will repeat inspection when requested and assured that the Work has been completed.
   2. Results of the completed inspection will form the basis of requirements for Acceptance.

C. Warranty of Title
   1. No material, supplies, or equipment for Work under the Contract shall be purchased subject to any chattel mortgage, security agreement, or under a conditional sale or other agreement by which an interest therein or any part thereof is retained by seller or supplier. The Design-Build Entity warrants good title to all material, supplies, and equipment installed or incorporated in the Work and agrees upon completion of all the Work to deliver the premises, together with improvements and appurtenances constructed or placed thereon by Design-Build Entity, to the Owner free from any claim, liens, security interest, or charges, and further agrees that neither the Design-Build Entity nor any person, firm, or corporation furnishing any labor, materials or services for any Work covered by the Contract shall have right to lien upon the premises or improvement or appurtenances thereon. Nothing contained in this paragraph, however, shall defeat or impair right of persons furnishing labor, services or materials under bond given by the Design-Build Entity for their protection or any rights under law permitting persons to look to funds due the Design-Build Entity in hands of the Owner.

1.05 Acceptance

A. Before requesting Final Inspection for Certification of Acceptance and final payment, complete the following.
   1. Preliminary procedures: List exceptions in the request.
      a. Submit final payment request with releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required per Contract Requirements.
      b. Submit an updated final Statement, accounting for final additional changes to the Stipulated Sum.
      c. Submit a certified copy of the Owner'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 Owner.
      d. Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of Completion, or when the Owner took possession of and responsibility for corresponding portions of the Work.
      e. Submit consent of surety to final payment.
      f. Submit a final liquidated damages settlement Statement, when applicable.

g. Submit evidence of final, continuing insurance coverage complying with insurance requirements.

B. Final Adjustments of Accounts
1. Submit a final statement of accounting to the Owner, showing all adjustments to the Contract Sum and complete and execute Document 00 6530 (Agreement and Release of Claims).
2. If so required, the Owner shall prepare a final Change Order for submittal to Design-Build Entity, showing adjustments to the Contract Sum that were not previously made into a Contract Modification.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 7823

OPERATIONS AND MAINTENANCE DATA

PART I - GENERAL

1.01. Summary

A. Section Includes:

1. Administrative and procedural requirements for preparing operations and maintenance manuals, including the following:
   a. Operations and maintenance documentation directory.
   b. Emergency manuals.
   c. Operations manuals for systems, subsystems, and equipment.
   d. Maintenance manuals for the care and maintenance of products, materials and finishes, systems, and equipment.

1.02. Definitions

A. O&M Manual or Manual:

1. Any operations manual, maintenance manual, emergency manual, or directory, described in this Section 01 7823 or other applicable portion of Contract Documents.

B. System:

1. An organized collection of parts, equipment, or subsystems united by regular interaction.

C. Subsystem:

1. A portion of a system with characteristics similar to a system.

1.03. Requirements

A. Content and Form all Operations and Maintenance (O&M) Manuals.

1. The specific content and format requirements for all O&M manuals are detailed herein, under Products, Part 2, and in the individual Specifications. The O&M Manuals will be submitted in both hard copy and electronic form. The electronic form will be compiled in the most current form of Adobe Acrobat, Release 7.0 or better. The electronic file will be bookmarked according to its Table of Contents, but will contain no less than the book marking identification in descending order of section, system, subsystem, equipment, component, etc., where applicable. The goal is to make the manuals both manageable and user friendly for the Owner's use.
2. All manual documents must be word searchable, scanned images of text will not be acceptable.

B. Design-Build Entity Design Team Contribution. The Design-Build Entity will include, in the beginning of each O&M manual, a separate section describing the systems, including:

1. The Basis of Design narrative prepared by the Design-Build Entity's Designers, updated to as-built status by the Designers.
2. Simplified, professionally-drawn, single-line system diagrams on 8 ½" x 11" or 11" x 17" sheets. These must include chillers, water system, condenser water system, heating system, supply air systems, exhaust systems etc. These must show major pieces of equipment such as pumps, chillers, boilers, control valves, expansion tanks, coils, service valves, electrical distribution and controls systems, etc.

C. Owner Review and Approval.

1. Prior to completion, the Owner will review the O&M manuals, documentation, and redlined as-builts to verify compliance with the Performance Criteria and other applicable Contract Documents (including Bridging Documents). The Owner will also review each equipment warranty to verify that all requirements to keep the warranty valid are clearly stated. The Owner will communicate observed deficiencies to the Design-Build Entity for correction, but no Owner review or failure to observe deficiencies or request corrections will limit any other Design-Build Entity obligation under Contract Documents.

1.04. Submittals

A. Initial Submittal:

1. Prepare and submit two (2) draft copies of each manual (emergency, operations, maintenance, and directory) within sixty (60) days following completion of the construction phase submittal process, but in no case later than one hundred and twenty (120) days prior to completion. The drafts will be reviewed, approved, and corrections noted where applicable by the Owner.
2. The Owner will also mark on draft directories whether general scope and content are acceptable.

B. Final Submittal:

1. Following a satisfactory approval of the draft by the Owner, submit two copies of each manual in final form at least sixty (60) days before completion. The Owner will return one copy with any further comments within thirty (30) days before completion.
2. Correct or modify each manual to comply with the Owner's comments. Submit 3 copies of each corrected manual and two copies on CD-R of the electronic file(s) of the corrected manual within fifteen (15) days of receipt of the Owner's comments and prior to the commencement of any training related activities.

1.05. Coordination

A. General:

1. Where operation and maintenance documentation includes information on installations by more than one factory-authorized service representative, assemble and coordinate information furnished by representatives and prepare manuals.

PART II - - PRODUCTS

2.01. Operation and Maintenance Documentation Directory

A. Operations and Maintenance Documentation Directory:

1. Prepare a separate manual that provides an organized reference to each type of manual, including without limitation emergency, operations, and maintenance manuals.

B. Organization:

1. Include a Section in the directory for each of the following:
   a. Master table of contents for directory.
   b. List of contacts.
   c. List of systems and subsystems.
   d. List of equipment.
   e. Tables of contents.

C. List of Contacts

1. List systems/equipment contacts; list by system, alphabetically.

D. List of Systems and Subsystems:

1. List systems alphabetically. Include references to operations and maintenance manuals that contain information about each system.

E. List of Equipment:

1. List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.

F. Tables of Contents:

1. Include every table of contents for each emergency, operation and maintenance manual.

G. Identification:

1. In the documentation directory and in each operations and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Construction Documents. If no designation exists, assign a designation according to American Society of Heating Refrigerating & Air Conditioning Engineers (ASHRAE) Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

2.02. Manuals, General

A. Organization:

1. Unless otherwise required, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system.
2. Each manual must contain the following materials, in the order listed:

a. Title page.
b. Table of contents.
c. Manual contents.

B. Title Page:

1. Enclose title page in transparent plastic sleeve. Include the following information:
   a. Subject matter included in manual.
   b. Name and address of County Project.
   c. Date of submittal.
   d. Name, address, and telephone number of Design-Build Entity.
   e. Cross-reference to related systems in other operations and maintenance manuals.

C. Table of Contents:

1. List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in final Contract Documents.
2. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.

D. Manual Contents:

1. Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
2. Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf D-ring binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
   a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.
   b. Identify each binder on front and spine, with printed title "OPERATIONS AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number (and volume count) for multiple-volume sets.
3. Dividers: Heavy-paper dividers with plastic-covered tabs for each Section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the Section on each divider, cross-referenced to Specification Section number and title of Contract Documents.
4. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.
5. Supplementary Text: Prepared on 8-1/2-by-11-inch white bond paper.
6. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
   a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
   b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

E. Manufacturers' Data:

1. Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Construction Documents. Identify data applicable to the Work and delete references to information not applicable.
2. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.

F. Drawings:

1. Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in Project Record Drawings to ensure correct illustration of completed installation.
2. Do not use original Skylonda Fire Station Project Record Documents as part of operation and maintenance manuals.
3. Comply with requirements of newly prepared Record Drawings in Section 01 7839, Project Record Documents.

2.03. Emergency Manuals

A. Emergency Manual:

1. Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by the Owner for types of emergencies required.

B. Content:

1. Organize manual into a separate section for each of the following:
   a. Type of emergency.
   b. Emergency instructions.
   c. Emergency procedures.

C. Type of Emergency:

1. Where applicable for each type of emergency required below, include instructions and procedures for each system, subsystem, piece of equipment, and component:
   a. Fire.
   b. Flood.
   c. Gas leak.
   d. Water leak.
   e. Power failure.
   f. Water outage.
   g. System, subsystem, or equipment failure.
   h. Chemical release or spill.

D. Emergency Instructions:

1. Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of the Owner for notification of Installer, supplier, and manufacturer to maintain warranties.

E. Emergency Procedures:

1. Include the following, as applicable:
   a. Instructions on stopping.
   b. Shutdown instructions for each type of emergency.
   c. Operating instructions for conditions outside normal operating limits.
   d. Required sequences for electric or electronic systems.
   e. Special operating instructions and procedures.

2.04. Operations Manuals

A. Operations and Maintenance Manuals:

1. Assemble a complete set of operations and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
2. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
3. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by the Owner.
4. Prepare a recommended general overall preventative maintenance manual and include a schedule for use by the Owner.

B. Content:

1. In addition to requirements in this Section, include operations data required in individual Specification Sections and the following information:
   a. Contacts.
      1) List names,
      2) Addresses,
      3) Phone numbers (direct contact, where possible)
      4) Email addresses.
   b. System, subsystem, and equipment descriptions.
   c. Performance and design requirement if Design-Build Entity is delegated design responsibility.
   d. Operating standards.
   e. Operating procedures.
   f. Operating logs.
   g. Wiring diagrams.
   h. Control diagrams.
   i. Piped system diagrams.
   j. Precautions against improper use.
   k. License requirements including inspection and renewal dates.

C. Descriptions:

1. Include the following:
   a. Product name and model number.
   b. Manufacturer's name.

c. Equipment identification with serial number of each component.
d. Equipment function.
e. Operating characteristics.
f. Limiting conditions.
g. Performance curves.
h. Engineering data and tests.
i. Complete nomenclature and number of replacement parts.

D. Operating Procedures:

1. Include the following, as applicable:
a. Startup procedures.
b. Equipment or system break-in procedures.
c. Routine and normal operating instructions.
d. Regulation and control procedures.
e. Instructions on stopping.
f. Normal shutdown instructions.
g. Seasonal and weekend operating instructions.
h. Required sequences for electric or electronic systems.
i. Special operating instructions and procedures.

E. Systems and Equipment Controls:

1. Describe the sequence of operation, and diagram controls as installed.

F. Piped Systems:

1. Diagram piping as installed, and identify color-coding where required for identification.

2.05. Product Maintenance Manuals

A. Product Maintenance Manual:

1. Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.

B. Content:

1. Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.

C. Source Information:

1. List each product included in manual identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Contract Documents.

D. Product Information:

1. Include the following, as applicable:
a. Product name and model number.
b. Manufacturer's name.
c. Color, pattern, and texture.

d. Material and chemical composition.
e. Reordering information for specially manufactured products.

E. Maintenance Procedures:

1. Include manufacturer's written recommendations and the following:
   a. Inspection procedures.
   b. Types of cleaning agents to be used and methods of cleaning.
   c. List of cleaning agents and methods of cleaning detrimental to product.
   d. Schedule for routine cleaning and maintenance.
   e. Repair instructions.

F. Repair Materials and Sources:

1. Include lists of materials and local sources of materials and related services.

G. Warranties and Bonds:

1. Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
2. Include procedures to follow and required notifications for warranty claims.

2.06. Maintenance Manual Information for Systems and Equipment

A. Content:

1. For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.

B. Source Information:

1. List each system, subsystem, and piece of equipment included in manual identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Contract Documents.

C. Manufacturers' Maintenance Documentation:

1. Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
   a. Standard printed maintenance instructions and bulletins.
   b. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
   c. Identification and nomenclature of parts and components.
   d. List of items recommended to be stocked as spare parts.

D. Maintenance Procedures:

1. Include the following information and items that detail essential maintenance procedures:
   a. Test and inspection instructions.
   b. Troubleshooting guide.

c. Precautions against improper maintenance.

2. Disassembly; component removal, repair, and replacement; and reassembly instructions.
3. Aligning, adjusting, and checking instructions.
4. Demonstration and training videotape, if available.

E. Maintenance and Service Schedules:

1. Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
2. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
3. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.

F. Spare Parts List and Source Information:

1. Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.

G. Maintenance Service Contracts:

1. Include copies of service and maintenance agreements provided by the supplier or manufacturer of any equipment or materials used in the Project and provided by any subcontractors that performed any portion of the Project Work. The duration of any service or maintenance agreements supplied to Owner shall be from the date of Final Completion of the Project Work. Provide each with name and telephone number of service agent.

H. Warranties and Bonds:

1. Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
2. Include procedures to follow and required notifications for warranty claims.

PART III - EXECUTION – NOT USED

END OF SECTION

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 7900

DEMONSTRATION AND TRAINING

PART 1 - GENERAL

1.01 Summary

A. Administrative and procedural requirements for instructing the Owner, including the following
   1. Demonstration of operation of systems, subsystems and equipment
   2. Training in operation and maintenance of systems, subsystems and equipment.
   3. Demonstration and training Interactive Digital Video Display (DVD)
   4. Special requirements for mechanical equipment training.

1.02 Submittals

A. Instruction Program:
   1. Submit two copies of outline of instructional program for demonstration and training, including: the agenda for the training; a schedule of proposed dates and times; length of instruction time for each section of training, and instructors' names for each training module. Include learning objective and outline for each training module. Each training submittal must be provided a minimum of three weeks before the proposed training date.
   2. Complete the Training Orientation Plan and Training Agenda forms for each training session to be conducted. Submit to the Owner no later than sixty (60) days before training begins.
   3. At completion of training, submit two complete training manual(s) in both paper and electronic format for the Owner's use. Electronic format to be word searchable.

B. Qualification Data:
   1. For facilitator, instructor, and videographer.

C. Attendance Record:
   1. For each training module, submit list of participants and length of instruction time.
   2. Complete the Training Record form included for each training session conducted. Submit to the Owner within seven (7) calendar days of each session being completed.

D. Evaluations:
   1. For each participant and for each training module, submit results and documentation of performance-based test.

E. Demonstration and Training Interactive DVDs:
   1. Submit two copies within seven (7) calendar days of end of each training module.
   2. Identification: On each copy, provide an applied label with the following information:
      a. Name of Project.
      b. Name and address of videographer.
      c. Name of Design-Build Entity and Construction Manager.
      d. Name of Design-Build Entity.
      e. Date Interactive DVD was recorded.
      f. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
   3. Transcript: Prepared on 8-1/2-by-11-inch paper, punched and bound in heavy- duty, 3-ring, vinyl-covered binders. Mark appropriate identification on front and spine of each binder. Include a cover sheet with same label information as the corresponding Interactive DVD. Include name of Project and date of Interactive DVD on each page. Include copy of

relevant DVD in plastic sleeve.

F. Training Planning, Agenda, and Record Forms:
   1. Forms follow on subsequent pages.
      a. Overall Staff Training and Orientation Plan (one page)
      b. Training and Orientation Agenda (two pages)
      c. Staff Training and Orientation Record (one page)

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Overall Staff Training and Orientation Plan

Project: Skylonda Fire Station No. 58 Date: _____ Prepared by:_____
(To be filled out by the Commissioning Authority in consultation with the Owner)

Equipment / System	Spec Section	Total Hours (if spec'd)	Scope Code [5]	Trainee Type [6] (list no. of ea.)	Primary Responsible Party	Trainers' Company	Agenda Recv'd?	Planned Training Date(s)
Mechanical / HVAC								
Electrical								
Re-Commissioning [1]								
Architect [2]								
Mechanical Designer [3]								
Electrical Designer [4]								

[1] **Re-commissioning.** The Commissioning Authority will provide instruction on the use of blank functional test forms for periodic re-commissioning of equipment and systems, per the specification.
[2] **Architect.** The Design-Builder's architect will provide a general overview of the facility, its use, special features, tenant and public considerations, etc.
[3] **Mechanical Design Engineer.** The mechanical designer will provide an overview of the major systems and equipment in the facility, including for each system: the design intent, why the system was chosen, an overview of its operation, and interactions with other systems, any special areas to be aware of, issues regarding future expansion and remodeling, etc.
[4] **Electrical Design Engineer.** The electrical designer will provide an overview of the major electrical systems and equipment in the facility, particularly the lighting control systems, fire alarm, security and emergency power, focusing on the design intent, why the sys-tem was chosen, an overview of its operation, and interactions with other systems, any special areas to be aware of, issues regarding future expansion and remodeling, etc.
[5] **General Scope Codes** (refer to the specifications and to the specific equipment Training Agenda for additional details)
A Provide an ***overview*** of the purpose and operation of this equipment, including required interactions of trainees with the equipment.
B At an ***intermediate level***, provide technical information regarding the purpose, operation and maintenance of this equipment, expecting that serious malfunctions will be addressed by factory reps.
C At a ***very technical level***, provide information regarding the purpose, operation, troubleshooting and maintenance of this equipment, expecting that almost all operation, service and repair will be provided by the trainees.
[6] **Trainee Types** FM = facility manager, FE = facility engineer and assistants, FT = facility technician / maintenance, PM = project manager, T=tenants, O = other
*CSCI = County supplied, Design-Build Entity installed

TRAINING AND ORIENTATION AGENDA

Project: Skylonda Fire Station No. 58 Date: _____

Equipment / System: Spec Section: _____

Section 1 - Audience and General Scope *[Owner and Commissioning Authority fill out this section and transmit entire form to the responsible party. Attach training specification section]*

Intended Audience Type *(enter number of staff)*

___Facility Manager(s), ___Facility Engineer(s), ___Facility Technician(s), ___Project Manager(s), ___Tenant(s), ___Other:_____

General Objectives and Scope of Training: *(check all that apply)*

___ A. Provide an overview of the purpose and operation of this equipment, including required interactions of trainees with the equipment.

___ B. Provide technical information regarding the purpose, operation and maintenance of this equipment at an intermediate level, expecting that all serious malfunctions will be addressed by factory representatives.

___ C. Provide technical information regarding the purpose, operation, troubleshooting and maintenance of this equipment at a very detailed level, expecting that almost all operation, service and repair will be provided by the trainees.

Section 2 - Instructors *[Commissioning Authority fills in Company. Trainer fills out the balance, prior to training.]*

ID	Trainer	Company	Position / Qualifications
1)	_____	_____	_____
2)	_____	_____	_____
3)	_____	_____	_____

Section 3 - Agenda *[The responsible parties will have their trainers fill out this section and submit it to the Owner and Commissioning Authority for review and approval prior to conducting training.]*

Location: ___ Site _____ Date _____

Classroom (location) _____ Date _____

Agenda of general subjects covered (√ all that will be covered)	(√ when completed)	Duration (min.)	Instructor (ID)	Completed (√)
___ General purpose of this system or equipment (design intent)		_____	_____	
___ Review of control drawings and schematics (have copies for attendees)		_____	_____	
___ Startup, loading, normal operation, unloading, shutdown, unoccupied operation, seasonal changeover, etc., as applicable		_____	_____	
___ Integral controls (packaged): programming, troubleshooting, alarms, manual operation		_____	_____	
___ Building automation controls (BAS): programming, troubleshooting, alarms, manual operation, interface with integral controls		_____	_____	
___ Interactions with other systems, operation during power outage and fire		_____	_____	
___ Relevant health and safety issues and concerns and special safety features		_____	_____	
___ Energy conserving operation and strategies		_____	_____	
___ Any special issues to maintain warranty		_____	_____	
___ Common troubleshooting issues and methods, control system warnings and error messages, including using the control system for diagnostics		_____	_____	
___ Special requirements of tenants for this equipment's function		_____	_____	
___ Service, maintenance, and preventative maintenance (sources, spare parts inventory, special tools, etc.)		_____	_____	
___ Question and answer period		_____	_____	

Other subjects covered, specific to the equipment:	Duration Completed	Instructor
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Total duration of training (hrs) ---------->

Training methods that will be included (clarify, as needed): *(Trainer, check all that apply)*

Use of the O&M manuals, illustrating where the verbal training information is found in writing
Each attendee will be provided: 1) The control drawing schematic and sequence of operations; 2) A copy of this agenda.
Discussion/lecture at site _____
Site demonstration of equipment operation _____
Written handouts _____
Manufacturer training manuals _____
Classroom lecture _____
Classroom hands-on equipment _____
Video presentation _____
Question and answer period _____

Section 4 - Approvals and Use *[Once the Agenda has been filled out by the Trainer, the Owner and Commissioning Authority review it, make edits, sign and return to Design-Build Entity who provides it to the Trainer for use during training. Copies of Agenda will be provided to trainees.]*

This plan has been approved by the following individuals, subject to the additions and clarifications noted in the left columns marked "add." *(This is not an approval of training completion.)*

_____ _____
Owner's Representative Date

_____ _____
Commissioning Authority Date

STAFF TRAINING AND ORIENTATION RECORD

Project: Skylonda Fire Station No. 58 Date: _____ Prepared by: _____
System or Equipment: _____

Trainee Signature[2] and Positions	Total Req'd Hrs[1]	Hrs Done	Training Date	General Topics Covered	Trainer Signature and Company	CA Initials/ Note ID
1.						
2.						
3.						
4.						

[1] The hours of required training have been filled out from the *Specifications*. Refer to the *Specifications* for additional details regarding the training requirements.

[2] Trainee signs after the training session is completed.

Notes attached. (Y/N) _____

Final Approval of Training Completion
According to the Agreement Documents: _____ (Owner's Representative) _____ (Date)

1.03 Quality Assurance

A. Facilitator Qualifications:
1. A firm or individual experienced in training or educating maintenance personnel in a training program similar in content and extent to that required for Skylonda Fire Station, and whose work has resulted in training or education with a record of successful learning performance.

B. Instructor Qualifications:
1. A factory-authorized service representative, complying with requirements in Section 01 4523, Quality Requirements, experienced in operation and maintenance procedures and training.

C. VIDEOGRAPHER QUALIFICATIONS:
1. A professional videographer who is experienced digitally recording construction projects.

D. PRE-INSTRUCTION CONFERENCE:
1. Conduct conference at Skylonda Fire Station site to comply with requirements in Section 01 3100 Project Management and Coordination, similar to "Pre-Installation Conference." Review methods and procedures related to anticipated demonstration and training including, but not limited to, the following:
   a. Inspect and discuss locations and other facilities required for instruction.
   b. Review and finalize instruction schedule and verify availability of educational materials, instructors' personnel, audiovisual equipment, and facilities needed to avoid delays.
   c. Review required content of instruction.
   d. For instruction that must occur outside, review weather and forecasted weather conditions and procedures to follow if conditions are unfavorable.
   e. Review "Training and Orientation Agenda" with video director so as to, coordinate any Trade or Level breaks that will be used in editing for creation of video clips.

1.04 Coordination

A. GENERAL:
1. Coordinate instruction schedule with the Owner's operations. Adjust schedule as required to minimize disrupting the Owner's operations.
2. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.
3. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by the Owner.

1.05 Instruction Program

A. PROGRAM STRUCTURE:
1. Develop an instruction program that includes individual training modules for each system and equipment not part of a system, as required by individual Specification Sections, and as follows:
   a. Motorized doors, including overhead coiling doors overhead coiling grilles and automatic entrance doors.
   b. Equipment, including video screens, loading dock equipment, waste compactors, service equipment, and other equipment as applicable to Skyonda Fire Station Project.
   c. Fire-protection systems, including fire alarm, firepumps, and fire- extinguishing systems.
   d. Security systems.

e. Conveying systems.
f. Refrigeration systems, including chillers, cooling towers, condensers, pumps, thermal energy storage and distribution piping.
g. Steam plant systems, including boilers, deaerators, Feedwater pumps, condensate return system
h. HVAC systems, including air-handling equipment, air distribution systems, and terminal equipment and devices.
i. EMCS, HVAC instrumentation and controls.
j. Electrical service and distribution, including transformers, switchboards, panelboards, uninterruptible power supplies, and motor controls.
k. Packaged engine generators, including transfer switches.
    1) Black start generators
    2) Emergency generators
l. Lighting equipment and controls.
m. Communication systems, including intercommunication, surveillance, clocks and programming, voice and data, and television equipment.
n. Steam Turbine Generator system and equipment
o. Power monitoring, control system and UPS
p. Other systems and equipment as applicable to Project.

B. Training Modules:
1. Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master.
    a. For each scene of the module define the Trade and Level of target participant. Some cross-over is expected.
    b. Participant category and subcategory to be determined in consultation with the Owner.
    c. Example Trades are: Controls, Electrical, Mechanical
    d. Example Levels: Operation, Maintenance, Trouble-shooting
2. Design Requirements, Operational Requirements, and Performance Specifications: Include the following:
    a. System, subsystem, and equipment descriptions.
    b. Performance Specifications
    c. Design Requirements.
    d. Operating standards.
    e. Regulatory requirements.
    f. Equipment function.
    g. Operating characteristics.
    h Limiting conditions.
    i. Performance curves.
3. Documentation: Review the following items in detail:
    a. Emergency manuals.
    b. Operations manuals.
    c. Maintenance manuals.
    d. Skylonda Fire Station Project Record Documents.
    e. Identification systems.
    f. Warranties and bonds.
    g. Maintenance service agreements and similar continuing commitments.
4. Emergencies: Include the following, as applicable:
    a. Instructions on meaning of warnings, trouble, indications, and messages
    b. Instructions on stopping
    c. Shutdown instructions for each type of emergency
    d. Operating instructions for conditions outside of normal operating limits
    e. Sequences or electric or electronic systems.
    f. Special operating instructions and procedures
5. Normal Operations: Include the following, as applicable:

a. Startup procedures.
b. Equipment or system break-in procedures.
c. Routine and normal operating instructions.
d. Regulation and control procedures.
e. Control sequences.
f. Safety procedures.
g. Instructions on stopping.
h. Normal shutdown instructions.
i. Operating procedures for system, subsystem, or equipment failure.
j. Seasonal and weekend operating instructions.
k. Required sequences for electric or electronic systems.
l. Special operating instructions and procedures.

6. Adjustments: Include the following:
   a. Alignments.
   b. Checking adjustments.
   c. Noise and vibration adjustments.
   d. Economy and efficiency adjustments.
7. Troubleshooting: Include the following:
   a. Diagnostic instructions.
   b. Test and inspection procedures.
8. Maintenance: Include the following:
   a. Inspection procedures.
   b. Types of cleaning agents to be used and methods of cleaning.
   c. List of cleaning agents and methods of cleaning detrimental to product.
   d. Procedures for routine cleaning
   e. Procedures for preventive maintenance.
   f. Procedures for routine maintenance.
   g. Instruction on use of special tools.
9. Repairs: Include the following:
   a. Diagnosis instructions.
   b. Repair instructions.
   c. Disassembly; component removal, repair, and replacement; and reassembly instructions.
   d. Instructions for identifying parts and components.
   e. Review of spare parts needed for operation and maintenance.

PART 2 - PRODUCTS NOT USED

PART 3 - EXECUTION

3.01 Preparation

A. GENERAL:
   1. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a combined training manual.
   2. Set up instructional equipment at instruction location.
   3. Script training module video clips to focus on defined staff Trade and Level.

3.02 Instruction

A. FACILITATOR:
   1. Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Design-Build Entity and the Owner for number of participants, instruction times, and location.

B. INSTRUCTORS:

1. Engage qualified instructors to instruct the Owner to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
2. The Owner will furnish an instructor to describe the Owner's operational philosophy.
3. The Owner will furnish Design-Build Entity with names and positions of participants.

C. SCHEDULING:
1. Provide instruction at mutually agreed upon times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
2. Design-Build Entity must coordinate with the Owner to create as comprehensive an overall training schedule as possible to facilitate the limited numbers of Owner staff that must be trained in all aspects of the new facilities. Schedule training with the Owner with at least twenty-one (21) calendar days advance notice.

D. EVALUATION:
1. At conclusion of each training module, assess and document each participant's mastery of module by use of an oral, written, or demonstration performance-based test, as applicable.

E. CLEANUP:
1. Collect used and leftover educational materials and give to The Owner. Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

F. POST VIDEO EDITING:
1. Instructor to edit transcript so as to identify video clips that are targeted for different Operation and Maintenance (O&M) sections, Staff Trade & Level.

3.03 Demonstration and Training Video Interactive DVD'S

A. GENERAL:
1. Engage a qualified commercial videographer to record all demonstration and training video Interactive DVDs. Record each training module separately. Include classroom instructions and demonstrations, board diagrams, and other visual aids, but not student practice.
2. At beginning of each training module, record each chart containing learning objective and lesson outline.

B. INTERACTIVE DVD FORMAT:
1. Provide high-quality color Interactive DVDs with hard plastic snap-case for each.
2. All videos are to be shot by the same videographer.

C. CAMERAS:
1. Provide two identical cameras with a minimum resolution of 1080i High-definition at 30 frames per second.
2. Cameras to be mounted on fluid head tripods.

D. CAMERA SETUP:
1. Two identical cameras are to be used.
2. Camera one is a medium to wide shot which includes the trainer and display materials, white board, charts, etc. Camera does minimal panning and zooming. Camera one is the default camera: All footage from camera one to be continuously usable. A lavaliere (lapel) microphone, is connected to Camera one.
3. Camera two is a close-up camera capturing details of whiteboards, machinery and, controls, etc. Camera two is outfitted with a medium-length shotgun microphone for clean back-up sound on audio channel 1. Audio channel 2 on camera two is outfitted with second microphone at director's station for scene descriptions and notes.
4. Both cameras shoot continuously to ease synchronization in editing.
5. The Director watches monitors of both camera angles and directs camera operators via

wireless headset. Director monitors sound from camera one and also takes notes regarding any missed shots for pick-up at conclusion of training session. Monitor and sound from camera one is recorded (digitally) with time code, generating the window dub for transcription.

6. Supplemental lighting may be required depending on room size/on-site or details being filmed.

E. VIDEO FORMAT:
   1. Window Dubs: Provide minimum standard definition (SD) resolution, full color, on DVD.
   2. Original Footage: High definition (HD) Digital video (DV) at full camera resolution.
   3. Edited Video Clips:
      a. Original camera resolution as digital media files supplied on Data DVD. (For archiving)
      b. Recompressed clips in H.264 WMV or quality-comparable Windows environment compatible compression, supplied on Data DVD. (For in-house server-based training stations.)
      c. Bookmarked & Menu'd DVDs in SD (For review, checks of edits and alternate training methods)
      d. Bookmarked & Menu'd DVDs in HD (For review, checks of edits and alternate training methods)

F. RECORDING:
   1. Mount camera one on tripod before starting recording. Display continuous running time.
   2. Mount camera two on tripod before starting recording, unless otherwise necessary to show area of demonstration and training. Display continuous running time.
   3. Shoot a slate at start of each session including Module, Trainer, Location, Date and Time.

G. NARRATION:
   1. Describe scenes on video Interactive DVD by audio narration by microphone while video Interactive DVD is recorded, or by dubbing the sound after recording, whichever gives better results and clarity. Include description of items being viewed. Describe vantage point, indicating location, direction (by compass point), and elevation or story of construction.

H. TRANSCRIPT:
   1. Provide a typewritten transcript of the narration. Display images and running time captured from video Interactive DVD opposite the corresponding narration segment.
   2. Transcripts to be generated from window dubs (raw video footage).
   3. Raw transcript to be delivered to the trainer for marking of the video, tagging with the trade and level information and any content edits, for each video clip.
   4. Trainer content edits to be incorporated into final transcript.

I. VIDEO EDITING PRODUCTS & ORGANIZATION:
   1. Required Products:
      a. Clips edited and compressed for use with local-network training stations.
      b. Clips edited and compiled into DVDs & HD DVDs for alternate training methods. (Classroom, offsite, etc.)
      c. Edit video into clips per trainers edits of transcript. Name clips so as to facilitate compilation by trade and level. (Example: M16T05L03)
      d. A five second title card to appear at front of each clip identifying: Trade, Level, O&M section, instructor, facility, and date of recording.
   2. Compile video clips by sequence, trade and level into the following movies. Provide menu for access by the following selections on DVDs & HD DVDs:
      a. Entire module in sequence
      b. By Trade: Where more than one trade is identified in the module assemble the clips in sequence for that trade.

c. By Level: Where more than one level is identified in the module, assemble the clips in sequence for that level.
d. By O&M documentation section.

3.04 Electronic Documentation Linking

A. Hyperlink each training module video clip to the corresponding section of the narration and corresponding O&M document section.

3.05 Special Training for Mechanical Equipment

A. Training Responsibilities:
1. Require that the mechanical subcontractor be responsible for mechanical training coordination, scheduling and ultimately to ensure that training is completed.
   a. Provide designated Owner personnel with a comprehensive training plan for mechanical equipment two months before the planned training.
   b. Provide the Owner with comprehensive orientation and training in the understanding of the systems and the operation and maintenance of each piece of mechanical equipment including, but not limited to, chillers, boilers, pumps, air handling units, fans, terminal units and controls systems, etc.
2. Start training with classroom sessions followed by hands-on training on each piece of equipment, which must illustrate the various modes of operation, including startup, shutdown, fire/smoke alarm, power failure, etc.
3. If during demonstration the system fails to perform in accordance with the requirements of the O&M manual or sequence of operations, repair or adjust the system as necessary and repeat the demonstration.
4. Engage the appropriate trade or manufacturer's representative to provide the instructions on each major piece of equipment. This person may be the start-up technician for the piece of equipment, the installing Design-Build Entity or manufacturer's representative. Practical building operating expertise as well as in- depth knowledge of all modes of operation of the specific piece of equipment is required. More than one party may be required to execute the training.
5. The controls subcontractor must attend sessions other than the controls training, as requested, to discuss the interaction of the controls system as it relates to the equipment being discussed.
6. The training sessions must follow the outline in the Table of Contents of the operation and maintenance manual and illustrate whenever possible the use of the O&M manuals for reference.
7. Training must include:
   a. Use of the printed installation, operation and maintenance instruction material included in the O&M manuals. This material must be submitted and approved prior to being used in training.
   b. A review of the written O&M instructions emphasizing safe and proper operating requirements, preventative maintenance, special tools needed and spare parts inventory suggestions. The training must include start-up, operation in all modes possible, shut-down, seasonal changeover and any emergency procedures.
   c. Discussion of relevant health and safety issues and concerns. d. Discussion of warranties and guarantees.
   e. Common troubleshooting problems and solutions.
   f. Explanatory information included in the O&M manuals and the location of all plans and manuals in the facility.
   g. Discussion of any peculiarities of equipment installation or operation.
   h. The format and training agenda in "The Commissioning Process," ASHRAE Guideline 2005 is recommended.
   i. Classroom sessions must include the use of overhead projections, slides, video/audio Interactive DVD material as might be appropriate.

j. Hands-on training must include start-up, operation in all modes possible, including manual, shut-down and any emergency procedures and preventative maintenance for all pieces of equipment.
k. The mechanical subcontractor must fully explain and demonstrate the operation, function and overrides of any local packaged controls, not controlled by the central control system.
l. Training must occur after functional testing is complete, unless approved otherwise by the Owner.
m. Require the mechanical subcontractor to provide training on each piece of equipment according to the requirements identified in the Performance Specifications.

END OF SECTION

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 2600

MODIFICATION PROCEDURES AND PRICING OF CHANGED WORK (Design-Build)

PART 1 – GENERAL

1.01 Summary

A. Section includes requirements that supplement the paragraphs of Document 00 7253 (General Conditions).

B. Description of procedures for modifying Contract Documents, including particularly final approved Construction Documents, and determining costs for changes in contract amounts.

C. Unless otherwise specified by Owner, this Section shall not apply to changes to Bridging Documents that are made either (i) prior to the Design Development Phase or (ii) pursuant to Section 01 1101 (Design-Build Design Services), paragraph 1.04.C.

1.02 Procedures for Design-Build Entity Initiated Change Order

A. Design-Build Entity-Initiated Change Proposal Request (CPR) and Procedures:
   1. Design-Build Entity may initiate changes by submitting a Change Proposal Request ("CPR").
   2. Whenever Design-Build Entity elects or is entitled to submit a CPR, Design-Build Entity shall prepare and submit to Owner for consideration a CPR using the form included in this Project Manual or another approved template. All CPRs must contain a complete breakdown of costs of credits, deducts and extras; itemizing materials, labor, taxes, Markup and any requested changes to Contract Time. All Subcontractor Work shall be so indicated. Individual entries on the CPR form shall include applicable Schedule of Values code, with all amounts determined as provided herein. After receipt of a CPR with a detailed breakdown, Owner will act promptly thereon.
   3. If Owner accepts a CPR, Owner will prepare a Change Order for Owner and Design-Build Entity signatures.
   4. If CPR is not acceptable to Owner because it does not agree with Design-Build Entity's proposed cost and/or time, Owner will provide comments thereto. Design-Build Entity will then, within seven (7) Days (except as otherwise provided herein), submit a revised CPR.
   5. When necessity to proceed with a change does not allow Owner sufficient time to conduct a proper check of a CPR (or revised CPR), Owner may issue a Change Directive (CD) as provided below.

B. Design-Build Entity-Initiated Request for Information (RFI) Procedures, Requirements and Limitations:
   1. Design-Build Entity may submit RFI's for clarifications in Owner-prepared Contract Documents (such as Bridging Documents), which may result in the Design-Build Entity submitting a CPR. (Owner-prepared Contract Documents exclude, at a minimum, Design-Build Entity-prepared Construction Documents.)
   2. Whenever Design-Build Entity requires information regarding the Project or Owner-prepared Contract Documents, or receives a request for such information from a Subcontractor, Design-Build Entity may prepare and deliver an RFI to Owner. ***Under no circumstances may Design-Build Entity deliver an RFI to Owner relating to any Design-Build Entity-prepared Construction Document.*** Design-Build Entity shall provide a RFI template for approval by Owner. Design-Build Entity shall not issue an

RFI to Owner solely to clarify Design-Build Entity-prepared Construction Documents. Design-Build Entity must submit time critical RFIs at least 30 days before scheduled start date of the affected Work activity. Design-Build Entity shall reference each RFI to an activity of Progress Schedule and shall note time criticality of the RFI, indicating time within which a response is required. Design-Build Entity's failure to reference RFI to an activity on the Progress Schedule and note time criticality on the RFI shall constitute Design-Build Entity's waiver of any claim for time delay or interruption to the Work resulting from any delay in responding to the RFI.

3. Design-Build Entity shall be responsible for its costs to implement and administer RFIs throughout the Contract duration. Regardless of the number of RFIs submitted, Design-Build Entity shall not be entitled to additional compensation for the effort required to submit the RFIs. Design-Build Entity shall be responsible for Owner's administrative costs for answering RFIs where the answer could reasonably be found by reviewing the Contract Documents, as determined by Owner; at Owner discretion, such costs may be deducted from progress payments or final payment.
4. Owner will respond within ten (10) days from receipt of RFI with a written response to Design-Build Entity. Design-Build Entity shall distribute response to all appropriate Subcontractors.
5. If Design-Build Entity is satisfied with the response and does not request a change in Contract Sum or Contract Time, then the response shall be executed without a change.
6. If Design-Build Entity believes the response is incomplete, Design-Build Entity shall issue another RFI (with the same RFI number with the letter "A" indicating it is a follow-up RFI) to Owner for clarification of the original RFI. Additionally, Owner may return RFI requesting additional information should original RFI be inadequate in describing condition.

C. Time Requirements:
1. If Design-Build Entity believes that an Owner response to an RFI, submittal or other Owner direction, results in change in Contract Sum or Contract Time, Design-Build Entity shall notify Owner with the issuance of a preliminary CPR within ten (10) days after receiving Owner's response or direction, and in no event after starting the disputed work or later than the time allowed under Article 12 of Document 00 7253 (General Conditions). If Design-Build Entity also requests a time extension, or has issued a notice of delay or otherwise requests a time extension with a CPR, then Design-Build Entity shall submit the Time Impact Evaluation (TIE) required by Section 01 3200 concurrently with the CPR and in no event later than ten Days after providing the notice of delay.
2. If Design-Build Entity requires more time to accurately identify the required changes to the Contract Sum or Contract Time, Design-Build Entity may submit an updated and final CPR and TIE within 14 days of submitting the preliminary CPR.
3. If Owner agrees with Design-Build Entity's CPR and/or TIE, then, subject to obtaining any required approvals under paragraph 1.02A above, Owner will prepare a Change Order for Owner and Design-Build Entity signatures. If Owner disagrees with Design-Build Entity, then Design-Build Entity may give notice of potential claim as provided in Article 12 of Document 00 7253 (General Conditions), and proceed thereunder.
4. Design-Build Entity must submit CPRs, documentation required by paragraph 1.02C above, and notices of potential claim or Claims, within the required time periods. Any failure to do so waives Design-Build Entity's right to submit a CPR or file a Claim.

D. Cost Estimate Information:
1. Design-Build Entity. Designers and Subcontractors shall, upon Owner's request, permit inspection of the original unaltered cost estimates, subcontract and design agreements, purchase orders relating to the change, and documents substantiating all costs associated with its CPR or Claims arising from changes in the Work.

1.03 Procedures for Owner Initiated Change Orders

A. Owner Initiated Change Directives (CD):

1. Owner may, by Change Directive ("CD") or initially by Instruction Bulletin or by following the procedures for disputed work herein, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, with or without adjustment to Contract Sum or Contract Time.
2. If at any time Owner believes in good faith that a timely Change Order will not be agreed upon using the foregoing procedures, or at any other time, Owner may issue a CD with its recommended cost and/or time adjustment (if any). Upon receipt of CD, Design-Build Entity shall promptly proceed with the change of Work involved and respond to Owner within ten (10) Days.
3. Design-Build Entity's response must be any one of following:
   a. Return CD signed, thereby accepting Owner response, including adjustment to time and cost (if any).
   b. Submit a (revised if applicable) Cost Proposal with supporting documentation (if applicable, reference original Cost Proposal number followed by letter A, B, etc. for each revision), if Owner so requests.
   c. Give notice of intent to submit a claim as described in Article 12 of Document 00 7253 (General Conditions), and submit its claim as provided therein.
4. If CPR or the CD provides for an adjustment to any Contract Sum, the adjustment shall be based on one of the following methods:
   a. Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation.
   b. Design-Build Entity to proceed on cost reimbursable (force account) basis while negotiating towards a firm price.
   c. Cost to be determined in a manner agreed.
5. Change Directive signed by Design-Build Entity indicates the agreement of Design-Build Entity therewith, including adjustment in Contract Sum or the method for determining them. Such agreement shall be effective immediately and shall be finalized as a Change Order. Where Owner authorizes CD work on a time and materials basis up to a maximum amount, then Design-Build Entity shall promptly advise Owner upon reaching 75% of such maximum amount, otherwise Design-Build Entity shall accept fully the risk of completing the CD work without exceeding such maximum amount.
6. If Design-Build Entity does not respond promptly or disagrees with the method for adjustment (or non-adjustment) in the Contract Sum, the method and the adjustment shall be determined by Owner on the basis of the Contract Documents and the reasonable expenditures and savings of those performing the Work attributable to the change. If the parties still do not agree on the proper adjustment due to a Change Directive, Design-Build Entity may file a Claim per Article 12 of Document 00 7253 (General Conditions) and/or Owner may direct the changed work through a unilateral change order. Design-Build Entity shall keep and present an itemized accounting in a manner consistent with the SOV, together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this paragraph shall be limited to those provided herein.
7. Pending final determination of cost to Owner, Design-Build Entity may include amounts not in dispute in its Applications for Payment. The amount of credit to be allowed by Design-Build Entity to Owner for a deletion or change which results in a net decrease in the Contract Sum shall be actual net cost as confirmed by Owner. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for Markup shall be figured on the basis of net increase, if any, with respect to that change.

B. Owner Initiated Change Order (CO) or Request for Proposal (RFP):

1. Owner may initiate changes in the Work or Contract Time by issuing a Request for Proposal ("RFP") or Change Order ("CO") to Design-Build Entity.

2. Owner may issue an RFP to Design-Build Entity. Any RFP will detail all proposed changes in the Work and request a quotation of changes in Contract Sum and Contract Time from Design-Build Entity.
3. In response to an RFP, Design-Build Entity shall furnish a Change Proposal Request (CPR) within twenty-one (21) Business Days of Owner's RFP. Upon approval of CPR, Owner may issue a Change Directive directing Design-Build Entity to proceed with extra Work.
4. If the parties agree on price and time for the work, the Owner will issue a Contact Change Order. If the parties do not agree on the price or time for a CPR, Owner may either issue a CD or decide the issue per Article 12 of Document 00 7253 (General Conditions). Design-Build Entity shall perform the changed Work notwithstanding any claims or disagreements of any nature.

1.04 Procedures That Apply To Design-Build Entity-And Owner-Initiated Change Orders

A. Adjustment of Schedules to Reflect Change Orders or CDs:
1. Design-Build Entity shall revise Schedule of Values and Application for Payment forms to record each authorized Change Order or CD as a separate line item and adjust the Contract Sum as shown thereon prior to the next monthly pay period.
2. Design-Build Entity shall revise the Progress Schedules prior to the next monthly pay period, to reflect CO or CD.
3. Design-Build Entity shall enter changes in Project Record Documents prior to the next monthly pay period.

B. Required Documentation for Adjustments to Contract Amounts:
1. For all changes and cost adjustments requested, Design-Build Entity shall provide documentation of change in Contract Amounts asserted, with sufficient data to allow evaluation of the proposal.
2. In all requests for compensation, cost proposals, estimates, claims and any other calculation of costs made under the Contract Documents, Design-Build Entity shall breakout and quantify costs of labor and professional services, equipment and materials identified herein, for Design-Build Entity and subcontractors of any tier.
3. Design-Build Entity shall, on request, provide additional data to support computations for:
   a. Quantities of products, materials, labor and equipment.
   b. Taxes, insurance, and bonds.
   c. Justification for any change in Contract Time and new Progress Schedule showing revision due, if any.
   d. Credit for deletions from Contract, similarly documented.
4. Design-Build Entity shall support each claim or computation for additional cost, with additional information including:
   a. Origin and date of claim or request for additional compensation.
   b. Dates and times Work was performed and by whom.
   c. Time records and wage rates paid.
   d. Invoices and receipts for products, materials, equipment, subcontracts and design agreements, similarly documented.
   e. Credit for deletions from Contract, similarly documented.

C. Responses and Disputes:
1. For all responses for which the Contract Documents do not provide a specific time period, recipients shall respond within a reasonable time.
2. For all disputes arising from the procedures herein, Design-Build Entity shall follow Article 12 of Document 00 7253 (General Conditions).

PART 2 – COST DETERMINATION FOR CHANGES IN CONTRACT AMOUNTS

2.01 Cost Determination for Changes in Contract Amounts

A. Calculation of Total Cost of Extra Work:

1. Total cost of changed Work, extra Work or of Work omitted shall be the sum of three components defined immediately below as:

    a. Component 1 (Direct Cost(s));
    b. Component 2 (Markup); and,
    c. Component 3 (bonds, insurance, taxes).

2. Component 1: Direct Cost(s) of labor and professional services, equipment and materials, is calculated based upon actually incurred (or omitted) labor and professional services costs, material costs and equipment rental costs, as defined herein;
3. Component 2: Markup on such actually incurred Direct Costs, is applied in the percentages identified below; and
4. Component 3: Actual additional costs for any additionally required insurance, bonds, and/or taxes, defined herein, is calculated without Markup.

2.02 Measurement of Direct Cost of Design and Construction (Cost Component No. 1)

A. Composition of Component 1 (Direct Cost of Design and Construction):

1. Component 1 has four subcomponents, also referred to as "LEMS":
    a. Labor and Professional Services (Component 1A)
    b. Equipment (Component 1B)
    c. Materials (Component 1C)
    d. Subcontractors (Component 1D)

B. Measurement of Cost of Labor and Professional Services (Component 1A):

1. Cost of Labor shall be calculated as: Cost of labor for workers (including forepersons when authorized by Owner) used in actual and direct performance of the subject work, whether employer is Design-Build Entity, Subcontractor or other forces, in the sum of the following:
    a. Actual Wages: Actual wages paid shall include any employer payments to or on behalf of workers for health and welfare, pension, vacation, and similar purposes.
    b. Labor surcharge: Payments imposed by local, county, state, and federal laws and ordinances, and other payments made to, or on behalf of, workers, other than actual wages as defined, such as worker's compensation insurance. Such labor surcharge shall not exceed generally accepted standards in the State for labor rates in effect on date upon which extra Work is accomplished.
    c. Cost of labor shall include no other costs, fees or charges.
2. Labor cost for operators of equipment owned and operated by Design-Build Entity or any Subcontractor, shall be no more than rates of such labor established by collective bargaining agreements for type of worker and location of Work, whether or not owner-operator (i.e., Design-Build Entity or Subcontractor) is actually covered by such an agreement.
3. Cost of labor shall be recorded and documented in certified payroll records, maintained in the form customary and/or required in the State, delivered to Owner weekly.
4. Cost of Professional Services shall be at agreed rates for licensed architects and engineers established in Design-Build Entity's Proposal, provided that under no circumstances may the applicable rate for any individual exceed his or her regular rate for work and services on other California public entity projects.

C. Measurement of Cost of Equipment (Component 1B):

1. Measurement of Component 1B (Cost of Equipment). Cost of Equipment shall be calculated as: Cost of Equipment used in actual and direct performance of the subject work, whether by Design-Build Entity, Subcontractor or other forces. Cost of Equipment shall be calculated as herein described.
2. For rented equipment, cost will be based on actual rental invoices, appropriate for the use and duration of the work. Equipment used on extra Work shall be of proper size and type. If, however, equipment of unwarranted size or type and cost is used, cost of use of equipment shall be calculated at rental rate for equipment of proper size and type, as determined by Owner.
3. Equipment rental cost for Design-Build Entity or Subcontractor-owned equipment, shall be determined by reference to, and not in excess of, the generally accepted standards in the State for equipment rental rates in effect on date upon which extra Work is accomplished. If there is no applicable rate for an item of equipment, then payment shall be made for Design-Build Entity- or Subcontractor-owned equipment at rental rate listed in the most recent edition of the CalTrans Standard Schedules and Specifications, and absent a rental rate therein, then the Association of Equipment Distributors (AED) book.
4. In all cases, rental rates paid shall be deemed to cover cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals.
5. Unless otherwise specified, manufacturer's ratings, and manufacturer-approved modifications, shall be used to classify equipment for determination of applicable rental rates. Individual pieces of equipment or tools not listed in said publication and having a replacement value of $100 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefore as payment is included in payment for labor. Rental time will not be allowed while equipment is inoperative due to breakdowns.
6. For equipment on Site, rental time to be paid for equipment shall be time equipment is in operation on extra Work being performed or on standby as approved by Owner. The following shall be used in computing rental time of equipment:
    a. When hourly rates are listed, less than 30 minutes of operation shall be considered to be ½ hour of operation.
    b. When daily rates are listed, less than four hours of operation shall be considered to be ½ Day of operation.
    c. Rates shall correspond to actual rates paid by Design-Build Entity, i.e., if Design-Build Entity pays lower weekly or monthly rates, then same shall be charged to Owner.
7. For equipment that must be brought to Site to be used exclusively on extra Work, cost of transporting equipment to Site and its return to its original location shall be determined as follows:
    a. Owner will pay for costs of loading and unloading equipment.
    b. Cost of transporting equipment in low bed trailers shall not exceed hourly rates charged by established haulers.
    c. Cost of transporting equipment shall not exceed applicable minimum established rates of California Public Utilities Commission or appropriate State Dept. of Transportation.
    d. Owner will not make any payment for transporting and loading and unloading equipment if equipment is used on Work in any other way than upon extra Work.
    e. Rental period may begin at time equipment is unloaded at Site of extra Work and terminate at end of the performance of the extra Work or Day on which Owner directs Design-Build Entity to discontinue use of equipment, whichever first occurs. Excluding Saturdays, Sundays, and Owner legal holidays, unless equipment is used to perform extra Work on such Days, rental time to be paid per Day shall be four hours for zero hours of operation, six hours for four hours of operation and eight hours for eight hours of operation, time being prorated between these parameters. Hours to be paid for equipment that is operated less than eight hours

due to breakdowns, shall not exceed eight less number of hours equipment is inoperative due to breakdowns.

8. Employee vehicles are not part of Component 1A, rather, are included within Component 2 (Markup).
9. Equipment costs shall include no other costs, fees or charges.

D. Measurement of Cost of Material (Component 1C):
1. Cost of Material shall be calculated as herein described. Cost of such materials will be cost to purchaser (Design-Build Entity, Subcontractor or other forces) from supplier thereof, except as the following are applicable:
2. If cash or trade discount by actual supplier is offered or available to purchaser, it shall be credited to Owner notwithstanding fact that such discount may not have been taken.
3. For materials salvaged upon completion of Work, salvage value of materials shall be deducted from cost, less discounts, of materials.
4. If cost of a material is, in opinion of Owner, excessive, then cost of material shall be deemed to be lowest current wholesale price at which material is available in quantities concerned delivered to Site, less any discounts as provided in this Paragraph.
5. Material costs shall include no other costs, fees or charges.

E. Measurement of Cost of Subcontractors (Component 1D):
1. Where reimbursed or calculated per the terms of the Contract Documents, change order or Change Directive, cost of Subcontractors shall be calculated as amounts earned by Subcontractors procured in compliance with the Contract Documents and approved by the Owner, provided such subcontractor earned amounts meet the following requirements:
   a. Such amounts are earned under the terms of the Subcontracts and the Work complies with the terms of the Contract Documents;
   b. Such amounts are properly requested, documented and permitted under the terms of the subcontract(s) and the Contract Documents.
   c. Total cost to Owner of Direct Cost of Design and Construction (labor and professional services, equipment, materials), Markup, and costs of bonds, insurance and taxes, conform to contract limitations (i.e., totals paid by Owner do not exceed the 20% Markup limitation.).

2.03 Measurement and Payment of Mark Up (Cost Component 2)

A. Markup Percentages for Changed Work (Component 2):
1. Markup on Direct Cost of labor and materials for extra Work shall be 15%. Markup on Direct Cost of equipment for extra Work shall be 15%.
2. When extra Work is performed by Subcontractors, regardless of the number of tiers, total Markup on "Component 1" Direct Costs shall not exceed 20%. Design-Build Entity and its Subcontractors shall divide the 20% as they may agree.
3. Under no circumstances shall the total Markup on any extra Work exceed twenty (20) percent, stated as a percent of the Direct Cost of labor, equipment and materials. This limitation shall apply regardless of the actual number of subcontract tiers.
4. On proposals covering both increases and decreases in Contract Sum, Markup shall be allowed on the net increase only as determined above. When the net difference is a deletion, no percentage for Markup shall be allowed, but rather an appropriate percentage deduction shall be issued in the amount of the net difference.

B. Measurement and Payment of Mark Up (Component 2):
1. Mark Up (Component 2) provides complete compensation to Design-Build Entity for:
   a. All Design-Build Entity profit;
   b. All Design-Build Entity home-office overhead;

c. All Design-Build Entity assumption of risk assigned to Design-Build Entity under the Contract Documents;

d. Subject to the qualifications below regarding self-performed work, all General Conditions and General Requirements.

2. Profit. Compensation for profit included within Component 2 (Mark Up), includes without limitation: Fees of all types, nature and description; and Profit and margins of all types, nature and description.

3. Home Office Expenses. Compensation for home office expenses included within Component 2 (Mark Up), includes without limitation: Salaries and other compensation of any type of Design-Build Entity's personnel (management, administrative and clerical), and all direct and indirect operating, travel, payroll, safety, storage, quality control, maintenance and overhead costs of any nature whatsoever, incurred by Design-Build Entity at any location other than the Project specific site office, including without limitation, Design-Build Entity's principal or branch offices; insurance premiums other than those for Project specific insurance directed by the Owner in a change order; all hardware, software, supplies and support personnel necessary or convenient for Design-Build Entity's capture, documentation and maintenance of its costs and cost accounting data and cost accounting and control systems and work progress reporting.

4. Assumption of Risk. Compensation for Design-Build Entity's assumption of risk under the Contract Documents, included within Component 2 (Mark Up), includes without limitation loss, cost, damage, expense or liability resulting directly or indirectly from any of the following causes ("unallowable costs"), for Design-Build Entity and subcontractors of any tier: noncompliance with the Contract Documents, fault or negligence, defective or non-conforming Work, by Design-Build Entity or any Subcontractor or Vendor of any tier or anyone directly or indirectly employed by any of them, or for whose acts or omissions any of them are responsible or liable at law or under the Contract Documents; cost overruns of any type; costs in excess of any lump sum, not to exceed amount or GMP; costs resulting from bid or "buy out" errors, unallocated scope, or incomplete transfer of scope or contract terms to subcontractors; any costs incurred by Design-Build Entity relating to a Change in the Work without a Change Order or Change Directive in accordance with the Contract Documents; costs for work or materials for which no price is fixed in the Contract Documents, unless it is expressly specified that such work or material is to be paid for as extra work.

5. General Conditions and Division 1 General Requirements. Compensation for Design-Build Entity's General Conditions and General Requirements Costs included within Component 2 (Mark Up), includes compensation to Design-Build Entity for: Design-Build Entity's direct costs, without overhead or profit, for salaries and related forms of compensation and employer's costs for labor and personnel costs, of Design-Build Entity's employees and subconsultant's employees (if any), while and only to the extent they are performing Work at the Project Site. Personnel and Work compensated by this Component include without limitation: All required Project management responsibilities; all on-site services; monthly reporting and scheduling; routine field inspection of Work; general superintendence; general administration and preparation of cost proposals, schedule analysis, change orders and other supporting documentation as necessary; salaries of project superintendent, project engineers, project managers, safety manager, other manager, timekeeper, and secretaries; all cost estimates and updates thereto; development, validation and updates to the project schedule; surveying; estimating. Compensation for Design-Build Entity's General Requirements Costs included within Component 2 (Mark Up), compensates Design-Build Entity for its "General Requirements" Costs, including without limitation: all scheduling hardware, software, licenses, equipment, materials and supplies; purchase, lease or rental, build out, procurement, supporting equipment and maintenance of temporary on-Site facilities, Project field and office trailers and other temporary facilities, office equipment and supporting utilities; platforms, fencing, cleanup and jobsite security; temporary roads, parking areas, temporary security or safety fencing and barricades, etc.; all Design-Build

Entity's motor vehicles used by any Design-Build Entity's personnel, and all costs thereof; all health and safety requirements, required by law or Owner procedures; all surveying; all protection of Work; handling and disposal fees; final cleanup; repair or maintenance; other incidental Work; all items, activities and function similar to any of those described above; all travel, entertainment, lodging, board and the like.

6. Personnel compensated by the Markup Component do not include workers of foreman level or below in the case of self-performed work; rather, such personnel shall be treated as a Direct Cost of Design and Construction. Costs compensated by the Markup component do not include temporary measures specifically required by the changed work, not otherwise required or ongoing in the prosecution of the Work, that commence specifically to support the changed work and conclude with the completion of the changed work. Such costs shall be treated as Direct Costs of Design and Construction. Examples of General Requirements costs that this component may not cover are the following: temporary barricades or fencing of specific areas required specifically for the changed work; cranes required specifically for the changed work; extra security required specifically for the changed work.

2.04 Measurement and Payment of Bonds Insurance Taxes (Component 3)

A. Measurement of Bonds, Insurance, Taxes (Component 3):
   1. Component 3 (Bonds, Insurance, Taxes) consists of the cost of bonds, insurance and taxes, also referred to as **"BIT".** All State sales and use taxes, applicable County and applicable City sales taxes, shall be included. Federal and Excise tax shall not be included.
   2. There is no mark up on BIT.

PART 3 – EFFECT OF PAYMENT

3.01 Change Order Compensation Is All Inclusive

A. Except as provided expressly below regarding changes that extend the Contract Time, payment of calculated cost of extra work constitutes full and complete compensation for costs or expense arising from the extra Work, and is intended to be all inclusive.

B. Payment for Direct Cost of Design and Construction (Component 1 or LEMS) is intended to be all-inclusive. Any costs or risks not delineated within cost of labor, professional services, equipment or materials herein, shall be deemed to be within the costs and risks encompassed by the applicable Markups and unallowable in any separate amount.

C. Payment of Markup (Component 2) is intended to be all-inclusive. Design-Build Entity waives claims for any further or different payment of cost and risk items delineated herein, other than the allowable percentage markup on costs set forth in the Contract Documents; such separate, further or different cost or risk items shall be unallowable, waived and liquidated within the allowable percentage markup.

D. Design-Build Entity shall recover no other costs or markups on extra work of any type, nature or description.

3.02 Exception for Changes Extending the Contract Time

A. Where a change in the Work extends the Contract Time, Design-Build Entity may request and recover additional, actual direct costs, provided Design-Build Entity can demonstrate such additional costs are (i.) actually incurred performing the Work, (ii.) not compensated by the Markup allowed, and (iii) directly result from the extended Contract Time. Design-Build Entity shall make such request and provide such documentation following all required procedures, documentation and time requirements in the Contract Documents, and subject to all contract

limitations of liability. Design-Build Entity may not seek or recover such costs using formulas (e.g., Eichleay).

3.03 Limits of Liability / Accord and Satisfaction

A. The foregoing limits of compensation apply in all cases of claims for changed Work, whether calculating Change Proposal Requests, Change Orders or CDs, or calculating claims and/or damages of all types, and applies even in the event of fault, negligence, strict liability, or tort claims of all kinds, including strict liability or negligence. Design-Build Entity may recover no other costs arising out of or connected with the performance of extra Work, of any nature.

B. Under no circumstances may Design-Build Entity claim or recover special, incidental or consequential damages against Owner, its representatives or agents, whether arising from breach of contract, negligence, strict liability or other tort or legal theory, unless specifically and expressly authorized in the Contract Documents.

C. No change in Work shall be considered a waiver of any other condition of Contract Documents. No claim shall be made for anticipated profit, for loss of profit, for damages, or for extra payment whatever, except as expressly provided for in Contract Documents.

1. Accord and Satisfaction: Every Change Order and accepted CD shall constitute a full accord and satisfaction, and release, of all Design-Build Entity (and if applicable, Subcontractor) claims for additional time, money or other relief arising from or relating to the subject matter of the change including, without limitation, impacts of all types, cumulative impacts, inefficiency, overtime, delay and any other type of claim. Design-Build Entity may elect to reserve its rights to disputed claims arising from or relating to the changed Work at the time it signs a Change Order or approves a CD, but must do so expressly in a writing delivered concurrently with the executed Change Order or approved CD, and must also submit a Claim for the reserved disputed items pursuant to Article 12 of Document 00 7253 (General Conditions) no later than thirty (30) days after Design-Build Entity's first written notice of its intent to reserve rights. Execution of any Change Order or CD shall constitute Design-Build Entity's representation of its agreement with this provision.

3.04 Disputes Relating to Change Orders

A. If any dispute should arise between the Owner and Design-Build Entity with respect to an increase or decrease in the Contract Sum or in the time of completion of a portion of the Work by a Specific Date or the Contract Time, as a result of a Change in the Work, Design-Build Entity shall not suspend performance of a Change in the Work or the Work itself unless otherwise so ordered by the Owner in writing.

3.05 Miscellaneous Requirements

A. Owner-Furnished Materials

1. Owner reserves right to furnish materials as it deems advisable, and Design-Build Entity shall have no claims for costs and Markup on such materials

3.06 Records and Certification

A. All charges shall be recorded daily and summarized in Change Proposal Request form attached hereto. Design-Build Entity or authorized representative shall complete and sign form each day. Design-Build Entity shall also provide with the form: the names and classifications of workers and hours worked by each; an itemization of all materials used; and a list by size type and identification number of equipment and hours operated.

B. Owner shall have the right to audit all records in possession of Design-Build Entity relating to activities covered by Design-Build Entity's claims for modification of Contract, including CD Work. This right shall be specifically enforceable, and any failure of Design-Build Entity to voluntarily comply shall be deemed an irrevocable waiver and release of all claims then pending that were or could have been subject to Article 12 of Document 00 7253 (General Conditions).

PART 4 – PRODUCTS – NOT USED

PART 5 – EXECUTION – NOT USED

END OF SECTION

COST PROPOSAL FORM FOLLOWS ON NEXT PAGE

July 8, 2015

COST PROPOSAL (CP)

Skylonda Fire Station Project

Contract Number

CP Number: _____

Date: _____

In Response To _____
RFP #, etc.

To: COUNTY OF SAN MATEO

Attention: Theresa Yee, Capital Projects Manager

Department of Public Works
555 County Government Center, Fifth Floor
Redwood City, CA 94063-1665
Phone: (650) 363-4100
Email: tyee@smcgov.org

From: [Insert Design-Build Entity's Name/Address]

_____

_____

This Cost Proposal is in response to the above-referenced _____ **[insert RFP, etc. as applicable]**.

Brief description of change(s): _____

_____

ITEM DESCRIPTION	PRIME CONTRACTOR	SUB 1	SUB 2	SUB 3	SUB 4	TOTAL
MATERIAL						
LABOR AND PROFESSIONAL SERVICES						
EQUIPMENT						
Other (Specify) Extended Overhead						
TOTAL COST						
Subcontractor's Overhead & Profit 15 percent						
Design-Build Entity's Overhead & Profit 15 percent						

Overhead & Profit to Design-Build Entity for Subcontractor's Work 5 percent						
(percent of Total Cost above not including any Overhead & Profit – may not exceed 20%)						
GRAND TOTAL						
REQUESTED CHANGE IN CONTRACT TIME (DAYS) (Time Impact Evaluation Enclosed)						

By Design-Build Entity: Signature: Date:

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01 9100

GENERAL COMMISSIONING REQUIREMENTS

PART 1 – GENERAL

1.01 Summary

A. This section describes the elements of Commissioning common to all Divisions of the project. The requirements listed here are in addition to, or are expected to coordinate with, the requirements in the related documents and specifications including detailed administrative and procedural requirements covering individual responsibilities, submittals, meetings, documentation, equipment inspections, startup and testing procedures, training, operating and maintenance manuals, and any related work during the Warranty Period.

B. Drawings and general provisions of the Contract Documents, including General and Supplementary Conditions and other sections in Division 1 are fully applicable to this Section, as if repeated herein.

C. THE Skylonda Fire Station Project is requiring a LEED Certified rating or better in accordance with USGBC LEED Enhanced Commissioning requirements is required and is referenced herein.

1.02 References

A. American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) 90.1 - 2013:
B. United States Green Building Council (USGBC):
   1. LEED: EA Prerequisite 1 and Credit 3 Enhanced Commissioning

1.03 Definitions

A. Acceptance Phase: Phase of construction after Startup and Pre-Functional checkout when Functional Performance Tests, operation and maintenance documentation review and training occurs.

B. Approval: Acceptance that a piece of equipment or system has been properly installed and is functioning in tested modes according to the Contract Documents and Commissioning Plan.

C. Basis of Design (BOD): A document that records concepts, calculations, decisions and product selections used to meet the OPR and to satisfy applicable regulatory requirements, standards, and guidelines. The document both narrative descriptions and lists individual items that support design process.

D. Building Automation System (BAS): The automated building system providing control and user interaction with select building systems.

E. Commissioning: The systematic process of ensuring that the building's systems are operating in accordance with the Contract Documents, that the systems perform interactively in accordance with the Contract Documents and that Facility Personnel are prepared to operate and maintain the building and its systems. This includes, but may not be limited to, pre-functional testing of equipment, functional testing of systems, system interoperability testing, training of Facility personnel, delivering Operations and Maintenance (O&M) documentation and turnover of completed systems.

F. Commissioning Authority (CxA): The designated third-party entity that provides oversight and review of the commissioning process in concert with the commissioning team. Owner will engage the CxA under a separate contract.

G. Commissioning Issue: A condition that affects, prevents or inhibits commissioning, and must be resolved to complete the commissioning process. Commissioning Issues are documented on the Commissioning Issues Log.

H. Commissioning Issues Log: A log maintained by the CxA listing all Deficiencies and Commissioning Issues documented during the commissioning process. All issues require action, correction and closure, and will be categorized as Open or Closed.

I. Commissioning Plan (Cx Plan): A document that outlines the organization, coordination, allocation of resources, and documentation requirements of the commissioning process.

J. Design-Build Entity: The Design-Build Entity is directly contracted to the Owner with overall responsibility for Skylonda Project, and all commissioning activities described. The Design-Build Entity is responsible for all work within its Contract scope, including that of the Installation Subcontractors.

K. Design-Build Entity's Commissioning Coordinator (CxC): Individual designated by the Design-Build Entity who plans, schedules, directs and coordinates all the Design-Build Entity's commissioning activities, and serves as the Commissioning Authority's (CxA) single point of contact for all administrative and coordination issues.

L. Data Logger: A stand-alone measuring device installed separate from the BAS to monitor and record equipment parameters such as flow, current, status, pressure, temperature and the likes.

M. Deferred Testing: Any Pre-Functional Checks & Tests or Functional Performance Testing which cannot be completed when scheduled due to building structure, required occupancy condition or other Deficiency causing delay. CxA and Owner must approve deferral of testing.

N. Deficiency: A condition in the installation or function of a component, piece of equipment or system that is not in compliance with the requirements of the Contract Documents. A Deficiency will be considered a Commissioning Issue and documented on the Deficiencies & Resolutions Log.

O. Design Professional: The Design Professional(s) responsible for design of each portion of Skylonda being commissioned.

P. Functional Performance Test (FPT): A test of the dynamic function, operation and control sequences of equipment and systems under various modes, such as during low cooling or heating loads, high loads, component failures, unoccupied, varying outside air temperatures, alarm, power failure, etc. The FPTs can include Monitoring or Trending of the system to verify integrated operation and system performance to the fullest extent.

Q. Indirect Indicators: Indicators of a response or condition, such as reading from a control system screen reporting a damper to be 100 percent open.

R. Installation or Installing Subcontractor: Subcontractor responsible for construction of a specific division of work.

S. Installation Verification: Field verification and documentation of proper installation of system equipment, assemblies and components prior to Startup. Process is complete when systems are ready for Startup. Installation Verifications are organized under the System Readiness Checklist (SRC) forms.

T. Manual Test: Using hand-held instruments, immediate control system readouts or direct observation to verify performance (contrasted with analyzing monitored data to make the observation).

U. Monitoring: The recording of parameters (flow, current, status, pressure and the like) of equipment operation using data-loggers or the Trending capabilities of BAS.

V. Non-Compliance: See Deficiency

W. Non-Conformance: See Deficiency

X. Owner's Project Requirements (OPR): Written narrative describing the operational, functional, aesthetic, and energy efficiency requirements for Skylonda Fire Station, and expectations of how the facility will be used and operated, as defined by the Owner. This document provides an explanation of the ideas, concepts, goals, criteria, and supporting information that are considered to be important to the Owner and is often the documented outcome of the budgeting, programming, and pre-conceptual Skylonda phases. Includes Bridging Documents as applicable.

Y. Percent Sampling: Inspecting or testing only a fraction of the total number of identical or near-identical pieces of equipment such as VAV boxes.

Z. Pre-Functional Checks & Tests: Based primarily on the manufacturer's detailed installation, startup and checkout sheets, these are the various checks and tests performed on a piece of equipment or system just before or after preparing the equipment and system for initial operation. They are typically performed to confirm that equipment and individual components are working properly, such as electrical spot measurements on motors, spot flow measurements, pressure testing, pipe flush-out and cleaning, control point-to-point checks, sensor calibration, actuator testing, etc., and include such things as mechanical system test and balance (TAB). Pre-Functional Checks & Tests are organized under the System Readiness Checklist (SRC) forms and must be completed prior to Functional Performance Testing.

AA. Seasonal Tests: Functional tests that are deferred until conditions closer to design loads or weather conditions are experienced.

BB. Startup: Initial starting or activating of equipment usually performed by the Installation Subcontractor.

CC. System Readiness Checklist (SRC): A summary checklist, ideally a one or two page cover sheet, covering the necessary commissioning tasks to conduct, and verify proper installation and startup of the equipment, prior to Functional Performance Testing. System Readiness Checklists include all necessary inspections and procedures to prepare equipment and systems for Functional Performance Testing. The Design-Build Entity or Installation Subcontractor completed Installation Verification, Startup and Pre-functional forms must be attached to the related SRC organized by equipment.

DD. TAB: Testing, Adjusting, and Balancing or Test and Balance.

EE. Installation Subcontractor: Typically a subcontractor to the Design-Build Entity who provides and installs specific building components and systems.

FF. Test Procedures: The step-by-step process which must be executed to fulfill the Test Requirements.

GG. Test Requirements: Requirements, indicating what modes and functions must be tested.

HH. Trending: Monitoring using the Building Automation Systems (BAS) to aid in functional testing and verify system operation and performance under actual operating conditions.

II. Warranty Issues: Operational and outstanding issues and deficiencies identified during the Warranty Period.

JJ. Warranty Period: Warranty Period for the entire Skylonda, including components. Refer to General Conditions, Warranty, Guaranty, and Inspection of Work, for Warranty, Extended Guarantees, and Correction Period provisions.

1.04 Systems to Be Commissioned

A. This specification section is applicable to the following systems and equipment to be commissioned in Skylonda:
1. All equipment of the heating, ventilating and air conditioning (HVAC) systems, such as condenser/hot/chilled water systems, radiant systems, natural ventilation systems, geothermal/cooling towers, boilers, air handling units, terminal units, exhaust fans, smoke evacuation fans, etc.
2. Central building automation system
3. Plumbing (domestic hot water generators and pumps).
4. Lighting controls (scheduled or occupancy sensors).
5. Daylight dimming controls.
7. Refrigeration systems.
9. Power monitoring controls, emergency generators including fuel oil and leak detection system, UPS, ATS, and power distribution panels.
10. Fire alarm, detection, and fire annunciation systems.
11 Fire suppression systems.
12 Other required fire systems.
11. Security systems including CCTV and access control.
12. Communication systems (public address, audio / visual, and IT backbone).
13. Vertical transportation systems (elevators, escalators, and other machinery devices).
14. Domestic, grey and other water systems.
15. Plumbing (sewage ejector system, sump pumps, domestic booster pumps, toilets, showers and lavatories, storm drainage system).
16. Water saving vacuum wastewater system, recycled water, and landscape irrigation systems.
17. Chemical treatment system for cooling towers and fluid coolers.

1.05 Summary Description of Commissioning

A. Commissioning process and documentation must conform to the requirements of the USGBC's LEED v4 for New Construction EA Prerequisite 1 – Fundamental Commissioning and Credit 3 - Enhanced Commissioning. Design-Build Entity, Installing Subcontractors, and suppliers are responsible to ensure all requirements for commissioning are met in their respective work as defined in this section.

B. Commissioning scope of work must encompass systems that are referenced in USGBC's LEED v4 for New Construction as well as other systems not included in LEED per Section 1.04 above.

C. Commissioning is a systematic process of ensuring that building systems are installed and perform functionally and interactively as intended according to the Owners Operational Requirements (OPR), Basis of Design (BOD), and the requirements of the Contract Documents (including Bridging Documents).

D. Commissioning during the design phase is intended to achieve the following specific objectives in development of the Contract Documents:

1. Review the OPR and BOD for clarity and completeness. The Owner and Designers must update the OPR and BOD, respectively, as required.
2. The CxA reviews the Design Documents, prior to mid-phase construction documents completion, for adherence to the OPR and BOD, and back-checks the review comments in the subsequent design submission.
3. Incorporate commissioning requirements into the Contract Documents.

E. Commissioning during the construction phase is intended to achieve the following specific objectives according to the Contract Documents:
   1. Finalize the Commissioning Plan.
   2. Review Design-Build Entity submittals applicable to the systems being commissioned. The CxA review must be concurrent with the DP reviews and submitted to the Designers and Owner.
   3. Verify that applicable equipment and systems are installed according to the manufacturer's recommendations and to industry-accepted minimum standards and that they receive adequate operational checkout and testing by the Installation Subcontractors.
   4. Verify and document proper performance of equipment and systems.
   5. Verify that operation and maintenance documentation is provided and is complete.
   6. Develop a systems manual that provides future operating staff the information necessary to optimally operate the commissioned systems.
   7. Verify that the Owner's facilities and operations personnel are trained per the Contract Document requirements.

F. Commissioning during the warranty phase is intended to achieve the following specific objectives according to the Contract Documents:
   1. Perform any seasonal or deferred testing.
   2. Review operational issues prior to end of warranty period so that warranty items are identified and corrected.

G. The commissioning process does not take away from or reduce the responsibility of the Design-Build Entity to provide a finished and fully functioning product. The Design-Build Entity has overall responsible to assure that all systems are properly tested and commissioned, and that all required commissioning documents are completed and provided to the Owner.

1.06 Commissioning Team

A. Owner's Representatives

B. Design Professionals (DP).

C. Commissioning Authority (CxA).

D. Design-Build Entity

E. Design-Build Entity's Commissioning Coordinator (CxC)

F. Installing Subcontractors responsible for specific types of systems being commissioned:
   1. Mechanical Subcontractor
   2. Electrical Subcontractor
   3. Plumbing Subcontractor
   4. HVAC Controls Subcontractor
   5. Testing and Balance (TAB) Subcontractor
   6. Emergency Generator Installing Subcontractor
   7. UPS Installing Subcontractor
   8. Security and CCTV Installing Subcontractor
   9. Telecomm and IT Installing Subcontractors

10. Signage Installing Subcontractors
11. Paging Systems Installing Subcontractors
12. Fire Alarm and Detection Systems Installing Subcontractors
13. Fire Suppression Systems Installing Subcontractors

G. Any Testing Subcontractor and 3rd party testing agencies for commissioned systems.

1.07 Commissioning Process Overview

A. The following narrative provides an overview of the typical commissioning tasks during construction and the general order in which they occur:
   1. The Commissioning Authority (CxA) prepares a Preliminary Cx Plan during the Skylonda final design phase. The Cx Plan provides guidance in the execution of the commissioning process during construction.
   2. Commissioning during construction begins with a kickoff meeting conducted by the CxA where the commissioning process and systems to be commissioned are reviewed with the commissioning team members, including the Design-Build Entity and Installation Subcontractors. The Preliminary Cx Plan is presented and reviewed, and specific requirements are discussed. The Design-Build Entity will designate the CxC at or before this meeting.
   3. The CxA must review Design-Build Entity submittals applicable to systems being commissioned for conformance to the construction documents, BOD and OPR. This review will run concurrent with Engineer of Record reviews and written comments submitted to the Design-Build Entity and the Owner.
   4. As part of the commissioning submittals, the Design-Build Entity must submit to the CxA equipment documents and proposed commissioning forms for completing Installation Verification, Startup, and Pre-Functional Checks & Tests. The CxA will review these commissioning forms and will provide final approval and acceptance of these forms prior to their use by the Design-Build Entity and/or Installation Subcontractors.
   5. These forms include standard Manufacturer or Installation Contactor installation checklists, detailed startup procedures, proposed startup and pre-functional checks and tests, and other Skylonda specific requirements and forms.
   6. The CxA reviews these Design-Build Entity-submitted commissioning forms for completeness including any Skylonda specific requirements.
   7. The CxA may request additional data, changes and/or additions to these forms to make sure they are complete. If the Design-Build Entity submitted forms are not available or not sufficient, then the CxA will develop specific forms or supplemental forms, based on the construction documents and specifications, manufacturer installation manuals and procedures, and/or industry standards or guidelines.
   8. The CxA develops System Readiness Checklist (SRC) forms which summarize and track the Installation Verifications, Startup, and Pre-Functional Checks & Tests required for each system and equipment to be commissioned prior to FPT. The Design-Build Entity must complete the SRC forms, and include (attach) completed Installation Verification, Startup, and Pre-functional Checks and Test forms to document that systems and equipment are ready for FPT. The CxC must submit the completed SRCs and associated documents to the CxA and Owner for approval before proceeding to Functional FPT.
   9. The CxA will update the Cx Plan with equipment specific documentation, check-lists, and test forms.
   10. Additional meetings will be conducted throughout construction with Commissioning Team members, as required, to plan, scope, coordinate, and schedule commissioning activities, review documentation, and resolve Commissioning Issues and Deficiencies.
   11. CxA will perform various inspections and back-checks of the completed Installation Verification forms submitted by the CxC as part of the SRC.
   12. Installing Subcontractors, as directed by the CxC, must perform Startup and Pre-Functional Checks & Tests. The CxC must document completion of the Installation Verification, Startup and Pre-Functional Checks & Tests on the SRC and attach completed forms to the SRC. The

CxA will witness select Start-up and Pre-Functional Checks & Tests, and perform a sample number of inspections and back-checks where determined to be necessary.

13. The CxA will develop final equipment and system Functional Performance Test (FPT) procedures and forms. These test procedures are submitted to the Design-Build Entity and Installation Subcontractors for review and comment.
14. Once systems to be commissioned are verified ready for FPTs by the completion of the SRC, the FPTs are executed by the Installation Subcontractors under direction of the CxC, and witnessed by the CxA. The FPTs may be achieved by, or any combination of: Manual Testing; Monitoring via the BAS system Trending capabilities; or by stand-alone Data Loggers and analyzing the results.
15. During Installation Verification, Startup, Pre-Functional Checks & Tests, and Functional Performance Testing, all Deficiencies and Commissioning Issues are recorded by the CxA on the Commissioning Issues Log. The Design-Build Entity and its Installation Subcontractors must correct Commissioning Issues and retest the system(s) without delay at no additional cost to the Owner.
16. The Design-Build Entity must compile and complete the Operations & Maintenance Manuals per the Contract documents requirements. The CxA will review for completeness and provide comments to the Owner and Design-Build Entity on the Operation and Maintenance documentation.
17. The CxA will review and provide comment to the Owner and Design-Build Entity on the specified training provided by the Installation Subcontractors and must verify that it has been completed.
18. The CxA will review the Systems Manual requirements with the CxC and will provide assistance to the CxC in preparing this document.
19. The CxA will complete the Final Construction Phase Commissioning Report for the Owner.

1.08 Submittal Requirements for Commissioning

A. Normal Submittals:
   1. For all systems and equipment commissioned, the CxA will review equipment submittals concurrently to the Design Professional as part of the normal submittal process and per LEED enhanced commissioning requirements. Electronic files are acceptable.
   2. The CxA will receive from the Design-Build Entity a copy of approved submittals for equipment and systems to be commissioned. Electronic files are acceptable.

B. Commissioning Submittals. Submittals to CxA for use in developing the Cx Plan and all commissioning forms will include, but not be limited to the following. Electronic files are acceptable.
   1. Detailed manufacturer installation and startup manuals with checklists, troubleshooting procedures, operating and maintenance procedures for the equipment and systems to be commissioned. These are contained within the manufacturer O&M Manuals, as required in Division 01 "Operations and Maintenance Data."
      a. This commissioning submittal will be after equipment submittals are approved and prior to equipment onsite installation. This commissioning submittal can be part of the preliminary O&M Manuals submittal, if submitted prior to equipment onsite installation.
      b. The manufacturer installation and startup checklists and procedures will be used by the CxA to review Design-Build Entity submitted commissioning forms (item 3) and developing supplemental forms, if needed, before equipment onsite installation.
   2. A copy of the installation and checkout materials actually shipped with equipment, including actual field checkout forms to be used by factory or field technicians.
   3. Design-Build Entity, Installation Subcontractor or Manufacturer commissioning forms for Installation Verification and Startup and Pre-Functional Checks & Tests.
      a. The CxA reviews these Design-Build Entity submitted commissioning forms for completeness including any Skylonda specific requirements.
      b. The CxA may request additional data, changes and/or additions to these forms to make sure they are complete.

4. Shop drawings including detailed sequences of operation.

1.09 Operating and Maintenance & Systems Manuals

A. The Design-Build Entity must compile Operation and Maintenance Manuals as specified in the Contract Documents. The O&M manual documents must be clearly marked to highlight the actual equipment and features installed. In addition, the following must be included for all systems and equipment commissioned:
   1. Specification sections copied from the design documents including any addenda.
   2. Approved submittal data, cut sheets and appropriate shop drawings.
   3. Manufacturer's Operation and Maintenance Instructions which must include:
      a. Installation, startup and break-in instructions.
      b. All starting, normal shutdown, emergency shutdown, manual operation, seasonal changeover and normal operating instructions.
      c. Operation, Maintenance and Installation instructions originally shipped with the unit.
      d. Detailed preventative maintenance and service procedures including a schedule matrix checklist (checked as weekly, monthly, quarterly, etc.).
      e. Troubleshooting procedures.
      f. Parts list, edited to omit reference to items which do not apply.
      g. Lists of special tools required to service or maintain the equipment.
      h. Performance data, ratings and curves, etc.
      i. Warranty documents clearly identifying conditions required to maintained warranty, and specific conditions which may void the warranty.
      j. Any service contracts issued.
   4. Design-Build Subcontractors must include as-built controls drawings and as-built detailed sequences of operation for each piece of commissioned equipment and its components.

B. For all systems and equipment commissioned, CxA will review for required content inclusion and completeness in O&M manuals.

C. For all systems and equipment commissioned. Provide a separate "Systems Manual" which focuses on operating rather than maintaining equipment, particularly the interaction between equipment to include the following;
   1. The final version of the BOD.
   2. System single line diagrams.
   3. As-built "Sequences of Operation", control drawings and original set points.
   4. Operating instructions for integrated building systems.
   5. Recommended schedule of maintenance requirements and frequency if not already included in the Skylonda O&M manuals.
   6. Recommended schedule for retesting of commissioned systems with blank test forms from the original Commissioning Plan.
   7. Recommended schedule for calibrating sensors and actuators.

1.10 Responsibilities

A. General:
   1. The Commissioning Team and all others involved in the commissioning process must follow the Commissioning Plan, attend commissioning kickoff meeting, and additional commissioning meetings as necessary.

B. Commissioning Authority (CxA)
   1. The primary role of the CxA is to organize and lead the commissioning team, to develop the Commissioning Plan, and assist the CxC in coordination and execution of the commissioning process.
   2. Prepare the Cx Plan and work with the Owner and Design-Build Entity to schedule commissioning activities.

3. Review submittals for compliance with the Cx Plan and the need for developing commissioning forms.
4. Convene commissioning team meetings, prepare meeting agendas and distribute meeting minutes.
5. Perform inspections and back-checks of Design-Build Entity completed Installation Verification.
6. Observe and inspect system and equipment installation, start-up, checkout, and testing for compliance with the OPR, BOD, and Contract Documents, review completion of commissioning documentation, and record any Deficiencies and Commissioning Issues on the Deficiencies & Resolutions Log.
7. The CxA will develop FPT forms for review and comment by the Design-Build Entity and Installation Subcontractors. The CxA will witness the execution of the FPTs by the Installation Subcontractors. The CxA will witness one (1) re-test of any commissioned equipment or system.
8. Review and comment on Operation and Maintenance documentation and training plans.
9. Assist the Design-Build Entity in developing the Systems Manual.
10. Assemble the commissioning documents and include in a Commissioning Report.
11. The CxA is not responsible for:
    a. Design concept or design criteria
    b. Review for code compliance
    c. Design and construction scheduling
    d. Cost estimating
    e. Construction management
    f. Providing tools and test equipment used for commissioning and data collection.
    g. Scheduling Startup or Functional Performance Testing
    h. Coordinating the work of Installation Subcontractors, vendors and any special testing agents
    i. Performing Pre-functional checks and tests, Startup and Functional Performance Tests.

C. Design-Build Entity:
1. Design-Build Entity is responsible for all commissioning tasks to be performed, including tasks assigned to Installation Subcontractors. The Design-Build Entity must ensure that all commissioning responsibilities are assigned to and completed by competent personnel.
2. Include the cost for the Design-Build Entity and Installation Subcontractor's support of the commissioning process in the Stipulated Sum.
3. Schedule and coordinate the commissioning kickoff meeting and other selected meetings with the CxA to facilitate the commissioning process.
4. Plan, schedule, coordinate and facilitate the commissioning work performed by Design-Build Entity and Installation Subcontractors. Provide sufficient lead-time of at least 10 days to notify the CxA in advance of commissioning activities. Update the master construction schedule periodically with commissioning progress and required activities.
5. Review, comment and accept the Cx Plan prepared by the CxA.
6. Furnish a copy of any Design-Build Entity or Installation Subcontractor construction related documents such as change orders, approved submittals, and shop drawings related to commissioned systems to the CxA. Electronic files are acceptable.
7. Include requirements for submittal data, installation manuals, operation and maintenance data, commissioning tasks, and training in each purchase order or subcontract written for commissioned systems. Electronic files are acceptable.
8. Ensure that all Installation subcontractors execute commissioning responsibilities according to the Contract Documents, Cx Plan, and schedule.
9. Using SRC and FPT forms, document and certify that all work is complete and systems are installed, operational and functionally tested, according to the Contract Documents, including calibration of instrumentation and controls.
10. Evaluate installation and performance deficiencies identified on the Commissioning Issues Log and any inspection and test reports. Commissioning Issues will be tracked according to the responsible entity. Collaborate with Installation Subcontractors responsible for system

and equipment installation and recommend corrective action for Installation Subcontractor Deficiencies. Assure all Installation Subcontractor Deficiencies and Commissioning Issues are resolved.

11. Prepare a training plan, submit to CxA and Owner for review. Execute training of Owner's personnel per approved training plan.
12. Prepare Operation and Maintenance Manuals in accordance with the Contract Documents.
13. For all systems commissioned, document Warranty Issues for the Owner.
14. Pay additional costs and back-charges for additional CxA services resulting from excessive retests.

D. Installation Subcontractors:
   1. See Bridging Documents for reference to other specifications sections for responsibilities relating to specific systems and Divisions. Installation Subcontractors responsibilities may be re-assigned as seen fit by the Design-Build Entity.
      a. Include and itemize all cost for Installation Subcontractors commissioning tasks.
      b. Provide additional submittal data, installation manuals, manufacturer's detailed installation checks and startup procedures Operation and Maintenance data, required warranty procedures, and any other requested documentation for equipment and systems to be commissioned.
      c. Attend commissioning meetings as directed by the CxC to facilitate the commissioning process.
      d. Assign personnel with expertise and authority to act on behalf of the Installation Subcontractor and schedule them to participate in and perform assigned commissioning tasks.
      e. Assist CxA in preparing the Functional Performance Test Procedures, clarifying the operation and control of commissioned equipment where the specifications, control drawings or equipment documentation is not sufficient for writing detailed testing procedures. Review the Functional Performance Test procedures to ensure feasibility, safety and equipment protection, and provide necessary written alarm limits to be used during the tests.
      f. Provide Owner training for systems commissioned. Submit a training plan for CxA and Owner review and approval.
      g. Perform and document Startup and checkout. Complete all Pre-Functional Checks & Testing documentation clearly and legibly. Provide a copy of all forms to the CxC and CxA as part of completing the System Readiness Checklists.
      h. Address Installation Subcontractor applicable Deficiencies & Resolution Log items promptly. All installation and Startup issues must be resolved before Function Performance Testing can proceed.
      i. Coordinate with CxA and perform Functional Performance Testing. Execution of tests must be witnessed by the CxC and CxA.
      j. Assist the CxA in collecting all requested Monitoring / Trending data associated with FPTs.
      k. Prepare Operation and Maintenance Manuals according to the Contract Documents, including all additional documentation required by these specifications.
      l. During construction, maintain as-built red-line drawings and make available for CxA review during the commissioning process.

E. Testing and Balancing (TAB) Subcontractor:
   1. The commissioning responsibilities of the TAB Subcontractor for commissioning in addition to those listed in "Installation Subcontractors" section are:
      a. Submit the outline of the TAB plan and approach for each system and component to the CxA and Design-Build Entity prior to starting TAB. This plan must be developed after the TAB Subcontractor is familiar with all control systems.
      b. Immediately report any Deficiencies discovered which may affect or delay the commissioning process.
      c. Provide draft TAB report to DP, CxA and CxC for review.

F. Equipment Suppliers:
1. Provide all requested submittal data, including detailed installation checks, startup and checkout procedures and forms, and O&M manuals.
2. Provide factory test data and documentation per the Design-Build Entity Documents.
3. Assist in equipment testing per any agreements with Installation Subcontractors.
4. Include all special tools and instruments specific for a piece of equipment which are only available from equipment supplier and required for testing the equipment according to Contract Documents.
5. Provide information and support requested by the CxA regarding equipment sequences of operation and testing procedures.
6. Coordinate balance activities with activities of the mechanical and controls contractors. Verify that coordination, installation, quality control and final subcontractor's testing have been completed to allow proper balancing work to be performed.
7. Test, Adjust, & Balance the system per specification requirements.
8. Perform field verification of 10% of total TAB measurements under the direction of CxA to confirm accuracy of TAB report as provided in Section 23 08 00 and Section 23 05 93. A total of 40 hours, not including hours needed to resolve identified issues and perform follow-up testing if required, shall be provided for this testing.

G. Third Party Testing Subcontractors and Agencies
1. Include the cost for support of the commissioning process.
2. Immediately report any Deficiencies discovered which may affect or delay the commissioning process.
3. Plan, schedule, coordinate and facilitate the commissioning work performed by Design-Build Entity and Installation Subcontractors. Provide sufficient lead-time and notify CxA well in advance of commissioning activities. Update the master construction schedule periodically with commissioning progress and required activities.
4. Review, comment and accept the Cx Plan prepared by the CxA.
5. Evaluate installation and performance deficiencies identified on the Commissioning Issues Log and any inspection and test reports. Collaborate with Installation Subcontractors responsible for system and equipment installation and recommend corrective action for Deficiencies. Assure all Deficiencies and Commissioning Issues are resolved.
6. Provide copies of all forms and field reports that include commissioned equipment to the CxA for review.

PART 2 - PRODUCTS

2.01 Test Equipment

A. All standard testing equipment required to perform Startup, Pre-Functional Checks & Tests and Functional Performance Testing must be furnished by the Installation Subcontractor responsible for the equipment and systems being commissioned.

B. Special equipment, tools and instruments (only available from the vendor, specific to a piece of equipment) required for testing equipment must be included in the base bid price, and turned over to the Owner at Skylonda Project completion.

C. All testing equipment must be of sufficient quality and accuracy to test and/or measure system performance with the tolerance specified in the Contract Documents. If not otherwise specified, the following minimum requirements apply:
1. Temperature sensors and digital thermometers must have a certified calibration within the past year to an accuracy of 0.5 degree F and a resolution to + or – 0.1 degree F.
2. Pressure sensors must have an accuracy of + or – 2.0 percent of the value range being measured (not full range of meter) and have been calibrated within the last year.

3. All equipment must be calibrated according to the manufacturer's recommended intervals and recalibrated when dropped or damaged.
4. Calibration tags must be affixed or certificates readily available for all test equipment.

2.02 Commissioning Forms

A. Installation Verification Form:
   1. Forms used to provide field verification and documentation of proper installation of equipment and system components prior to Startup.
   2. Forms will be developed by the Design-Build Entity or Installation Subcontractor, CxA referencing the Contract documents and manufacturer provided documentation provided during submittal. The CxA will review the forms and may request changes and/or additions to these forms or supplemental forms to make sure they are complete.

B. Startup and Pre-Functional Checks & Tests forms
   1. Forms primarily consist of Manufacturer and Installation Subcontractor Startup and Pre-Functional checkout sheets, and must be used where required and appropriate. The CxA will review all forms to ensure manufacturer-recommended procedures and tests are fully included.
   2. The CxC and Installation Subcontractor must review all Functional Performance Tests (FPT) documents provided by the CxA prior to including them in the final Commissioning Plan.
   3. Installation Subcontractor must use Functional Performance Test forms provided by CxA.

PART 3 -EXECUTION

3.01 Scheduling and Coordination

A. The CxA will provide an initial schedule of commissioning events to the CxC at the commissioning kickoff meeting.

B. Design-Build Entity must develop a detailed Start-up Schedule for all systems to be commissioned and coordinate with CxA to include commissioning milestones. The Design-Build Entity will integrate all commissioning activities into the master construction schedule.

C. The CxC must provide sufficient notice to the CxA and Owner for scheduling and coordinating commissioning activities. A minimum 10 day's notice must be provided to the CxA for witnessing equipment Start-ups, Pre-Functional Checks & Tests, and Functional Performance Testing.

D. The Commissioning Team must address scheduling problems and make necessary notification in a timely manner in order to expedite the commissioning process.

3.02 Meetings

A. When commissioning team member attendance is required, as determined by the CxA and CxC, be punctual and attentive during the meeting.
   1. The CxA will conduct a commissioning kick-off meeting, usually within 60 days of the commencement of construction. All team members involved in the commissioning process must attend the kick-off meeting.
   2. The CxA will plan other commissioning meetings as deemed necessary as construction progresses. These meetings will cover planning and coordination, and Commissioning Issues resolution.
   3. The frequency of meetings will vary through construction, but generally increase during start-up and commissioning activities.

B. The CxA will write and distribute meeting minutes documenting the meeting discussion, conclusions, and actions for each team member.

3.03 Systems Readiness: Installation Verification, Startup, Pre-functional Checks & Tests

A. Design-Build Entity must utilize and complete System Readiness Checklists (SRC) to ensure equipment and systems are complete, operational, and ready for Functional Performance Testing. The SRCs are checklists which summarize and track the completion of Installation Verification, Startup, and Pre-Functional Checks & Tests.
   1. SRCs are developed by the CxA with input from the CxC and Installation Subcontractors.
   2. Design-Build Entity must document the progress and completion of Installation Verification, Startup, and Pre-Functional Checks & Test on the SRC. Upon completion, Design-Build Entity must attach all associated Installation Verification, Startup and Pre-Functional Checkout & Testing forms to the SRCs and submit to the CxA for approval.
   3. Approval of completed SRC by the CxA is required prior to Functional Performance Testing of equipment and system.
   4. Each SRC may have more than one Installation Subcontractor responsible for its execution.

B. Design-Build Entity must provide complete Installation Verification, Startup and Pre-Functional Checkout & Testing forms for each commissioned system.
   1. Each piece of equipment and system will receive a full Installation Verification, Startup, and Pre-Functional Checks & Tests.
   2. The CxA must perform the Installation Verification. The Design-Build Entity will be responsible for the completion of all Startup and Pre-Functional Check & Tests and associated forms.
   3. All completed forms must be attached to the SRC and submitted for CxA and approval before proceeding with Functional Performance Testing.
   4. At the discretion of the CxA and per the approved Cx Plan, Percent Sampling may be used for multiple identical pieces of non-life-safety or non-critical equipment.

C. All tests and start-up procedures must be conducted without compromise to human or equipment safety. The Design-Build Entity will be responsible for the liability and safety of conducting all tests.

D. Design-Build Entity must clearly identify and list any Deficiencies resulting from the Installation Verification, Start-up and Pre-Functional Checks & Tests on the SRC forms and immediately notify the CxA. Once Deficiencies are corrected and verified or tested, update and resubmit SRC and associated forms.

3.04 Functional Performance Testing (FPT)

A. The CxA will develop test procedures and Function Performance Test (FPT) forms for each piece of equipment and system to be commissioned. At the discretion of the CxA and per the approved Cx Plan, percent sampling may be used for selected, multiple identical pieces of non-life-safety or non-critical equipment (example: VAV boxes).
   1. Design-Build Entity will assist the CxA in development of FPT forms by providing the required submittal data and updates, and providing additional equipment and system operation information when requested by CxA.
   2. Prior to execution, the CxA will provide a copy of the test procedures to the Design-Build Entity and Installation Subcontractor. The Design-Build Entity and Installation Subcontractor must review and approve the tests procedures for feasibility, safety, equipment and warranty protection.

B. Installation Design-Build Entity will execute all Functional Performance Tests per the approved test procedures on the FPT forms. All testing results must be documented on the FPT forms; the

forms must be signed and dated by the representative performing the tests. Off hours or weekend work may be required to complete the FPTs.

C. The CxA must witness all FPT procedures per the Cx Plan. Design-Build Entity must coordinate all Functional Performance Tests with the CxA, and provide a minimum of 10 day's notice prior to conducting each system test.

D. Functional Performance Testing for each system must be successfully completed and signed by the CxA prior to formal Approval of system commissioning.

E. Functional Performance Tests may be conducted using these approved test methods:
   1. Manually manipulating the equipment settings and observe performance and/or monitoring performance by analyzing results using the control system's trending capabilities.
   2. Overwriting control system sensor values to simulate a condition, such as overwriting the outside air temperature to be something other than it actually is.
   3. Altering set points to force equipment into a mode of operation to verify a sequence. For example, to see the AC compressor lockout work at an outside air temperature below 55 degrees F, when the outside air temperature is above 55 degrees F, temporarily change the lockout set point to be 2 degrees F below the current outside air temperature.
   4. Using Indirect Indicators for testing responses will be allowed only after the actual conditions represented by the Indirect Indicators have been visually and directly verified, calibrated and documented on the SRC.

F. Setup:
   1. Each function and test must be performed under conditions that simulate actual conditions as close as is practically possible.
   2. The Installation Subcontractor executing the test must provide all necessary materials, system modifications, etc. to produce the necessary flows, pressures, temperatures, etc. necessary to execute the test according to the specified conditions.
   3. At completion of the test, the Installation Design-Build Entity must return all affected building equipment and systems to their pre-test normal condition.

G. Functional testing must be performed and documented for 100% of all equipment in the scope of commissioning. At the discretion of the CxA, the CxA may witness a sampling of the functional tests.

H. Where the CxA requires BAS trending, the CxA will provide within a FPT form a points list that may include both hardware (inputs, outputs) and virtual / software points, and appropriate trending intervals.
   1. The Design-Build Entity must provide trend data to the CxA in electronic format. As an Owner approved alternative, the Design-Build Entity can provide the CxA remote access to the control system and provide training that will allow the CxA to directly download trend data.
   2. The CxA will analyze and review the trend data and associated system performance.

3.05 Deficiencies and Commissioning Issues

A. During the Installation Verification, Startup, and Pre-Functional Checks & Tests, all Deficiencies and Commissioning Issues will be documented on the inspection and test forms in use, and will additionally be documented by the CxA on a Commissioning Issues Log.

B. Immediate correction of minor Deficiencies identified during testing may be allowed at the discretion of the CxA. In such cases the Deficiency and identified resolution must still be documented on the commissioning form in use.

C. When Commissioning Issues are identified during Functional Performance Testing, the CxA will discuss with the executing Installation Design-Build Entity and/or CxC and determine whether

testing can proceed or be suspended. The Commissioning Issue and any identified resolution will be documented on the commissioning test form in use in addition to the Commissioning Issues Log.

D. The CxA will maintain and update the Commissioning Issues Log, and document the issues resolution process. Copies will be distributed to the Design-Build Entity, Owner, and Installation Subcontractors as appropriate.

E. All Deficiencies and Commissioning Issues must be corrected promptly. The responsible party must correct the issue and inform the Design-Build Entity and CxA in writing of the resolution and completion date. The CxA will record completion on the Commissioning Issues Log and the CxC must reschedule testing with the CxA and Installation Subcontractor. Testing must be repeated until passing performance is achieved or the Owner accepts the noted issue.

F. When there is a dispute regarding a Commissioning Issue, whether it is valid or who is responsible, additional parties may be brought into the discussion as appropriate. The CxA must have the final interpretive authority and the Owner will have the final approval authority.

G. The CxA may recommend solutions to Deficiencies and Commissioning Issues. However, the burden of responsibility to solve, correct and perform required retests is with the Design-Build Entity, Installation Subcontractors, and the Design Professional(s).

H. Retesting:
   1. For all Commissioning Issues identified during Functional Performance Testing, retesting is required to verify the resolution of the issue and to complete the FPT.
   2. The CxA will witness one re-test for each equipment or system. A minimum 48 hours' notice is requested for scheduling any re-testing, though the CxA will work to accommodate a shorter timeframe if feasible.
   3. Any required retesting must not be considered a justified reason for a claim of delay or for a time extension.

3.06 Training of Owner Personnel

A. The CxC must coordinate and schedule the training for Owner Personnel. The CxC must ensure that training is completed per the requirements of the construction documents and specifications.

B. Installation Subcontractors responsible for specific equipment and system training must submit a written training plan to the Design-Build Entity for all equipment and systems to be commissioned no less than (30) days prior to start of training. Design-Build Entity must submit training plan(s) to CxA and Owner for review and approval. The training plan(s) will cover the following elements:
   1. Equipment and/or systems included in training
   2. Intended audience
   3. Location of training
   4. Subjects covered (description, duration of discussion, presentation methods, etc.)
   5. Instructor's name and qualifications

C. The CxA must review the training plans to verify compliance with the Specifications.

D. Design-Build Entity must submit to CxA an 'attendee signed' attendance sheets for each training session conducted.

3.07 Deferred and Seasonal Testing

A. Before or during the end of the first year Warranty Period, any Seasonal Testing or Deferred Testing as defined in the Cx Plan, must be completed as part of this Contract. Tests must be conducted by the Installation Subcontractor responsible for the equipment and systems,

completed in the same manner as all other commissioning tests, and must be witnessed and by the CxA.

B. Design-Build Entity must coordinate with CxA and Owner and schedule all Deferred and Seasonal Testing.

C. Design-Build Entity must make final adjustments to the Operations and Maintenance Manual and as-builts needed for any modifications made during Deferred or Seasonal Testing.

3.08 Skylonda Project Closeout

A. Upon completion of all commissioning activities, the CxA will prepare and submit to the Owner a Final Commissioning Report detailing the Cx Plan and all commissioning activities. The CxC will support this effort by providing all Design-Build Entity coordinated commissioning documentation.

3.09 Near-Warranty-End- Review

A. No later than 90 days prior to the expiration of the first year of Warranty Period, the Design-Build Entity must schedule and participate in a review of the commissioned systems with the Owner, O&M staff, Designers, appropriate Installation Subcontractors, and the CxA to identify any Warranty Issues.

B. A list of Warranty Issues will be developed by the Owner and CxA. The Design-Build Entity will be responsible for and will ensure the cooperation of appropriate Installation Subcontractors to resolve Warranty Issues prior to the end of the Warranty Period.

C. After correcting noted Warranty Issues, the Design-Build Entity must notify the CxA in writing, the CxA will back-checking and verify Warranty Issue as resolved.

D. Issues identified during the Warranty Period will remain Warranty Issues until satisfactory completion by Design-Build Entity and back-check verification by CxA, even if the Warranty Period expires during the correction and back-check period.

END OF SECTION