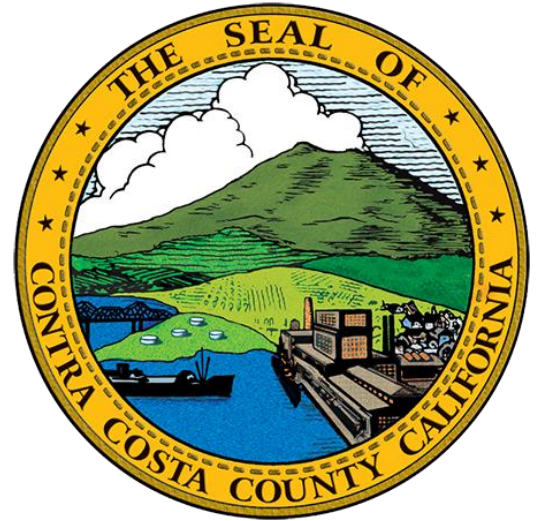


**CRITERIA MANUAL FOR DESIGN-BUILD SERVICES
DIVISION 00 TO 01**



Los Medanos Recovery Center
Pittsburg, California
June 2, 2026

PROPOSAL DUE DATE: October 29, 2026
AUTHORIZATION NO. WH153
CCC PWD FILE: 345-2601

Vanir Construction Management, Inc.
1255 Treat Blvd, Ste 390
Walnut Creek, CA 94597
P (415) 284-9050

DOCUMENT 000110

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CRITERIA MANUAL

ISSUED/REVISED

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CRITERIA MANUAL EXHIBITS

Contract Document Exhibits: The following Exhibits are part of the Contract Documents, and the contents thereof represent contract requirements.

- Exhibit 1 Criteria Documents – Narratives and Appendices prepared by BCRA dated 260701 for Contra Costa County Los Medanos Recovery Center Project
- Exhibit 2 Contra Costa County Building Design & Construction Guidelines rev.2021
- Exhibit 3 DOIT Cabling Standards 1.4
- Exhibit 4 Prevailing Wage Rates. Adopted by Reference. Current rates available at:
<https://www.dir.ca.gov/Public-Works/Prevailing-Wage.html>

Non-Contract Document Exhibits: The following Exhibits are provided for Bidder's convenience. These documents are not part of the Contract Documents and are provided for reference purposes.

- Exhibit A Los Medanos Record Drawing, (pg count 32), dated November 1976
- Exhibit B Alta Survey (pg count 3), dated December 2025
- Exhibit C Phase I Environmental Site Assessment, (pg count 1539), dated October, 2025
- Exhibit D Vehicle Miles Traveled, (pg count 4), dated April, 2026
- Exhibit E Topographic Survey, (pg count 2), dated December, 2025
- Exhibit F Geotechnical Report, (pg count 71), dated November, 2025
- Exhibit G Criteria Architect Media Release Form, (pg count 1) dated May, 2026
- Exhibit H Condition of Title (pg count 14), dated June, 2014
- Exhibit I Climate Action and Adaptation Plan (pg count 344), dated November, 2024
- Exhibit J Contra Costa County BDA Management Form (pg count 1)
- Exhibit K Contra Costa County BDA Guidelines (pg count 1)
- Exhibit L Noise and Vibration Technical Memorandum, (pg count 32), dated May 1. 2026.
- Exhibit M Air Quality Memo, (pg count 119), dated July 9, 2026.

END OF DOCUMENT

SECTION 013119

PROJECT MEETINGS

PART 1 - GENERAL

1.1 SUMMARY

- 1.1.1 This section describes the required project meetings for this work. These meetings include:

- 1.1.1.1 Design and Preconstruction Conferences
- 1.1.1.2 Coordination Meetings
- 1.1.1.3 Progress Meetings
- 1.1.1.4 Scheduling Meetings
- 1.1.1.5 Quality Control Meetings
- 1.1.1.6 Regulatory Agency Preconstruction Meetings
- 1.1.1.7 User Group Meetings and Workshops
- 1.1.1.8 Special Meetings
- 1.1.1.9 Permitting Package Pre-submittal Compliance Review Meetings
- 1.1.1.10 Commissioning Coordination Meetings
- 1.1.1.11 Pre-installation Meetings
- 1.1.1.12 Safety Meetings
- 1.1.1.13 Pre-instruction conference

- 1.1.2 Related Sections.

- 1.1.2.1 Section 011110 (Summary of Work)
- 1.1.2.2 Section 011114 (Summary of Work - Design Services and Deliverables)
- 1.1.2.3 Section 012900 (Payment Procedures)
- 1.1.2.4 Section 013216 (Schedules and Reports)
- 1.1.2.5 Section 013000 (Submittal Procedures)
- 1.1.2.6 Section 019113 (Commissioning)

1.2 DESIGN & PRECONSTRUCTION CONFERENCE

- 1.2.1 County will call for and administer Design and Preconstruction Conferences at times and places to be announced. A Design Conference will occur as soon after issuance of the Notice to Proceed as can be reasonably scheduled. Preconstruction Conferences will be scheduled no later than 30 days prior to the start of construction of each major phase of work including but not limited to the following:

- 1.2.1.1 Phase 1: Scope of work shall include Demolition of the Existing Building, Abatement & Soil Remediation.
- 1.2.1.2 Phase 2: Scope of work shall include Underground Utilities & Foundation Package "Make-Ready".
- 1.2.1.3 Phase 3: Scope of work shall include construction of the structural framing, building envelope, major building core and systems, exterior and interior finishes and associated site work.

- 1.2.2 Design Builder, all design consultants and key subconsultants and major suppliers shall attend the Design Conference(s). Agenda will include, without limitation, the following items:

- 1.2.2.1 Design Builder and County Coordination and Meeting Procedures
- 1.2.2.2 Design Builder's Design Coordination Plan with Subconsultants
- 1.2.2.3 Design Builder's Initial Project Master Schedule, including Design and Construction Schedules
- 1.2.2.4 Design Builder's Schedule of Values (including design activities)
- 1.2.2.5 Design Builder's Schedule of Deliverables and Agency Submittals including proposed incremental permit packages for each building.

- 1.2.3 Design Builder, design consultants and design subconsultants from the relevant disciplines, all Subcontractors, and all major suppliers associated with the upcoming portion of the Work being discussed shall attend the Preconstruction Conference(s). Agenda will include, without limitation, the following items:

- 1.2.3.1 Safety, Contractor's Injury and Illness Prevention Program
- 1.2.3.2 Communication protocols
- 1.2.3.3 Schedules
- 1.2.3.4 Personnel and vehicle permit procedures
- 1.2.3.5 Use of premises
- 1.2.3.6 Location of the Design Builder's on-site facilities
- 1.2.3.7 Security
- 1.2.3.8 Housekeeping/Clean up
- 1.2.3.9 Design Builder's Quality Control Program
- 1.2.3.10 Submittals
- 1.2.3.11 Inspection and testing procedures, on-site and off-site
- 1.2.3.12 Utility shutdown procedures
- 1.2.3.13 Control and reference point survey procedures
- 1.2.3.14 Design Builder's Updated Project Master Schedule, including Design and Construction Schedules
- 1.2.3.15 Design Builder's Schedule of Values
- 1.2.3.16 Design Builder's Schedule of Submittals

- 1.2.4 Design Builder will record and distribute minutes of the conference. Attendees shall have five (5) Business Days to submit comments or additions to minutes. Minutes will constitute final memorialization of results of any conference.

1.3 COORDINATION MEETINGS

1.3.1 Design Phase Coordination

- 1.3.1.1 County will be available to participate in Design Phase Coordination meetings or workshops as deemed necessary by the Design Builder.
- 1.3.1.2 Throughout the design phase, Design Builder shall conduct at least monthly design coordination meetings with all Consultants and Subconsultants employed by the Design Builder. Design Builder shall invite the County or its representative to participate in these meetings.
- 1.3.1.3 Design Builder shall record and distribute minutes of the meetings including copies to the County.

1.3.2 Construction Phase Coordination

- 1.3.2.1 County will be available as necessary to participate in Construction Phase Coordination Meetings.
- 1.3.2.2 Design Builder Construction Phase Coordination shall be integrated with the Design Builder's Quality Control Program, see Section 014500 (Quality Control and Assurance).
- 1.3.2.3 Throughout the construction phase, Design Builder shall conduct at least twice-monthly Construction Phase Coordination Meetings with all Consultants and Subcontractors employed by Design Builder. Design Builder shall invite County or its representative to participate in these meetings. At a minimum, County will attend Design Builder's Quality Control Meetings. County may elect to attend Subcontractor coordination meetings.
- 1.3.2.4 Design Builder shall record and distribute minutes of the meetings including copies to the County.

1.4 PROGRESS MEETINGS

- 1.4.1 Design Builder will schedule and administer Progress Meetings throughout the duration of Design and Construction Work. Progress meetings will be held weekly unless otherwise directed by County.
 - 1.4.1.1 Design Phase Progress Meetings shall be held at the offices of the Design Builder at the Project Site, at the Offices of the County, or via virtual conferencing as mutually agreed on in advance by Design Builder and County to be most advantageous for monitoring progress of the work.
 - 1.4.1.2 Construction Phase Meetings shall be held at the Design Builder's Site office and or virtual conferencing unless otherwise agreed on in advance by Design Builder and County.
 - 1.4.1.3 Design Builder will prepare and distribute electronically a draft agenda for each Progress Meeting no later than (48) hours prior to scheduled Progress Meeting. County shall review draft agenda and provide comments or proposed agenda revisions no later than (24) hours prior to scheduled Progress meeting.
 - 1.4.1.4 County will preside at and conduct the meeting.
 - 1.4.1.5 Design Builder will record and distribute minutes to the County, Inspectors, all other participants, and those affected by decisions made at meeting, within three (3) Business Days after each meeting. Attendees shall have two (2) Business Days to submit comments or additions to the minutes. Minutes will constitute final memorialization of results of meeting.

1.5 SCHEDULING MEETINGS

1.5.1 Initial Schedule Review

- 1.5.1.1 Design Builder shall meet with the County and conduct initial review of the Design Builder's draft Project Master Schedule, including Design Schedule and Construction, Schedule of Shop Drawing and Sample Submittals, and Schedule of Values.
- 1.5.1.2 An authorized representative in the Design Builder's organization, designated in writing, who will be responsible for working and coordinating with County relative to preparation and maintenance of Progress Master Schedule, shall attend the initial review meeting.

1.5.2 Schedule Update Meetings

Design Builder will administer scheduling update meetings monthly. Details for Schedule Update Meetings shall conform to description provided in Section 013216 (Schedules and Reports).

1.6 QUALITY CONTROL MEETINGS

- 1.6.1 Design Builder shall conduct a minimum of twice-monthly Quality Control Meetings as part of the Design Builder's Quality Control Program, see Section 014500 (Quality Control).

- 1.6.2 Design Builder's attendees at Quality Control Meetings shall at a minimum include:

- 1.6.2.1 Design Builder's Quality Control Manager
- 1.6.2.1 Design Builder's LEED Coordinator
- 1.6.2.2 Design Builder's Commissioning Coordinator; as required
- 1.6.2.3 Design Builder's Safety Officer
- 1.6.2.4 Subcontractors actively working on Site or soon to mobilize.
- 1.6.2.5 Representatives of manufacturers and fabricators; as required
- 1.6.2.6 Design Builder's Architect/Designer
- 1.6.2.7 Subconsultant Engineers as activities dictate.

- 1.6.3 County's attendees at Quality Control Meetings shall at a minimum include:

- 1.6.3.1 County's Representatives
- 1.6.3.2 Inspector of Record or Special Inspectors
- 1.6.3.3 Members of the User Groups, County facility maintenance and operations staff when deemed necessary.
- 1.6.3.4 Building Inspectors when deemed necessary.

- 1.6.4 Quality Control Meeting agenda shall include at a minimum:

- 1.6.4.1 Submittal Review, including approval status and schedule
 - 1.6.4.1.1 Product Data and MSDS
 - 1.6.4.1.2 Shop Drawings & Coordination Documents
 - 1.6.4.1.3 Substitutions and Modifications Request

- 1.6.4.1.4 Manufacture's Installation Requirements & Instructions
- 1.6.4.1.5 Manufacture's Operating Requirements & Instructions

- 1.6.4.2 Distribution of Testing and Inspection Reports
- 1.6.4.3 Review of In-progress Activities for compliance and timeliness.
- 1.6.4.4 Coordination of Upcoming Testing, Inspection and Observation Procedures & Requirements
- 1.6.4.5 Summary of activity successes, deficiencies, and corrective measures

1.7 LEED Meetings

- 1.7.1 Design Builder's LEED consultant will schedule and administer LEED Meetings throughout the duration of Design. LEED meetings will be held monthly unless otherwise directed by County.

- 1.7.1.1 LEED Meetings shall be held at the Design Builder's Site office or at the Office of the County as is mutually agreed on in advance by Design Builder and County to be most advantageous for progressing the work.
- 1.7.1.2 Design Builder's LEED consultant will prepare a draft agenda and distribute it to the County four (4) Business Days in advance of meeting.
- 1.7.1.3 Design Builder's LEED consultant will preside at and conduct the meeting.
- 1.7.1.4 Design Builder's LEED consultant will record and distribute minutes to the County and all other participants, and those affected by decisions made at meeting, within three (3) Business Days after each meeting. Attendees shall have two (2) Business Days to submit comments or additions to the minutes. Minutes will constitute final memorialization of results of meeting.

1.8 Regulatory Agency Preconstruction Meeting

- 1.8.1 A Preconstruction Meeting will be held with representatives from the Regulatory Agency at least thirty (30) days prior to the start of construction of any phase or increment of the Work.
- 1.8.2 Attendees at the Regulatory Agency Preconstruction Meeting shall at a minimum include:
 - 1.8.2.1 Regulatory Agency representatives
 - 1.8.2.2 County Representatives
 - 1.8.2.3 Architect/Engineer of Record (meeting presider)
 - 1.8.2.4 Design Builder's Design Manager, Project Manager, Quality Control Manager, field engineer(s), Superintendent(s)
 - 1.8.2.5 Major subcontractors as appropriate to the scope of work being permitted including: Rebar, metal stud, MEP, structural steel, elevator, masonry, etc.
 - 1.8.2.6 Others as determined by the County Representative or requested by the Regulatory Agency.
- 1.8.3 Regulatory Agency Preconstruction Meeting agenda, which shall be prepared by the Design Builder Architect of Record, shall include at a minimum:
 - 1.8.3.1 Introduction/designation of key personnel and their duties.
 - 1.8.3.2 Procedures to be followed during performance of the Work.

- 1.8.3.3 Procedures for Regulatory Agency field visits.
- 1.8.3.4 Procedures for processing Field Orders and Change Orders.
- 1.8.3.5 Procedures for RFIs and Instructional Bulletins.
- 1.8.3.6 Procedures for testing and inspecting.
- 1.8.3.7 Documentation requirements.

1.9 USER GROUP MEETINGS

- 1.9.1 The Design Builder will attend meetings with the Users, Key Stake Holders, and the County to develop and complete the design.
- 1.9.2 The Design Builder will attend meetings with the Facility and County to communicate methods of procedures that will be used during construction when Work occurs within an operating portion of the Facility.

1.10 SPECIAL MEETINGS

- 1.10.1 Preparatory Meetings as activities dictate for Testing, Inspection and Observation.
- 1.10.2 Community Meetings as directed by County.
- 1.10.3 Ad Hoc Meetings as directed by County.

1.11 Permitting Package Pre-submittal Compliance Review Meetings

- 1.11.1 Design Builder shall participate in pre-submittal review sessions with County Consultants performing code compliance reviews prior to submittal of each permit package to the Regulatory Agency.
- 1.11.2 Review sessions shall include initial document reviews, back-checks, and comment/issue resolution.
- 1.11.3 Design Builder attendees at the review sessions shall include, at a minimum, the design manager, the AOR, EOR, DOR, and other design subconsultants for disciplines associated with the package under review.

1.12 Commissioning Coordination Meetings

- 1.12.1 Commissioning Meetings as called for in Section 019113 (General Commissioning Requirements) and per approved Commissioning Plan and Schedule.
 - 1.12.1.1 Pre-Commissioning Planning
 - 1.12.1.2 Commissioning Plan Review
 - 1.12.1.3 Commissioning Scheduling and Procedures
 - 1.12.1.4 Regular Commissioning coordination and status update

1.13 Pre-installation Meetings

- 1.13.1 Design Builder shall conduct a system specific Pre-installation meeting for each of the major components of the Project at least one (1) week prior to the responsible subcontractor arriving on site to begin work.

1.13.2 Agenda, which shall be prepared by the Design Builder, shall include at a minimum:

- 1.13.2.1 Review of any outstanding certifications, documentation, MSDS, or submittals needed from the Subcontractor prior to commencing work.
- 1.13.2.2 Subcontractor acknowledgement of Project Site Safety Plan, site access and restrictions for deliveries, work limits, worker parking, etc.
- 1.13.2.3 Verification of work scope consistent with all current Construction Documents, addenda, RFI's, Change Orders, approved Submittals, and Permits.
- 1.13.2.4 Review of installation schedule in conformance with Master Schedule.
- 1.13.2.5 Coordination needed with any other trades and building inspectors.
- 1.13.2.6 Any special issues associated with the scope of work.

1.14 Safety Meetings

- 1.14.1 Design Builder shall conduct regular Safety Meetings per approved Safety Plan.
- 1.14.2 In the event County institutes an OCIP program, County's OCIP representative shall attend regularly scheduled Safety Meetings.

1.15 Pre-instruction Conference

- 1.15.1 Design Builder shall conduct the Pre-instruction Conference with County staff to review methods and procedures related to required demonstration and training as outlined in Section 017900 (Demonstration and Training).

PRODUCTS - Not used.

EXECUTION - Not used.

END OF SECTION

A. Executive Summary	
1	Statement highlighting Bidder's unique qualifications.
B. Certifications	
1	Fully executed Document 004540 (Design Builder Certifications).
C. Exceptions to Criteria Manual and Criteria Documents	
1	Statement of any and all exceptions to the Criteria Manual and Criteria Documents.
2	In accordance with Document 002100, provide certification regarding material changes and/or Bidder's Material Changes List per Document 004540 (Design Builder Certifications).
D. "Favorable/Unfavorable" Factors	
1	20.2.1 Green Building Criteria/LEED BD+C Silver: Plan and LEED scorecard outlining approach to achieve LEED BD+C Silver.
2	Apprenticeship Program Participation & Safety Record: Certification of Skilled Labor and Safety Record per Document 004540, confirming active apprenticeship program participation and EMR/OSHA rates within required standards.
3	Schedule Compliance: Provide CPM Schedule showing a realistic design and construction plan to achieve the Project completion date in accordance with Document 005200 (Agreement).
E. Subconsultant/Subcontractor Outreach/Procurement Plan (Evaluation Factor Category 1)	
1	Subconsultant/Subcontractor Procurement Plan: In accordance with Document 006230 (Subconsultant/Subcontractor Plan) describe bid packaging and selection method for all subconsultants and subcontractors. In accordance with Document 002219 (Outreach Program) describe good faith effort documentation process and effort to meet 30% Mandatory Subcontracting Minimum (MSR) requirement.
F. Criteria Documents Conformance (Evaluation Factor Category 2)	
1	Building Aesthetics: Provide (1) narrative, and (2) interior and exterior depictions of building design. Describe intent to meet or deviate from Criteria Documents.
2	Functional and Therapeutic Design: Provide (1) narrative, and (2) depictions of design features that support functional and therapeutic design. Describe intent to meet or deviate from Criteria Documents.
3	Sustainability: Describe method to meet or exceed energy usage requirements, stormwater management, and other sustainability measures.
4	Mechanical/Electrical/Plumbing/Technology (MEPT) Systems: Narrative and diagrams identifying MEP systems and ability to meet permitting and scheduling requirements.
5	Abatement and Demolition Strategy: Describe permitting approach to demolition of existing building as well as strategy for performing work with sensitivities to the surrounding neighborhood communities.
6	Logistics Plan:
	<i>a. Site Logistics:</i> Describe plan to minimize construction impacts to traffic and adjacent properties during construction including temporary fencing, gates, access, worker parking, layout, storage, staging, job trailers, fire department access, temporary utilities, and security.
	<i>b. Phasing:</i> Describe strategy for any incremental permitting, deferred approval packages, or demolition and construction phasing.
	<i>c. Equipment Lead Time:</i> Describe procurement strategy for long lead time materials or equipment.
	<i>d. Utilities:</i> Describe approach to obtaining required demolition and connection permits from Utility Companies. Include Utility Company application submittals and approval activities in the Schedule.

G. Team Qualifications (Evaluation Factor Category 3)	
1	Narrative and Organizational Chart: Provide an organizational chart demonstrating the proposed makeup of the Design-Build Team. The organizational chart provides an understanding how the team envisions working together. In addition, describe the teaming relationships within the Design-Build Team (Architects/Designers and General Contractor) for whom similar projects have been completed together. Describe how team members have directed or participated in projects with strong team organizations, clear lines of authority, and hierarchy. Provide information on how the schedules, budgets and quality have been maintained throughout the projects. Indicate how communication between the various team members and the Client was managed to ensure all project requirements were addressed and met.
2	Working Relationship Matrix: Select 6 projects from the 10 Project Profiles submitted in the RFQ and list them on a Working Relationship Matrix to provide an understanding of the proposed members' experience and ability to function as a team at the outset of the Project due to prior existing working relationships established on previous projects. For each position listed on the Working Relationship Matrix, indicate whether the key individual being proposed for the Project had a significant role in the listed project's success by placing a "mark" in the appropriate box.
3	Integrated Approach: Provide philosophy, approach, and relevant experience with similar projects. The response should highlight understanding of critical project elements, including design quality, accelerated schedules, site efficiency, sustainability, energy performance, and communication systems. The Bidder should describe its quality control processes, methods to prevent design errors, examples of resolving project issues, and demonstrate successful collaboration with public agencies. The section should also explain strategies for fostering teamwork and maintaining efficiency during construction.
4	Bidder Financial Strength: Confirm accuracy of all financial information provided during the RFQ process in accordance with Document 004540 (Bidder Certifications), Item 9. Provide letter from bonding company certifying that Bidder can obtain a bond in accordance with project requirements.
H. Price Proposal (Evaluation Factor Category 4)	
1	The Price evaluated will be that figure provided by the Design Builder as the Total Evaluated Price in the completed Proposal Form (Document 004200). The low bidder will score 50 points. Other bidders will receive a prorated portion of 50 points calculated based the difference between its Total Evaluated Price and the low bidder's Total Evaluated Price. "Price Proposal" will be scored using the proportional ratio formula: $(\text{Lowest Responsive Total Evaluated Price} \div \text{Total Evaluated Price}) \times \text{Maximum Price Points}$ Scores will be rounded to two decimal places. All pricing information must be submitted in "Envelope B" as described above.
I. Best Value Enhancements (Evaluation Factor Category 5)	
1	Best Value Enhancements per Document 002100-B, providing measures, design concepts, or approaches beyond minimum Criteria Document requirements. Bidders must complete one Best Value Enhancement Form (Document 002100-B) for each proposed enhancement, identifying the subcategory, brief description, benefits, potential drawbacks, and total cost. Failure to submit a form for each subcategory will result in zero points. County will evaluate and award up to 10 points based on value and benefit across Aesthetic Material & Scope Upgrades (30%), Space Layout & Functionality (30%), Sustainability (20%), and MEPT Upgrades (20%).
J. Interview / Presentation (Evaluation Factor Category 6)	
1	County will award up to 25 points based on its determination that the Proposal provides the best value for the design and construction of the Project.
K. Bidding Documents	

1	Proposal Form: Document 004200 (Proposal Form) filled out and signed by Bidder.
2	Proposal Security: Document 004310 (Bond Accompanying Proposal) filled out and signed by Bidder. Bond shall be a check, cashier's check or corporate surety bond.
3	Registration and Safety Experience: Document 004510 (Design Builder Registration and Safety Experience Form) filled out and signed by Bidder.
4	Non-Collusion Affidavit Form: Attached to Document 004200, Request for Proposals from Bidders, filled out and signed by Bidder.
5	Bidder Certifications: Document 004540 (Bidder Certifications) filled out and signed by Bidder.
6	Objections: List of Bidder's objections or protests (as needed).
7	Material Changes: List of Bidder's material changes (as needed).
8	Apprentice Program: Copy of Bidder's Registered Apprentice Program Agreement.
L. Plans	
1	Provide, at a minimum, the following items, drawings and narratives.
General	
1	Drawings explaining design and any proposed modifications or developments to the Criteria Documents.
2	Renderings explaining design and any proposed modifications or developments to the Criteria Documents.
3	Drawings describing Program Review of the Criteria Documents. Show ability to achieve the greatest conformance with the requirements outlined in the Criteria Documents.
Site	
4	Preliminary Site Plan (includes project boundaries, building orientation, connection to utility services such as water, fire water, irrigation, sewer, electrical, and low voltage systems, parking lot layouts, entrances, utility services, paving, curbing, walks).
5	Preliminary Landscaping Plan (including kind, size and type trees, shrubs and ground covering).
6	Construction Phase Site Logistics and Construction Management Plan including temporary fencing, gates, access, worker parking, layout, storage, staging, job trailers, fire-department access, temporary utilities, and security.
Architectural	
7	Preliminary Abatement and Demolition Plans.
8	Program Comparison that includes each program space described in the Criteria Documents with the associated net square footage from the Criteria Documents compared to Bidder's proposed net square footage.
9	Preliminary Floor Plans (includes all levels and all rooms, furniture, equipment, doors, windows, special doors, shelves, vanities, counters, built-in cabinets, and any special design features).
10	Preliminary Life Safety Plan and code analysis.
11	Enlarged Floor Plans as required to explain design solutions.
12	Roof Plans (includes roof slope, drainage, and future solar panel locations).
13	Preliminary Cross Sections (indicating building heights, structures, general construction).
14	Preliminary Exterior Elevations (includes material indications, windows, doors, signs, equipment, screens, lighting, etc.).
15	Preliminary Finish Schedule.
16	Preliminary Door Schedule.
17	Details of special construction.
18	Renderings of significant spaces or views.
Structural	
19	Codes, classifications, and criteria to be used for design, complete design loads, and material

20	Special structural requirements including specific loads.
21	Preliminary Foundation and Framing Plans (includes typical foundations, slab, floor and roof framing, and retaining walls).
22	Descriptions of any deviation to structural system from the Criteria Documents.
Plumbing	
23	Preliminary Plumbing Plans including plumbing fixtures, diagram of mains for water and gas supply and sanitary waste.
24	Descriptions of any deviation to plumbing system from the Criteria Documents.
Mechanical	
25	Preliminary HVAC Plans (includes single line diagrams indicating zoning, distribution, capacities of equipment, and roof top or equipment room layouts).
26	Systems Selection Analysis and Narrative (life cycle cost plus discussion of why system was picked).
27	Special mechanical equipment.
28	Descriptions of any deviation to mechanical system from the Criteria Documents.
Fire Protection	
29	Preliminary Fire Detection and Protection Plans (includes site, fire system, densities, and occupancy/hazardous classification for each area).
30	A description of the control system such as activation of the system, interlocks with HVAC system, and connection to detection and alarm system.
31	Define the type of Automatic Fire Detection that will be provided.
32	Identification of any alternative fire suppression systems such as FM-200.
33	Descriptions of any deviation to fire protection system from the Criteria Documents.
Electrical	
34	Preliminary Electrical Plans including typical lighting and power layout, handicap requirements, fire alarm, telephone and sound systems, site lighting, service type and size.
35	Define any hazardous area and indicate type of equipment proposed for use in the area.
36	Descriptions of any deviation to electrical system from the Criteria Documents.
Low Voltage	
37	Preliminary system plans including audio/visual, data/communications, security cameras/locking systems, and access control.
38	A narrative description of each of the systems.
39	Descriptions of any deviation to low voltage systems from the Criteria Documents or County Building Design and Construction Guidelines.
M. Specifications	
1	Outline Specifications for any section where the Design-Builder may clarify, modify, enhance, delete, deviate from, or add to the Criteria Documents.
2	Provide, 5-10 page outline specification summary including but not limited to architectural elements and materials, structural, MEPF, audio/visual, data/communications, security cameras, access control, and other low-voltage systems.
3	Preliminary System Plans (includes audio/visual, data/communications, security cameras, access control, and other low-voltage systems identified in the Criteria Documents)
N. Other	
1	Additional items required by the Request for Proposal that are not itemized above.

DOCUMENT 002100-B
BEST VALUE ENHANCEMENT FORM

Submit one form for each proposed enhancement.

1. CATEGORY

- a. Aesthetic Material and Scope Upgrades
- b. Space Layout and Functionality
- c. Sustainability
- d. MEPT Upgrades

2. DESCRIPTION (include benefits, potential drawbacks)

3. **COST** (the value of the item included in the Total Evaluated Price Proposal identified in Document 002100 (Request for Proposal)).

END OF DOCUMENT

DOCUMENT 002105

REQUEST FOR SUPPLEMENTAL INFORMATION FROM BIDDERS

The CONTRA COSTA COUNTY is requesting information to supplement the sealed Proposals submitted by pre-qualified Bidders (“Bidders”) on **October 29, 2026** for the **Los Medanos Recovery Center Project**.

1. **RECEIPT OF RESPONSES TO THIS REQUEST FOR SUPPLEMENTAL INFORMATION FROM BIDDERS.** Sealed Responses to this Request for Supplemental Information (“RSI”) must be submitted to the County at the Public Works Department (see paragraph 3.1, below) on or before **November 4, 2026**. Responses to the RSI shall be due **by 2:00 p.m.**, as determined by the Receptionist’s date stamp at the Department of Public Works. Any RSI issued by the County will be issued at least two (2) business days prior to the due date for responses to such RSI. County may reject all RSI Responses received after the specified time and may return such RSI Responses to Bidders unopened. Bidders must submit any Response to the RSI on or before the designated deadline date, in accordance with this Document 002105 (Request for Supplemental Information from Bidders).
 - 1.1 Only Bidders who submitted sealed Proposals on **October 29, 2026** are eligible to submit supplemental information.
 - 1.2 The purpose of the RSI is (a) to obtain additional information from the Bidders to allow the County to determine whether the initial Proposals are responsive, balanced and not defective, (b) to provide Bidders the opportunity to update their Proposal Forms in recognition of revisions or clarifications made to the RFP Specifications by the RSI, and (c) to make necessary delineations and deviations as permitted more specifically in paragraph 2.5 below.
2. **REQUEST FOR SUPPLEMENTAL INFORMATION.**
 - 2.1 **REVISED OR ADDED SPECIFICATIONS.** The Bidders’ Proposals contained exceptions, delineations and deviations from the County’s RFP specifications. After considering the Bidders’ exceptions, delineations and deviations, the County has revised, deleted, or added the following Documents and Sections:

Specification Number	Specification Title	Date

- 2.2 Revised Documents or Specifications replace the documents of the same document number issued with the RFP and are hereby made a part of the Contract Requirements. They shall be binding as though included in the original Bridging Manual or Bridging

Documents. Documents or Specifications not revised and issued with the RSI remain in the same form as issued with the RFP. Any proposed exception to the Bridging Manual in a Bidder's Proposal which is not incorporated in the revised Documents and Sections referred to in paragraph 2.1 above is hereby rejected by the County.

- 2.3 The revised specifications govern over drawings as the minimum Contract Requirements.
 - 2.4 Except as provided in paragraph 2.5 below, no exceptions to, deviations or delineations from the revised Bridging Manual are permitted.
 - 2.5 Bidders may continue to propose previously submitted deviations or delineations and provide additional information, if necessary, to explain conformance with County Minimum Requirements. Bidders may propose new or revised deviations or delineations responsive to County Minimum Requirements, as listed in Document 000110 (Table of Contents) in response to the RSI and its amendments. As stated in Section 1.2.1.1 of Document 011114 (Summary of Work-Design Services and Deliverables), the Bridging Documents, as modified by this RSI, set forth the County's minimum design and construction requirements for the Project that the Design Builder shall meet in preparing designs and construction of the Project. Design Builder shall prepare designs to meet these requirements and submit deliverables as described in these requirements.
 - 2.6 Information contained in Bidders' RSI Responses will take precedence over information contained in Bidders' Proposals submitted on **October 29, 2026**.
3. **CONTACT INFORMATION.** All inquiries and requests for information shall be submitted by electronic mail (E-mail) to **Vanir Construction Management, Inc. and Contra Costa County**.
 - 3.1 E-mail address for the Contra Costa County Department of Public Works:

Contra Costa County Public Works:

Jeffrey K. Acuff, Project Manager
Email: Jeff.Acuff@pw.cccounty.us
 - 3.2 Vanir Construction Management, Inc.:

Qendrese Alalusi, Project Manager
Email: gendrese.alalusi@vanir.com
4. **DETERMINATION OF BEST VALUE.** If the Contract is to be awarded, the County will award the Contract to the qualifying Bidder whose Proposal, as modified by its Response to this RSI, is determined to provide the Best Value to the County for the fixed Project price of **Twenty-Six Million Two Hundred Thousand Dollars (\$26,200,000)** (the "Contract Sum"), **Alternate 1** for the fixed project price of approximately **Eight Hundred Ten Thousand Dollars (\$810,000)**, and **Alternate 2** for the fixed project price of approximately **One Million Four Hundred Thousand Dollars (\$1,400,000)**.
 - 4.1 The County reserves the right to deem non-responsive any Proposal and/or any RSI Response, with a price greater than the Contract Sum, as well as any Proposal and/or any RSI Response, which does not address and respond to all of the requirements of the Contract Documents including, but not limited to, substantial conformance with the Bridging Documents.

- 4.2 The qualifying Bidder with the most points will be awarded the Contract as provided in Document 002100 (Request for Proposals). Best Value is a value determined by the criteria specified in Article 21 (Evaluation Factors) of Document 002100 (Request for Proposals).
5. **REQUIRED NON-COLLUSION AFFIDAVIT.** Bidders must submit a current Non-Collusion Affidavit Document (see Section 004200 – Proposal Form) with their RSI Response. County may reject as non-responsive any RSI Response submitted without a Non-Collusion Affidavit.
6. **RSI-RELATED CONFERENCE.**
- 6.1 Confidential Interviews. County may conduct CONFIDENTIAL Interviews with each Design Build Team which submits a responsive RSI Response. The Project Manager from the General Contractor and the Project Architect (AOR) of the DESIGN-BUILDER must be present at the CONFIDENTIAL interview. Other members of the Bidder's team may attend as the Bidder desires. Full Design-Builder team participation is encouraged. The proposed time and locations of each Confidential Interviews will be confirmed with each responsive Design-Build team at a later date. In response to questions arising at the RSI Conference, the County may transmit to all pre-qualified Bidders any Amended RSI the County in its discretion considers necessary, see Article 7 below.
- 6.2 Additional Meetings. Additional meetings following the Confidential Interviews and prior to the submission of the RSI Responses may be scheduled by the County as required. Amended RSI will be issued as the County deems necessary to address clarifications or comments resulting from additional Conferences.
7. **AMENDED RSI.** Bidders must direct all questions about the meaning or intent of any documents related to this Document 002105 (Request for Supplemental Information from Bidders) to the County in writing. The County will issue by written Amended RSI any interpretations or clarifications it considers necessary in response to such questions. The County will send any Amended RSI by electronic mail (Email) to all pre-qualified Bidders at the address supplied to the County by the Bidder in its Pre-Qualification Questionnaire. The County will not respond to questions received after **November 4, 2026 @ 2:00 p.m.** Only questions answered by formal written Amended RSI shall be binding on the County; oral responses or any other interpretation or clarification will be without legal effect.
- 7.1 At the County's discretion, it may also issue an Amended RSI to modify any documents related to this Document 002105 (Request for Supplemental Information from Bidders).
- 7.2 The Bidder shall acknowledge its receipt of any Amended RSI in Document 004210 (Updated Proposal Form) submitted with its RSI Response. Bidders may obtain a complete list of RSI Amendments from the County.

SUBMISSION OF RESPONSES TO RSI. Each Bidder shall submit its Response to the RSI in one or more sealed envelopes, boxes, or other containers (referred to herein as a "RSI Response Package"). RSI Response Packages shall be hand delivered to County's receptionist at the Public Works Department, as described in paragraph 3.1 above. Each RSI Response Package will be time and dated stamped by County's receptionist upon receipt. All RSI Response Packages should be marked as follows:

AMENDED PROPOSAL FOR CONTRA COSTA COUNTY
Los Medanos Recovery Center Project
(CCC PROJECT NO. **WH153**)
Package ____ of ____

- 7.3 One (1) hard copy of Bidder's RSI Response Package and one (1) electronic, scanned copy of the same (USB Flash Drive) shall be submitted to the County as outlined in this section. Bidder's RSI Response Package must contain at a minimum the following, fully completed:

7.3.1 Narrative Summary

A written narrative summarizing any changes to your Proposal submitted on October 29, 2026 generated by this Document 002105 (Request for Supplemental Information from Bidders).

7.3.2 Updated Proposal Form

Document 004200 (Proposal Form).

7.3.3 Best Value Enhancements

The intent of this requirement is to permit Bidder to revise its Best Value Enhancements in response to this RSI. If Bidder elects to revise its original Best Value Enhancements submittal, provide an updated comprehensive listing of the Best Value Enhancements, and a Best Value Enhancement Form for each proposed enhancement.

Only Best Value Enhancement information submitted or resubmitted in response to this RSI will be evaluated by County.

- 7.4 Bidder's RSI Response Package may include drawings, but the Revised Specifications shall take precedence over all drawings.

8. RSI RESPONSE RECEIPT AND EVALUATION.

- 8.1 County shall time-stamp all RSI Response Packages on receipt. RSI Response Packages will not be opened publicly and will be held in confidence during the Proposal evaluation period prior to the Contract award. RSI Response Packages may become public later as described in Article 25 of Document 002100 (Request for Proposals)
- 8.2 County will perform a preliminary completeness review to identify any patently defective or non-responsive RSI Responses. RSI Responses not meeting the requirements of this Document 002105 (Request for Supplemental Information from Bidders), including those with a Proposal price greater than the amount identified in Article 3 (the "Contract Sum") of Document 002100 (Request For Proposals From Bidders), may be considered non-responsive. County action on a defective or non-responsive RSI Response may include refusal to evaluate the RSI Response and evaluation of only the Bidder's original Proposal as well as elimination of the Bidder from the evaluation process. The County reserves the right to take any action consistent with the requirements of Document 002100 (Request for Proposals from Bidders) including, without limitation, requesting additional information after receipt and opening of any RSI Responses and waiving any inconsequential RSI Response defects.
- 8.3 During the County's technical review period, Bidders must respond in a timely manner to all questions from the County regarding their RSI Response.
- 8.4 County may reject any RSI Response and may waive, to the fullest extent permitted by law, any informalities or minor irregularities therein not involving price, time or changes in the Work. County also reserves the right, in its discretion, to reject all Proposals and RSI Responses and issue a further request for proposals for the Project. Additionally, County

reserves the right: (i) to reject any nonconforming, non-responsive, unbalanced, or conditional Proposal or RSI Response, (ii) to request other proposals, and (iii) to reject the Proposal or RSI Response of any Bidder if County believes that for any reason it would not be in the best interest of Project to make an award to that Bidder. For purposes of this paragraph, an “unbalanced Proposal” is one having nominal/low prices for some work items and enhanced prices for other work items.

- 8.5 County will determine at its sole discretion whether a Proposal and/or RSI Response, is responsive and whether a Bidder is responsible.

9. **BEST VALUE ENHANCEMENTS.**

- 9.1 As stated in paragraph 20.3.4 of Document 002100 (Request for Proposals from Bidders), Best Value Enhancements shall provide measures and other items beyond the minimum requirements specified in the Bridging Documents.
- 9.2 The County understands the requirement restated in paragraph 9.1 above to mean that Best Value Enhancements are only those measures or other items that provide additional benefit to the County while meeting or by exceeding County Minimum Requirements.
- 9.3 To the extent that any proposed Enhancement is required to meet County Minimum Requirements, it shall be considered in connection with Bridging Document Conformance under Subsection 20.3.2 of Document 002100. To the extent that any proposed Enhancement provides additional benefit to the County beyond County Minimum Requirements, it shall be considered in connection with Best Value Enhancements under Subsection 20.3.4 of Document 002100.
- 9.4 Bidder shall provide the cost for each proposed enhancement measure and a short description of the measure’s Project benefit(s), potential drawbacks, and value enhancement in the supplied Best Value Enhancement Form (Document 002100-B).
- 9.5 The short narrative on Bidder’s plan and any associated cost for achieving the proposed accelerated completion date submitted as a Best Value Enhancement may include suggested changes to the dates on which liquidated damages begin to be assessed under paragraph 3.5 of Document 005200 (Agreement).

10. **FAILURE TO EXECUTE AND DELIVER DOCUMENTS.** If the Bidder to whom the Contract is awarded fails to comply with the requirements of Article 23 (Post-Notice of Award Requirements) of Document 002100 (Request for Proposals), County may, in its sole discretion, deposit the Bidder’s surety bond, cashier’s check, or certified check for collection and retain the proceeds as liquidated damages for Bidder’s failure to enter into the Contract Documents. By submitting a Proposal and/or RSI Response, Bidder agrees that calculating the damages County may suffer as a result of the Bidder’s failure to execute and deliver all required Contract Documents and other required documents should it be awarded the Contract would be extremely difficult and impractical and that the amount of the Bidder’s required Proposal security shall be the agreed and presumed amount of County’s damages for such a failure by Bidder.

11. **DEFINITIONS.** Except as otherwise set forth herein, all abbreviations and definition of terms used in this Document are set forth in Section 014200 (References and Definitions).

END OF DOCUMENT

DOCUMENT 002110

PRE-PROPOSAL MEETING AGREEMENT AND WAIVER OF CLAIMS

This Agreement and Waiver of Claims (“Agreement and Waiver”) is made and entered into by and between the COUNTY of CONTRA COSTA, acting by and through VANIR CONSTRUCTION MANAGEMENT, INC. (“County”), and pre-qualified Bidders:

DBE #1: _____

DBE #2: _____

DBE #3: _____

(hereinafter “Bidder(s)”) _____

RECITALS

1. Pursuant to its “Request for Qualifications of Design-Build Entities for a Design-Build of the COUNTY of CONTRA COSTA **Los Medanos Recovery Center**”, dated **June 2, 2026**, Contra Costa County pre-qualified three (3) Design-Build Entities, the Bidders, to submit Proposals to design and construct the above referenced project.
2. On **August 20, 2026** County issued to Bidders a “Request for Proposals” for the **Los Medanos Recovery Center Project**. In that Request, County listed specific mandatory pre-proposal conferences to be attended by the Bidders. County also stated that additional pre-Proposal meetings may be scheduled as required by County. (Reference Document 002100 (Request for Proposals).) The purpose of this Agreement and Waiver is to define and enable such additional pre-proposal meetings.
3. In a joint meeting with the County held on **Tuesday, August 25, 2026** Bidders each stated their desire for confidential pre-proposal meetings and Site tours to be held between the County and each Bidder separately in order to facilitate each Bidder’s independent understanding of the Criteria Documents and to facilitate each Bidder’s development of a unique and competitive Proposal offering Best Value to the County.
4. The County has determined that confidential pre-Proposal meetings and Site tours are likely to increase Bidders’ independent understanding of the County’s intent for the Project as expressed by and through the Criteria Documents and may help refine Project requirements and specifications. Accordingly, County finds that such confidential meetings and Site tours are likely to increase competition between Bidders and enhance the Best Value delivered to the County for the **Los Medanos Recovery Center Project**.

Therefore, County and Bidders mutually agree as follows:

AGREEMENT

5. County will hold a confidential pre-proposal meeting (“Meetings”) and site tour (“Tours”) independently with each pre-qualified Bidder. County will give each Bidder an equal opportunity for the same number and duration of Meetings and Tours.
6. In order to provide consistency of information and responses to Bidder questions, County will identify a core group of County representatives and will exercise best efforts to cause that core

group to attend each Meeting and Tour requested by each Bidder. To the extent Bidders request Meetings or Tours addressing a specific system or aspect of Project design that requires the attendance of additional County representatives or consultants, County will exercise best efforts to cause the same additional County representatives or consultants attend each such Meeting or Tour.

7. Tours. Except as may be occasionally limited by the operations of the existing County Buildings / Facilities, the County will schedule, in conjunction with the Bidder's requested confidential pre-proposal meeting, a tour for each Bidder of existing County Facilities on **August 27, 2026**. The tours will normally be no more than (90) ninety minutes in duration and, for each Bidder, will be scheduled on the same day as the confidential pre-proposal meeting. Bidders will notify the County no later than 12:00 pm the Business Day before a scheduled Tour to cancel that Tour if desired. Bidders will provide a Tour agenda to the County within a reasonable time in advance of each scheduled Tour so as to enable attendance of additional County representatives or consultants as is appropriate. Tours may be longer than two (90) ninety minutes in duration at the convenience of the County and FACILITY and may be discontinued upon mutual agreement among County and Bidders.
8. Meetings. The County will schedule confidential pre-proposal meetings with each of the Bidders. Meetings may be held virtually, at the Project Site or off-site at a location mutually convenient to County and Bidder. Bidders agree that off-site Meetings will be held at a County location. The Meeting for each Bidder will be held on **September 17, 2026**.
9. Confidentiality. County will exercise best efforts to cause all information and discussion exchanged during each Meeting and Tour to remain confidential as between the County and the Bidder present at that Meeting or Tour. To that end, County will cause each individual present at each Meeting or Tour to sign a joint Confidentiality Agreement in the form attached as Exhibit A to this Agreement and Waiver. However, County and Bidders agree that issues relating to compliance with program, design criteria, Project Manual, or Criteria Document, or relating to changes to Project requirements, that arise out of Meetings or Tours will be documented in written form and distributed to all Bidders as Addenda pursuant to Document 002100 (Request for Proposals).
10. Waiver of Claims. In order to induce the County to hold Meetings and Tours, Bidders hereby waive their right, individually and collectively, to object to or protest the Design Builder selection process for the Los Medanos Recovery Center. because of such Meetings or Tours, or because of anything related in any way to such Meetings or Tours.

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

BIDDER NAME

BIDDER NAME

BY: _____

BY: _____

Its: _____

Its: _____

BIDDER NAME

BY: _____

Its: _____

CONTRA COSTA COUNTY, acting by and through VANIR CONSTRUCTION MANAGEMENT, INC.

BY: _____

Its: _____

END OF DOCUMENT

(EXHIBIT A FOLLOWS NEXT PAGE)

EXHIBIT A

PRE-PROPOSAL MEETING/TOUR CONFIDENTIALITY AGREEMENT

1. **CONFIDENTIAL AND PROPRIETARY NATURE OF THE INFORMATION.** The undersigned each agree, by affixing their signatures below, to treat all ideas or information discussed, displayed, or exchanged during the Meeting/Tour described in paragraph 4 below as confidential and proprietary to the single Bidder listed in paragraph 4 below.
2. **RESTRICTED USE OF CONFIDENTIAL INFORMATION.** Except as among themselves to the extent required to perform or respond to Document 002100 (Request for Proposals), the undersigned each agree not to reproduce, transmit, use, or disclose any ideas or information discussed, displayed, or exchanged during the Meeting/Tour described in paragraph 4 below without the advance written consent of both the County and the single Bidder listed in paragraph 4 below.
3. **EXCEPTIONS.** The obligations and restrictions above do not apply to information that: (a) was or becomes generally available to the public prior to, and other than as a result of, a disclosure by the undersigned or the undersigned's representative(s) or (b) was available, or becomes available, to the undersigned on a non-confidential and non-proprietary basis prior to its disclosure to the undersigned during the Meeting/Tour described below.
4. **MEETING/TOUR INFORMATION:**

Date of Meeting/Tour: _____

Location of Meeting/Tour: _____

Name of Bidder: _____

I have read paragraphs 1 through 4 above and, with my signature below, I hereby agree that I will not reproduce, transmit, use, or disclose any ideas or information discussed, displayed, or exchanged during the Meeting/Tour described in paragraph 4 above, except as is permitted by this Confidentiality Agreement.

Printed Full Name	Signature	Organization / Entity

(signatures continued next page)

[illegible]

END OF DOCUMENT – EXHIBIT A

DOCUMENT 002111

PRE-RESPONSE TO RSI MEETING AGREEMENT AND WAIVER OF CLAIMS

This Agreement and Waiver of Claims ("Agreement and Waiver") is made and entered into by and between the CONTRA COSTA COUNTY, acting by and through VANIR CONSTRUCTION MANAGEMENT, INC. ("County"), and pre-qualified bidders:

Bidder A: _____

Bidder B: _____

Bidder C: _____

(hereinafter "Bidder(s)")

RECITALS

1. Pursuant to its "Request for Qualifications of Design-Build Entities for a Design-Build of the Contra Costa County **Los Medanos Recovery Center**", dated **June 2, 2026**, County pre-qualified three (3) Design-Build Entities, the Bidders, to submit Proposals to design and construct the above referenced project.
2. On **August 20, 2026**, County issued to Bidders a "Request for Proposals" for the **Los Medanos Recovery Center Project**. In that Request, County listed certain mandatory pre-Proposal conferences to be attended by all Bidders. County also stated that additional pre-proposal meetings may be scheduled as required by County. (Reference Document 002100 (Request for Proposals from Bidders).)
3. In a joint meeting with the County held on **Tuesday, August 25, 2026**, Bidders each stated their desire for confidential pre-proposal meetings and Site tours to be held between the County and each Bidder separately in order to facilitate each Bidder's independent understanding of the Criteria Documents and to facilitate each Bidder's development of a unique and competitive Proposal offering Best Value to the County.
4. On _____, the Bidders submitted Proposals and on _____, the County issued to Bidders a "Request for Supplemental Information" to obtain additional information from the Bidders. In a joint meeting with the County held on _____, Bidders each stated their desire for confidential Pre-Response meetings to be held between the County and each bidder separately in order to facilitate each Bidder's independent understanding of the Request for Supplemental Information (RSI) and to facilitate each Bidder's development of a unique and competitive Response to the RSI and Proposal offering Best Value to the County.
5. The County has determined that confidential pre-Response meetings are likely to increase Bidders' independent understanding of the County's intent for the Project as expressed by and through the Criteria Documents and may help refine Project requirements and specifications. Accordingly, County finds that such confidential meetings/interviews are likely to increase competition between Bidders and enhance the Best Value delivered to the County for Project.

Therefore, County and Bidders mutually agree as follows:

AGREEMENT

1. County will hold confidential meetings/interviews ("Meeting(s)") independently with each pre-qualified Bidder. Each Bidder will have the opportunity for one (1) confidential meeting/interview with the County / VCM after submission of their initial response to the request for proposals.
2. In order to provide consistency of information and responses to Bidder questions, County will identify a core group of County representatives and will exercise best efforts to cause that core group to attend each Meeting requested by each Bidder. To the extent Bidders request Meetings addressing a specific system or aspect of Project design that requires the attendance of additional County representatives or consultants, County will exercise best efforts to cause the same additional County representatives or consultants attend each such Meeting.
3. Meetings. The County will schedule a meeting date/time for each of the Bidders. Meetings may be held at a County site or off-site at a location mutually convenient to County and Bidder. Bidders agree that off-site Meetings may be held at the offices of either Bidder. For purposes of planning, bidders may assume confidential meetings/interviews will be scheduled the week of _____. No more than one (1) Meeting will be scheduled for each of the Bidders.
4. Confidentiality. County will exercise best efforts to cause all information and discussion exchanged during each Meeting to remain confidential as between the County and the Bidder present at that Meeting. To that end, County will cause each individual present at each Meeting to sign a joint Confidentiality Agreement in the form attached as Exhibit A to this Agreement and Waiver. However, County and Bidders agree that issues relating to compliance with program, design criteria, Project Manual, or Criteria Document, or relating to changes to Project requirements, that arise out of Meetings will be documented in written form and distributed to both Bidders as Amended RSI pursuant to Document 002105 (Request for Supplemental Information from Bidders).
5. Waiver of Claims. In order to induce the County to hold Meetings, Bidders hereby waive their right, individually and collectively, to object to or protest the Design Builder selection process for the **Los Medanos Recovery Center Project** because of such Meetings, or because of anything related in any way to such Meetings.

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

CONTRACTOR NAME

CONTRACTOR NAME

BY: _____

BY: _____

Its: _____

Its: _____

CONTRACTOR NAME

BY: _____

Its: _____

CONTRA COSTA COUNTY acting by and through VANIR CONSTRUCTION MANAGEMENT, INC.

BY: _____

Its: _____

END OF DOCUMENT

(EXHIBIT A FOLLOWS NEXT PAGE)

EXHIBIT A

PRE-RESPONSE MEETING CONFIDENTIALITY AGREEMENT

1. **CONFIDENTIAL AND PROPRIETARY NATURE OF THE INFORMATION.** The undersigned each agree, by affixing their signatures below, to treat all ideas or information discussed, displayed, or exchanged during the Meeting described in paragraph 4 below as confidential and proprietary to the single Bidder listed in paragraph 4 below.
2. **RESTRICTED USE OF CONFIDENTIAL INFORMATION.** Except as among themselves to the extent required to perform or respond to Document 002100 (Request for Proposals from Bidders) and Document 002105 (Request for Supplemental Information from Bidders), the undersigned each agree not to reproduce, transmit, use, or disclose any ideas or information discussed, displayed, or exchanged during the Meeting described in paragraph 4 below without the advance written consent of both the County and the single Bidder listed in paragraph 4 below.
3. **EXCEPTIONS.** The obligations and restrictions above do not apply to information that: (a) was or becomes generally available to the public prior to, and other than as a result of, a disclosure by the undersigned or the undersigned's representative(s) or (b) was available, or becomes available, to the undersigned on a non-confidential and non-proprietary basis prior to its disclosure to the undersigned during the Meeting described below.
4. **MEETING INFORMATION:**

Date of Meeting: _____

Location of Meeting: _____

Name of Bidder: _____

I have read paragraphs 1 through 4 above and, with my signature below, I hereby agree that I will not reproduce, transmit, use, or disclose any ideas or information discussed, displayed, or exchanged during the Meeting described in paragraph 4 above, except as is permitted by this Confidentiality Agreement.

Printed Full Name	Signature	Organization / Entity

(signatures continued next page)

[illegible]

END OF DOCUMENT – EXHIBIT A

DOCUMENT 002115

STIPEND AGREEMENT

(Revised September 28, 2021)

This Stipend Agreement ("Agreement") is entered into by and between the COUNTY OF CONTRA COSTA ("County") and _____ ("Proposer") and is effective as of _____ ("Effective Date").

RECITALS

WHEREAS, Proposer submitted a response to County's "Request for Qualifications of Design-Build Entities for a Design-Build of the Contra Costa County **Los Medanos Recovery Center**", dated June 2, 2026 (the "RFQ"), for the design and construction of the Los Medanos Recovery Center in part with County funds ("Project");

WHEREAS, Proposer is one of the short-listed RFQ respondents that County has invited to submit a competitive sealed proposal in the manner set forth in County's Request for Proposals (Document 002100) (the "RFP"), and authorized by Public Contract Code Section 22160, et seq.;

WHEREAS, Public Contract Code Section 20129 requires all Proposer's response to the RFP (the "Proposal") to be accompanied by some form of bid security;

WHEREAS, if Proposer is not awarded the Project Design-Build Agreement (the "Contract"), Proposer desires and County is willing to compensate Proposer for (1) some of the efforts County anticipates Proposer will expend in developing, refining and enhancing its Proposal during the RFP and Request for Supplemental Information process (Document 002105), and (2) for County's ownership of Proposer's Proposal documents and submissions; inclusive of the concepts, ideas and approaches reflected therein.

WHEREAS, County has invited three short-listed RFQ respondents, including Proposer, to submit a competitive sealed proposal in the manner set forth in the RFP.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, stipulated and agreed, Proposer and County hereby agree as follows:

1. Proposer shall cause its Proposal security submitted to County pursuant to Public Contract Code Section 20129 and the RFP to remain in place throughout the interview, selection and award process. In the event Proposer's Proposal price is modified during the interview and selection process, Proposer shall ensure that its Proposal security is maintained as required by Public Contract Code Section 20129 and in the amount stipulated in the RFP.
2. Subject to Section 5 below, if County does not award the Contract to Proposer, County shall pay a \$25,000 stipend (the "Stipend") to Proposer concurrent with the award of the Contract.

3. If Proposer is not ultimately awarded the Contract, Proposer agrees not to protest the award of the Contract to another RFP respondent, or if the Contract is not awarded to any RFP respondent.
4. In consideration of County's agreement to pay the Stipend, Proposer understands and agrees that ownership of all Proposal documents and other submissions and concepts provided by or discussed by Proposer during the Proposal interview and selection process, including without limitation, designs, drawings, strategies, and specifications, shall become the property of the County.
5. County may withdraw or withhold the payment of the Stipend in any of the following situations:
 - a. Withdrawal or cancellation by the County of the RFP prior to the RFP response submittal date;
 - b. Failure of Proposer to submit its Proposal on or before the RFP response submittal date specified in the RFP, including revised dates specified in any subsequent notices;
 - c. Proposer withdraws its Proposal at any time and does not resubmit in compliance with the due date as provided in the RFP;
 - d. County finds that Proposer's Proposal materially fails to meet the minimum requirements of the RFP, and is determined to be nonresponsive;
 - e. Proposer is disqualified at any point during the proposal process, including without limitation, a finding by County that the Proposer is not responsive and/or not responsible; or
 - f. Proposer fails to obtain a score of at least 75 percent of the total available points.
6. Miscellaneous. No provision of this Agreement may be modified or amended, nor shall any term be waived, except expressly in a writing signed by all parties hereto. Should any part, term or provision of this Agreement, be declared invalid, void or unenforceable, in general or in one or more specific instances, all remaining parts, terms and provisions of this Agreement shall remain in full force and effect in all other instances and shall in no way be invalidated, impaired or affected thereby. This Agreement may be executed in two or more counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument, and (except as otherwise provided herein) shall be governed by California law.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the Effective Date provided above.

COUNTY:
COUNTY OF CONTRA COSTA

PROPOSER:
[Name of Design-Build Entity]

By:_____

By:_____

Name:_____

Name:_____

Title:_____

Title:_____

Date:_____

Date:_____

END OF DOCUMENT

DOCUMENT 002210

SUPPLEMENTAL INSTRUCTIONS REGARDING PROJECT LABOR AGREEMENT

1. This Document describes Bidder requirements and obligations related to the negotiation and execution of a Project Labor Agreement for the Contra Costa County **Los Medanos Recovery Center Project**, as anticipated in Article 7 of Document 002100 (Request for Proposals).
2. **REQUIREMENT FOR PROJECT LABOR AGREEMENT.**
 - 2.1 Pursuant to the previously established Contra Costa County Project Labor Agreement (PLA), Document 007349, said PLA shall be utilized for **the Los Medanos Recovery Center Project** and is intended to “promote efficiency of construction operations” on the Project “and to provide for the expedited and peaceful settlement of labor disputes and grievances without strikes or lockouts.”
3. **PLA NEGOTIATIONS & BIDDER PARTICIPATION.**
 - 3.1 In order to submit a Proposal in accordance with Document 002100 (Request for Proposals), Bidders shall (a) submit a signed copy of the Project PLA as part of the Proposal Package required by paragraph 19.1 of Document 002100 and (b) certify in Document 004540 (Bidder Certifications) that they agree to be bound by and comply with the conditions of the PLA.

END OF DOCUMENT

DOCUMENT 002219

OUTREACH PROGRAM

SECTION 1. OUTREACH PROGRAM

A. General

This project is subject to the policies and requirements established in the County's Outreach Program for the use of Minority Business Enterprises (MBEs), Women Business Enterprises (WBEs), Other Business Enterprises (OBEs), Small Business Enterprises (SBEs), Local Business Enterprises (LBEs), and Disabled Veteran Business Enterprises (DVBES). The County is committed to ensuring full and equitable participation by minority, women, and other sub-bid or subcontracting businesses in County-funded construction projects. The Outreach Program is set forth herein. Bidders should be fully informed of this program. Bidders are encouraged to use MBE/WBE firms whenever there is a need to subcontract portions of the work. Failure to comply with the County's Outreach Program may render the bid non-responsive.

B. MBE/WBE/OBE Participation: The Outreach Program requires the Bidder to:

1. Make a "Good Faith Effort" to meet the Mandatory Subcontracting Minimum (MSM) of 30% participation by MBEs, WBEs, OBEs, SBEs, LBEs and DVBES and,
2. Submit Good Faith Effort (GFE) documentation showing that affirmative steps were taken to recruit and solicit participation from these firm.

C. Definitions

For purposes of this program, the following definitions shall apply:

1. "Minority or Women Business Enterprise (MBE or WBE)" means a business enterprise that meets both of the following criteria:
 - a. A business entity that is at least 51 percent owned by one or more minority persons or women or, in the case of any business whose stock is held, at least 51 percent of the stock is owned by one or more minority persons or women; and
 - b. A business whose management and daily business operations are controlled by one or more minority persons or women.
2. "Other Business Enterprise (OBE)" means any business which does not otherwise qualify as a Minority or Women Business Enterprise.
3. "Small Business Enterprise (SBE)" means a small business concern, as defined in Section 3 of the Small Business Act and implementing regulations (Volume 13 of the Code of Federal Regulations, Chapter 1).
4. "Local Business Enterprise (LBE)" means a business that has its main office or principal place of business within the boundaries of Contra Costa County.
5. "Minority person" means African Americans; Hispanic Americans; Native Americans (including American Indians, Eskimos, Aleuts, and Native Hawaiians); Asian Pacific (including persons whose origins are from Japan, China, Taiwan, Korea, Vietnam, Laos, Cambodia, the Philippines, Samoa, Guam, the U.S. Trust Territories of the Pacific, and the Northern Marianas); and Asian Indians (including persons whose origins are from India, Pakistan, and Bangladesh).
6. "Subcontract" means an agreement between the prime contractor and an individual, firm, or corporation for the performance of a particular portion(s) of the work which the prime contractor has obligated itself.

7. "Subcontractor" means an individual, firm, or corporation having a direct contract with the contractor for the performance of a part of the work which is proposed to be constructed or done under the contract or permit, including the furnishing of all labor, materials, or equipment.
8. "Vendor and/or supplier" means a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public in the usual course of business. The firm must engage in, as its principal business, and its own name, the purchase and sale of the products in question. A vendor and/or supplier of bulk items such as steel, cement, stone, and petroleum products need not keep such products in stock, if it owns or operates distribution equipment.
9. "Manufacturer" means a firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the contractor.
10. "Trucker" means a firm that performs hauling or trucking work with trucks owned or leased by that firm.
11. "Broker" means a firm that charges for providing a bona fide service such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, insurance or bonds, materials, or supplies required for the performance of the contract. The fee or commission is to be reasonable and not excessive as compared with fees customarily allowed for similar services.

D. Certification and Participation of Minority and Women Business Enterprises

1. If recognition is to be given to MBE/WBE participation on this project, within three (3) working days after bid opening, an MBE/WBE must be: (a) certified by the involved County department or self-certified on an appropriate form satisfactory to the County; or (b) certified by any of the following agencies-State of California Department of Transportation (Caltrans), City of Oakland, Port of Oakland, Regional Transit Coordinating Council, San Francisco Human Rights Commission, Los Angeles County Metropolitan Transportation Commission, or U.S. Small Business Administration.

Applications for certification and/or directories of MBE/WBE certified firms are available at the following locations:

- a. Contra Costa County
Equal Employment Opportunity, 2530 Arnold Drive, Suite 140, Martinez, CA 94553 Telephone: 925-335-1455
Fax: 925-335-1420
- b. City of Oakland
Office of City Manager, Contract Compliance & Employment Services
250 Frank H. Ogawa Plaza, Suite 3341, Oakland, CA 94612
Telephone: (510) 238-3970
Fax: (510) 238-3363
- c. Los Angeles County Metropolitan Transportation Commission
Equal Opportunity Department, 1 Gateway Plaza, Los Angeles, CA 90012
Telephone: (213) 922-2600
Fax: (213) 922-7660
- d. Port of Oakland
530 Water Street, Oakland, CA 94607
Telephone: (510) 627-1657
Fax: (510) 451-1656
- e. Regional Transit Coordinating Council
Includes the following agencies:

AC Transit (Alameda Contra Costa Transit District)
Telephone: (510) 891-7176
Fax: (510) 891-4724

BART (Bay Area Rapid Transit District)
Telephone: (510) 464-6110
Fax: (510) 464-7587

County Connection (Central Contra Costa Transit Authority)
Telephone: (925) 676-1976
Fax: (925) 686-2630

Métropolitain Transportation Commission
Telephone: (510) 464-7777
Fax: (510) 464-7848

SamTrans (San Mateo County Transit District)
Telephone: (650) 508-7939
Fax: (650) 508-7738

San Francisco Municipal Railway/San Francisco Public Transportation
Telephone: (415) 923-6139
Fax: (415) 923-6180

Santa Clara Valley Transportation Authority
Telephone: (408) 952-4105
Fax: (408) 955-0892

- f. San Francisco Human Rights Commission
25 Van Ness Avenue, Suite 800, San Francisco, CA 94102-6033
Telephone: (415) 252-2500
Fax: (415) 431-5764
Webpage: <http://www.sfhumanrights.org/>
(Note: Firm must be listed on their certification list, not their registry).

- g. Caltrans (California Department of Transportation)
Division of Civil Rights, 1120 N Street, Room 2445, Sacramento, CA 95814
Webpage: <http://www.dot.ca.gov/hq>

- h. U.S. Small Business Administration
Regional Office, 71 Stevenson Street, 20th Floor, San Francisco, CA 94105-2939
Telephone: (415) 744-6843
Webpage: <http://www.sba.gov>

2. This applies to recognition as an MBE/WBE.

- a. All listed MBE or WBE firms must be certified as defined under the preceding paragraph.
- b. Work performed by a prime contractor will be considered for credit in computing any level of anticipated MBE/WBE participation established for this project. The prime contractor will be required to make a good faith effort to obtain certified MBEs/WBEs through subcontracting.
- c. A listed MBE or WBE firm must perform a commercially useful function, i.e., must be responsible for the execution of a distinct element of the work and must carry out its responsibility by actually performing, managing, and supervising the work.
- d. Recognition for materials and/or supplies is limited to 60 percent of the amount to be paid to the vendor, unless the vendor manufactures or substantially alters the materials/supplies.
- e. MBE/WBE credit shall not be given to a Joint Venture partner listed as a subcontractor by a Joint Venture Bidder.

- f. MBE/WBE credit for brokers required for performance of the contract is limited to the reasonable fee or commission charged, as not considered excessive, as compared with fees customarily allowed for similar services.

E. Good Faith Effort Documentation

The Bidder must take affirmative steps prior to bid opening to ensure that a maximum effort is made to recruit Sub-Bidder/subcontractors. Minority and women-owned and controlled businesses must be considered along with other business enterprises whenever possible as sources of supplies, construction, and other services. The required affirmative steps for Good Faith Effort documentation are outlined below.

It is the policy of Contra Costa County to provide all MBEs, WBEs, OBEs, SBEs, LBEs, and DVBES an equal opportunity to participate in the performance of all County contracts. Bidders must assist the County in implementing this policy by taking all reasonable steps to ensure that all qualified business enterprises, including MBEs, WBEs, OBEs, SBEs, LBEs, and DVBES have an equal opportunity to compete for and participate in County contracts. A Bidder's good faith efforts to reach out to MBEs, WBEs, OBEs, SBEs, LBEs, and DVBES (subcontractors, suppliers, manufacturers, truckers, etc.) will be determined by the Board of Supervisors from written documentation of the level of effort put into achieving the indicators. **Failure to include supporting documentation of a good faith effort and failure to achieve a minimum of 75 out of 100 Good Faith Effort evaluation points may render the bid non-responsive and may result in its rejection.** Adequacy of Bidder's good faith effort will be determined after consideration of the indicators of good faith as set forth below.

Indicator	1	2	3	4	5	6	7	8	9	10	Total
Points	0	10	13	9	10	10	5	10	26	7	100

Each indicator (2-10) is evaluated on a pass/fail basis, i.e., either full or zero points can be achieved for compliance with each item.

1	OUTREACH PARTICIPATION AND MSM	No Points

The Bidder has made a good faith effort to obtain sub-bid participation by MBEs, WBEs, OBEs, SBEs, LBEs, and DVBES. The documented outreach effort is expected to produce a reasonable level of participation by all businesses.

The Bidder has met the Mandatory Subcontracting Minimum (MSM) for the project.

2	ATTENDED PRE-BID MEETING	10 Points

The Bidder has attended the pre-bid meeting scheduled by the County to inform all Bidders of the requirements for the project for which the contract will be awarded. This requirement may be waived only if the Bidder certifies in writing prior to the pre-bid meeting that it was already informed as to those project requirements.

Required Documentation: a) Attend pre-bid meeting and be listed on the attendance sheet; or b) Submit a letter prior to the pre-bid meeting either by fax to (925) 500-0086 or by mail to Contra Costa County General Services Department, Capital Projects Management Division, 2530 Arnold Drive, Suite 140, Martinez California 94553.

3	SUFFICIENT WORK IDENTIFIED FOR SUBCONTRACTORS	13 Points

The Bidder has identified, listed and selected specific work items in the project to be performed by sub-Bidders/subcontractors in order to provide an opportunity for participation by MBEs, WBEs, OBEs, SBEs, LBEs, and DVBES. Upon making this determination, the Bidder subdivided the total contract work requirements into smaller portions or quantities to permit maximum active participation of MBEs, WBEs, OBEs, SBEs, LBEs, and DVBES.

Required Documentation: Proof of this must be demonstrated in either Indicator 4 or 5.

4	ADVERTISEMENT	9 Points

Not less than ten (10) calendar days prior to bid opening, the Bidder advertised for sub-bids from interested business enterprises in one or more daily or weekly newspapers, trade association publications, minority or trade oriented publications, trade journals, or other media, specified by the County, such as the Daily Construction Service, the Daily Pacific Builder, or the Small Business Exchange.

Required Documentation: A copy of the paid advertisement and a proof of publication statement or other verification which confirms the date the advertisement was published.

Note: The advertisement must be specific to the project, not generic, and may not be a plan holder advertisement provided by the publication. It should include the County project name, name of Bidder, areas of work available for subcontracting, and a contact person's name and telephone number, information on the availability of plans, specifications and requirements, and the Bidder's policy concerning assistance to subcontractors in obtaining bonds, lines of credit, and/or insurance. Consideration will be given to the wording of the advertisement to ensure that it did not exclude or seriously limit the number of potential respondents.

5	WRITTEN NOTICES TO SUBCONTRACTORS	10 Points

The Bidder provided written notice of its interest in receiving sub-bids on the contract to those subcontractors, suppliers, manufacturers, and truckers, including MBEs, WBEs, OBEs, SBEs, LBEs, and DVBES having an interest in participation in the selected work items. All notices of interest shall be provided not less than ten (10) calendar days prior to the date the bids are required to be submitted.

Required Documentation: A copy of each letter sent to available MBEs, WBEs, OBEs, SBEs, LBEs, and DVBES for each item of work to be performed. If there is only one master notification, then a copy of the letter along with a listing of all recipients will suffice. Faxed copies must include the fax transmittal confirmation slip showing the date and time of transmission. Mailed letters must include copies of the metered envelopes or certified mail receipts. Letters must contain: areas of work to be subcontracted; County project name; name of the Bidder; Bidder contact person's name, address, and telephone number; information on the availability of plans and specifications; and the Bidder's policy concerning assistance with bonds, lines of credit, and insurance.

Note: This written notice can be used to satisfy Indicators 3, 7, and 10.

CERTIFICATION AGENCIES

(Bidders should contact the agencies listed in Paragraph D.1 above to obtain current copies of MBE/WBE directories for listings of certified MBE/WBE firms.)

6	FOLLOW-UP ON INITIAL SOLICITATION	10 Points

The Bidder documented efforts to follow-up initial solicitations made in Indicator #5 by contacting the MBEs, WBEs, OBEs, LBEs, and SBEs to determine with certainty whether said businesses were interested in performing specific portions of the project work, to answer any questions from them, to record any telephone quotes, and to confirm and record the business' interest in bidding on the project.

Required Documentation: A copy of telephone logs. These logs must include the name of the company called, telephone number, contact person, who did the calling, time, date, and the result of the conversation. Bidder must follow-up with all subcontractors to whom they sent letters.

7	PLANS, SPECIFICATIONS AND REQUIREMENTS	5 Points

The Bidder provided interested sub-bid enterprises with information about the plans, specifications, and requirements for the selected sub-bid/subcontracting work.

Required Documentation: Include in Indicator 4 or 5, information detailing how, where, and when the Bidder will make the plans, specifications and other project requirements available to interested subcontractors.

8	CONTACTED RECRUITMENT/PLACEMENT ORGANIZATIONS	10 Points

The Bidder requested assistance from organizations that provide assistance in the recruitment and placement of MBEs, WBEs, OBEs, SBEs, LBEs, and DVBEs not less than fifteen (15) calendar days prior to the submission of bids. Any organizations which have been contacted must be listed in the required documentation.

Required Documentation: A copy of each letter sent to outreach agencies requesting assistance in recruiting MBEs, WBEs, OBEs, SBEs, LBEs, and DVBEs. Faxed copies must include the fax transmittal confirmation slip showing the date and time of transmission. Mailed letters must include copies of the metered envelopes or certified mail receipts. Letters must contain areas of work to be subcontracted, County project name, name of the Bidder, and Bidder contact person's name, address, and telephone number.

9	NEGOTIATE IN GOOD FAITH	26 Points

The Bidder negotiated in good faith with interested MBEs, WBEs, OBEs, SBEs, LBEs, and DVBEs and did not, as determined by the County, unjustifiably reject a satisfactory bid or proposal prepared by any business.

Required Documentation: a) Copies of all MBE/WBE/OBE/SBE/LBE/DVBE bids or quotes received; and b) Summary sheet organized by work area, listing the bids and quotes received, the name of the company that submitted the bid, the dollar amount of the bid and the subcontractor selected for that work area. The summary sheet must include all bids and quotes received, including those delivered by telephone, facsimile, electronic medium and written format. If the Bidder elects to perform a listed work area with its own forces, they must include a bid that shows their own costs for the work.

10	BOND, LINES OF CREDIT, AND INSURANCE ASSISTANCE	7 Points

The Bidder documented efforts to advise and assist interested MBEs, WBEs, OBEs, SBEs, LBEs, and DVBEs in obtaining bonds, lines of credit, and insurance required by the County or Bidder.

Required Documentation: Include in Indicator 4 or 5, information about the Bidder's efforts to assist with bonds, lines of credit, and insurance.

No later than three (3) working days following bid opening, the Bidders shall submit completed good faith effort documentation to the County. In its review of the good faith effort documentation, the County may request additional information to validate and/or clarify that the good faith effort submission was adequate. Such information shall be submitted promptly upon request by the County.

For MBE/WBE firms to be used on the project, the Bidder shall submit, within three (3) working days after bid opening, a completed "Letter of Intent" form for each such firm (see sample form at end of Division E). Use of the form will verify the amount of work each MBE/WBE subcontractor, supplier, manufacturer, or trucker intends to perform. The form shall be signed by the MBE/WBE subcontractor, supplier, manufacturer, or trucker identifying the item(s) of work to be performed and the actual dollar value to be received.

F. Award of Contract

The Board reserves the right to reject any and all bids. The award of a contract will be to the qualifying Bidder whose Proposal is determined to provide the Best Value to the County for the Fixed Project Price and complies with all requirements prescribed herein. This includes a commitment to comply with the required Outreach Program. A positive and adequate demonstration to the satisfaction of the Board of Supervisors that a good faith effort to include MBE/WBE/OBE/SBE/LBE subcontractors' participation will be made is a condition for eligibility for award of the contract.

In the event that the Board considers awarding away from the apparent best value Bidder because of the Bidder's failure to demonstrate their intent to provide adequate good faith effort documentation, the County shall afford the Bidder an opportunity to present further evidence prior to award of contract.

The Board specifically reserves the right, in its sole discretion, to waive any of the time requirements set forth in this Document 00 22 19 and to waive any other irregularities relating to compliance with the County's Outreach Program.

G. Subcontractor Substitution

In addition to the requirements set forth in the provisions pertaining to the listing of subcontractors the following shall apply for the purpose of this program:

1. Substitution During Construction: The contract award requires that the level of all subcontractor participation shall be maintained throughout the duration of the contract.
 - a. The Contractor shall request advance approval for all substitutions of bid-listed subcontractors.
 - b. The request shall be in writing and submitted to the County. The request shall give the reason for the substitution, the name of the subcontractor, supplier, trucker, or manufacturer, and the name of the replacement.
2. MBE/WBE Sub-Bidder/Subcontractor Substitution: The County requires that whenever the Contractor seeks to substitute a bid-listed MBE/WBE subcontractor, supplier, manufacturer, or trucker, the Contractor must make a good faith effort to replace the MBE/WBE with a firm of the same certification status (i.e., MBE for MBE and WBE for WBE).
 - a. The Contractor shall call at least two (2) certified MBE or WBE sub-bid prospects from each trade for which sub-bid/subcontracting work is available and document the following for submittal:

Name of the company called; contact person and telephone number; date and time of contact.

Response for each item of work which was solicited, including dollar amounts.

Reason for selection or rejection of sub-bid prospect.

- b. The Contractor shall submit all documentation of good faith efforts to the County for review and approval by the County.

H. Sub-Agreement Falsification

Falsification or misrepresentation of a sub-agreement as to company name, contract amount, and/or actual work to be done by the Sub-Bidder/subcontractor will result in sanctions set forth in provisions pertaining to listing of subcontractors.

I. Final Subcontracting Report Submittal/Verification of Performance Forms

The Contractor must submit the Final Subcontracting Report to the County Affirmative Action Office within fifteen (15) calendar days after the final inspection of the contract work by the County. Failure to comply may result in the assessment of liquidated damages in the amount of five hundred dollars (\$500.00) per calendar day by the Board of Supervisors.

Upon completion of work, the Contractor shall submit a completed "Verification of Performance" form (Form included in this Document 002219) for each MBE/WBE prime contractor, subcontractor, supplier, manufacturer, or trucker used on the project or listed in the bid. The form shall be signed by the MBE/WBE identifying the item(s) of work performed and the actual dollar amount received. Final payment for work done may be withheld until all MBE/WBE Verification of Performance forms are received. The Prime Contractor must explain in writing any total dollar amounts paid to MBE/WBE subcontractors, suppliers, manufacturers, or truckers that are less than the dollar amounts shown on the respective Letter of Intent.

J. Review of Records

Upon request, the Contractor and its subcontractors and truckers shall promptly make available, for review by the County Administrator's Office, certified payroll records and copies of purchase orders, invoices, and/or contracts from suppliers and manufacturers.

K. Prompt Payment

The Contractor shall make prompt payment to its subcontractors, truckers, suppliers, and manufacturers in accordance with their contracts and legal relationships.

L. Design-Build and Progressive Design-Build Outreach Requirements

The Contra Costa County Board of Supervisors adopted a construction outreach program on August 1, 1998. The program was intended to increase small and minority business participation in County construction projects. At the time of adoption, the traditional design-bid-build method of procuring projects was the only method of project procurement used in the County. Since then, the County has approved the use of both design-build and progressive design-build procurement methodology as allowed under changes in the State of California Public Contract Code. These procurement methods change the sequence of actions regarding when most subcontracts are signed in regard to County's award of the main contract to the General Contractor. Since many of these subcontracts are now signed after the award of the main contract by the Board of Supervisors, the timing of the documentation required by the original outreach program is no longer achievable as currently written. Specifically, the original program requires all outreach efforts to be completed, documented and executed prior to bid opening, and all evidence submitted within three days of bid opening. This timing is not achievable with Design-Build (DB) and Progressive Design-Build (PDB) projects because there is no single bid opening that encompasses all aspects of the project before the award of the construction contract, and the scopes of work for many parts of the project are not fully detailed and ready for bid until well after the original main contract is signed.

Therefore, for DB and PDB projects the requirements for showing a good faith effort are changed as follows:

- 1) The DB or PDB team is required to submit a narrative discussion of how they will comply with the 10 indicators that make up the outreach program as part of their submittal in response to a request for qualifications/request for proposals.
- 2) The DB or PDB team is required to maintain documentary evidence of their compliance with both their narrative and the indicators in the outreach program.
- 3) The DB or PDB team is required to submit the documentation of their outreach efforts, including small and minority business participation in the project as originally required and outlined in the outreach policy, within 15 days of completion of the project.

The intent of the County remains, as in the original outreach program, to have the maximum practical involvement of small and minority contractors of all varieties involved with County construction projects. These requirements will insure the intent of the program is conformed to the necessities of DB and PDB procurement.

SECTION 2. MANDATORY SUBCONTRACTING MINIMUM

A. General

This project is subject to the policies and requirements established by the Board of Supervisors Outreach Program-Construction. The County is committed to maximizing subcontracting opportunities in the provision of all goods and services to the County on a contractual basis. The Outreach Program is set forth herein. Bidders should be fully informed of this program. Failure to comply with the Mandatory Subcontracting Minimum requirements may result in sanctions as indicated in Section 3, Part D-Enforcement, item 2 on page 14 of 17 of this Document.

B. Mandatory Subcontracting Minimum Participation Level

The Board of Supervisors requires the Bidder to subcontract a minimum percentage of its fixed price, which is stated in the PROPOSAL sheet (page 11 of 17 of this Document), to any qualified available contractor, and list all subcontractors, regardless of amount, that the Bidder wishes to be credited toward achieving the required MSM. Failure to list the subcontractors and subcontracting amounts with the bid on the form provided in the proposal, sufficient to meet or exceed the required MSM, may cause the bid to be rejected by the County as non-responsive.

C. Definitions

For purposes of this program, the following definitions shall apply:

1. "Subcontractor" means an individual, firm or corporation having a direct contract with the contractor for the performance of a part of work which is proposed to be constructed or done under the contract or permit, including the furnishing of all labor, materials, or equipment.
2. "Subcontract" means an agreement between the prime contractor and an individual, firm or corporation for the performance of a particular portion(s) of the work which the prime contractor has obligated itself.
3. "Vendor and/or supplier" means a firm that owns, operates or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public in the usual course of business. The firm must engage in, as its principal business, and its own name, the purchase and sale of the products in question. A supplier of bulk items such as steel, cement, stone and petroleum products need not keep such products in stock, if it owns or operates distribution equipment.
4. "Manufacturer" means a firm that operates or maintains a factory or establishment that produces on the premises the materials or suppliers obtained by the contractor.
5. "Broker" means a firm that charges for providing a bona fide service, such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, insurance or bonds, materials or supplies required for performance of the contract. The fee or commission is to be reasonable and not excessive as compared with fees customarily allowed for similar services.

D. MSM Participation Recognition

1. Work performed by a prime contractor will not be considered for credit toward the MSM participation level.
2. MSM credit for materials and/or supplies is limited to 60 percent of the amount to be paid to the vendor for the materials/supplies.
3. MSM credit for a vendor who substantially alters materials/supplies and/or is a manufacturer will be 100 percent.
4. MSM credit for brokers required for performance of the contract is limited to the reasonable fee or commission charged, as not considered excessive, as compared with fees customarily allowed for similar services.

PROPOSAL

All good faith effort documentation must be submitted with the bid or within three (3) working days following the bid opening.

Failure to submit the required good faith effort documentation within three (3) working days following the bid opening may render the bid non-responsive.

The Bidder is required to subcontract the following minimum percentage of its bid:

Mandatory Subcontracting Minimum (MSM) Requirement	30%

NOTE: Outreach Program information and/or assistance may be obtained through the County's Affirmative Action Office at 925-335-1455 .

Contra Costa County
OUTREACH PROGRAM
ADVISORY COUNCIL ON EQUAL EMPLOYMENT OPPORTUNITY
2530 Arnold Drive #140
(925) 335-1455

**LETTER OF INTENT TO PERFORM AS A
SUBCONTRACTOR / SUPPLIER / MANUFACTURER / TRUCKER**

Name of Prime Contractor

Name of Project

Project Number

The undersigned is a (check one):

☐ Sole proprietorship ☐ Corporation ☐ Limited Liability
☐ Partnership ☐ Joint Venture

Check the following which may apply.

MBE	WBE	SBE	LBE	DVBE
☐ Subcontractor	☐ Subcontractor	☐ Subcontractor	☐ Subcontractor	☐ Subcontractor
☐ Supplier	☐ Supplier	☐ Supplier	☐ Supplier	☐ Supplier
☐ Manufacturer	☐ Manufacturer	☐ Manufacturer	☐ Manufacturer	☐ Manufacturer
☐ Trucker	☐ Trucker	☐ Trucker	☐ Trucker	☐ Trucker
☐ Other _____ Describe	☐ Other _____ Describe	☐ Other _____ Describe	☐ Other _____ Describe	☐ Other _____ Describe

☐ None of the Above Apply

The undersigned is prepared to perform the following described work in connection with the above project (specify in detail the particular work items or parts thereof to be performed):

Total Amount Bid to Prime Contractor: \$ _____

Signature

Position Title

Date

Name of Person Completing this Form

Company Name

Phone Number

12.	()
Company Name	Phone Number
	()
	FAX Number



Contra Costa County

Attention Special Notice

Date: January 2004

To: Prime Contractors

From: Antoine Wilson
Equal Employment Officer

Subject: New Business Enterprise Category

On October 14, 2003, the Board of Supervisors approved the addition of the Disabled Veterans Business Enterprise (DVBE) category to the County's Outreach Program. The definition of a DVBE is:

A Disabled Veteran Business Enterprise (DVBE) is a business entity at least 51% owned by one or more disabled veterans and whose daily business operations must be managed and controlled by one or more disabled veterans(s); the disabled veteran(s) who manages and controls the business is not required to be the disabled veteran business owner(s); and the home office must be located in the U.S. (the home office cannot be a branch or subsidiary of a foreign corporation, foreign firm, or other foreign based-business). The disabled Veteran must be a California resident, have a service-connected disability of at least 10% or more and be an honorably discharged veteran of the U.S. Military, Naval or Air Services.

Whenever you see the listing of Minority Business Enterprises (MBEs), Women Business Enterprises (WBEs), Small Business Enterprises (SBEs), and Local Business Enterprises (LBEs), please add Disabled Veteran Business Enterprises (DVBEs) to the list of business enterprises. For example: MBE, WBE, SBE, LBE, and DVBE.

Contact the following agency for a listing of DVBEs:

State of California
Department of General Services
Procurement Division
Small Business and DVBE Certification
707 Third Street, 1st Floor, Room 400
P. O. Box 989052
West Sacramento, CA 95798-9052
(800) 559-5529
<http://www.pd.dgs.ca.gov/smbus/certinq.htm>

If you have any questions, contact:

ADVISORY COUNCIL ON EQUAL EMPLOYMENT
OPPORTUNITY
2530 Arnold Drive #140
Martinez, California 94553
(925) 335-1455

DOCUMENT 003130

GEOTECHNICAL DATA AND EXISTING CONDITIONS

1. This document sets forth the terms and conditions under which a Bidder may review, study, use or rely upon geotechnical data for, or areas near, the **Los Medanos Recovery Center Project** site (the "Site"), and existing conditions information concerning existing conditions at the Site. This document, the available geotechnical data, and the supplied existing conditions information are not Contract Documents.
2. **REPORTS AND INFORMATION**
 - 2.1 County, its consultants and prior contractors may have collected documents that provide 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, tenant improvement contracts, as-built drawings, utility drawings, and information regarding Underground Facilities. These reports, documents and other information are not part of the Contract Documents.
 - 2.2 Bidders must inspect all available geotechnical reports and all information regarding existing conditions that have been provided by the County.
 - 2.3 The following reports and information regarding existing conditions and Underground Facilities at or contiguous to the Site are provided as non-contract document Exhibits for Bidder's convenience:
 - 2.3.1 Exhibit A – Los Medanos Record Drawings - (page count [32]) Drawings dated November 9, 1976, as issued by Lyons and Hill Architects AIA Inc.
 - 2.3.2 Exhibit B – Los Medanos ALTA Survey - (page count [3]) Drawings dated December, 2025 as issued by Wood Rodgers.
 - 2.3.3 Exhibit C – Los Medanos Phase I ESA - (page count [1,539]) Report dated October 30th, 2025 as issued by Cameron Cole.
 - 2.3.4 Exhibit D – Los Medanos Vehicle Miles Traveled - (page count [4]) Memorandum dated April 28, 2026 as issued by Contra Costa County Department of Conservation and Development.
 - 2.3.5 Exhibit E – Los Medanos Topo Survey - (page count [2]) Drawings dated December, 2025, as issued by Wood Rodgers.
 - 2.3.6 Exhibit F – Los Medanos Geotechnical Engineering Report - (page count [71]) Drawings dated November 6, 2025 as issued by Terracon.
 - 2.3.7 Exhibit G – Criteria Architect Media Release - (page count [1]) Form dated May 21, 2026 as issued by BCRA.
 - 2.3.8 Exhibit H – Conditions of Title - (page count [14]) Guarantee dated October 22, 2024 as issued by WFG National Title Insurance Company.
 - 2.3.9 Exhibit I – Climate Action and Adaptation Plan - (page count [344]) Plan dated November 5, 2024 as issued by PlaceWorks.

- 2.3.10 Exhibit J – BDA Management Form - (page count [2]) Form as issued by Contra Costa County.
- 2.3.11 Exhibit K – BDA Guidelines - (page count [2]) Document as issued by Contra Costa County.
- 2.3.12 Exhibit K – BDA Guidelines - (page count [2]) Document as issued by Contra Costa County.
- 2.3.13 Exhibit L – Noise and Vibration Technical Memorandum - (page count [32]) Document as issued by Helix Environmental Planning.
- 2.3.14 Exhibit M – Air Quality Memorandum - (page count [XX]) Document as issued by Helix Environmental Planning.
- 2.3.15 The reports, documents, and information described in paragraphs 2.3.1 - 2.3.14 above are not part of the Contract Documents. However, for Bidder's convenience, a copy of the documents will be provided with the Criteria Documents, see "Criteria Manual Exhibits" Document 000110 (Table of Contents).

3. **USE OF INFORMATION ON EXISTING CONDITIONS**

- 3.1 Above-Ground Existing Conditions. Under no circumstances shall County be deemed to make a warranty or representation of visible existing above-ground conditions, as-built conditions, or other above-ground actual conditions verifiable by reasonable independent investigation. These conditions are verifiable by the Bidder by the performance of its own independent investigation, which the Bidder must perform prior to submitting a Proposal. The Bidder must not rely on the information supplied by County regarding existing above-ground conditions. By submitting a Proposal, Bidder represents and agrees that in submitting its Proposal, it is not relying on any information regarding existing above-ground conditions supplied by County to the extent such conditions are verifiable by reasonable independent investigation.
- 3.2 Underground Facilities. Information supplied regarding existing Underground Facilities at or contiguous to the Site is based on information furnished to County by others (e.g., the owners or builders of such Underground Facilities or others). For those Underground Facilities that are owned by County, County will be responsible for the accuracy of information regarding Underground Facilities and for any conditions which materially differ from those indicated in the information provided by the County, provided that Bidder has conducted an independent review of the information provided by the County and discrepancies were not apparent. Bidder is responsible for understanding and interpreting all information on Underground Facilities other than those owned by County and County agrees that Bidder is not responsible for the accuracy of such information or reports. In reviewing any information regarding Underground Facilities, Bidder is responsible for making all reasonable interpretations and drawing all reasonable conclusions from that information but shall be solely responsible for any unreasonable interpretations or conclusions drawn therefrom. Compensation to the Design Builder for unknown differing site conditions shall be allowed as is provided for in the Contract Documents.

4. **LIMITED RELIANCE PERMITTED ON CERTAIN INFORMATION**

- 4.1 Geotechnical Data. By submitting a Proposal, Bidder represents and agrees that in submitting its Proposal, it is not relying on any geotechnical data supplied by County, except as specifically set forth herein.
- 4.2 The Bidder may rely upon the accuracy of the “technical data” contained in the geotechnical reports and drawings identified above, but only insofar as it relates to subsurface conditions and only if Bidder has conducted a thorough review of such technical data and discrepancies were not apparent. The term “technical data” in the referenced reports and drawings shall be limited as follows:
- 4.2.1 The term “technical data” shall include actual reported depths, reported quantities, reported soil types, reported soil conditions, and reported material, equipment or structures that were encountered during subsurface exploration.
- 4.2.2 The term “technical data” does not include, and the Bidder may not rely upon, any other data, interpretations, opinions, or information shown or indicated in such drawings or reports that otherwise relate to subsurface conditions or described structures.
- 4.2.3 The term “technical data” shall not include the location of Underground Facilities.
- 4.2.4 The Bidder may not rely on the completeness of reports and drawings for the purposes of design or construction. The Bidder may rely upon the general accuracy of the “technical data” contained in such reports or drawings.
- 4.2.5 The Bidder is responsible for making reasonable interpretations of technical data and reports. The Bidder is solely responsible for any unreasonable interpretation or conclusion drawn from any “technical data” or any other data, interpretations, opinions or information contained in supplied geotechnical data. However, compensation for unknown differing site conditions shall be allowed as is provided for in the Contract Documents.

5. **INVESTIGATIONS**

- 5.1 Before submitting a Proposal, each Bidder shall conduct its own visual inspection of the Site and will be responsible for performing all other investigations that Bidder deems are necessary to make its Proposal and for performing and furnishing Work in accordance with the time, price and other terms and conditions of the Contract Documents. Bidder may rely upon the geotechnical and existing conditions data provided by the County only to the extent the Bidder’s geotechnical engineer deems appropriate in the exercise of its professional judgment. The design shall not be developed based solely upon the information provided by the County. Each Bidder will be responsible for obtaining and reviewing such additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the Site or otherwise, as deemed necessary by its geotechnical engineer, that may affect structural design, cost, progress, performance or furnishing of Work or that relate to any aspect of the means, methods, techniques, sequences or procedures of construction to be employed by the Bidder and safety precautions and programs incident thereto, and for performing reasonable on-site inspections for visible conditions, which the Bidder deems necessary to make its Bid and for performing and furnishing the Work in accordance with the time, price and other terms and conditions of Contract Documents.

6. **ACCESS TO SITE**

- 6.1 Subject to County approval and reasonable scheduling, County will provide each Bidder access to the Site to conduct such examinations and investigations as each Bidder deems necessary for submission of its Proposal. Bidders must contact Vanir Construction Management (VCM) - Reference Contact Information Section 002100, Article 2.3, to coordinate or schedule any site examinations and/or investigations at the project sites.

END OF DOCUMENT

DOCUMENT 004200

PROPOSAL FORM

To be submitted by the time and date indicated in Document 002100 (Request for Proposals):

TO: BOARD OF SUPERVISORS OF THE COUNTY OF CONTRA COSTA

**RE: CCC PUBLIC WORKS DEPARTMENT AUTHORIZATION NO(s): WH153
DESIGN-BUILD SERVICES FOR THE CONTRA COSTA COUNTY LOS MEDANOS
RECOVERY CENTER PROJECT**

1. The undersigned Bidder proposes and agrees that, if this Proposal is accepted, Bidder will enter into an agreement with the COUNTY OF CONTRA COSTA ("County") in the form included in the Contract Documents and Document 005200 (Agreement), to perform and furnish all Work specified or indicated in the Contract Documents for the Contract Sum and within the Contract Time indicated in this Proposal and in accordance with all other terms and conditions of the Contract Documents.
2. The Bidder accepts all the terms and conditions of the Contract Documents. The Bidder accepts all the terms and conditions of Document 002100 (Request for Proposals), including but not limited to Document 002100A (RFP Master Proposal Packaging list), Document 002100B (Best Value Enhancement Form) and all Addenda thereto, including without limitation, those dealing with the disposition of Proposal security. This Proposal will remain subject to acceptance for one hundred fifty (150) Days after the Date of Proposal below, unless a greater period is authorized by Document 002100, and may not be withdrawn during that time period. The Bidder will sign and submit Document 005200 (Agreement), bond commitments and other documents required by Document 002100 by the time and in the manner set forth therein.
3. In submitting this Proposal Form, the Bidder represents that:
 - 3.1 Bidder has examined all the Contract Documents, and
 - 3.2 Based on that examination, Bidder proposes and agrees to fully perform the Work within the time stated and in strict accordance with the Contract Documents for the following sum of money listed in the following Schedule (Bidder Proposal Form).
4. Bidder must provide the following price breakdown information for proposal evaluation purposes. The amounts included in the following breakdown must accurately reflect the Bidders estimated costs and **total the price identified in Document 002100, Paragraph 3**. This information is for proposal evaluation purposes. However, DBE should anticipate the information will be utilized in the development of its schedule of values for project invoicing.
5. All proposal items must be filled in completely. Proposal items are described in Sections 011110 (Summary of Work) and 011114 (Summary of Work - Design Services & Deliverables). The price breakdown information included on the Bidder Proposal Form is intended for proposal evaluation and does not reflect the work sequencing requirements described in Section 011216 (Work Sequence). Construction must be performed in accordance with the requirements of Section 011216. Quote in numerals only, unless words are specifically requested.
6. **PROJECT LABOR AGREEMENT:** As a condition of being awarded the contract, the selected Design-Build Team is required to sign a Project Labor Agreement ("PLA") with the Contra Costa Building and Construction Trades Council. The required Project PLA and PLA forms are included in the RFP (Document 007349). The Design-Build Team shall require all subcontractors, as a condition of working on the project, to sign the PLA.

The following ADDENDA are hereby acknowledged as being included in the Price Proposal:

RFP ADDENDA NO.	DATED	SIGNATURE OF PROPOSER
Addendum #		
Addendum #		
Addendum #		
Addendum #		
Addendum #		
Addendum #		

Bidder Proposal:

Los Medanos Recovery Center Project				
Abatement Direct Costs				\$
Demolition Direct Costs				\$
Underground Utilities Direct Costs				\$
Site Work Direct Costs				\$
Building Construction Direct Costs				\$
Subtotal				\$
Escalation (thru midpoint of construction)		%		\$
General Requirements		%		\$
General Conditions		%		\$
Design Contingency		%		\$
Construction Contingency		%		\$
Insurance & Subguard		%		\$
Subtotal				\$
Contractor Fee		%		\$
Preconstruction Services		%		\$
Design-Build Team A/E Fees		%		\$
Permits (Reference Section 13 - Document 007200)		%		\$
Bonds		%		\$
Subtotal				\$

DBE PROPOSAL PRICE - CONSTRUCTION	25,697,000.00
Allowance No.1 - Owner Allowance (Scope Change Contingency)	\$ 503,000.00
TOTAL COMPETITIVE BID PRICE (DBE PROPOSAL PRICE + ALLOWANCES)	\$ 26,200,000.00

Project Alternates / Enhancements:

Alternate Price captures all design and construction costs, including but not not limited to, Materials, Labor, Escalation, General Requirements, General Conditions, design contingency, insurance/subguard, Contractor Fee, Preconstruction costs, DB Team A/E Fees, permit and bond costs.

Los Medanos RECOVERY CENTER - ALTERNATE PRICING				ALTERNATE PRICE
1. Additive Alternate - 250 kW Diesel Generator			\$	
2. Additive Alternate - 500 kW Diesel Generator			\$	
ALTERNATE PRICING BREAKDOWN				
Building Construction Direct Costs			\$	
Subtotal				\$
Escalation (thru midpoint of construction)		%	\$	
General Requirements		%	\$	
General Conditions		%	\$	
Design Contingency		%	\$	
Construction Contingency		%	\$	
Insurance & Subguard		%	\$	
Subtotal				\$
Contractor Fee		%	\$	
Preconstruction Services		%	\$	
Design-Build Team A/E Fees		%	\$	
Permits (Reference Section 13 - Document 007200)		%	\$	
Bonds		%	\$	
Subtotal				\$
TOTAL - ALT. PRICING (Los Medanos NOS. 1)				\$

Project Enhancements:

Los Medanos RECOVERY CENTER - CCCPW LISTED PROJECT ENHANCEMENTS										TOTAL COST		
A. Description												
										\$	0	
County Decision Point Date - Owner must notify DBE no later than this date to accept "enhancement" without incurring additional project costs. Check box to indicate enhancement has been included in Design Builder Total Proposal Price.												
B. Description												
										\$		
County Decision Point Date - Owner must notify DBE no later than this date to accept "enhancement" without incurring additional project costs. Check box to indicate enhancement has been included in Design Builder Total Proposal Price.												
C. Description												
										\$		
County Decision Point Date - Owner must notify DBE no later than this date to accept "enhancement" without incurring additional project costs. Check box to indicate enhancement has been included in Design Builder Total Proposal Price.												
D. Description												
										\$		
County Decision Point Date - Owner must notify DBE no later than this date to accept "enhancement" without incurring additional project costs. Check box to indicate enhancement has been included in Design Builder Total Proposal Price.												
E. Description												
										\$		
County Decision Point Date - Owner must notify DBE no later than this date to accept "enhancement" without incurring additional project costs. Check box to indicate enhancement has been included in Design Builder Total Proposal Price.												
TOTAL - CCCPW LISTED ENHANCEMENTS PRICING										\$		

7. Contractor acknowledges and agrees that final adjustment to Contract Sum, if any, with respect to the foregoing amounts, may be made as provided in Document 007200 (General Conditions) at no additional costs beyond those noted above if accepted prior to any corresponding Decision Point Dates.
8. DEFINITION OF TOTAL EVALUATED PRICE PROPOSAL: A transparent process for procurement of equipment, services and work in which bids are invited by prequalification, covering the scope and specifications of the equipment, services and work required for the project. The terms and conditions of the proposed contract as well as the criteria by which bids shall be evaluated. Subject to additions and deductions which may be made only in accordance with the Contract Documents.

9. The undersigned understands that County reserves the right to reject this Proposal, or all proposals, in its sole discretion.
10. If written notice of the acceptance of this Proposal, referred to as the Notice of Award, is mailed or delivered to the undersigned Bidder within the time described in paragraph 2 above or at any other time thereafter before it is withdrawn, the undersigned agrees to execute and deliver the documents required by Document 002100 (Request for Proposals) including, but not limited to, Documents 005200 (Agreement), 006110 (Construction Performance Bond), and 006120 (Construction Labor and Material Payment Bond), and insurance certification all within the time and in the manner specified in Document 002100.
11. Notice of Award or request for additional information may be addressed to the undersigned Bidder at the address set forth below.
12. The undersigned Bidder encloses with this Proposal a certified check or cashier's check on 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 having an A.M. Best Company financial rating of A-7 or better, in the amount of ten percent (10%) of the total of Proposal Price above, and made payable to the "**The County of Contra Costa**".
13. The undersigned Bidder agrees to commence work under the Contract Documents on the date established by Document 007200 (General Conditions) and to complete all work by the Bidder's specified completion date included in their proposal. Bidders specified proposal project completion date to be included in Document 005200 (Agreement) subject to terms and conditions of Article 3.3.2 of the Agreement (Document 005200).
14. If the Bidder 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 Bidder 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. By signing this Proposal, all signers represent and warrant that they are authorized to sign this Proposal on behalf of Bidder.
15. **EXISTING CONDITIONS:** The undersigned has examined the location of the proposed work and is familiar with the site and surroundings, the County's "Criteria Documents," the Request for Proposal ("RFP") including all attachments and exhibits to the RFP, the contract documents, and the local conditions at the place where the work is to be done. The Design-Builder shall satisfy themselves through their own investigation as to the actual conditions to be encountered.
16. **UTILITIES:** The Design-Builder shall be responsible at their own cost for any and all work, expense, delay, or special precautions caused or required by the existence or proximity of utilities encountered in performing the work, including without limitation thereon, repair of any or all damage and all hand or exploratory excavation and potholing required. The proposer is cautioned that such utilities may include gas/fuel, communication cables or electrical cables which may be high voltage, and the ducts enclosing such cables, and when working or excavating in the vicinity thereof, the special precautions to be observed at their own cost shall also include the following: All such cables and their enclosure ducts shall be exposed by careful hand excavation so as not to damage the ducts or cables, nor cause injury to persons, and suitable warning signs, barricades and safety devices shall be erected as necessary or required.
17. **CHECKING OF STATED FIGURES:** The undersigned has checked carefully all of its stated figures and understands that the County will not be responsible for any errors or omissions on the part of the undersigned in making up this Price Proposal.
18. **PRICE PROPOSAL INTEGRITY:** The undersigned hereby certifies that this Price Proposal is genuine and not sham or collusive, or made in the interest of or on behalf of any person not

herein named, and that the undersigned has not directly induced or solicited any other entity to put in a sham price proposal, or any other person, firm or corporation to refrain from submitting a price proposal, and that the undersigned has not in any manner sought by collusion to secure for themselves an advantage over any other entity interested in submitting a price proposal.

19. The undersigned Bidder agrees that, in accordance with Document 007200 (General Conditions), liquidated damages for failure to complete all Work under the Contract Documents within the time specified therein shall be as set forth in Document 005200 (Agreement). It is understood, with due allowances made for unavoidable delays, that if the Design-Build Team fails to complete the Work within the time set forth in Document 005200 (Agreement), the Design-Build Team shall be liable to the County for liquidated damages, and not as a penalty, in accordance with Article 3.5 of the Agreement (Document 005200), as follows:

19.1 **Eight Thousand Dollars (\$8,000) per calendar day** for each day Substantial Completion is delayed beyond the time specified in the Contract Documents; and

19.2 **Eight Thousand Five Hundred Dollars (\$8,500) per calendar day** for each day Final Completion is delayed beyond the time specified in the Contract Documents.

It is understood and agreed that the assessment of liquidated damages for Final Completion shall apply only after the time period established in the Agreement for achieving Final Completion following Substantial Completion has expired. It is agreed and expressly stipulated that it would be impractical and extremely difficult to determine the actual amount of damages.

20. **NEGOTIATIONS:** The Price Proposal, together with all required parts of the Design-Builder's Proposal package, will be evaluated by the County pursuant to the criteria set forth in the RFP document. The County reserves the right to hold good faith discussions or negotiations concerning the **Total Evaluated Price Proposal** to arrive at a final agreed price (the contract sum) starting with the highest ranked design-builder.

Design-Build Team: _____

General Contractor:

By _____
Print Name Signature

Title _____

Address _____

Phone: _____ Email: _____

Federal Tax Payer I.D. or Social Security No. _____

Dated this _____ day of _____, 20____.

General Contractor:

Classification and License No. _____ Expiration Date _____

Architect/Designer:

By _____
Print Name Signature

Title _____

Address _____

Phone: _____ Email: _____

Federal Tax Payer I.D. or Social Security No. _____

Dated this _____ day of _____, 20____.

Architect/Designer:

License No. _____ Expiration Date _____

**NONCOLLUSION AFFIDAVIT TO BE EXECUTED BY
PROPOSER AND SUBMITTED WITH PRICE PROPOSAL**

State of California)
County of _____) ss

_____, being first duly sworn, deposes and says that he or she is _____ of _____ the party making the foregoing price proposal that the price proposal is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization or corporation; that the price proposal is genuine and not collusive or sham; that the proposer has not directly or indirectly induced or solicited any other proposer to put in a false or sham price proposal, and has not directly or indirectly colluded, conspired, connived or agreed with any proposer or anyone else to put in a sham price proposal, or that anyone shall refrain from proposing; that the proposer has not in any manner, directly, or indirectly, sought by agreement, communication or conference with anyone to fix the price proposal of the proposer or any other proposer, or to fix any overhead, profit, or cost element of the price proposal, or of that of any other proposer, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the price proposal are true; and, further, that the proposer has not, directly or indirectly, submitted his or her price proposal or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, price proposal depository, or to any member or agent thereof to effectuate a collusive or sham price proposal.

Dated: _____

Signed: _____

NOTE: THIS FORM MUST BE NOTARIZED

CERTIFICATE OF ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)
County of _____) ss

On the date written below, before me, the undersigned Notary Public, personally appeared the person(s) signing above for Contractor, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Dated: _____

[NOTARIAL SEAL]

Notary Public

END OF DOCUMENT

DOCUMENT 004310

BOND ACCOMPANYING PROPOSAL

KNOW ALL BY THESE PRESENTS:

That the undersigned [] as Principal and the undersigned as Surety are held and firmly bound unto the COUNTY OF CONTRA COSTA ("County"), as obligee, in the penal sum of _____ (\$_____) lawful money of the United States of America, being at least ten percent (10%) of the aggregate amount of said Principal [] proposal, 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

Los Medanos Recovery Center Project Authorization No. WH153A

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 a period of ten (10) Days after such award enter into the contract so awarded and execute DOCUMENT 005200 (AGREEMENT) 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 _____, 2026.

(Corporate Seal)

By

Principal

Surety

(Corporate Seal)

By

Attorney in Fact

END OF DOCUMENT

DOCUMENT 004336

DESIGNATED SUBCONTRACTORS AND SUBCONSULTANTS LIST

PROJECT: LOS MEDANOS RECOVERY CENTER

Bidder must list hereinafter the name and location of each subcontractor and subconsultant who will be employed, and the kind of Work that each will perform if the Contract is awarded to the Bidder. Bidder acknowledges and agrees that under Public Contract Code section 4100, et seq., it must clearly set forth below the name and location of each subcontractor who will perform work or labor or render service to the Bidder in or about the construction of the Work in an amount in excess of one-half of one percent (1/2 of 1%) of Bidder's total Bid, and that as to any Work that Bidder fails to list, Bidder agrees to perform that portion itself or be subjected to penalty under applicable law.

In case more than one subcontractor is named for the same kind of Work, state the portion that each will perform. Vendors or suppliers of materials only do not need to be listed.

If further space is required for the list of proposed subcontractors, additional sheets showing the required information, as indicated below, shall be attached hereto and made a part of this document.

CLARIFICATION: Document 004336 shall be provided by the Bidder as part of the proposal package listing all the proposed Core Team Subcontractors. Pending Contract award, the attached form shall be updated and resubmitted for each subsequent Bidder bid package.

(1) (4) Name and City of Subcontractor or Subconsultant	(1) Description of Work: Reference to Contract Items	(2) (3) Prices Under Subcontract	Subcontractor's License Numbers.		
			(2) State of California Contractor's License	(2) Dept. of Industrial Relations Registration No.	(2) Business License and City/County Issued

(Bidder to attach additional sheet(s) if necessary)

- (1) Submit this information with sealed bid/Proposal.
- (2) This information shall be required of the two (2) apparent low bidders, no later than two days following the bid opening. **NOT REQUIRED WITH RFP PROPOSAL.**
- (3) Dollar amount will be treated as proprietary and will solely be for the use of County staff. **NOT REQUIRED WITH RFP PROPOSAL.**
- (4) Submit full address of Subcontractors two (2) days following bid opening.

END OF DOCUMENT

DOCUMENT 004510

DESIGN BUILDER REGISTRATION AND SAFETY EXPERIENCE FORM

INSTRUCTIONS

IN ORDER TO PROPOSE TO UNDERTAKE WORK FOR THE COUNTY OF CONTRA COSTA,
YOU MUST DO THE FOLLOWING:

- 1) FILL OUT THIS FORM COMPLETELY; DO NOT LEAVE BLANKS.
- 2) PROVIDE CERTIFICATES OF INSURANCE COMPLYING WITH DOCUMENTS 007200
(GENERAL CONDITIONS) AND 007320 (INSURANCE).

REGISTRATION

CONTRACTORS LICENSE # _____

DATE: _____ FED I.D. # _____

FULL CORPORATE NAME OF COMPANY:

STREET ADDRESS: _____

MAILING ADDRESS: _____

PHONE: _____ FAX: _____

NAME OF PRINCIPAL CONTACT: _____

TYPE OF BUSINESS: _____ Sole Proprietor _____ Partnership

_____ Non-Profit 501(c)(3) _____ Corporation

_____ Other (Please explain below)

INSURANCE

COMMERCIAL GENERAL LIABILITY:

CARRIER: _____

ADDRESS: _____

PHONE: _____

POLICY NUMBER: _____ Deductible: \$ _____

POLICY LIMITS: \$ _____ Self-Insured Retention: \$ _____

COMMERCIAL AUTOMOBILE LIABILITY:

CARRIER: _____

ADDRESS: _____

PHONE: _____

POLICY NUMBER: _____ Deductible: \$ _____

POLICY LIMITS: \$ _____ Self-Insured Retention: \$ _____

BUILDER'S RISK:

CARRIER: _____

ADDRESS: _____

PHONE: _____

POLICY NUMBER: _____ Deductible: \$ _____

POLICY LIMITS: \$ _____ Self-Insured Retention: \$ _____

PERILS COVERED: _____

WORKER'S COMPENSATION:

CARRIER: _____

ADDRESS: _____

PHONE: _____

POLICY NUMBER: _____ Deductible: \$ _____

POLICY LIMITS: \$ _____ Self-Insured Retention: \$ _____

UMBRELLA/EXCESS LIABILITY:

CARRIER: _____

ADDRESS: _____

PHONE: _____

POLICY NUMBER: _____ Deductible: \$ _____

POLICY LIMITS: \$ _____ Self-Insured Retention: \$ _____

PROFESSIONAL LIABILITY:

CARRIER: _____

ADDRESS: _____

PHONE: _____

POLICY NUMBER: _____ Deductible: \$ _____

POLICY LIMITS: \$ _____ Self-Insured Retention: \$ _____

SAFETY EXPERIENCE

The following statements as to the Bidder's safety experience are submitted with the Bid, as part thereof, and the Bidder guarantees the truthfulness and accuracy of all information.

1. List your firm's interstate Experience Modification Rate for the last three years.
2023 _____ 2024 _____ 2025 _____
2. Use your last year's Cal/OSHA 200 log to fill in the following number of injuries and illnesses:
 - a. Number of lost workday cases _____
 - b. Number of medical treatment cases _____
 - c. Number of fatalities _____
3. Employee hours worked last year _____
4. State the name of your firm's safety engineer/manager:

Attach a resume or outline of this individual's safety and health qualifications and experience.

I CERTIFY, UNDER PENALTY OF PERJURY, THAT THE FOREGOING INFORMATION IS CURRENT AND ACCURATE, AND I AUTHORIZE THE COUNTY OF CONTRA COSTA, AND ITS AGENTS AND REPRESENTATIVES, TO OBTAIN A CREDIT REPORT AND/OR VERIFY ANY OF THE ABOVE INFORMATION.

[_____] / Name of Design Builder

By: _____
Signature

Its: _____
Title

Date

END OF DOCUMENT

DOCUMENT 004525

UPDATED NON-COLLUSION AFFIDAVIT

Public Contract Code § 7106

NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY DESIGN BUILDER AND
SUBMITTED WITH RESPONSE TO REQUEST FOR SUPPLEMENTAL INFORMATION

STATE OF CALIFORNIA)
) ss.
CONTRA COSTA COUNTY)

[Name of Principal(s) of the Bidder], being first duly sworn, deposes and says that he or she is **[Office of Affiant]** of **[Name of the Bidder]**, the party making the foregoing Response to Request for Supplemental Information of **[RSI Date]**, that its Response is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that its Response is genuine and not collusive or sham; that the Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham Response, and has not directly or indirectly colluded, conspired, connived or agreed with any bidder or anyone else to put in a sham Response, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication or conference with anyone to fix its Updated Proposal price of the Bidder or any other bidder, or to fix any overhead, profit or cost element of the Updated Proposal price, or of that of any other bidder, or to secure any advantage against CONTRA COSTA COUNTY, acting by and through its PUBLIC WORKS DEPARTMENT, or anyone interested in the proposed contract; that all statements contained in the Proposal are true; and further, that Bidder has not, directly or indirectly, submitted its Updated Proposal price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, Proposal/bid depository, or to any member or agent thereof to effectuate a collusive or sham Proposal.

Executed under penalty of perjury under the laws of the State of California.

(Name of Bidder)

(Signature of Principal)

Subscribed and sworn before me this _____ day of _____, 2026.

Notary Public of the State of: _____ (Seal)
In and for the County of: _____
My Commission expires: _____

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

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

END OF DOCUMENT

DOCUMENT 004540

DESIGN BUILDER CERTIFICATIONS

TO BE EXECUTED BY ALL DESIGN BUILDERS AND SUBMITTED WITH PROPOSAL

The undersigned Design Builder certifies to the COUNTY OF CONTRA COSTA ("County"), as is set forth in paragraphs 1 through 12 below all under the penalty of perjury that:

1. **CERTIFICATE OF NON-DISCRIMINATION:** There will be no discrimination in employment with regard to race, color, religion, gender, sexual orientation, or national origin; that all federal, state, and local laws, regulations, directives, and executive orders regarding non-discrimination in employment will be complied with; and that the principle of equal opportunity in employment will be demonstrated positively and aggressively.
2. **STATEMENT OF CONVICTIONS:** No final, unappealable finding of contempt of court by a Federal Court has been issued against Design Builder 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. **PREVIOUS DISQUALIFICATION:** Neither the below indicated Design Builder or any of its officers or employees with a proprietary interest in such Design Builder has ever been disqualified, removed or otherwise prevented from bidding on, or completing a Federal, State, or local government project because of a violation of law or a safety regulation except as indicated on the separate sheet attached hereto entitled "Previous Disqualifications." If such exceptions are attached, please explain the circumstances.
4. **CERTIFICATION OF WORKER'S COMPENSATION INSURANCE:** I am aware of the provisions of Labor Code § 3700 which requires every employer to be insured against liability for workers' 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.
5. **CERTIFICATION OF PREVAILING WAGE RATES AND RECORDS:** I am aware of the provisions of California State Labor Code § 1773 and/or Federal Code 40 U.S.C. § 3142, which requires the payment of prevailing wage on public projects. Also, that the Design Builder and all of its Subcontractors shall comply with California State Labor Code § 1776 and/or Federal Labor Code 29 CFR Part 516, regarding wage records, and with California State Labor Code § 1777.5 and/or Federal Labor Code 29 C.F.R. § 5.2(j), regarding the employment and training of apprentices. It is the Design Builder's responsibility to ensure compliance by any and all subcontractors performing work under this Contract. I hereby certify that I will conform to the State of California Public Works Contract requirements regarding prevailing wages, benefits, on-site audits with 48-hours' notice, payroll records, and apprentice and trainee employment requirements, for all Work on the above Project.
6. **CERTIFICATION OF APPRENTICESHIP PROGRAM PARTICIPATION:** Design Builder 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 § 22164), and that attached hereto is a copy of that agreement, which is true and correct and in full force and effect.

7. **CERTIFICATION OF ACCEPTABLE SAFETY RECORD:** Design Builder'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 if the Design Builder is a party to an alternative dispute resolution system as provided for in Labor Code § 3201.5.

8. **CERTIFICATION REGARDING SELECTION PROCESS.**

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

_____ Design Builder has no objections or protests to any Design Builder selection procedure, process or requirement, or any other aspect of the Design Builder selection process and does not object to any aspect of the Design Builder selection process.

Attached as an appendix to its Proposal, consisting of _____ pages, is a detailed description of all of Design Builder's objections or protests regarding any aspect of the Design Builder selection process. **Design Builder must attach an appendix to its Proposal if this item is checked and comply with paragraph 20 of Document 002100 (Request for Proposals).**

9. **CERTIFICATION REGARDING MATERIAL CHANGES.**

[Please check and/or complete the following]

_____ All information Design Builder submitted to County in connection with the Pre-Qualification process, including without limitation its Pre-Qualification Questionnaire, and any modifications, amendments or supplements thereto remains true and correct in all material respects as of the date of submitting its Proposal. All financial information Design Builder submitted to County in connection with the Pre-Qualification process remains an accurate representation of the financial strength of Design Builder and its core Subcontractors and Subconsultants.

Except as identified in Design Builder's Material Changes List submitted with Design Builder's Proposal, submitted as provided in Document 002100 (Request for Proposals), all information Design Builder submitted to County in connection with the Pre-Qualification process, including without limitation its Pre-Qualification Questionnaire, and any modifications, amendments or supplements thereto remains true and correct in all material respects as of the date of submitting its Proposal. Except as identified in Design Builder's Material Changes List submitted with Design Builder's Proposal, submitted as provided in Document 002100 (Request for Proposals), all financial information Bidder submitted to County in connection with the Pre-Qualification process remains an accurate representation of the financial strength of Design Builder and its core Subcontractors and Subconsultants.

10. **CERTIFICATION REGARDING USE AND OWNERSHIP OF INFORMATION:** All rights to information developed, disclosed or provided in the undersigned's Proposal and the attendant submissions are the property of County, unless Design Builder makes specific reference to data that is considered proprietary. To the extent the undersigned Design Builder claims any copyright, patent or other property right in any portion of its Proposal, submission of a Proposal constitutes Design Builder's express (a) grant and assignment of a perpetual, transferable (in whole or in part), non-exclusive, royalty-free license to County for all such portions, and (b) agreement that County may use any such intellectual property without charge for any lawful

purpose in connection with its County project, including without limitation to the creation of derivative works and issuance of sublicenses.

11. **CERTIFICATION REGARDING GOVERNMENT CODE SECTION 4420:** Design Builder does not have serious or willful violations of Part 1 (commencing with § 6300) of Division 5 of the Labor Code, during the past five-year period or Design Builder is taking appropriate corrective action to prevent further violations of Part 1 of Division 5 of the Labor Code; Design Builder's workers' compensation experience modification factor is below 1.25 or Design Builder's experience modification rate is 1.25 to 1.75 and Design Builder is taking all appropriate action to reduce employee workplace injuries, illnesses and workers' compensation losses; and Design Builder has an injury prevention program in place pursuant to Labor Code § 3201.5 or § 6401.7.

12. **CERTIFICATION REGARDING HAZARDOUS MATERIALS**

- 12.1 Design Builder hereby certifies that no Asbestos, or Asbestos-Containing Materials, polychlorinated biphenyl (PCB), or any material listed by the federal or state Environmental Protection Agency or federal or state health agencies as a hazardous material, or any other material defined as being hazardous under federal or state laws, rules, or regulations ("New Hazardous Material"), shall be furnished, installed, or incorporated in any way into the Project or in any tools, devices, clothing, or equipment used to affect any portion of Design Builder 's work on the Project for County.
- 12.2 Design Builder further certifies that it has instructed its employees with respect to the above-mentioned standards, hazards, risks, and liabilities.
- 12.3 Asbestos and/or asbestos-containing material shall be defined as all items containing but not limited to chrysotile, crocidolite, amosite, anthophyllite, tremolite, and actinolite. Any or all material containing greater than one-tenth of one percent (.1%) asbestos shall be defined as asbestos-containing material.
- 12.4 Any disputes involving the question of whether or not material is New Hazardous Material shall be settled by electron microscopy or other appropriate and recognized testing procedure, at the County's determination. The costs of any such tests shall be paid by Design Builder if the material is found to be New Hazardous Material.
- 12.5 All Work or materials found to be New Hazardous Material or Work or material installed with equipment containing "New Hazardous Material" will be immediately rejected and this Work will be removed at Design Builder 's expense at no additional cost to the County.

13. **DEFINITIONS**

All capitalized terms not otherwise defined in these Design Builder Certifications shall have the meanings provided in Document 002100 (Request for Proposals) or Section 014200 (References and Definitions).

Design Builder: _____

[Name of Design Builder]

By: _____

[Signature]

Name: _____

[Printed Name]

Its: _____

[Title]

Dated: _____

END OF DOCUMENT

DOCUMENT 005100

NOTICE OF INTENT TO AWARD

DATE ISSUED: _____

PROJECT AUTHORIZATION NUMBER: WH153A

PROJECT TITLE: LOS MEDANOS RECOVERY CENTER

[_____], the [TITLE_____], intends to recommend to the County
of Contra Costa the award of the above-referenced project to

(Name of Design Builder)

SIGNATURE _____ DATE _____

[_____],

[_____]

[Title]

END OF DOCUMENT

DOCUMENT 005110

NOTICE OF AWARD

Dated _____, 20__.

TO: _____

ADDRESS: _____

CONTRACT FOR DESIGN-BUILD SERVICES

on the

LOS MEDANOS RECOVERY CENTER PROJECT

COUNTY AUTHORIZATION NO. WH153

Based on the County's evaluation and scoring of your submitted proposal dated _____, according to the criteria in the Request for Proposals, the County is awarding _____ (name of Design-Builder) the above Project for design-build service.

The Contract Price of your contract is the Contract Sum provided in Document 005200 (Agreement), which is **Twenty-Six Million Two Hundred Thousand Dollars (\$26,200,000.00)** for the Recovery Center; and either **Eight Hundred Ten Thousand Dollars (\$810,000)** for Alternate 1: 250kW Diesel Generator, or **One Million Four Hundred Thousand Dollars (\$1,400,000)** for Alternate 2: 500kW Diesel Generator, subject to any additions and deductions by Change Order, as provided in the Contract Documents.

Four (4) copies of each of the proposed Agreement (Document 005200) accompany this Notice of Award.

Upon commencement of the Work, you and each of your subcontractors shall certify and make available for inspection payroll records on forms provided by the Division of Labor Standards Enforcement, in accordance with Section 1776 of the California Labor Code.

In accordance with Article 23 of Document 002100 (Request for Proposals), you must comply with the following conditions precedent within ten (10) Days of the date of this Notice of Award, that is by _____:

1. Deliver to County three fully executed counterparts of Document 005200 (Agreement) each bearing your original signature(s) where required.

2. Deliver to County Document 006110 (Construction Performance Bond) executed by you and your surety.
3. Deliver to County Document 006120 (Construction Labor and Material Payment Bond) executed by you and your surety.
4. Deliver to County Document 006530 (Guaranty) executed by you.
5. Deliver to County all insurance information and certificates required by Document 007320 (Insurance).
6. Deliver to County the documentary evidence received or generated by you in preparation of your Proposal, as set forth in Document 006130 (Escrow Bid Documents).

Failure to comply with these conditions within the time specified will entitle County to consider your Proposal abandoned, to annul this Notice of Award, and to declare your Proposal Security forfeited. The County may then negotiate with the second or third ranked Bidders:

Second Ranked Bidder:

Third Ranked Bidder:

Within fifteen (15) Days after you comply with these conditions, County will return to you one fully signed counterpart of the Agreement.

CONTRA COSTA COUNTY,

By: _____

Attest: _____

Secretary

END OF DOCUMENT

DOCUMENT 005200

AGREEMENT

**FOR DESIGN BUILD SERVICES
FOR THE
LOS MEDANOS RECOVERY CENTER PROJECT**

THIS AGREEMENT FOR DESIGN BUILD SERVICES, made this _____ day of _____, 2026 (this "Agreement"), by and between **[Design Builder Name]**, a [State of incorporation / formation] [corporation / limited liability company] whose place of business is at _____ hereinafter referred to as Design Builder, and the CONTRA COSTA COUNTY, a political subdivision of the State of California, hereinafter referred to as "County":

In consideration of the mutual covenants hereinafter set forth, Design Builder and County agree as follows:

1. **WORK.** Design Builder shall, in a good and workmanlike manner and in accordance with the highest professional standards, provide, furnish, perform and complete all necessary planning, architectural, engineering, all other design services of any type, procurement, permitting and support services, construction, landscaping, clean-up, all other construction services of any type, and shall provide and furnish all necessary supplies, materials and equipment (except those to be provided by County, if any) and all necessary supervision, labor, and services required for the complete engineering, design, procurement, quality assurance, construction and all necessary installation, start-up and testing required for a complete, operational, and fully functional Project, as further described in Documents 011110 (Summary of Work) and 011114 (Summary of Work - Design Services and Deliverables), and Design Builder's Proposal. The all-inclusive obligations of the Design Builder set forth in this Section 1 (Work) are referred to in this Agreement as the "Work". The Design-Builder's obligation to deliver a complete, operational and fully functional Project is coextensive with the Design Builder's obligations set forth in the Contract Documents. Except with regard to any material to be provided and/or installed by County, the Design Builder shall fully commission and turn over a complete, operational, and fully functional Project to County. Without limiting the generality of this Agreement, the Design Builder shall provide the following work and services:
 - 1.1 Design Builder shall prepare 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 and for the construction of the complete, operational, and fully functional Project, and shall furnish the services of all necessary supervisors, engineers, designers, draftsmen, and other personnel necessary for the preparation of those drawings and specifications required for the Work, including the pertinent information for power, natural gas, water supply, and any other utilities, as required.
 - 1.2 Design Builder 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, 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 the permanent interconnection for electricity, natural gas, water supply, and any other utilities and demonstration of fully satisfactory operation of all systems and equipment.

- 1.3 Design Builder 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, and fully functional Project. Design Builder shall provide, manage and organize such personnel as necessary to complete the Work in accordance with all requirements of the Contract Documents.
- 1.4 Design Builder shall obtain all governmental, regulatory and private approvals, licenses, and permits required to complete the Work; provided, however, the Design Builder is not required to pay any charges associated with any permits **except** for reinspection charges or for encroachment permits for work performed in public right of ways. Design Builder is responsible for the cost of all other items related to the Work. Design Builder shall design and construct a complete, operational, and fully functional 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 manufacturers' recommendations pertaining to individual items of equipment or systems.

2. **COUNTY'S PROJECT MANAGER AND REPRESENTATIVES.**

- 2.1 County may delegate all or part of its rights, responsibilities and duties under this Agreement to a County Project Manager or other representative. County shall inform the Design Builder in writing of any such delegation and the extent of its representative's authority.

- 2.2 All notices or demands to County under the Contract Documents shall be to County's Capital Project Manager at:

Jeffrey K. Acuff
Capital Projects Management
255 Glacier Drive
Martinez, CA 94553
Telephone: (925)-595-6001
Email: jeff.acuff@pw.cccounty.us

or to such other person(s) and address(es) as County shall provide to Design Builder.

3. **CONTRACT TIME AND LIQUIDATED DAMAGES.**

- 3.1 Design Builder shall complete the Work within the schedule set forth in this Section 3, and beginning with the date in the Notice to Proceed that specifies the commencement of the Contract Time, and Document 007200 (General Conditions). County reserves the right to modify or alter the date the Work is to commence at any time.
- 3.2 Design Builder shall obtain all required regulatory agency approvals related to the Project. Design Builder accepts all time-related risks and all cost-related risks relating to those approvals except as is provided in paragraphs 15.6 and 15.7 of Document 007200 (General Conditions), and paragraph 1.2.7 of Document 013216 (Schedules and Reports).
- 3.3 Design Builder acknowledges that time is of the essence with respect to the Completion of the Work and the performance of this Agreement and that the County will be damaged by any delay in completing any of the major phases of the Project listed in paragraphs 3.3.1, 3.3.2, and 3.3.3 below. Therefore, Design Builder accepts the following Completion obligations:

- 3.3.1 Design-Builder shall achieve Substantial Completion no later than Six-Hundred and Nine (609) calendar days after the commencement date set forth in the Notice to Proceed, and Final Completion of the Project no later than 60 calendar days after the date by which Design-Builder achieves Substantial Completion ("Contract Time").
- 3.3.2 Following the issuance by the permitting agency of a permit allowing the Design Builder to commence construction of the foundation and structure for the Project, the Design Builder shall update the Project Master Schedule in accordance with Document 013216 (Schedules and Reports). The County is under no obligation to accept an updated Project Master Schedule that shows Design-Builder achieving Substantial Completion past Six-Hundred and Nine (609) calendar days after the commencement date established by the Notice to Proceed.
- 3.3.3 In addition to achieving Substantial Completion and Final Completion, Design Builder shall fully cooperate with the County so that the County may obtain all necessary Regulatory Agency approvals required to operate the Project.
- 3.4 To facilitate Design Builder performing its Completion obligations as described in Section 3.3 above, Design Builder acknowledges and accepts that the Regulatory Agency's initial review of each incremental construction permit application may take up to eight (8) weeks from the date the permit application is submitted to the Regulatory Agency as outlined in Design-Builder's bridging documents. The Design Builder's Project Master Schedule, Design Schedule and Construction Schedule shall reflect durations for permit reviews and work sequencing. If the Design-Builder fails to provide the Regulatory Agency with all documents necessary for the Regulatory Agency to review an incremental construction permit application within the time period stated above, (a) the project Completion Time shall not be extended, (b) the Contract Sum shall not be adjusted, and (c) the Design-Builder shall accelerate the recovery of time to the critical path of the Project without compensation. County will manage its own decision-making process to timely review and approve Construction Documents within Design Builder's planned durations, and will make its reasonable best efforts to facilitate the Regulatory Agency's timely review of construction permit applications within Design Builder's planned durations.
- 3.5 Liquidated Damages and Schedule Incentives. The County and Design Builder recognize that time is of the essence in this Agreement and that the County may suffer financial loss in the form of additional contract administration expenses (including project management and consultants' expenses) and delay and loss of public use if the Work is not completed within the time specified in Section 3.3 above, plus any extensions thereof allowed in accordance with the Contract Documents. Design Builder and County 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 County because of a delay in completion of the Work.

Accordingly, County and Design Builder agree that Design Builder shall pay County the following liquidated damages measures that apply separately and cumulatively:

- 3.5.1 If Design Builder fails to achieve Substantial Completion of the Project and/or final Completion of the Project within the times specified in paragraph 3.3 above in accordance with the Contract Documents, Design Builder shall pay County as liquidated damages and not as a penalty, the following sums of money per day for each calendar day the actual time of Design Builder's performance exceeds the authorized Contract Time for construction of the Project:

3.5.1.1 Design-Builder shall pay County **\$8,000 per calendar day** as liquidated damages for every day by which Substantial Completion exceeds the number of days per this agreement, from and after the starting date as established by the Notice to Proceed.

- 3.6 Liquidated damages for delay shall cover and be in lieu of the actual damages suffered by County as a result of delay. Liquidated damages are intended to compensate County for damages it incurs as a result of delay, but do not cover the cost of completion of the Work or any other damages not arising from delay. These liquidated damages shall be the County's sole remedy for recovery of damages due to delay in the Work, provided that this provision shall not limit any right or remedy of County in the event of any other default of Design Builder other than failing to complete the Work within the Contract Time.
- 3.7 Subject to the liquidated damages measures in the Contract Documents, neither Design Builder or County shall have any liability for consequential damages arising out of the completion of the Work under the Contract Documents, except to the extent that such consequential damages arise from personal injury, property damage, economic loss or defective work and are covered by any insurance maintained by County, Design Builder, or any Subcontractor, Supplier, design professional or any other party involved on the Project.

4. **CONTRACT SUM.**

- 4.1 County shall pay the Design Builder **Twenty Six Million Two Hundred Thousand Dollars (\$26,200,000.00)** (the "Contract Sum"), and either **Eight Hundred Ten Thousand Dollars (\$810,000.00)** for Alternate 1: 250kW Diesel Generator, or **One Million Four Hundred Thousand Dollars (\$1,400,000.00)** for Alternate 2: 500kW Diesel Generator, for completion of the Work in strict accordance with the Contract Documents, as it may be adjusted pursuant to this Article 4 (Contract Sum).
- 4.2 The Contract Sum does not include any allowances beyond those specified. All allowances listed in Specification Section 012100 – Allowances are added to the Contract Sum.
- 4.3 The Contract Sum is all inclusive and includes all costs and expenses of the Work, including profit, markups, overhead with no allowances; all federal, state, and local taxes on materials and equipment, and labor furnished by Design Builder, its subcontractors, subconsultants, architects, engineers, and vendors or otherwise arising out of Design Builder's performance of the Work, including any increases in any such taxes during the term of this Agreement; and any duties, fees, and royalties imposed with respect to any materials and equipment, labor or services, except as otherwise provided in paragraph 13.7 of Document 007200 (General Conditions). The taxes covered hereby include (but are not limited to) occupational, sales, use, excise, unemployment, FICA, and income taxes, customs, duties, and any and all other taxes on any item or service that is part of the Work, whether such taxes are normally included in the price of such item or service or are normally stated separately. Notwithstanding the foregoing, each party shall bear such state or local inventory, real property, personal property or fixtures taxes as may be properly assessed against it by applicable taxing authorities.

5. **DESIGN BUILDER'S REPRESENTATIONS AND WARRANTIES.** In order to induce County to enter into this Agreement, Design Builder represents and warrants to County the following:

- 5.1 Design Builder has visited the Site, and made a non-destructive inspection of the Site, and has examined the nature and extent of the Work, Site, locality, actual conditions, as built conditions, labor availability 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 design and the means, methods, techniques, sequences or procedures of construction to be employed by Design Builder and safety precautions and programs incident thereto.
- 5.2 Design Builder has examined all reports of exploration and tests of subsurface conditions, as built drawings, drawings or reports, available for design and construction purposes, of physical conditions that have been provided by the County, including those which are identified in Documents 018825 (Miscellaneous Hazardous Materials Performance Requirements) or 003130 (Geotechnical Data and Existing Conditions), or which may be apparent at the Site and accepts the criteria set forth in these documents and Document 007200 (General Conditions) to the extent of the information contained in these documents upon which the Design Builder is entitled to rely.
- 5.3 After execution of this Agreement, Design Builder will conduct or obtain any additional examinations, investigations, explorations, tests, reports and studies, including but not limited to geotechnical investigations upon which the design will be based, that pertain to the surface and subsurface conditions, as-built conditions, Underground Facilities and all other physical conditions at or contiguous to the Site necessary, or that Design Builder considers necessary for the performance or furnishing of Work for the Contract Sum, within the Contract Time and in accordance with the terms and conditions of the Contract Documents.
- 5.4 Design Builder has correlated its knowledge and the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.
- 5.5 Design Builder has given County prompt written notice of all conflicts, errors, ambiguities, or discrepancies that it discovered prior to executing and delivering this Agreement in or among the Contract Documents and as-built drawings and actual conditions and the written resolution thereof through Addenda issued by County or otherwise is acceptable to Design Builder.
- 5.6 Design Builder is duly organized, validly existing, and in good standing under the laws of the jurisdiction of its incorporation or organization and is duly qualified to conduct business in the State of California.
- 5.7 The execution, delivery and performance of this Agreement, the other Contract Documents and the Work to be performed herein (a) have been duly authorized by all necessary corporate or other organizational action, and (b) does not violate or create a default under any instrument, agreement, order or decree binding on Design Builder.
- 5.8 Design Builder will use the following pre-qualified Subcontractors, who were listed in the Design Builder's Proposal to perform the Work. Consistent with Public Contract Code sections 4100 *et seq.*, Design Builder shall not substitute a different Subcontractor or supplier in place of any of those listed in Design Builder's Proposal, including in its response to County's Request for Qualifications, nor shall any Subcontractor assign or transfer, subcontract, or permit the same to be performed by any other Subcontractor without County's prior written approval. Design Builder shall provide County with a complete and updated list of Subcontractors as they become known on the project, and

shall comply with the requirements of Public Contract Code section 22166 in awarding subcontracts.

[illegible]

- 5.9 Design Builder shall assign to the Project the key personnel listed in Design Builder's Proposal, together with those listed below in this Section 5.9, and make them available to work on the Project as a first priority during the term of this Agreement. Should any approved key personnel terminate employment or otherwise become unavailable during the term of this Agreement, Design Builder shall obtain County's prior written consent to any replacement. Any proposed replacement shall possess qualifications and experience equal or superior to the key personnel being replaced.

Contractor's Key Personnel:

[Name] – [Title]

[Name] – [Title]

[Name] – [Title]

- 5.10 All Work performed by Design Builder is subject to the Project Labor Agreement (Document 007349) to be entered into among Design Builder, County, the Project Subcontractors and other required signatories thereto (the "PLA"). Prior to County's approval of this Agreement, Design Builder shall execute and deliver the PLA to the County. Before allowing any Subcontractor to perform any work on the Project, Contractor shall have the Subcontractor execute the PLA and submit the signature page to County.

6. CONTRACT DOCUMENTS.

- 6.1 The following documents, including all changes, addenda and modifications thereto comprise the entire agreement between County and Design Builder concerning the Work (collectively, the "Contract Documents")

6.1.1	Design Builder's Prequalification Questionnaire submitted in response to County's Request for Qualifications
6.1.2	Request for Proposal (RFP) (Document 002100)
6.1.3	Request for Supplemental Information (Document 002105) if issued
6.1.4	Pre-Proposal Meeting Agreement and waiver of Claims (Document 002110)

- 6.1.5 Pre-Response to RSI Meeting Agreement and Waiver of Claims (Document 002111) if issued
 - 6.1.6 Design Builder's Proposal dated October 29, 2026, including Price Proposal
 - 6.1.7 Outreach Program (Document 002219)
 - 6.1.8 Best Value Enhancement Forms (Document 002100B)
 - 6.1.9 Design Builder Certifications (Document 004540)
 - 6.1.10 Notice of Award (Document 005110)
 - 6.1.11 Agreement (Document 005200)
 - 6.1.12 Notice to Proceed (Document 005510)
 - 6.1.13 Construction Performance Bond (Document 006110)
 - 6.1.14 Construction Labor and Material Payment Bond (Document 006120)
 - 6.1.15 Escrow Agreement for Security Deposits In Lieu of Retention (Document 006140)
 - 6.1.16 Agreement and Release of Any and All Claims (Document 006510)
 - 6.1.17 Project Guaranty (Document 006530)
 - 6.1.18 General Conditions (Document 007200)
 - 6.1.19 Insurance (Document 007320)
 - 6.1.20 Project Labor Agreement (Document 007349)
 - 6.1.21 Performance Criteria Manual (Division 00 through 01), including General Requirements and Exhibits
 - 6.1.22 Performance Criteria Documents Technical Specifications
 - 6.1.23 Performance Criteria Documents Drawings
 - 6.1.24 Performance Criteria Documents Narratives & Appendices
 - 6.1.25 Contra Costa County Design and Construction Guidelines 2021
 - 6.1.26 Written Change Orders issued by County
- 6.2 The intent of the Contract Documents is to include all necessary criteria to establish the process, scope and quality for completion of the Work by Design Builder. The Contract Documents are complementary and what is required by one shall be as binding as if required by all. Performance by the Design Builder shall be required to the extent consistent with, and reasonably inferable from, the Contract Documents.
- 6.3 Any conflict between or among Contract Documents shall be resolved pursuant to paragraph 5.8 (Order of Precedence) of Document 007200 (General Conditions).
- 6.4 Construction Documents produced by the Design Builder that set forth the obligations of the Design Builder or its Subcontractor are an instrument for fulfilling the requirements of this Agreement as defined by the Contract Documents as defined in this Article 6 (Contract Documents), and do not replace them. See 007200 5.8.8.
- 6.5 There are no Contract Documents other than those listed above in Section 6.1 of this Agreement. For the purpose of clarity and without in any way limiting the foregoing sentence, Documents 003130 (Geotechnical Data and Existing Conditions) and the information supplied through them are not Contract Documents. The Contract Documents may only be amended, modified, or supplemented as is provided for in Document 007200 (General Conditions).

7. MISCELLANEOUS

- 7.1 Capitalized terms used in this Agreement and not defined here have the meaning given in Document 007200 (General Conditions), and if not defined therein, as defined in Section 014200 (References and Definitions), and if not defined therein, as defined in the Contract Documents.

- 7.2 It is understood and agreed that in no instance is any person signing this Agreement for or on behalf of County or acting as an employee or representative of County liable pursuant to this Agreement or upon any warranty of authority, or otherwise, and it is further understood and agreed that liability of County is limited and confined to such liability as authorized or imposed by the Contract Documents or applicable law.
- 7.3 Design Builder shall not assign any portion of the Contract Documents, but may subcontract portions of the Work only in compliance with the subcontractor listing requirements of Public Contracting Code section 4100 *et seq.*
- 7.4 The Contract Sum includes all design, management, overhead, profit, allowances (if any), and other costs of the Project necessary to complete the Work.
- 7.5 In entering into a public contract or a subcontract to supply goods, services or materials pursuant to a public contract, the Design Builder or subcontractor irrevocably 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) and under the Cartwright Act, (Chapter 2 (commencing with California Business and Professions Code section 16700) of Part 2 of Division 7 of the), 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 the County renders final payment to the Design Builder, without further acknowledgment by the parties.
- 7.6 Pursuant to Labor Code section 1773, the Director of the California State Department of Industrial Relations has ascertained the general prevailing rates of per diem wages and for holiday and overtime work in the locality in which the Project is to be performed for each craft, classification, or type of worker needed to execute the this Agreement and the Work, and copies of such rates are in the Contract Documents and on file at County's office, and are hereby incorporated herein by this reference, and shall be made available to any interested party on request. Pursuant to Labor Code section 1861, Design Builder shall execute and file with County a certification that it is aware of the provisions of Labor Code section 3700 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 Builder shall comply with such provisions before commencing the performance of the Work of the Contract Documents.
- 7.7 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).
- 7.8 This Agreement shall be deemed to have been entered into in the County of Contra Costa and shall be governed in all respects by California law (excluding conflicts of laws).
- 7.9 Design Builder accepts the claims procedures established by Article 12 (Claims by Design Builder) of Document 007200 (General Conditions) and agrees that the provisions of Article

12 (Claims by Design Builder) constitute a claims procedure by agreement under Government Code Section 930.2, and Government Code sections 930 through 930.6. Design Builder shall bear all costs incurred in the preparation and submission of a Claim.

- 7.10 County shall have the right to timely and fully review and approve all phases of Design Builder's design including, but not limited to, drawings, specifications, shop drawings, samples and submittals, prior to submittal for any permit approval or deferred approval, as specified in the Contract Documents within the review durations published in the Design Builder's approved schedule, or in the absence of an approved schedule, within the review durations published in the Milestone Schedule of Section 011216 (Work Sequence). Such review, approval and other action shall not relieve Design Builder of its responsibility for a complete design complying with the requirements of the Contract Documents; but rather, such review and approval shall be in furtherance of County's monitoring and accepting the design as developed and issued by the Design Builder, consistent with these Contract Documents. Design Builder's responsibility to design and construct the Project in conformance with the Contract Documents is absolute.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day first mentioned above.

County

CONTRA COSTA COUNTY

By: _____

Design Builder

[DESIGN BUILDER]

By: _____

Name: _____

Its: _____

By: _____

Name: _____

Its: _____

Design Builder: For corporations and limited liability companies, the Agreement must be signed by two officers. The first signature must be that of the chairman of the board, president or vice-president; the second signature must be that of the secretary, assistant secretary, chief financial officer or assistant treasurer. (Civ. Code, Sec. 1190 and Corps. Code, Sec. 313.) The acknowledgment below must be signed by a Notary Public.

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California)

)

County of _____)

On _____, before me, _____,
Notary Public, personally appeared _____
(insert name(s) and title(s) of the officer(s) signing on behalf of the Consultant), who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS MY HAND AND OFFICIAL SEAL

(Notary's Seal)

Signature

END OF DOCUMENT

DOCUMENT 005500

NOTICE TO PROCEED

Dated _____, 2026

TO: _____

ADDRESS: _____

COUNTY AUTHORIZATION NO. WH153

COUNTY FILE NO. 345-2601

CONTRACT FOR DESIGN-BUILD SERVICES

LOS MEDANOS RECOVERY CENTER PROJECT

You are notified that the Contract Time under the above contract will commence to run on _____, 2026. By that date, you are to start performing your obligations under the Contract Documents. In accordance with Article 3 (Contract Time and Liquidated Damages) of Document 005200 (Agreement):

Design Builder shall achieve Substantial Completion no later than six hundred and nine (609) calendar days from and after the starting date as established by the Notice to Proceed, and Final Completion of the Project no later than sixty (60) calendar days after the date by which Design Builder achieves Substantial Completion.

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

CONTRA COSTA COUNTY / VANIR

By: _____

END OF DOCUMENT

DOCUMENT 006110

CONSTRUCTION PERFORMANCE BOND - PUBLIC WORK

Bond No. _____

Premium _____

Any claim under this Bond should be sent
to the following address:

KNOW ALL MEN BY THESE PRESENTS:

That we, _____
As Principal, and _____, a
corporation organized and existing under the laws of the State of _____
and authorized to transact surety business in the State of California, as Surety, are held and firmly bound
unto CONTRA COSTA COUNTY, as Obligee, in the sum of **Twenty-Six Million Two Hundred
Thousand Dollars (\$26,200,000.00, The Project)**; and either **Eight Hundred Ten Thousand Dollars
(\$810,000.00)** for Alternate 1, or **One Million Four Hundred Thousand Dollars (\$1,400,000.00)** for
Alternate 2, lawful money of the United States of America, for the payment of which sum well and truly to
be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and
severally, firmly by these presents.

THE CONDITION of the above obligation is such that, whereas the Principal has entered into a contract
dated _____, 2026, with the Obligee to do and perform the following work, to wit: **DESIGN
& CONSTRUCTION of the Los Medanos Recovery Center Project** to be located at 2311 Loveridge Rd,
Pittsburg, CA 94565 as is more specifically set forth in the contract documents, reference to which is
hereby made.

NOW, THEREFORE, if the Principal shall well and truly perform all the requirements of said contract
documents required to be performed on its part, at the times and in the manner specified therein, then
this obligation shall be null and void, otherwise it shall remain in full force and effect.

PROVIDED, that any alterations in the work to be done or the materials to be furnished, or changes in the
time of completion, which may be made pursuant to the terms of said contract documents, shall not in any
way release the Principal or the Surety thereunder, nor shall any extensions of time granted under the
provisions of said contract documents release either the Principal or the Surety, and notice of such
alterations or extensions of time is hereby waived by the Surety.

PROVIDED, that if any action is commenced on this bond by the Obligee, in addition to the sum specified
above, the Principal and the Surety, their heirs, executors, administrators, successors and assigns, jointly
and severally, shall be obligated to pay to the Obligee all costs, attorney's fees and other litigation
expenses incurred by the Obligee in collecting monies due under the terms of this bond.

(signature lines on following page)

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

SIGNED AND SEALED, this _____ day of _____, 2026

(Principal)

(Surety)

By: _____
(Signature)

(Signature)

(SEAL AND ACKNOWLEDGEMENT OF NOTARY)

(SEAL AND ACKNOWLEDGEMENT OF NOTARY)

BOND TERMS AND CONDITIONS

1. The Design Builder and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to County for the complete and proper performance of the Construction Work under the Contract which is incorporated herein by reference.
2. If the Design Builder completely and properly performs all of its obligations concerning the Construction Work under the Contract, the Surety and the Design Builder shall have no obligation under this Bond.
3. If there is no County Default, the Surety's obligation under this Bond shall arise after:
 - 3.1 County has declared a Design Builder Default concerning the Construction Work under the Contract pursuant to the terms of the Contract; and
 - 3.2 County has agreed to pay the Balance of the Contract Sum owing under the Contract for the Construction Work to:
 - 3.2.1 The Surety in accordance with the terms of this Bond and the Contract; or
 - 3.2.2 To a Design Builder selected to perform the Construction Work under the Contract in accordance with the terms of this Bond and the Contract.
4. When County has satisfied the conditions of Article 3 above and has default terminated Design Builder for Default, the Surety shall promptly (within thirty (30) Days) and at the Surety's expense elect to take one of the following actions:
 - 4.1 Arrange for the Design Builder, with consent of County, to perform and complete the Construction Work under the Contract unless the County expresses its objection, 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 Construction Work under the Contract itself, through an independent design builder fully qualified to perform and complete the Construction Work under the Contract and to which the County does not reasonably object. In order to be fully qualified under this paragraph 4.1, an independent design builder may not be in any way, presently or formerly, associated with or related to the Design Builder in any form, or to its officers or employees. County may reject, in its sole discretion, use of the Design Builder as an agent or subcontractor of an independent design builder.
 - 4.3 Obtain bids from qualified Design Builders acceptable to County for a contract for performance and completion of the Construction Work under the Contract (other than the original Design Builder), and, upon determination by County of the most qualified Design Builder offering the greatest value, arrange for a contract to be prepared for execution by County and the Design Builder selected with County's concurrence, to be secured with performance and payment bonds executed by a qualified surety on the same forms of the bonds issued on the Contract; and, if the Surety's obligations defined in Article 6, below, exceed the Balance of the Contract Sum, then the Surety shall pay to County the amount of such excess; or
 - 4.4 Waive its right to perform and complete, arrange for completion, or obtain a new Design Builder and with reasonable promptness under the circumstances, and, after

investigation and consultation with County, determine in good faith its monetary obligation for which it may then be liable to County under Article 6, below, for the performance and completion of the Construction Work under the Contract and, as soon as practicable after the amount is determined, tender payment therefor to County with full explanation of the payment's calculation. If County accepts the Surety's tender under this paragraph 4.4, County may still hold Surety liable for future damages then unknown or liquidated or unliquidated damages resulting from the Design Builder Default. If County disputes the amount of Surety's tender under this paragraph 4.4, County may exercise all remedies available to it at law to enforce the Surety's liability under paragraph 6, below.

- 4.5 Deny liability after conducting a reasonable and good faith investigation of the County's declaration of Default and all facts and circumstances relating to the Surety's obligations to the County.
5. If the Surety does not proceed as provided in Article 4 above, then the Surety shall be deemed to be in Default on this Bond ten (10) Days after receipt of an additional written notice from County to the Surety demanding that the Surety perform its obligations under this Bond. At all times County shall be entitled to enforce any remedy available to County at law, in equity, or under the Contract including, without limitation, and by way of example only, rights to perform work, protect work, mitigate damages, or coordinate work with other consultants or Design Builders.
6. The Surety's monetary obligation under this Bond is limited to the amount of this Bond, plus the Balance of the Contract Sum owing from the County hereunder. Subject to these limits, the Surety's obligations under this Bond are commensurate with the obligations of the Design Builder for the Construction Work under the Contract. The Surety's obligations shall include, but are not limited to:
 - 6.1 The responsibilities of the Design Builder under the Contract for completion of the Construction Work under the Contract and correction of defective work;
 - 6.2 The responsibilities of the Design Builder under the Contract to pay liquidated damages, and other damages for which no liquidated damages are specified in the Contract, actual damages caused by non-performance of the Construction Work under the Contract, including but not limited to, all valid and proper backcharges, offsets, payments, indemnities, or other damages;
 - 6.3 Additional legal costs, costs of design professional services not included in the scope of the Contract Documents, and delay costs resulting from the Design Builder Default or resulting from the actions or failure to act of the Surety under Paragraph 4, above.
7. No right of action shall accrue on this Bond to any person or entity other than County or its heirs, executors, administrators, or successors.
8. The Surety hereby waives notice of any change, alteration or addition to the Contract or to related subcontracts, purchase orders and other obligations, including changes of time. The Surety consents to all terms of the 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 required thereunder, shall release or exonerate Surety on this Bond or in any way affect the obligations of Surety on this Bond.
9. Any proceeding, legal or equitable, under this Bond shall be instituted in any court of competent jurisdiction where a proceeding is pending between County and the Design Builder regarding the

Contract, or in the courts of the County of Contra Costa, or in a court of competent jurisdiction in the location in which the work is located.

10. Notice to the Surety, County or the Design Builder shall be mailed or delivered to the address shown on the signature page.
11. 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.
12. **DEFINITIONS.**
 - 12.1 Balance of the Contract Sum: The total amount payable by County to the Design Builder for Construction Work under the Contract pursuant to the terms of the Contract after all proper adjustments have been made under the Contract, for example, deductions for progress payments made, increases/decreases for approved modifications to the Contract, valid and proper backcharges, offsets, indemnities or other damages.
 - 12.2 Contract: The agreement between County and the Design Builder identified on the signature page, including all Contract Documents and changes thereto.
 - 12.3 Design Builder Default: Material failure of the Design Builder, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract concerning Construction Work under the Contract.
 - 12.4 County Default: Material failure of County, which has neither been remedied nor waived, to pay the Design Builder progress payments due for Construction Work under the Contract or to perform other material terms of the Contract with regard to Construction Work under the Contract, if such failure is the cause of the asserted Design Builder Default and is sufficient to justify Design Builder termination of the Contract.
13. Qualification Regarding Extended Warranties. The Surety's liability for extended warranties for subcontractors and suppliers shall not apply to a breach of any such extended warranty under the Contract that occurs more than two years after the applicable warranty commencement date under the Contract.

END OF DOCUMENT

DOCUMENT 006120

PAYMENT BOND - PUBLIC WORK
[Civ. Code, §§ 9550 - 9554]

Bond No. _____

Premium _____

Any claim under this Bond should be sent

to the following address:

KNOW ALL PERSONS BY THESE PRESENTS:

That we, _____
As Principal, and _____,
a corporation organized and existing under the laws of the State of _____ and authorized to
transact surety business in the State of California, as Surety, are held and firmly bound unto CONTRA
COSTA COUNTY, as Obligee, in the sum of **Twenty-Six Million Two Hundred Thousand Dollars
(\$26,200,000.00, The Project)**; and either **Eight Hundred Ten Thousand Dollars (\$810,000.00)** for
Alternate 1, or **One Million Four Hundred Thousand Dollars (\$1,400,000.00)** for Alternate 2, lawful
money of the United States of America, for the payment of which sum well and truly to be made, we bind
ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by
these presents.

THE CONDITION of the above obligation is such that, whereas the Principal has entered into a contract
dated _____, 2026, with the Obligee to do and perform the following work, to wit:
DESIGN & CONSTRUCTION of the Los Medanos Recovery Center Project to be located at 2311
Loveridge Rd, Pittsburg, CA 94565 as is more specifically set forth in the contract documents, reference
to which is hereby made.

KNOW, THEREFORE, if the Principal or a subcontractor fails to pay any of the persons named in Section
9100 of the Civil Code, or amounts due under the 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 Employment Development Department from the wages of employees of the Principal and
subcontractors pursuant to Section 13020 of the Unemployment Insurance Code, with respect to such
work and labor, the Surety will pay for the same, in an amount not exceeding the sum specified in this
bond, and also, in case suit is brought upon this bond, a reasonable attorney's fee, to be fixed by the
court.

This bond shall ensure to the benefit of any of the persons named in Section 9100 of the Civil Code so as

to give a right of action to such persons or their assigns in any suit brought upon this bond.

(signature lines on following page)

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

SIGNED AND SEALED, this _____ day of 2026

(Principal)

(Surety)

By: _____
(Signature)
(SEAL AND ACKNOWLEDGEMENT OF NOTARY)

(Signature)
(SEAL AND ACKNOWLEDGEMENT OF NOTARY)

BOND TERMS AND CONDITIONS

1. The Design Builder and the Obligee (also referred to herein as the Surety), jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to County and to Claimants, to pay for labor, materials and equipment furnished for use in the performance of the Work which is incorporated herein by reference.
2. With respect to County, this obligation shall be null and void if the Design Builder:
 - 2.1 Promptly makes payment, directly or indirectly, for all sums due Claimants, and
 - 2.2 Defends, indemnifies and holds harmless County from all claims, demands, liens or suits by any person or entity who furnished labor, materials or equipment for use in the performance of the Construction Contract, provided County has promptly notified the Design Builder and the Surety (at the address described in Article 10 below) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the Design Builder and the Surety, and provided there is no County Default.
3. With respect to Claimants, this obligation shall be null and void if the Design Builder promptly makes payment, directly or indirectly through its subcontractors, for all sums due Claimants. However, if Design Builder or its subcontractors fail to pay any of the persons named in Civil Code § 9100, or amounts due under the 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 Employment Development Department from the wages of employees of Design Builder or subcontractors pursuant to Unemployment Insurance Code § 13020, with respect to such work and labor, then Surety will pay for the same, and also, in case suit is brought upon this bond, a reasonable attorney's fee, to be fixed by the court.
4. Consistent with the California Mechanic's Lien Law, Civil Code §§ 8000 - 9566, the Surety shall have no obligation to Claimants under this Bond unless the Claimant has satisfied all applicable notice requirements.
5. The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety under this Bond.
6. Amounts due the Design Builder under the Contract shall be applied first to satisfy claims, if any, under any Construction Performance Bond and second, to satisfy obligations of the Design Builder and the Surety under this Bond.
7. County shall not be liable for payment of any costs, expenses, or attorney's fees of any Claimant under this bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.
8. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.
9. Suit against Surety on this Payment Bond may be brought by any Claimant, or its assigns, at any time after the Claimant has furnished the last of the labor or materials, or both but, pursuant to Civil Code § 9558, must be commenced before the expiration of six months after the period in which stop notices may be filed as provided in Civil Code § 9356.
10. Notice to the Surety, County or the Design Builder shall be mailed or delivered to the address shown on the signature page. Actual receipt of notice by Surety, County or the Design Builder,

however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page above.

11. This Bond has been furnished to comply with the California Mechanic's Lien Law including, but not limited to, Civil Code §§ 9550 - 9560. Any provision in this Bond conflicting with said statutory requirements shall be deemed deleted and provisions conforming to such statutory or other legal requirements shall be deemed incorporated herein. This Bond shall be construed as a statutory bond and not as a common law bond.
12. Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Design Builder shall promptly furnish a copy of this Bond or shall permit a copy to be made.
13. **DEFINITIONS.**
 - 13.1 Claimant: An individual or entity having a direct contract with this Design Builder or with a subcontractor of the Design Builder to furnish labor, materials or equipment for use in the performance of the Contract, as further defined in Civil Code Section 9100. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Contract, architectural and engineering services required for performance of the work of the Design Builder and the Design Builder's subcontractors, and all other items for which a stop notice might be asserted. The term Claimant shall also include the Employment Development Department as referred to in Civil Code § 9554.
 - 13.2 Contract: The agreement between County and the Design Builder identified on the signature page, including all Contract Documents and changes thereto.
 - 13.3 County Default: Material failure of County, which has neither been remedied nor waived, to pay the Design Builder as required by the Contract, provided that failure is the cause of the failure of Design Builder to pay the Claimants and is sufficient to justify termination of the Contract.

END OF DOCUMENT

DOCUMENT 006130

ESCROW BID DOCUMENTS

1. REQUIREMENTS FOR ESCROW BID DOCUMENTS.

- 1.1 The successful Bidder ("Bidder") shall submit, within the time period established in Document 005110 (Notice of Award), a set of all then existing Escrow Bid Documents defined below, **and shall subsequently submit within fifteen (15) Days of their preparation or receipt all Escrow Bid Documents subsequently prepared or received by Bidder.** The Escrow Bid Documents will be examined by County and will be used only for the resolution of change orders and claims disputes.
- 1.2 The submission of the Escrow Bid Documents, as with the bonds and insurance documents required and other Contract award submittals, is considered an essential part of the Contract award.
- 1.3 If, at any time, the above required information is not submitted and approved as required, Bidder agrees that County may, in addition to any other right under the Contract documents, withhold from the Bidder for each set of Escrow Bid Documents not timely submitted the sum of \$50,000 in Contract funds otherwise due until the above required information is submitted, at which time the \$50,000 shall be released to Bidder.
- 1.4 The Escrow Bid Documents shall be submitted in person by an authorized representative of the Bidder to County.

2. SCOPE OF ESCROW BID DOCUMENTS.

- 2.1 Bidder shall submit one copy of all estimates and supporting subcontractor quotes received or generated by Bidder in preparation of Contract prices for its Proposal, **and such additional prices determined following submission of its Proposal as the scope of the work is defined through design development,** as specified in Articles 5 (Format and Contents of Escrow Bid Documents) and 6 (Submittal of Escrow Bid Documents) below. This material is hereinafter referred to as "Escrow Bid Documents." The Escrow Bid Documents shall be submitted for both the design and the construction activities and shall relate to each contract entered into and/or bid package issued by Bidder. The Escrow Bid Documents will be held in escrow for the duration of the Contract.
- 2.2 Bidder agrees that the Escrow Bid Documents constitute **all written information used in the preparation of its Contract price,** and that no other written Contract price preparation information shall be considered in resolving disputes or claims. Bidder also agrees that nothing in the Escrow Bid Documents shall change or modify the terms or conditions of the Contract Documents.

3. OWNERSHIP OF ESCROW BID DOCUMENTS.

- 3.1 The Escrow Bid Documents are, and shall always remain, the property of Bidder, subject to joint review by County and Bidder, as provided herein.
- 3.2 County agrees that Escrow Bid Documents may: constitute trade secrets; not be known outside Bidder's business; be known only to a limited extent and only by a limited number of employees of Bidder; be safeguarded while in Bidder's possession, be extremely

valuable to Bidder; and be extremely valuable to Bidder's competitors by virtue of it reflecting Bidder's contemplated techniques of construction. County agrees to safeguard the Escrow Bid Documents, and all information contained therein, against disclosure to the fullest extent permitted by law, consistent with County's full and complete use of this information to resolve disputes with the Bidder. Should the use of this information be necessary to resolve disputes, County will stipulate to the terms of a reasonable protective order.

4. Escrow Bid Documents will be used in the determination of price adjustments and change orders and in the resolution of disputes and claims.

5. **FORMAT AND CONTENTS OF ESCROW BID DOCUMENTS.**

- 5.1 Bidder may submit Escrow Bid Documents in their usual cost estimating format; a standard format is not required. The Escrow Bid Documents shall be submitted in the English language.
- 5.2 Escrow Bid Documents must clearly itemize the estimated costs of performing each item of the Work, separating Work items into sub-items as required to present a detailed cost estimate and allow a detailed cost review. The Escrow Bid Documents shall include all designer, engineer, architect or subcontractor bids or quotes, supplier bids or quotes, quantity takeoffs, crews, equipment, calculations of rates of production and progress, copies of quotes from subcontractors and suppliers, and memoranda, narratives, add/deduct sheets, and all other information used by the Bidder to arrive at the Contract prices for the Contract. Estimated costs should be broken down into Bidder's usual estimate categories such as direct labor, repair labor, equipment ownership and operation, expendable materials, permanent materials and subcontract costs as appropriate. Plant, equipment, and indirect costs should be detailed in the Bidder's usual format. The Bidder's allocation of indirect costs, contingencies, markup, and other items to each work item shall be identified.
- 5.3 All costs shall be identified. For work items amounting to less than \$10,000, estimated unit costs are acceptable without a detailed cost estimate, provided that labor, equipment, materials and subcontracts, as applicable, are included and provided that indirect costs, contingencies and markup, as applicable, are allocated.

6. **SUBMITTAL OF ESCROW BID DOCUMENTS.**

- 6.1 The Escrow Bid Documents shall be submitted to the County by the Bidder for verification of contents and placed in a sealed container within the time described in paragraph 1.1 above. The container shall be clearly marked on the outside with the Bidder's name, date of submittal, Project name and the words "Escrow Bid Documents - Open only in the presence of Authorized Representatives of both County and contracted Design Builder." A detailed list of the Escrow Bid Documents indicating each bid or pricing package in the container shall be submitted to the County for review and approval and a copy affixed to the container(s).
- 6.2 By submitting Escrow Bid Documents, Bidder represents that the material in the Escrow Bid Documents constitutes all the documentary information used in preparation of the portion or portions of the Contract price referred to in the Escrow Bid Documents submitted and that the Bidder has personally examined the contents of the Escrow Bid Documents container and has found that the documents in the container are complete.

- 6.3 If Bidder's Proposal is based upon subcontracting any part of the work, each subcontractor whose total subcontract price exceeds five percent (5%) of the total Contract price proposed by Bidder, shall provide separate Escrow Bid Documents to be included with those of Bidder. Such documents shall be opened and examined in the same manner and at the same time as the examination described below for Bidder.

7. STORAGE, EXAMINATION AND FINAL DISPOSITION OF ESCROW BID DOCUMENTS.

- 7.1 The Escrow Bid Documents will be placed in escrow, for the life of the Contract, in a mutually agreeable location. The cost of storage will be paid by Bidder for the duration of the Project until final Contract payment and the final resolution of all claims and disputes arising out of or relating to the Work or the Contract. The storage facilities shall be the appropriate size for all the Escrow Bid Documents and located conveniently to both County's and Bidder's offices. Bidder may elect to store sealed escrow documents with the County at no cost to the Bidder.
- 7.2 The Escrow Bid Documents shall be examined by both County and Bidder, at any time deemed necessary by either County or Bidder, to assist in the negotiation of price adjustments and change orders or the settlement of disputes and claims. Examination of the Escrow Bid Documents is subject to the following conditions:
- 7.2.1 As trade secrets, the Escrow Bid Documents are proprietary and confidential.
- 7.2.2 County and Bidder shall each designate, in writing to the other party, and seven (7) Days prior to any examination, representatives who are authorized to examine the Escrow Bid Documents. No other person shall have access to the Escrow Bid Documents.
- 7.2.3 Access to the documents may take place only in the presence of duly designated representatives of both County and Bidder. If Bidder fails to designate a representative or appear for joint examination on seven (7) Days' notice, then County representative may examine the Escrow Bid Documents upon an additional three (3) Days' notice.
- 7.3 The Escrow Bid Documents will be returned to Bidder at such time as the Contract has been completed and final resolution, by settlement or otherwise, of all claims and disputes has been achieved.

END OF DOCUMENT

DOCUMENT 006140

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

Public Contract Code § 22300

This Escrow Agreement ("Escrow Agreement") is made and entered into this _____ day of _____, 2026, by and between the COUNTY OF CONTRA COSTA ("County"), and _____, whose place of business is _____ hereinafter called ("Design Builder"), and [INSERT EITHER] County, 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"). This Escrow Agreement is intended to incorporate the requirements of Public Contract Code § 22300.

For the consideration hereinafter set forth, County, Design Builder, and Escrow Agent agree as follows:

1. Pursuant to Public Contract Code § 22300, Design Builder has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by County pursuant to the Contract entered into between County and Design Builder for the **Los Medanos Recovery Center Project** in the amount of **Twenty-Six Million Two Hundred Thousand Dollars (\$26,200,000.00) and either \$810,000.00 for 250kW Diesel Generator (Alternate 1*) or \$1,400,000.00 for 500kW Diesel Generator (Alternate 2*)** dated _____ (the "Contract"). Alternatively, on written request of Design Builder, County shall make payments of the retention earnings directly to Escrow Agent. When Design Builder deposits the securities as a substitute for Contract earnings, Escrow Agent shall notify County within ten (10) 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 terms of Contract between County and Design Builder. Securities shall be held in name of _____ and shall designate Design Builder as beneficial owner.
2. County shall make progress payments to Design Builder for those funds which otherwise would be withheld from progress payments pursuant to Contract provisions, provided that Escrow Agent holds securities in form and amount specified above.
3. When County makes payment of retention earned directly to Escrow Agent, Escrow Agent shall hold them for the benefit of Design Builder until the time that the escrow created under this Escrow Agreement is terminated. Design Builder 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 County pays Escrow Agent directly.
4. Design Builder shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account, and all expenses of County. Such expenses and payment terms shall be determined by County, Design Builder and Escrow Agent.
5. 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 Builder and shall be subject to withdrawal by Design Builder at any time and from time to time without notice to County.
6. Design Builder 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 County to Escrow Agent that County consents to withdrawal of amount sought to be withdrawn by Design Builder.

7. County shall have the right to draw upon the securities in event of default by Design Builder. Upon seven (7) Days' written notice to Escrow Agent from County of the default, Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by County.
8. Upon receipt of written notification from County certifying that the Contract is final and complete, and that Design Builder has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Design Builder 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 monies and securities on deposit and payments of fees and charges.
9. Escrow Agent shall rely on written notifications from County and Design Builder pursuant to paragraphs 5 through 8, inclusive, of this Escrow Agreement and County and Design Builder shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of securities and interest as set forth above.
10. Names of persons who are authorized to give written notice or to receive written notice on behalf of County and on behalf of Design Builder in connection with the foregoing, and exemplars of their respective signatures are as stated and signed below.

At the time the Escrow Account is opened, County and Design Builder shall deliver to Escrow Agent a fully executed counterpart of this Agreement.

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

On behalf of County:

Title

Name

Signature

Address

On behalf of Design Builder:

Title

Name

Signature

Address

On behalf of Escrow Agent:

Title

Name

Signature

Address

END OF DOCUMENT

DOCUMENT 006230

SUBCONSULTANT / SUBCONTRACTOR PROCUREMENT

1. GENERAL

- 1.1 Design Builder shall use only Subconsultants and Subcontractors selected in accordance with the requirements of this Document 006230. In hiring all Subconsultants and Subcontractors, Design Builder must comply with Contra Costa County's Outreach Program, Reference Documents 002219 (Outreach Program).
- 1.2 Design Builder must use the general contractor and lead architect (and if the Design Builder is a partnership, limited partnership, or other association, the partners, general partners, and association members) which were identified by Design Builder in its responses submitted in response to the document entitled "Request for Qualification of Design-Build Entities for a Design-Build of the Contra Costa County **Los Medanos Recovery Center Project**, dated **June 2, 2026**, and any amendments, modifications or supplements thereto (the "Pre-Qualification Information") as being intended to participate in performing the Contract. Design Builder may not substitute or replace its General Contractor or Lead Architect (or any of its partners, general partners, association members) except upon providing the County with satisfactory evidence of the parties' default or other good cause. Any substitute or replacement entity must meet the minimum Pre-Qualification requirements for the position for which it is proposed. Design Builder may make such a substitution or replacement only with prior approval of the County.
- 1.3 Any Subconsultant or Subcontractor identified in the Pre-Qualification Information is eligible to perform Work as provided in the Pre-Qualification Information, provided that Subconsultant or Subcontractor is otherwise eligible to perform Work as provided in the Contract Documents.
- 1.4 With the prior approval of the County, Design Builder may substitute or replace a Subconsultant or Subcontractor identified in the Pre-Qualification Information (other than the general contractor or lead architect) in the same manner as it procures other Subconsultants and Subcontractors, as provided for herein. For any such substitution or replacement, the Design Builder shall submit to the County, for its review and approval, all information required by the Pre-Qualification Information for the position for which it is proposed.
- 1.5 Design Builder shall procure all Subconsultants and Subcontractors not described in paragraphs 1.2 and 1.3 above.

2. SUBCONSULTANT/SUBCONTRACTOR PROCUREMENT PLAN

- 2.1 As required by Document 002100 (Request for Proposals from Design Builders), Design Builder's Proposal shall include a Subconsultant/Subcontractor Procurement Plan ("Procurement Plan").
- 2.2 The Procurement Plan shall, in narrative form, detail Design Builder's planned packaging and selection method for all Subconsultants and Subcontractors, excluding only Subconsultants and Subcontractors identified in paragraphs 1.2 and 1.3 above, to be used by Design Builder. This plan shall include, but is not limited to the following:

- 2.2.1 A list of all expected or anticipated Subconsultant/Subcontractor packages, broken down by category of service, including pre-construction and construction phases.
- 2.2.2 A description of the scope of Work for each package.
- 2.2.3 The qualification criteria to be used in selecting the Subconsultant/Subcontractor team expected to perform the services for each package.
- 2.2.4 The estimated costs required to complete the scope of Work for each package.
- 2.2.5 The proposed method of selection (i.e., low bid, informal bid, competitive negotiation, best value, etc.), including all items described in Paragraph 3.0 below (to the extent applicable).
- 2.2.6 A description of how letting these packages in the proposed manner will further the best interests of the County and promote best value design and construction.
- 2.2.7 In separate sections of the proposed Procurement Plan for each Component, confirmation that the Procurement Plan represents a committed and realistic plan to achieve compliance with the County's Construction Outreach Program, Small Local and Emerging Business Program, and First Source Program as required by Documents 002219 (Outreach Program). As part of each such section of its proposed Procurement Plan, Design Builder shall submit all forms required by Document 002219.
 - 2.2.7.1 The County and the successful Design Builder shall use their combined best efforts to modify Documents 002219 (Construction Outreach Program) for the successful Design Builder's use in implementing its Procurement Plan in a manner that achieves the goals of the County's Outreach Programs.
- 2.2.8 A description of any intended Subconsultant/Subcontractor commercial terms that differ from the Contract Documents, and of any intended Subconsultant/Subcontractor liquidated damage measures.
- 2.3 The successful Design Builder shall make any revisions to its Procurement Plan reasonably requested by the County. Following receipt of a finally approved Procurement Plan, the successful Design Builder shall implement the Procurement Plan.

3. **OTHER REQUIREMENTS**

- 3.1 As required by Public Contract Code § 22164, all subcontractors bidding on contracts to perform Work, other than those described in paragraphs 1.2 and 1.3 above, shall be afforded the protections contained in Chapter 4 (commencing with § 4100) of Part 1 of the Public Contract Code. Without limiting the foregoing, Design Builder shall do both of the following:
 - 3.1.1 Provide public notice of the availability of work to be subcontracted in accordance with the publication requirements applicable to the competitive bidding process of the County.

- 3.1.2 Provide a fixed date and time on which the subcontracted work will be awarded in accordance with the procedure established herein.

END OF DOCUMENT

DOCUMENT 006510

AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS

This Agreement and Release of Claims ("Agreement and Release"), made and entered into this [15th] day of [December], [2026], by and between the COUNTY OF CONTRA COSTA, acting by and through Vanir Construction Management ("VCM"), and [], whose place of business is at [] hereinafter called "Design Builder".

RECITALS

1. County and Design Builder entered into an Agreement for Design-Build Services dated, _____ in the County of Contra Costa, State of California.
2. The Work under the above Design-Build Agreement for the design and construction of the **Los Medanos Recovery Center Project** has been completed.

Now, therefore, it is mutually agreed between County and Design Builder as follows:

AGREEMENT

3. Design Builder will not be assessed liquidated or other damages except as detailed below:

Original Contract Sum	\$ _____
Modified Contract Sum	\$ _____
Payment to Date	\$ _____
Liquidated Damages	\$ _____
Other Damages	\$ _____
Payment Due Design Builder	\$ _____
4. Subject to the provisions of this Agreement and Release, County shall forthwith pay to Design Builder the sum of [] Dollars and [] Cents (\$[]) less any amounts withheld under the Contract or represented by any Stop Notice to withhold funds on file with County as of the date of such payment.
5. Design Builder acknowledges and hereby agrees that there are no unresolved or outstanding claims in dispute against County arising from the performance of work under this Contract except for the claims described in paragraph 6, and continuing obligations described in paragraph 6, below. 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 Builder against County, all its respective agents, employees, inspectors, assignees and transferees except for the Disputed Claims set forth in paragraph 6, and continuing obligations described in paragraph 8, below.
6. The following claims submitted under Document 005200 (Agreement) and/or Document 007200 (General Conditions) are disputed (hereinafter, the "Disputed Claims") and are specifically excluded from the operation of this Agreement and Release:

<u>Claim No.</u>	<u>Date Submitted</u>	<u>Description of Claim</u>	<u>Amount of Claim</u>

[Insert information, including attachment if necessary]

7. Consistent with Public Contract Code § 7100, Design Builder hereby agrees that, in consideration of the payment set forth in paragraph 4, above, Design Builder hereby releases and forever discharges County, all its agents, employees, 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.
8. Guarantees and warranties for the Work, and any other continuing obligation of Design Builder, shall remain in full force and effect as specified in the Contract Documents.
9. Design Builder shall immediately defend, indemnify and hold harmless County, all its respective agents, employees, 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 Builder'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 this Contract, except for the Disputed Claims set forth in paragraph 6 above.
10. Design Builder hereby waives the provisions of Civil Code § 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 favor at the time of executing the release, which if known by him, must have materially affected his settlement with the debtor.
11. 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 regulations, 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.
12. All rights of County shall survive completion of the Work or termination of Contract, and execution of this Release.

COUNTY

DESIGN BUILDER

BY: _____

BY: _____

Its: _____

Its: _____

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

END OF DOCUMENT

DOCUMENT 006530

PROJECT GUARANTY

TO THE COUNTY OF CONTRA COSTA ("County"), for design and construction of the

LOS MEDANOS RECOVERY CENTER PROJECT

2311 LOVERIDGE RD, PITTSBURG, CALIFORNIA

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

Design Builder hereby grants to County, for a period of two (2) years following the date of Substantial Completion, as defined in Article 1.5 of Section 014200 (References and Definitions), unless a longer period is specified in the Contract Documents, its unconditional warranty of the quality and adequacy of all of the Work including, without limitation, all labor, materials and equipment provided by Design Builder and its subcontractors of all tiers in connection with the Work. In addition, during the two (2) year warranty period, Design Builder will provide or perform all manufacturer's recommended maintenance on the following systems: **All Security Hardware & Security Electronics systems, all HVAC systems; Plumbing; Hydronic systems; Fire Sprinkler systems; Electrical systems and Fire Alarm system.**

Neither final payment nor use or occupancy of the Work performed by the Design Builder shall constitute an acceptance of Work not done in accordance with this Guaranty or relieve Design Builder of liability in respect to any express warranties or responsibilities for faulty materials or workmanship. Design Builder shall remedy any defects in the Work and pay for any damage resulting therefrom, which shall appear within two (2) years, or longer if specified, from the date of Completion.

If within two (2) years after the date of Substantial 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 Builder shall promptly, without cost to County and in accordance with County's written instructions, correct such defective Work. Design Builder shall remove any defective Work rejected by County 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 Builder fails to promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, County may have the defective Work corrected or the rejected Work removed and replaced. Design Builder shall pay for all claims, costs, losses and damages caused by or resulting from such removal and replacement. Where Design Builder fails to correct defective Work, or defects are discovered outside the correction period, County shall have all rights and remedies granted by law.

Inspection of the Work shall not relieve Design Builder 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 Builder 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, including, without means of limitation, Specification Section 014200 (References and Definitions).

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

[DATE]

[DESIGN BUILDER]

By: _____

Its: _____

END OF DOCUMENT

DOCUMENT 007200

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1. INVESTIGATIONS AND SUBCONTRACTORS.

1.1 Investigation Required.

1.1.1 Prior to submitting a bid for this Agreement and prior to proceeding with the design and construction, the Design Builder must do all things referred to in Document 005200 (Agreement) regarding the Design Builder's representations and warranties contained in Article 5 thereof. The Design Builder is charged with all information and knowledge that a reasonable contractor would ascertain from having performed this required pre-bid review, research and analysis. The Contract Sum must include entire cost of all work "incidental" to completion of the Work, as that term is defined in paragraph 2.1 (Description of Work) of this Document 007200 (General Conditions).

1.1.2 Conditions Shown or Indicated in the Contract Documents: The County warrants, and the Design Builder relies on the accuracy of limited types of information shown or indicated in the Contract Documents as they refer to underground conditions, as-built conditions, or other conditions or obstructions, including such information contained in Documents 003130 (Geotechnical Data and Existing Conditions).

1.1.2.1 As to above-ground conditions or visible as-built conditions, there is no warranty, express or implied, or any representation express or implied, that such information is correctly shown or indicated, so long as such information is reasonably verifiable by pre-bid investigation. The Design Builder is required to make an independent investigation and verify existing above-ground conditions. In proceeding with the design and construction, the Design Builder shall rely on the results of its own independent investigation.

1.1.2.2 As to any subsurface condition shown or indicated in the Contract Documents, as well as those subsurface conditions identified in Documents 003130, the Design Builder may rely only upon the accuracy of actual reported depths, actual reported character of materials, actual reported soil types, actual reported water conditions, or actual obstructions shown or indicated to the extent provided for in Documents 003130. The County is not responsible for any unreasonable opinions or conclusions drawn from such information. Compensation for unknown differing Site conditions shall be allowed as provided in the Contract Documents.

1.1.3 Reference is made to Document 003130 (Geotechnical Data and Existing Conditions) for identification of:

1.1.3.1 Subsurface Conditions: Those reports of explorations and tests of subsurface conditions at or contiguous to the Site that have been made available for informational purposes; and

1.1.3.2 Physical Conditions: Those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been made available for informational purposes. These reports and drawings are not Contract Documents but as provided in Document 003130, the Design Builder may rely on the

information in these reports and drawings. However, the Design Builder shall independently verify the information provided in the reports in developing the design of the Project and performing the Work.

- 1.1.4 Subsurface conditions affecting cost or quantities of the Work materially differing from those indicated in Documents 003130 (Geotechnical Data and Existing Conditions) and elsewhere in the Contract Documents, or in the information supplied for informational purposes, will be compensated by the County. Compensation for unknown differing site conditions shall be allowed as provided in the Contract Documents.
- 1.1.5 Except for the reliance described above, except in the case of latent conditions not discoverable upon a reasonable pre-bid investigation, and except as otherwise provided in Documents 003130 (Geotechnical Data and Existing Conditions), the Design Builder may not rely upon or make any claim against the County, or any of its consultants, with respect to: any unreasonable Design Builder interpretation of or unreasonable conclusion drawn from any technical data or other such data, interpretations, opinions or information, contained in such information.
- 1.1.6 Records of existing structures on or in the vicinity of the Site may be supplied in Document 003130 (Geotechnical Data and Existing Conditions), or may be on file in the County's offices and may be examined by Design Builder (but subject to the conditions of Document 003130). The Design Builder should note that existing structures or facilities may differ from records on file, or may have been altered, and that no representation is made, nor responsibility taken nor warranty given either express or implied, by the County as to the accuracy of locations and other data shown on records, except as otherwise provided in the Contract Documents. After contract award, the Design Builder shall conduct all necessary investigations and become familiar with any and all actual as-built conditions.
- 1.1.7 See paragraph 13.4 (Notice of Concealed or Unknown Conditions) of this Document 007200 concerning notice of concealed or unknown conditions.

1.2 Design Builder and Subcontractors.

- 1.2.1 The Design Builder must list with its bid and provide required information for the major Subcontractors, Subconsultants and specifically identified designers (together for purposes of this Document 007200, "Subcontractor") who will perform a portion of Work, as far as such persons or entities are known on the day Proposals are submitted. The Design Builder shall submit updated Subcontractor Lists to the County as they become reasonably available following contract award or the Notice to Proceed. The Design Builder shall provide the following information:
 - 1.2.1.1 Name of Subcontractor.
 - 1.2.1.2 Business address of Subcontractor.
 - 1.2.1.3 Telephone numbers and e-mail addresses of Subcontractor.

- 1.2.1.4 Brief description of portion of Work to be performed under subcontract.
- 1.2.1.5 Amount to be paid for Subcontractor's work, labor, or service.
- 1.2.1.6 The Subcontractor's California Contractor's State License Number or Professional License Numbers.
- 1.2.2 The Design Builder shall constantly give personal attention to faithful prosecution of Work, whether performed by the Design Builder's own forces or under subcontract, and shall keep the Work under personal control and shall not assign by power of attorney or otherwise, nor subcontract the whole or any part thereof, except as herein provided.
- 1.2.3 Consistent with Public Contract Code §§ 4101 et seq., the Design Builder shall not substitute any other person or firm as a Subcontractor or Subconsultant in place of any of those listed in Bid or later (for actual building design or construction), nor shall any Subcontractor assign or transfer subcontract, or permit the same to be performed in whole or in part by any other Subcontractor without written approval of the County. Should the Design Builder thereafter let out or subcontract any portion of the Work in violation of this requirement, County shall have the right to assess the Design Builder a penalty of ten percent (10%) of the amount of the subcontract involved. The Design Builder shall provide the County with a complete copy of all executed subcontracts or final commercial agreements with Subcontractors and /or suppliers along with any modifications, amendments, or addenda thereto.
- 1.2.4 The Design Builder shall provide the County with a copy of any bid qualification forms to be utilized in bid packages prior to issuance of the bid package. The County will have the right to review and request inclusion of any qualification requirements it deems necessary to insure the qualifications of the bidders. The Design Builder and the County shall agree on a final form of the bid qualification forms. The Design Builder shall provide the County with all completed bid qualification forms submitted by each Subcontractor to which the Design Builder intends to award any subcontract. At the time the Design Builder provides the County with completed bid qualifications forms submitted by each Subcontractor to which the Design Builder intends to award any subcontract, the Design Builder shall advise the County in writing of the date by which the Design Builder intends to enter each subcontract with each Subcontractor. The County shall review the completed bid qualification forms submitted by each Subcontractor and, prior to the date by which the Design Builder intends to enter each subcontract with each Subcontractor, County shall advise the Design Builder in writing of its disapproval of any such Subcontractor(s). The Design Builder shall upon request provide the County with a copy of each contract which the Design Builder proposes to enter into for subcontracting or assigning any portion of Work. Within the County's sole discretion, any Subcontractor may be deemed not qualified to perform work if the County determines that the Subcontractor fails to meet the requirements of the Contract Documents, or for any other reason, at any time.
- 1.2.5 Subcontract agreements and assignments shall preserve and protect the rights of the County under the Contract Documents so that subcontracting and assignments will not prejudice such rights. To the extent of the Work to be performed by a Subcontractor, the Design Builder shall require the

Subcontractor's written agreement (1) to be bound to the terms of Contract Documents; (2) to provide access to and the right to audit and the right to copy all of Subcontractor's books, records, contracts, correspondence, instructions, drawings, receipts, vouchers, purchase orders, and memoranda relating to the Work; and (3) to assume vis-à-vis the Design Builder all the obligations and responsibilities that the Design Builder assumes toward the County under the Contract Documents. The County shall be a designated intended third-party beneficiary of all subcontracts.

- 1.2.6 The Design Builder shall provide for the assignment to the County of all rights any Subcontractor may have against any manufacturer, supplier, or distributor for breach of warranties and guarantees relating to the Work performed by the Subcontractor under the Contract Documents.
- 1.2.7 Each Subcontractor shall be reliable and responsible and fully able to perform its portion of the Work covered by the proposed subcontract or assignment, and able to complete the Work in accordance with the Contract Documents. The Design Builder may not use unqualified, inexperienced, or non-responsive Subcontractors. At a minimum, each Subcontractor and its proposed superintendent must have prior experience on at least two subcontracts of similar scope and complexity. In addition, Subcontractors must not have been terminated for default on any project within the previous three (3) years, and must never have submitted a false claim to any public entity.
- 1.2.8 No subcontract or assignment of this Agreement or any part thereof shall relieve the Design Builder or Sureties of liabilities or obligations under this Contract.
- 1.2.9 No assignment by the Design Builder of the Contract or any part thereof, or funds to be received there under by the Design Builder, will be recognized unless such assignment has written approval of the County and Surety has been given due notice and approved of such assignment in writing.
- 1.2.10 The Design Builder shall require each of its Subcontractors to execute agreements containing indemnity provisions coextensive with those in this Agreement.
- 1.2.11 The County has the right to request all documentation that supports the Design Builder's selection of a Subcontractor. The County shall have the right of final approval as to the qualification(s) of a Subcontractor to perform its designated scope of work. Within the County's sole discretion, any Subcontractor may be deemed not qualified to perform work on the Project if the County or County's Representative determines that the Subcontractor fails to meet the requirements of the Contract Documents, or for any other reason.
- 1.2.12 The County reserves the right to issue payments to the Design Builder and Subcontractor jointly for Work performed under this Agreement. At least seven (7) Days before exercising that right, County must give to the Design Builder written notice of County's intent to issue any such joint payment and provide Design Builder the reasonable opportunity to respond thereto.

2. SCOPE OF DESIGN BUILD RESPONSIBILITY.

- 2.1 Description of Work. The Design Builder shall provide a complete and operable Project in accordance with this Contract, including providing, furnishing, and performing all Services and providing and furnishing all necessary supplies, materials and equipment, and all necessary management, supervision, labor, and Services required for the design, coordination, procurement, quality assurance and inspection, construction, installation, Startup, Checkout, Testing, Maintenance, site cleanup, and the training of the County's personnel, all in conformity with the requirements, Legal Requirements, criteria, Performance Guarantees, and warranties set forth in the Contract Documents. As part of providing a complete and operable Project, Design Builder shall, among other things, coordinate and provide all necessary tie-ins to existing site utilities and shall coordinate and provide all necessary tie-ins to off-site utilities and Interconnection Facilities. County will pay all fees associated with any such connection except as is provided in paragraph 13.2.1 of this Document 007200 (General Conditions). The signature and seal of a licensed engineer or architect shall be obtained as necessary for compliance with the Legal Requirements.
- 2.2 All-Inclusive Design Build Obligation. Without limiting the generality of paragraph 2.1 (Description of Work) hereof, the Design Builder shall provide, at a minimum, the following Services and Materials and Equipment as further specified and described in Sections 011110 (Summary of Work) and 011114 (Summary of Work - Design Services and Deliverables) provided, however, that these sections shall not be construed in any way to limit the Design Builder's obligations hereunder to design, engineer, furnish, construct, Checkout, Startup, and Test a complete and operable Project (including tie-ins to utilities and Interconnection Facilities) in accordance with the provisions of this Agreement.
- 2.2.1 The Design Builder shall provide all design services and design, which will set forth in detail with specifications, drawings and requirements for the procurement of the Materials and Equipment and for the construction of the entire Project and tie-in to the Interconnection Facilities. The Design Builder shall furnish the services of all personnel, including supervisors, designers and draftsmen necessary for the preparation of all drawings and specifications required for the Work. The design shall include all architectural, civil, structural, mechanical, electrical, instrumentation and control work.
- 2.2.2 The Design Builder shall provide all equipment and materials and furnish the services of all supervision, buyers, inspectors, expeditors, and other personnel necessary to procure all Materials and Equipment for the construction of the Project and tie-in to the Interconnection Facilities. The Design Builder 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 Specified 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 and safe execution and completion of the Work, including any of the utilities, as required). Up to the time of Completion, as defined in paragraph 1.5.2.16 of Section 014200 (References and Definitions), the Design Builder shall maintain all Materials and Equipment in accordance with manufacturer's requirements while such Materials and Equipment are in transit or in the care and custody of the Design Builder. Should the Design Builder cause damage to public or private roadways in its performance of the Work, the Design Builder

shall make repairs as necessary without cost to the County. This excludes normal wear and tear from operations required for construction.

- 2.2.3 The Design Builder shall supervise and direct the Work, and shall furnish the services of all supervisors, foremen, skilled and unskilled labor, and all other personnel in sufficient quantities and with sufficient skills necessary to perform the Services in accordance with this Agreement. At the County's request, the Design Builder shall replace, at the Design Builder's expense, any individual if it is determined by the County that such individual's continued presence would jeopardize the quality or timely completion of the Work.
- 2.2.4 Whenever required by applicable laws or the Contract Documents, the Design Builder shall employ licensed personnel as necessary to perform engineering, design, architectural, or other professional services in the performance of the Work. All such professional services shall be performed with the degree of care, skill, and responsibility customary among such licensed personnel that specialize in work similar to the Work of this Agreement. The Design Builder 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. The Design Builder shall adopt and implement reasonable policies and practices designed to avoid work stoppage, slowdowns, disputes and strikes.
- 2.2.5 The Design Builder is solely responsible for all construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work, and the County shall not be responsible for or exercise any control over the actions or omissions of the Design Builder, any Subcontractor, supplier, or any of their employees or agents performing any of the Work or the Design Builder's warranty obligations. The Design Builder shall prosecute the Work continuously and diligently and complete the Work in accordance with all requirements of this Agreement.
- 2.2.6 Design Builder 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.
- 2.2.7 Design Builder is responsible for the layout of the Work and shall perform all necessary surveying during the construction of the Project and tie-in to the Interconnection Facilities. 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 Builder. The Design Builder shall preserve all permanent survey construction monuments and benchmarks. Prior to the completion date, the Design Builder shall accurately correct all Project (including tie-ins to Interconnection Facilities) documents to as-built conditions and deliver to the County these as-built documents in accordance with the Contract Documents. Such documents shall show the location of the Project (including tie-ins to Interconnection Facilities) 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.
- 2.2.8 The Design Builder shall provide appropriate installation and startup representatives from suppliers of major equipment and control systems, all necessary supervising personnel, all equipment, tools, construction and temporary material, and all labor for Checkout, Startup and Testing. The Design

Builder 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.

- 2.2.9 The Design Builder shall provide, upon request of the County, reasonable temporary facilities at the Design Builder's off-site offices to allow the County to review, inspect, and evaluate the Work in accordance with the Contract Documents.
- 2.2.10 Except for safety and warning signs, the Design Builder shall not install any signs on the Site without the express written consent of the County.
- 2.2.11 The Design Builder is responsible for all Site security until Completion, as defined in paragraph 1.5.2.16 of Section 014200 (References and Definitions), or termination of the Agreement. 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. The nature and extent of Site security measures shall be determined by the Design Builder, and the County relies upon the Design Builder's means and methods to provide adequate and appropriate Site security. After responsibility for Site security is returned to the County pursuant to this paragraph.
- 2.2.12. Design Builder will be subject to the County's Site security regulations and restriction.
- 2.2.13 The Design Builder shall prepare or cause to be prepared and shall furnish to County all drawing logs, drawings, manufacturers' drawings and data, supplier manuals and operating manuals in accordance with the Contract Documents.
- 2.2.14 The Design Builder shall ensure that the County and its representatives shall, at all times, have access to the Site for all purposes. In order to allow the County and its representatives to be present, the Design Builder shall give the County at least three (3) Days advance notice of any system or equipment Checkout or Testing. If the County desires access to any places where Work is being performed or from which Materials and Equipment are being obtained, the Design Builder shall provide or arrange reasonable access thereto and shall provide County reasonable advanced notice of any factory tests or other off site tests. The Design Builder shall maintain the Site in a safe condition to permit the County and any person authorized in writing by the County to inspect and review all field work during working hours, including Materials and Equipment, installation, calibration, Startup and Testing.

In addition, the Design Builder shall provide the participating State Agencies reasonable unrestricted access to observe, monitor, and inspect the Project. The Agencies' access to observe, monitor and inspect shall include the right to review all documents and files relating to the Project, as well as construction on the Site, including all tests and inspections relating to design or construction of the Project.

- 2.2.15 As part of the procurement of equipment, the Design Builder shall provide to the County 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, the Design Builder shall procure such operating spare parts from

Suppliers, as requested by the County, on behalf of the County. The cost of such operating spare parts shall be covered by change order.

- 2.2.16 When any equipment or portion of the Work is damaged, the Design Builder shall inform the County as soon as possible and provide the County a damage report detailing such occurrence, any required repairs, and the estimated duration of such repairs.
- 2.2.17 The Design Builder shall provide to the County all tests and measurements, laboratory analyses, and reports made or prepared in connection with the Work.
- 2.2.18 The Design Builder agrees that, in light of the high degree of confidence and trust that the County has reposed in the Design Builder: (a) the Design Builder has the duty to act in the County's best interests at all times throughout the course and performance of its design responsibilities pursuant to this Agreement; and (b) when acting in any role other than as a designer, the Design Builder has a duty to protect the County's interests and shall act in such a manner as to consider the County's interests to be equal to the interest of the Design Builder throughout the course and performance of its non-design responsibilities pursuant to this Agreement. Notwithstanding anything to the contrary, nothing contained herein shall create any fiduciary obligation on behalf of the Design Builder to the County.

3. **CONTRACT AWARD AND COMMENCEMENT OF THE WORK.**

3.1 Commencement of Work.

- 3.1.1 The Contract Time will commence to run on the day indicated in Document 005500 (Notice to Proceed). As a condition to the County signing Document 005200 (Agreement), however, the Design Builder shall deliver to County the executed agreements, forms, bonds, and insurance documents required by Document 002100 (Request for Proposals from Bidders) in the required quantities and within the required times. A Notice to Proceed may be given at any time within thirty (30) Days after the County's execution of Document 005200. See also Article 15 (Time allowances) of this Document 007200.
- 3.1.2 The Design Builder shall start to perform the Work on the date when the Contract Time commences to run, but no work shall be done at the Site prior to the date on which the Contract Time commences to run.

3.2 Mobilization.

- 3.2.1 Mobilization includes moving onto the Site of all plant and equipment; furnishing and erecting plants, temporary buildings, and other construction facilities; all as required for the proper performance and completion of the Work. Mobilization shall be undertaken in compliance with the requirements of the Contract and any staging plan approved by the County and shall include, but not be limited to, the following principal items:
 - 3.2.1.1 Moving onto the Site the Design Builder's plant and equipment as required.
 - 3.2.1.2 Installing temporary construction power and wiring.

- 3.2.1.3 Establishing fire protection system for its temporary facilities.
- 3.2.1.4 Developing construction water supply.
- 3.2.1.5 Providing field office trailers for the Design Builder with all Specified furnishings and utility services including telephones and internet. The Design-Builder may locate its field office trailers in the area between existing buildings “A” and “B” for the duration of the Project.
- 3.2.1.6 Providing connections to on-site sanitary facilities and potable water facilities as Specified, or providing portable toilets/port-a-potties as needed.
- 3.2.1.7 Arranging for and erection of the Design Builder’s work and storage yard(s).
- 3.2.1.8 Submittal to the County of all required Subcontractor insurance certificates and bonds, if required.
- 3.2.1.9 Posting all OSHA required notices and establishment of safety programs.
- 3.2.2 Within fifteen (15) Days following issuance by the County of a Notice of Award, the Design Builder shall submit to the County, for its review and concurrence, a Mobilization Plan including initial schedule and staffing plan for both design-side staff and construction-side staff.
 - 3.2.2.1 The Mobilization Plan is subject to review and concurrence by the County prior to, and as a condition precedent to, execution of the Contract.
 - 3.2.2.2 The Mobilization Plan shall be developed in both narrative and graphic format, and shall include, at a minimum, the following:
 - 3.2.2.2.1 Initial design activities, which include but are not limited to establishing on-site office space for design personnel, implementing an online project management system, and verifying existing site conditions and utilities.
 - 3.2.2.2.2 Initial construction activities, which include but are not limited to interior and exterior demolition, any proposed site excavation and perimeter structural shoring, parking and traffic control, temporary facilities and staging, followed by construction of interior improvements.
 - 3.2.2.2.3 A detailed sequential plan for commencement of interior construction consistent with the scheduling requirements of this Agreement for all design, demolition, construction, and other activities to be undertaken during the first sixty (60) Days following execution of the Contract.

4. **BONDS AND INSURANCE.**

4.1 Bonds.

4.1.1 Within the time period specified in Document 002100 (Request for Proposals from Bidders), the Design Builder shall provide to the County the following bonds for all of the Work, as described in Section 011216 (Work Sequence). Design Builder shall provide two (2) bonds pursuant to paragraphs 4.1.1.1 and 4.1.1.2.

4.1.1.1 For all of the Work, provide one (1) corporate surety bond in the form set forth in Document 006110 (Construction Performance Bond) to guarantee faithful performance of all construction and demolition work, including bonds, insurance, permits and fees under the Contract for that phase of the Work ("Performance Bond"). The performance bond shall be in an initial sum not less than one hundred percent (100%) of the amount of the value of non-design construction and demolition Work to be performed by the Design Builder under this Agreement, and shall obligate the surety to faithfully perform not less than one hundred percent (100%) of the amount of the value of non-design construction and demolition Work for the entire Project

4.1.1.2 For all phases of the Work, provide one (1) corporate surety bond in the form set forth in Document 006120 (Construction Labor and Material Payment Bond) to guarantee payment of wages for services engaged and of bills contracted for services, materials, supplies, and equipment used in performance of the Contract for that phase of the Work. In accordance with Civil Code section 9550 et seq., the Construction Labor and Material Payment Bond shall obligate a surety to guarantee payment in an amount equal to the entire Contract Sum for the Project

4.1.2 Corporate sureties issuing payment and performance bonds and on bonds accompanying Bids must be duly licensed and legally authorized to engage in the business of furnishing surety bonds in the State of California. Sureties must be satisfactory to the County and shall have an A.M. Best Company financial rating of A-7 or better.

4.1.3 In the event of increases in the Contract Sum by Change Orders, or otherwise, aggregating to five percent (5%) of the Contract Sum or more, and by all such subsequent increases in the Contract Sum thereafter, the Design Builder shall submit to the County evidence of additional bond coverage for such increases in the Contract Sum. The Design Builder shall be compensated for such additional bond coverage.

4.2 Insurance.

4.2.1 See Document 007320 (Insurance), incorporated herein by reference.

5. **DRAWINGS AND SPECIFICATIONS.**

5.1 Intent. The Contract Documents are complementary; what is called for by one is as binding as if required by all. It is the intent of the Contract Documents to describe a functionally complete Project and individual systems therein to be designed and

constructed in accordance with the requirements of the Contract Documents. Any Work, materials or equipment that may reasonably be inferred from the requirements of the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result shall be furnished and performed whether or not specifically required. When words, phrases or abbreviations, which have a well-known technical or construction industry or trade meaning are used to describe Work, materials or equipment, such words, phrases or abbreviations shall be interpreted in accordance with that meaning. Any non-technical words, phrases or abbreviations shall be interpreted in accordance with their commonly understood meanings.

- 5.2 Drawing Details and Specification Descriptions. The Drawings and Specifications (CSI 2004 Master Format) of the Construction Documents establish performance criteria the final design and construction must meet and, along with the warranty and other requirements in the Contract Documents, establish the minimum design, material, quality, workmanship and other standards required under the Contract Documents. The Design Builder has full “turnkey” responsibility to deliver the fully functional, operational Project described in Section 011113 (Summary of Work) as referenced in the Contract Documents.
- 5.3 Specifications and Drawings Do Not Control Division of Work. The Divisions and Sections of the Specifications and the identifications of any Drawings shall not control Design Builder in dividing the Work among Subcontractors or suppliers or delineating the work to be performed by any specific trade.
- 5.4 Interpretation of Contract, Drawings and Specifications.
- 5.4.1 Should any discrepancy or ambiguity appear or any misunderstanding arise as to the importance of anything contained in the Contract and the Drawings and Specifications included in the Contract Documents, the matter shall be referred to the County, who shall issue with reasonable promptness so as not to delay the Design Builder’s performance such written clarifications or interpretations of the requirements, which shall be consistent with the intent of and reasonably inferable from the Contract and Drawings and Specifications. Reasonable promptness may vary with issue; however, it is the goal of the County to respond in no longer than five (5) Business Days. It is the intent of the Contract Documents that the Design Builder shall have responsibility to provide a complete and comprehensive design (and construction thereof) for the Project in order to allow a complete and fully operational Project on a “turnkey” basis. The County’s review of the Design Builder’s designs, shop drawings, samples and submittals shall not relieve the Design Builder of its responsibility for a complete design complying with the requirements of the Contract Documents; but rather, such review shall be in furtherance of the County’s monitoring and accepting the design as developed and issued by the Design Builder, consistent with these Contract Documents.
- 5.4.2 The Contract Documents may omit modifying words such as “all” and “any,” and articles such as “the” and “an,” but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement. The use of the word “including,” when following any general statement, shall not be construed to limit such statement to specific items or matters set forth immediately following such word or to similar items or matters, whether or not non-limiting language (such as “without limitation,” “but not limited to,” or words of similar import) is used with reference thereto, but rather shall be deemed to refer to all other items or matters that

could reasonably fall within the broadest possible scope of such general statement.

- 5.4.3 Whenever the context so requires, the use of the singular number shall be deemed to include the plural and vice versa. Each gender shall be deemed to include any other gender, and each shall include corporation, partnership, trust, or other legal entity, whenever the context so requires. The captions and headings of the various subdivisions of the Contract Documents are intended only for reference and convenience and in no way define, limit, or prescribe the scope or intent of the Contract Documents or any subdivision thereof.
- 5.4.4 Design Builder shall submit to the County requests for information (RFIs) as Design RFIs (DRFIs). County shall submit to the Design Builder requests for information as Owner RFIs (ORFIs).
- 5.4.5 Design Builder's internal RFI process shall include identifying to the County any internal RFIs that will impact performance or program requirements, functionality, durability, maintenance and finish appearance.
- 5.5 Checking/Updating of Drawings. The Design Builder shall develop the final design and construction drawings for the Work and, thereafter, during design and construction, shall continuously check such drawings for conformance to actual conditions and update such drawings to maintain complete and current as-built drawings as construction progresses.
- 5.6 Necessary and Incidental Work. The Design Builder shall perform reasonably implied parts of Work as "incidental work" although absent from Drawings and Specifications. Incidental work includes any work not shown on Drawings or described in Specifications that is normally or customarily required as a part of the Work shown on Drawings or described in Specifications. Incidental work shall be treated as if fully described in Specifications and shown on Drawings, and the expense of incidental work shall be included in Price Proposal and Contract Sum.
- 5.7 Standards to Apply Where Detailed and/or Performance Specifications Are Not Furnished. Wherever in the Contract Documents, or in any orders given by the County, it is provided that the Design Builder shall furnish materials or manufactured articles or shall do work for which no detailed or performance specifications are set forth, the following general specifications shall apply.
 - 5.7.1 Design and construction shall meet the standards required by the Contract Documents to provide the County with a fully functional Project, designed and constructed in a manner consistent with the standards, equipment, materials and design, found in comparable, fully functional, contemporary facilities.
 - 5.7.2 Materials or manufactured articles shall be of the grade, in quality and workmanship, consistent with the requirements of this Agreement 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 materials or articles of the kind required, with due consideration of the use to which they are to be put. The Work for which no detailed specifications are set forth herein shall conform to the requirements of this paragraph 5.7. All such Work shall be consistent with the Contract Documents.
- 5.8 Precedence of Documents. In the case of discrepancy or ambiguity in the Contract Documents, the following order of precedence shall prevail:

- 5.8.1 Modifications in inverse chronological order, and in the same order as specific portions they are modifying (i.e., later-issued language shall take precedence and prevail over earlier conflicting versions or language).
- 5.8.2 Contract Document Exhibit 4 - Project Delivery and Construction Agreement
- 5.8.3 Signed Document 005200 (Agreement), and terms and conditions referenced therein.
- 5.8.4 Document 007200 (General Conditions).
- 5.8.5 Performance Criteria Manual Division 00 Bidding and Contracting Requirements.
- 5.8.6 Performance Criteria Manual Division 01 General Requirements (as modified, if at all, pursuant to paragraph 6.2.1 of Document 005200 (Agreement)).
- 5.8.7 Contract Document Exhibits 1 and 2 - Performance Criteria Documents as referenced in Section 014200 (as modified, if at all, pursuant to paragraph 6.2.1 of Document 005200 (Agreement)).
 - 5.8.7.1 Performance Criteria Document Technical Specifications
 - 5.8.7.2 Performance Criteria Document Drawings
 - 5.8.7.3 Performance Criteria Document Narratives & Appendices
- 5.8.8 Contract Document Exhibit 3 - Contra Costa County Building Design and Construction Guidelines.
- 5.8.9 The Construction Documents after having been accepted by the County and approved for all required permits. The Construction Documents will supplement and enhance, but not supplant the Contract Documents. If a conflict is later discovered between the Contract Documents and the Construction Documents, the Contract Documents shall prevail unless the Owner has explicitly agreed to specific revisions or deviations to the Contract Documents.
- 5.8.10 Design Builder's Proposal as defined in paragraph 6.1 of Document 005200 (Agreement).
- 5.8.11 Written numbers over figures, unless obviously incorrect.
- 5.8.12 Figured dimensions over scaled dimensions.
- 5.8.13 Large-scale Drawings over small-scale Drawings.
- 5.8.14 Any conflict between Drawings and Division 2 through 32 Specifications 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.
- 5.8.15 Any conflict between a bill or list of materials shown in the Contract Documents and the actual quantities required to complete the Work required by Contract Documents, will be resolved in favor of the actual quantities.

- 5.8.16 If there is any discrepancy or ambiguity concerning the character, nature, quality or quantity of Work, product, system, or materials required under the Contract Documents, the Design Builder shall (1) immediately bring such discrepancy or ambiguity to the attention of the County and (2) without regard to the order of precedence above, provide the better quality of or greater quantity of Work or materials, without an increase in the Contract Sum, unless otherwise ordered by the County.
- 5.8.17 If there is any discrepancy or ambiguity between a specified material, product, or system name or description and the model name, number, or code, the conflict will be resolved in favor of the description or name.

5.9 Design Deliverables, Shop Drawings and Submittals to be Furnished by Design Builder in Addition to Completed Design Drawings.

- 5.9.1 The Design Builder shall submit to the County for review a schedule of all deliverables required in Section 011114 (Summary of Work Design Services and Deliverables), identifying each required deliverable and the date on which it will be submitted to the County ("Schedule of Deliverables"). A preliminary Schedule of Deliverables will be submitted within sixty (60) Days of the Notice to Proceed. The County understands that a more complete Schedule of Deliverables will not be available until the beginning of the Construction Documents Phase as defined in Section 011114. A more complete Schedule of Deliverables will be submitted to the County when the final design is submitted to the County at the end of the Design Development Phase as defined in Section 011114.
- 5.9.2 Due to the design-build nature of the Project, the Design Builder and the County will jointly develop a list of submittals and shop drawings, which are to be submitted to the County. In accordance with Section 013000 (Submittal Procedures), the Design Builder shall submit to the County for review a preliminary schedule of shop drawings and submittals ("Schedule of Submittals"), which will list each required submittal in order by specification section and the times for submitting, reviewing and processing such submittal. A preliminary Schedule of Submittals will be submitted within sixty (60) Days of the Notice to Proceed. The County understands that a more complete Schedule of Submittals will not be available until sixty (60) Days after approval of one hundred percent (100%) Construction Drawings or final bid package procurement, whichever is later. Design Builder will endeavor to provide updated partial Schedules of Submittals as available every sixty (60) Days through the course of the "fast track" process of the Project. Shop drawings and submittals shall be in addition to the Design Builder's design developed pursuant to this Agreement.
- 5.9.3 The Design Builder shall submit submittals, Product Data, Samples and Shop Drawings to the County for review in strict accordance with Section 013000 (Submittal Procedures). Shop Drawings means drawings, submitted to the Design Builder by subcontractors, manufacturers, supplier or distributors, showing in detail the proposed fabrication and assembly of building elements and the installation (e.g., form, fit, and attachment details) of materials or equipment. Submission of a Submittal or shop drawing shall constitute the Design Builder's representation that all requirements of Section 013000 have been complied with. All Submittals and Shop Drawings will be identified as the County may require and made in the number of copies specified in Section

013000. The Design Builder shall coordinate all submittals and review them for accuracy, completeness, and compliance with the requirements of the Contract Documents and the Design Builder's Construction Documents and shall indicate its approval thereon as evidence of such coordination and review. The Design Builder shall submit Shop Drawings and samples that relate to finish materials and products approved by the Architect of Record.

- 5.9.4 Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate, for those portions of the Work for which submittals are required, how Design Builder proposes to conform to the information given and the design concept expressed in the Contract Documents. The Design Builder shall review, approve, and submit to the County's Representative Shop Drawings, Product Data, Samples, and similar Submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of County or of Separate Contractors. Submittals made by the Design Builder that are not required by the Contract Documents may be returned without action by County. The Design Builder shall perform no portion of the Work requiring Submittal and review of Shop Drawings, Product Data, Samples, or similar Submittals until the respective submittal has been reviewed by County's Representative and no exceptions have been taken by the County's Representative. Such Work shall be in accordance with approved Submittals and the Contract Documents. By approving and submitting Shop Drawings, Product Data, Samples, and similar Submittals, Design Builder represents that it has determined or verified materials and field measurements and conditions related thereto, and that it has checked and coordinated the information contained within such Submittals with the requirements of the Contract Documents and Shop Drawings for related Work.
- 5.9.5 If the Design Builder discovers any conflicts, omissions, or errors in Shop Drawings or other Submittals, Design Builder shall notify the County's Representative and receive instruction before proceeding with the affected Work. The Design Builder shall be responsible to correct to the satisfaction of the County, any conflicts, omissions, or errors in Shop Drawings or other Submittals.
- 5.9.6 The Design Builder shall not be relieved of responsibility for deviations from requirements of the Contract Documents by County's Representative's review of Shop Drawings, Product Data, Samples, or similar Submittals, unless the Design Builder has specifically informed the County's Representative in writing of such deviation at the time of submittal and the County's Representative has given written approval of the specific deviation. The Design Builder shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar Submittals by County's Representative's review, acceptance, comment, or approval thereof.

The Design Builder shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar Submittals, to revisions other than those requested by County's Representative on previous Submittals. The County will review first resubmittal of Shop Drawing at its cost. The County reserves the right to reduce the Contract Sum by Change Order for its cost for any subsequent reviews of Shop Drawings, Product Data, or other resubmittals.

- 5.9.7 Wherever the name or brand of manufacturer or an article is listed in the Contract Documents, it is to be used in the Work as the standard. Any variation in quality must be approved by the County.
- 5.9.8 Materials and equipment incorporated in the Work shall match the approved samples within tolerances appropriate to the items, and as may be described in the Contract Documents.
- 5.9.9 The Design Builder shall not perform work requiring submission of a Submittal, Product Data, Samples or Shop Drawing prior to submission and favorable review by the County of the Submittal or Shop Drawing. The County's review of Submittals or Shop Drawings shall be performed so as not to delay the Design Builder's performance. Where a Submittal or Shop Drawing is required by the Contract Documents or shop drawings accepted by the County, Architect or Engineer of Record, any related Work performed prior to favorable review of the pertinent Submittal or Shop Drawing will be at the sole expense, responsibility and risk of the Design Builder. The County's review of Shop Drawings, samples and Submittals shall not relieve the Design Builder of its responsibility for a complete design complying with the requirements of the Contract Documents; but rather, such review shall be in furtherance of the County's monitoring and accepting the design as developed and issued by the Design Builder, consistent with these Contract Documents.

5.10 Construction Documents.

- 5.10.1 Upon receipt of the Notice to Proceed, the Design Builder shall instruct the Architect to commence the design of the building systems and the preparation of the Construction Documents. The Construction Documents shall provide information customarily necessary in documents for projects of similar size, complexity, and quality. The Construction Documents shall include all information required by the building trades to complete the construction of the Project, other than such details customarily developed by others during construction. The County's review of the Construction Documents shall be conducted in accordance with the approved Project Master Schedule with procedures set forth in this Agreement. Such review shall not relieve the Design Builder from its responsibilities under the Agreement. Such review shall not be deemed an approval or waiver by the County of any deviation from, or of the Design Builder's failure to comply with, any provision or requirement of the Contract Documents, unless such deviation or failure has been identified as such in writing in the document submitted by the Design Builder and approved by the County.
- 5.10.2 However, it is acknowledged by the parties hereto that inherent in a design build concept, performance criteria or otherwise, the production and review of Construction Documents may be a continuing process with portions thereof completed at different times.

The Design Builder will limit the Construction Document packages for construction, including any deferred approval packages, to a reasonable number as approved by the Regulatory Agency. The Project Master Schedule shall indicate the times for the County to review the completion of each such portion of the Construction Documents prior to submittal to the Regulatory Agency and a reasonable time for Agency review of same.

- 5.10.3 The Design Builder shall submit completed packages of the Construction Documents for review by the Regulatory Agency, the BSCC, the State Fire Marshall, and other authorities having jurisdiction at the times indicated on the Project Master Schedule and as defined in the Scheduling Specification. Review meetings between the Design Builder and Regulatory Agency to review the Construction Document packages, shall be scheduled and held so as not to delay the Work.
- 5.10.4 The Construction Documents for hazardous and/or toxic abatement efforts and demolition activity shall be of sufficient clarity and shall be fully detailed when submitted to the County for review.
- 5.10.5 The Design Builder shall retain and pay expenses of a civil engineer or land surveyor to establish on the Site the required Primary Controls, including but not limited to benchmarks, establish building lines and elevations, check for building framing, plumbness, and establish on building frame the required basic grid lines. The engineer or land surveyor shall be licensed in the State of California. Subsequent surveying and layout may be performed by the Design Builder's qualified personnel.
- 5.10.6 The Design Builder shall locate and protect control points prior to starting Work on the Project site and preserve permanent reference points during construction and shall require the engineer or surveyor to replace control points which become lost or destroyed.
- 5.10.7 The Design Builder shall verify the location and depth (elevation) of all known existing utilities and services before performing any excavation Work.

6. CONSTRUCTION BY THE COUNTY OR BY SEPARATE CONTRACTORS.

6.1 The County's Right to Perform Construction and to Award Separate Contracts.

- 6.1.1 For the purpose of this paragraph 6.1 alone, the "County" refers to and includes the County Facility.
- 6.1.2 The County may perform with its own forces, construction or operations related to the Project. The County 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.
- 6.1.3 When separate contracts are awarded for different portions of the Project or other construction or operations on the Site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate County/Contractor Contract.
- 6.1.4 If the Design Builder fails to carry out the Work in accordance with the Contract Documents, fails to provide sufficient labor, materials, equipment, tools, and services, with respect to either the design or construction phases, fails to maintain the Project Master Schedule, or otherwise fails to comply with any material term of the Contract Documents, and fails within two (2) Business Days after receipt of notice from the County to promptly commence and thereafter diligently continue to completion the correction of such failure, the County may, without prejudice to other remedies the County may have, correct

such failure at the Design Builder's expense. In such case, the County will be entitled to deduct from payments then or thereafter due the Design Builder the cost of correcting such failure, including compensation for the additional services and expenses of the County made necessary thereby. If payments then or thereafter due the Design Builder are not sufficient to cover such amounts, the Design Builder shall pay the additional amount to the County.

- 6.1.5 When separate contracts are awarded for different portions of the Project or other construction or operations on the Site, County shall notify the Design Builder of such separate contracts before work on the Site pursuant to those contracts begins. County shall give such notice to the Design Builder with enough time to reasonably allow Design Builder to coordinate as required by paragraph 6.2 (Mutual Responsibility) below.

6.2 Mutual Responsibility.

- 6.2.1 The Design Builder shall afford all other separate contractors, utility owners, and the County (if the County is performing work with its own forces), proper and safe access to the Site, including such access to other lands and facilities designated in the Contract Documents for use by the Design Builder and reasonable opportunity for the installation and storage of their materials, shall ensure that the execution of its Work properly connects and coordinates with their work, and shall cooperate with them to facilitate the progress of the Work.
- 6.2.2 The Design Builder shall coordinate its work with the work of other separate contractors, the County, and utility owners, including, at a minimum, holding monthly coordination meetings with them. The County shall have the right to participate in these coordination meetings and shall be advised of the results of these coordination meetings at the monthly Progress Meeting.
- 6.2.3 Unless otherwise provided in the Contract Documents, the Design Builder 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. The Design Builder shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of the County and the others whose work will be affected.
- 6.2.4 The duties and responsibilities of the Design Builder under paragraphs 6.2.1 through 6.2.3 above are for the benefit of the County and also for the benefit of such utility owners and other contractors working at the Site.
- 6.2.5 To the extent that any part of the Design Builder's Work is to interface with the Work performed or installed by others, the Design Builder shall inspect and measure the in-place work and promptly report in writing to the County any defect in such in-place work that will impede or increase the cost of the Design Builder's interface unless corrected. The County will require the contractor responsible for the defective work to make corrections so as to conform to the Contract Documents. If the Design Builder fails to measure, inspect and/or report defects that are reasonably discoverable, all costs of accomplishing the interface acceptably shall be borne by the Design Builder. This provision shall be included in any and all other contracts or subcontracts for the Work to be performed where such a conflict could exist.

6.3 County Authority Over Coordination.

- 6.3.1 The County shall have authority over coordination of the activities of multiple contractors in those cases where the County or contracts with others for the performance of other work on the Project, the County performs work with its own forces, or utilities perform work on the Site. (The authority of the County with respect to coordination of the activities of multiple prime contractors and utility owners, however, shall not in any manner relieve the Design Builder of its obligation to other contractors and utility owners to coordinate its work with utility owners and other contractors as specified above.) The Design Builder shall promptly notify the County in writing when another contractor on this Project fails to coordinate its work with the Work of this Agreement.
- 6.3.2 The Design Builder shall suspend any part of the Work herein Specified or shall carry on the same in such manner if directed by the County when such suspension or prosecution is necessary to facilitate the work of other contractors or workers. No damages or Claims, as defined in Article 12 (Claims by Design Builder) below, by the Design Builder will be allowed therefore to the extent the suspension or work change is due to the Design Builder's failure to perform its obligation to coordinate its work with utility owners and other contractors. If the suspension or work change is due in whole or in part to the failure of another County employed contractor to coordinate its work with the Design Builder and other contractors and utility owners, then resulting damages or Claims by Design Builder will be allowed. The County reserves the right to back charge the Design Builder for any damages or claims of other contractors incurred as a result of the Design Builder's failure to perform its obligations to coordinate its work with other contractors and utility owners, and in its discretion, the County may deposit the funds retained with a Court of competent jurisdiction pursuant to applicable interpleader procedures and the Design Builder releases the County of any further liability regarding such funds.
- 6.3.3 The County may at any time and in its sole discretion, designate a person, firm or corporation other than the County, to have authority over the coordination of the activities among the other contractors.

7. THE COUNTY AND PAYMENT.

7.1 The County's Representatives.

- 7.1.1 The designated authorized representative(s) of the County, or the County's Project Manager will provide limited administration of the Contract as provided in the Contract Documents and will have limited authority to act on behalf of the County as set forth in the Contract Documents.
- 7.1.2 The County shall designate in the Contract Documents or otherwise in writing, from time to time, one or more County Representative (referred to herein as "County's Representative" or "County Representative") authorized to act on the County's behalf with respect to the Project, together with the scope of his/her respective authority. Functions that this Agreement provides will be performed by the County may be delegated by the County to its Representative only by written notice to the Design Builder from the County. The Design Builder shall not be entitled to rely on directions (nor shall it be required to follow the directions) from anyone outside the scope of that person's authority as set forth in written authorization pursuant to this Agreement. Directions and decisions

made by the County's authorized representatives within the scope of this authorization shall be binding on the County.

- 7.1.3 During the term of this Agreement, the County's Representative shall have the right to review Design Builder's Design Professionals' Work at such intervals as deemed appropriate by the Representative. However, no actions taken during such review or site visit by the County Representative, shall relieve the Design Builder of any of its obligations of single-point responsibility for the design and construction of this Project nor form the basis for a Claim if such actions extend the Contract Completion Date beyond the Contract Time.
- 7.1.4 The County's Representative will not have control over, will not be in charge of, and will not be responsible for design or construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the Work, since these are solely the Design Builder's responsibility.
- 7.1.5 Except as otherwise provided in the Contract Documents or when direct communications have been specifically authorized, the County and the Design Builder shall communicate through the County's Representative. Communications by Design Builder with County's consultants and County's Representative's consultants shall be through the County's Representative. Communications by the County and the County's Representative with Subcontractors will be through the Design Builder. Communications by the Design Builder and Subcontractors with Separate Contractors shall be through County's Representative. Should any direct communications between Design Builder and County's consultants, architects or engineers not identified in Article 2 of Document 005200 (Agreement) occur during field visits or by telephone, Design Builder shall immediately confirm them in a written document copied to the County. The Design Builder shall not rely on oral or other non-written communications.
- 7.1.6 Based on the County's Representative Project site visits, review of Design Work, and evaluations of Design Builder's Applications For Payment, the County's Representative will recommend amounts, if any, due the Design Builder and will issue Certificates For Payment in such amounts.
- 7.1.7 The County's Representative will have the authority to reject the Work, or any portion thereof, which does not conform to the Contract Documents. The County's Representative will have the authority to stop the Work, or any portion thereof whenever the County's Representative considers it necessary, or advisable, for implementation of the intent of the Contract Documents, the County's Representative will have the authority to require additional inspection or testing of the Work in accordance with the Contract Documents, whether or not such Work is fabricated, installed, or completed.

However, no authority of the County's Representative conferred by the Contract Documents nor any decision made in good faith either to exercise, or to not exercise such authority, will give rise to a duty or responsibility, of the County or the County's Representative to the Design Builder, or any person or entity claiming under, or through, the Design Builder.

- 7.1.8 The County's Representative (a) will have the authority to conduct inspections in connection with any Beneficial Occupancy pursuant to paragraph 13.25

(Beneficial Occupancy) below, and to determine the dates of Substantial Completion, and final Completion; (b) will receive for review and approval any records, written warranties, and related documents required by the Contract Documents and assembled by the Design Builder; and (c) will issue a final Certificate For Payment upon the Design Builder's compliance with the requirements of the Contract Documents.

- 7.1.9 The County's Representative will be, in the first instance, the interpreter of the requirements of the Contract Documents and the judge of performance thereunder by the Design Builder. Should the Design Builder discover any conflicts, omissions, or errors in the Construction Documents or the Contract Documents; have any questions about the interpretation or clarification of the Contract Documents; question whether the Work is within the scope of the Contract Documents; then, before proceeding with the Work affected, the Design Builder shall notify the County's Representative in writing and request interpretation, or clarification. The County's Representative's response to questions and requests for interpretations, clarifications, instructions, or decisions will be made with reasonable promptness. Should the Design Builder proceed with the Work affected before receipt of a response from the County's Representative, any portion of the Work which is not done in accordance with the County's Representative interpretations, clarifications, instructions, or decisions shall be removed or replaced at the direction of the County's Representative and Design Builder shall be responsible for all resultant costs.

7.2 Means and Methods of Design and Construction.

- 7.2.1 Subject to those rights specifically reserved in the Contract Documents, the County shall not supervise, direct, or have control over, or be responsible for, the Design Builder's design or means, methods, techniques, sequences or procedures of construction or for the safety precautions and programs incident thereto, or for any failure of the Design Builder to comply with laws and regulations applicable to the furnishing or performance of the Work.
- 7.2.2 The County shall not be responsible for the Design Builder's failure to perform or furnish the Work in accordance with Contract Documents.

- 7.3 Receipt and Processing of Applications for Payment. As required by Section 012900 (Payment Procedures), the Design Builder shall prepare and submit Applications for Payment and warrant title to all Work covered by each Application for Payment. The County will require of Design Builder all payment information required by the State Agencies. The County will review the Design Builder's Applications for Payment and make payment thereon, and the Design Builder shall make payments to Subcontractors, subconsultants suppliers and others, as required by Section 012900 (Payment Procedures).

8. **CONTROL OF THE WORK.**

8.1 Supervision of Work by Design Builder.

- 8.1.1 The Design Builder shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such personal skills and expertise as may be required and necessary to perform the Work in accordance with the Contract Documents. The Design Builder shall be solely

responsible for the design and means, methods, techniques, sequences and procedures of construction and for the safety precautions and programs incident thereto. The Design Builder shall be responsible to see that the completed Work complies accurately with the Contract Documents.

8.1.2 The Design Builder shall keep on the Site at all times during Work progress on the Site a competent resident Superintendent, who shall not be replaced without the express written consent of the County. The Superintendent may not perform the Work of any trade, pick-up materials, or perform any Work not directly related to the supervision and coordination of the Construction Work at the Project site when work is in progress. The Superintendent shall be the Design Builder's representative at the Site and shall have complete authority to act on behalf of the Design Builder. All communications given to, and received from, the Superintendent shall be as binding on the Design Builder. Failure to maintain a Superintendent on the Project site at all times Work is in progress shall be considered a material breach of this Agreement, entitling the County to terminate the Contract or, alternatively, issue a stop Work order until the Superintendent is on the Site.

8.1.3 The Design Builder shall have and maintain at the Site a full-time Quality Control Manager, who will have duties in addition to quality control, and a full-time project manager whose duties shall include providing a quality control document to the County that the Work has been reviewed and either found to meet the terms and conditions of the Contract Documents or has been found deficient and corrective action will be taken promptly.

8.2 Observation of Work by County. The County may observe and monitor the design and construction through its agents, employees, consultants or others. The Design Builder in no way is relieved of any responsibility by the activities of the County in this regard.

8.3 Access to Site. During performance of Work, the County and its respective agents, representatives, consultants, and employees may at any time enter upon the Site, shops or offices where any part of Work may be in preparation, or factories where any materials for use in Work are being or are to be manufactured, and the Design Builder shall provide proper and safe facilities therefore, and shall make arrangements with manufacturers to facilitate inspection of their processes and products to such extent as the County's interests may require. Other contractors performing work for the County may also, for all purposes required by their respective contracts, enter upon the Site. Furthermore, Design Builder shall permit the Regulatory Agency, or its authorized agents, to have access to the project staff and facilities whenever project activities are in progress and ensure that all Design Builder(s) will provide proper facilities for access, monitoring, and inspection.

8.4 Existing Utilities. Drawings may indicate above and below grade structures, drainage lines, storm drains, sewers, water, gas, electrical, chemical, hot water, and other similar items and utilities, and additional information may be on file with the County and/or the regional notification center Underground Service Alert ("USA"). Design Builder shall locate these known existing installations before proceeding with trenching or other operations that may cause damage, shall maintain them in service where appropriate, and shall repair any damage to them caused by the Work, at no increase in Contract Sum. Additional utilities whose locations are unknown to the County are suspected to exist. Design Builder shall be alert to their existence; if they are encountered, The Design Builder shall immediately report to County for disposition of the same. In addition to reporting if any utility is damaged, the Design Builder shall take appropriate action as

provided in this Document 007200. Additional compensation or extension of time on account of utilities not shown or otherwise brought to the Design Builder's attention, including reasonable action taken to protect or repair damage, shall be determined as provided in this Document 007200.

- 8.4.1 At no additional cost to the County, the Design Builder 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. The Design Builder shall take immediate action to restore any in service installations damaged by the Design Builder's operations. Should the County determine that the Design Builder has not responded in a timely manner or not diligently pursued completion of the Work, the County may restore service and deduct the costs of such action by the County from the amounts due under the Contract.
- 8.4.2 Consistent with Government Code § 4215, as between the County and the Design Builder, the County 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. The County will compensate for the cost of locating and repairing damage not due to the Design Builder's failure to exercise reasonable care, in the removing and relocating such main or trunk line utility facilities not indicated in the Contract Documents with reasonable accuracy, and equipment on the Project necessarily idled during such work.
- 8.4.3 Prior to performing Work at the Site, the Design Builder shall lay out the locations of known underground utilities that are to remain in service and other significant known underground installations. At no additional cost to the County, prior to commencing other Work in proximity to such known underground utilities or installations that can be readily inferred from adjacent surface improvements, the Design Builder shall further locate, by carefully excavating with small equipment, potholing and principally by hand, such utilities or installations that are to remain and that are subject to damage. This obligation applies to all utilities.
- 8.4.4 Nothing in this Document 007200 shall be deemed to require the County to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the Site can be inferred by the Design Builder from 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. The Design Builder shall immediately secure all available information and notify the County and utility, in writing, of its discovery, while performing Work under the Contract Documents, of any utility facilities not identified in the Drawings and Specifications.

8.5 Underground Facilities.

- 8.5.1 Before commencing work of digging trenches or excavation, the Design Builder shall review all information available regarding subsurface conditions, including but not limited to information supplied in Document 003130 (Geotechnical Data and Existing Conditions), and subject to the terms and conditions of these

documents, Design Builder shall also comply with Government Code §§ 4216 through 4216.9, and in particular § 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 (2) Business Days, but no more than fourteen (14) 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.”

- 8.5.2 The Design Builder shall contact USA/8-1-1 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. The Design Builder is charged with knowledge of all subsurface conditions reflected in USA records. Prior to commencing excavation or trenching work, the Design Builder shall provide County with copies of all USA records secured by the Design Builder. Design Builder shall advise County of any conflict between information provided in Document 003130 (Geotechnical Data and Existing Conditions), the Drawings and that provided by USA records. The Design Builder's excavation shall be subject to and comply with the Contract Documents, including without limitation Article 2 (Scope of Design Build responsibility) and paragraph 8.4 (Existing Utilities) of this Document 007200.
- 8.5.3 In the case of any Underground Facilities that are located on County property and are used to furnish services on the County property or are under the operation and control of the County, or in any other case in which the USA does not provide an inquiry notification number and notify its members that have subsurface installations of the area of the proposed excavation, then the Design Builder shall be fully responsible for locating the Underground Facilities and protecting such Underground Facilities during excavation. In locating the Underground Facilities the Design Builder shall investigate all records available at the County and all other records available to it relative to the location of such Underground Facilities and shall make use of all necessary industry locating techniques and/or engage qualified locating service to perform such services for the Design Builder. The Design Builder shall undertake no excavation Work until such time that the Underground Facilities are located, and field marked or determined not to be in the area of excavation. Thereafter, subject to any further requirements in the Contract Documents, the Design Builder shall determine the exact location of the Underground Facilities by excavating with hand tools within the area of the location of the Underground Facilities.

Design Builder shall provide the County with adequate prior written notice of its proposed excavation work in an area containing County owned Underground Facilities and shall submit for the County's approval its plan for locating and protecting the Underground Facility from damage due to the excavation work. The County's favorable review of such plan shall in no way limit or restrict the responsibility of the Design Builder under the Contract Documents and at law

and the Design Builder shall not rely on the County's review as a representation of the location of the Underground Facility, the suitability of the plan or its compliance with law.

- 8.5.4 The cost of all of the following will be included in the Contract Sum and the Design Builder shall have full responsibility for (a) reviewing and checking all available information and data including, but not limited to, Document 003130 (Geotechnical Data and Existing Conditions) and information on file at USA; (b) 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 pot-holing; (c) coordination of the Work with the owners of such Underground Facilities during construction; and (d) the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.
- 8.5.5 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 County or in information on file at USA or is otherwise reasonably available to the Design Builder, then the Design Builder shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby (and in no event later than seven (7) Days), and prior to performing any Work in connection therewith (except in an emergency as required by paragraph 16.4 (Emergencies) of this Document 007200, identify the owner of such Underground Facility and give written notice to that owner and to County. During such time, the Design Builder shall be responsible for the safety and protection of such Underground Facility.
- 8.5.6 The Design Builder 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 only where the Underground Facility:
- 8.5.6.1 Was not shown or indicated in the Contract Documents or in the information supplied pursuant to Document 003130 (Geotechnical Data and Existing Conditions) or in information on file at USA; and could not be readily inferred from surface improvements, and
- 8.5.6.2 The Design Builder represents that it has taken the necessary steps to ascertain the nature, location and extent of the Work, and that it has investigated and satisfied itself as to the general and local conditions which are applicable to the Work, such as: (a) conditions bearing on transportation, disposal, handling and storage of materials; (b) the availability of labor, water, power and roads; (c) seasonal weather patterns; (d) observable physical conditions at the Project Site; (e) the surface conditions of the ground; and (f) the character of equipment and facilities needed, prior to and during the performance of the Work.
- 8.5.6.3 To the extent the Design Builder encounters subsurface conditions or hazardous materials which differ materially from that described in the Contract Documents, or actually known by the Design Builder, or differing from those ordinarily known or anticipated to exist, or could not have been reasonably discovered within the time permitted, or

generally recognized as inherent in the area, then notice by the Design Builder must be immediately given to the County Representative, before conditions are disturbed, and in no event later than five (5) Business Days after the first observance of the conditions. Should any existing utilities or services be disturbed, disconnected or damaged during construction, the Design Builder is responsible, at no additional cost of time to the County, for all expense and consequential damages of every type arising from such disturbance or the replacement or repair thereof and must repair such items as required to maintain continuing service, including emergency repairs. (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 the Design Builder pursuant to Document 003130 (Geotechnical Data and Existing Conditions), in information on file at USA, or otherwise reasonably available to the Design Builder.)

- 8.5.7 Underground Facilities are inherent in construction involving digging of trenches or other excavations and the Design Builder is to apply its skill and industry to verify the information available. Underground Facilities are often in different locations and elevations that existing information indicates, and such differences shall constitute a differing site condition only if such difference is clearly material and is not discoverable through reasonable investigation.

9. **WARRANTY AND GUARANTEE; INSPECTION AND MAINTENANCE OF WORK.**

9.1 Warranty and Guarantee.

- 9.1.1 General Representations and Warranties: The Design Builder represents and warrants that it, and its Subcontractors of every tier are, and at all times will be, capable of performing every phase of the Work, and possesses or will timely obtain all necessary licenses and/or permits required to perform the Work, as necessary to complete the Work in accordance with the terms of the Contract Documents. The Design Builder warrants that all design, engineering, design related services, construction work and construction services shall be performed in accordance with generally accepted professional standards of good and sound design and construction practices observed by builders and designers with specific experience and specialized expertise in the Work of the Contract Documents. Design Builder warrants to the County that all Work will be performed in accordance with the professional standards and degree of care applicable to those design professionals who specialize in designing and providing services for projects of the type, scope, quality and complexity of the Project utilizing the design/build contracting mode. Design Builder warrants to the County that all labor, materials, equipment and furnishings used in, or incorporated into, the Construction Work will be of good quality, new (unless otherwise required or permitted by the Contract Documents), and all Work will be free of liens, claims and security interests of third parties; that the Work will be of the highest quality and free from defects and that all Work will conform with the requirements of the Contract Documents. If required by the County, the Design Builder shall furnish satisfactory evidence of compliance with this warranty. Design Builder warrants that the Work shall be fit for its intended

purpose, watertight and meeting current standards for work similar to the Project, shall be of suitable grade of its respective kind for its intended use, shall be free from defects in design, engineering, materials, construction and workmanship, and shall conform in all respects with all applicable requirements of federal, state and local laws, licenses, and permits, the Drawings, Specifications, and all descriptions set forth therein, applicable construction codes and standards, and all other requirements of the Contract Documents including the standard of care specified herein. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. Design Builder shall furnish and provide the architectural and engineering services necessary to design the Project in accordance with the County's requirements, as outlined in County's Performance Criteria Manual, and other relevant data defining the Project. The architectural and engineering services shall be performed in accordance with the standard of professional skill and care required for a project of similar size, location, scope, and complexity. Design Builder represents that Design Builder and its consultants and subcontractors are, and shall be during the Project, duly qualified, licensed, registered, and authorized by law to perform design services for the Project. Design Builder shall cause the Work to conform in all respects with all applicable requirements of federal, state and local laws, licenses, and permits, the Drawings, Specifications, and all descriptions set forth therein, applicable construction codes and standards, and all other requirements of the Contract Documents including the standard of care specified herein.

- 9.1.2 Extended Guarantees: If any guaranty exceeding two (2) years is provided by the supplier or manufacturer of any equipment used in this Project, then the Design Builder shall use best efforts to assist the County in pursuing such extended guarantees for such materials. The Design Builder shall supply and assign to the County all warranty and guarantee documents relative to equipment and materials incorporated in the job and guaranteed by its suppliers or manufacturers; see, however, Document 006110 (Construction Performance Bond) regarding the Surety's limit of its bond for its extended guarantees.
- 9.1.3 Environmental and Toxics Warranty: The covenants, warranties and representations contained in this paragraph 9.1 (Warranty and Guarantee) are effective continuously during Design Builder's Work on the Project and following cessation of labor for any reason including, but not limited to, Project completion. Design Builder covenants, warrants and represents to County that:
- 9.1.3.1 No litigation is pending or, to the Design Builder's knowledge, proposed, threatened or anticipated with respect to any other matter affecting the Project or the operation thereof.
- 9.1.3.2 To the Design Builder's knowledge after due inquiry, no lead or asbestos-containing materials were specified, installed or were discovered in the Project at any time during the Design Builder's construction thereof. If any such materials were discovered, Design Builder made immediate written disclosure to the County. Design Builder shall provide letter to County attesting to this requirement.

- 9.1.3.3 To the Design Builder's knowledge after due inquiry, no electrical transformers, light fixtures with ballasts or other equipment containing PCB's are or were located on the Project at any time during the Design Builder's construction thereof. If any such materials were discovered, the Design Builder made immediate written disclosure to the County.
- 9.1.3.4 To the Design Builder'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 the Design Builder's construction thereof except as required to be installed by the Contract Documents. If any such materials were discovered, the Design Builder made immediate written disclosure to the County.
- 9.1.3.5 The Design Builder's operations concerning the Project are not and were not in violation of any applicable environmental federal, state, or local statute, law, ordinance, code, rule, order or regulation dealing with hazardous or toxic materials or substances, and no notice from any governmental body has been served upon the Design Builder claiming any violation of any such statute, law, ordinance, code, rule, order 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 statute, law, ordinance, code, rule, order or regulation, with which the Design Builder has not complied. If there were or are any such notices, Design Builder has provided or shall provide the County with copies thereof.

9.2 Inspection of Work.

- 9.2.1 All materials, equipment and workmanship used in the Work shall be subject to inspection, testing or evaluation at all times during construction and/or manufacture in accordance with the terms of the Contract Documents. Work and materials, and manufacture and preparation of materials, from beginning of construction until completion and acceptance of the Work, shall be subject to inspection and rejection by the County, its agents, or independent contractors retained by the County to perform inspection services, or governmental agencies with jurisdictional interests.

The Design Builder shall provide them proper and safe conditions for such access and advise them of the Design Builder's Site safety procedures and program so that they may comply therewith as applicable. Upon request or where Specified, the County 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.

- 9.2.2 The Design Builder shall give the County forty-eight (48) hours' notice of readiness of the Work for all required inspections, tests or approvals, and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- 9.2.3 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, the Design Builder shall assume full responsibility for arranging and obtaining such inspections, tests or approvals, and furnish the County with the required certificates of inspection, or approval. The County retains the right to inspect, test and evaluate the Work without relieving the Design Builder of its obligations under this Agreement. The County will pay the cost of initial inspection and testing, and Design Builder shall pay all costs in connection with any follow-up or additional inspections or testing. The Design Builder 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 the Design Builder's purchase thereof for incorporation in the Work

- 9.2.3.1 County reserves the right, in its sole discretion, also to conduct air monitoring, earth monitoring, Work monitoring, and any other tests to monitor Contract requirements of safe and statutorily compliant work methods with respect to hazardous waste or materials and, where applicable, safe re-entry level air standards under state and federal law upon completion of the Work, and compliance of the Work with periodic and final inspection by public and quasi-public entities having jurisdiction.
- 9.2.3.2 Design Builder acknowledges that County has the right to perform, or cause to be performed, various activities and tests including, but not limited to, pre-abatement, during abatement, and post-abatement air monitoring, that County shall have no obligation to perform said activities and tests, and that a portion of said activities and tests may take place prior to the completion of the Work by Design Builder. In the event County elects to perform such activities and tests, Design Builder shall afford County access to the Site and all areas of the Work as may be necessary for the performance of such activities and tests.
- 9.2.3.3 Notwithstanding County's rights reserved and acknowledged by this paragraph 9.2.3, Design Builder may retain its own industrial hygiene consultant at Design Builder's own expense and may collect samples and may perform tests including, but not limited to, pre-abatement, during abatement, and post-abatement personal air monitoring, and County reserves the right to request documentation of all such activities and tests performed by Design Builder relating to the Work and Design Builder shall immediately provide that documentation upon request.
- 9.2.4 If any Work (or the work of others) that is required to be inspected, tested or approved is covered by the Design Builder prior to such inspection, testing or approval, without written approval of County, it must, if requested by County, be uncovered. Uncovering Work shall be at Design Builder's expense unless the Design Builder has given the County timely notice of Design Builder's intention to cover the same and the County has given its written approval of the covering of the Work prior to such inspection, testing or approval. If a portion of the Work has been covered, which is not required by the Contract Documents to be observed or inspected prior to its being covered and which County's Representative has not specifically requested to observe prior to its

being covered, the County may request to see such Construction Work and it shall be uncovered and recovered by Design Builder. If such Work is in accordance with the Contract Documents, the costs of uncovering and recovering the Work shall be added to the Contract Sum by Change Order; and if the uncovering and recovering of the Work delays the critical path of the Work on the Project, an appropriate adjustment of the Contract Time shall be made by Change Order. If such uncovered Work is not in accordance with the Contract Documents, the Design Builder shall pay such costs and shall not be entitled to an adjustment of the Contract Time or the Contract Sum.

- 9.2.5 In any case where the Work is covered contrary to the written request of the County, it must, if requested by the County, be uncovered for the County's observation or inspection at the Design Builder's expense.
- 9.2.6 Whenever required by the County, the Design Builder shall furnish tools, labor and materials necessary to make examination of Work that may be completed or in progress, including of uncovering or taking down portions of finished Work.
- 9.2.7 Inspection of the Work by or on behalf of the County, or the County's failure to do so, shall not under any circumstances be deemed a waiver or approval of any non-conforming aspect of the Work. The Design Builder shall have an absolute duty, in the absence of a written Change Order signed by the County, to perform the Work in conformance with the Contract Documents and correct defective work promptly upon knowledge thereof.
- 9.2.8 Any inspection, evaluation, or test performed by or on behalf of the County relating to the Work is solely for the benefit of the County and shall not be relied upon by the Design Builder. The Design Builder shall not be relieved of the obligation to perform the 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 the County, whether or not such inspections, evaluations, or tests are permitted or required under the Contract Documents. The Design Builder shall be solely responsible for testing and inspecting Work already performed to determine whether such Work is in proper condition to receive later Work.

9.3 Correction of Defective Work.

- 9.3.1 If the Design Builder 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, the County may order the Design Builder to replace any Defective Work, or stop any portion of Work to permit the County (at the Design Builder's expense) to replace such Defective Work. The County is not obligated to exercise these rights for the benefit of the Design Builder or any other party.
- 9.3.2 If required by the County, the Design Builder shall promptly, as directed, either correct all Defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by the County, remove it from the Site and replace it with Work that is not defective. The Design Builder shall pay all reasonable claims, costs, losses and damages caused by or resulting from such correction or removal (including but not limited to all costs of repair or replacement of work of others). Any extraordinary costs incurred in the

examination, evaluation and determination that such Defective Work should be corrected or removed and replaced will be the responsibility of the Design Builder. The Design Builder shall pay costs of re-inspection and re-testing. If the parties are unable to agree on the amount of an appropriate decrease in the Contract Sum, the County may deduct from monies due or to become due the Design Builder all claims, costs, losses, and damages caused by or resulting from such correction or removal (including but not limited to all costs of repair or replacement of work of others) as well as all costs of the County incurred in exercising such rights and remedies (including, but not limited to, the costs incurred in the examination, evaluation and determination that such Defective Work should be corrected or removed and replaced). If the Design Builder disagrees with the County's calculation, it may make a claim as provided in Article 12 (Claims by Design Builder) below. The County's rights under this paragraph 9.3 (Correction of Defective Work) shall be in addition to any other rights it may have under the Contract Documents or by law.

- 9.3.3 **Correction Period:** If within **two (2) years after the date of Substantial Completion** or such longer period of time as may be prescribed by laws or regulations or by the terms of any applicable special warranty or guarantee required by the Contract Documents or supplied with regard to the Work or required by any specific provision of the Contract Documents, any Work is found to be defective, the Design Builder shall promptly, without cost to the County and in accordance with the County's written instructions, (i) correct such defective Work or, if it has been rejected by the County, remove it from the Site and replace it with Work that is not defective, and (ii) satisfactorily correct or remove and replace any damage to other Work or the work of others resulting there from. If the Design Builder does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, the County may have the Defective Work corrected or the rejected Work removed and replaced, and all claims, costs, losses and damages caused by or resulting there from (including but not limited to all costs of repair or replacement of work of others) shall be paid by Design Builder. Where Design Builder fails to correct Defective Work, or defects are discovered outside the correction period, County shall have all the rights and remedies granted by the Contract Documents or by law.
- 9.3.4 In special circumstances where a part of the Work is occupied by the County or a particular item of equipment is placed in continuous service before Completion of all the Work, the correction period for that part of the Work or that item shall start to run from the date such work is occupied, or the date such item is placed in continuous service. Additionally, for equipment and systems having extended guarantees or warranties beyond the two (2) year obligation described in this paragraph 9.3 (Correction of Defective Work), the correction period shall commence on the later of (a) the County's actual use of the item for the purpose intended (i.e., not merely for testing, commissioning, etc.), and (b) when the County's commissioning agent indicates in writing to the County that the item is ready to be used for the purpose intended.
- 9.3.5 Where defective or rejected Work (and damage to other work resulting there from) has been corrected, removed or replaced under this provision, and the commencement of the original correction, removal or replacement began during the first year of the original correction period, the revised correction period hereunder with respect to such Work will be for an additional period of two (2) years after such correction or removal and replacement has been

satisfactorily completed. Where defective or rejected Work (and damage to other work resulting there from) has been corrected, removed or replaced under this provision, and the commencement of the correction, removal or replacement began during the second year of any correction period, the revised correction period hereunder with respect to such Work will be for an additional period of one (1) year after such correction or removal and replacement has been satisfactorily completed.

- 9.3.6 In the event of an emergency constituting an immediate hazard to health or safety of County employees, or other persons, property, or licensees, the County may undertake, at the Design Builder's expense and without prior notice, all work necessary to correct such hazardous condition(s) when it is caused by Work of the Design Builder not being in accordance with the requirements of the Contract Documents.

9.4 Acceptance and Correction of Defective Work by the County.

- 9.4.1 If after giving the Design Builder the opportunity to repair, should it not do so, the County may accept defective Work: If, instead of requiring correction or removal and replacement of defective Work, the County prefers to accept it, the County may do so. The Design Builder shall pay all claims, costs, losses and damages attributable to the County's evaluation of and determination to accept such defective Work. If any such acceptance occurs prior to final payment, a change order will be issued incorporating the necessary revisions in the Contract Documents with respect to Work, unless the parties are unable to agree upon an appropriate decrease in the Contract Sum, in which case the County may deduct from monies due or to become due to the Design Builder the amount of such claims, costs, losses (including diminution in value), damages, expenses and liabilities attributable to the acceptance of the defective work. If the Design Builder disagrees with the deduction, the Design Builder may make a Claim as provided in Article 12 (Claims by Design Builder). If the acceptance occurs after Final Payment, an appropriate amount shall be paid by the Design Builder as determined by the County.
- 9.4.2 The County may correct Defective Work: If the Design Builder fails within five (5) Days after written notice from the County to begin to correct defective Work or to begin to remove and replace rejected Work as required by the County in accordance with paragraph 9.3 (Correction of Defective Work) above or to provide a plan for correction of defective Work acceptable to the County, or if the Design Builder otherwise fails to perform the Work in accordance with Contract Documents, the County may, after seven (7) Days written notice to Design Builder, correct and remedy any deficiency. In connection with such corrective and remedial action, the County may exclude the Design Builder from all or part of the Site, take possession of all or part of the Work, and suspend Design Builder's work related thereto, take possession of all or part of the Design Builder's materials, tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work any materials and equipment stored at the Site or for which the County has paid the Design Builder but which are stored elsewhere. Design Builder shall allow the County, its representatives, agents, employees, consultants and other contractors access to the Site and materials to enable the County to exercise the rights and remedies under this paragraph 9.4 (Acceptance and Correction of Defective Work by the County). All claims, costs, losses (including diminution in value), damages, expenses and liabilities incurred or sustained by the

County in exercising such rights and remedies will be the responsibility of Design Builder and 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 on the amount of an appropriate decrease in the Contract Sum, the County may deduct from monies due or to become due to the Design Builder all claims, costs, losses (including diminution in value), expenses, damages and liabilities attributable to the Defective Work, including all costs of repair or replacement of work of others destroyed or damaged by correction, removal or replacement of the Design Builder's Defective Work. If the Design Builder disagrees with the County's calculation, it may make a Claim as provided in Article 12 (Claims by Design Builder) of this Document 007200.

- 9.4.3 If the Design Builder fails to pay the costs of such removal and storage as required by this paragraph 9.4 (Acceptance and Correction of Defective Work by the County) within ten (10) Days after written demand, the County may, without prejudice to other remedies, sell such materials at auction or at private sale, or otherwise dispose of such material. The Design Builder shall be entitled to the proceeds of such sale, if any, in excess of the costs and damages for which the Design Builder is liable to the County, including compensation for County Representative's services and expenses. If such proceeds of sale do not cover costs and damages for which the Design Builder is liable to County, the Contract Sum shall be reduced by such deficiency. If there are no remaining payments due the Design Builder or the remaining payments are insufficient to cover such deficiency, the Design Builder shall promptly pay the difference to the County.
- 9.4.4 The Design Builder's obligations under this Section are in addition to and not in limitation of its warranty under paragraph 9.1 (Warranty and Guarantee) of this Document 007200 or any other obligation of the Design Builder under the Contract Documents or law. Enforcement of the Design Builder's express warranties and guarantees to repair contained in the Contract Documents shall be in addition to and not in limitation of any other rights or remedies the County may have under the Contract Documents or at law for Defective Work.

Nothing contained in this Paragraph shall be construed to establish a period of limitation with respect to other obligations of the Design Builder under the Contract Documents and in no way limits either the Design Builder's liability for Defective Work or the time within which proceedings may be commenced to enforce the Design Builder's obligations under the Contract Documents or law.

9.5 Rights Upon Inspection or Correction.

- 9.5.1 The Design Builder shall not be allowed an extension of the Contract Time (or any milestones) because of any delay in the performance of the Work attributable to the reasonable exercise by the County of its rights and remedies under this Article 9 (Warranty, Guaranty, and Inspection of Work) of this Document 007200. Where the County reasonably exercises its rights under Article 9 of this Document, it retains all other rights it has by law or under the Contract Documents, including but not limited to, the right to terminate the Design Builder's right to proceed with the Work for cause under the Contract Documents and/or make a claim or back charge where a Change Order cannot be agreed upon.

- 9.5.2 Inspection shall not relieve the Design Builder 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 the County's right to require full compliance with the Contract Documents and shall in no way be deemed as acceptance of the Work paid therefore. The Design Builder's obligation to complete the Work in accordance with the Contract Documents shall be absolute, unless the County agrees otherwise in writing.

9.6 Samples and Tests of Materials and Work.

- 9.6.1 Samples or test specimens of all materials to be used or offered for use in connection with the Work shall be prepared at the expense of the Design Builder and furnished to the County in such quantities and sizes as may be required for proper examination, analysis and tests.
- 9.6.2 All samples shall be submitted in ample time to enable the County to make any tests, analyses or examinations necessary before the time at which it is desired to incorporate the material into the Work.
- 9.6.3 The County may refuse consideration of further samples of same brand or make of material or product previously determined as unsatisfactory for testing, analysis or examination.

- 9.7 Proof of Compliance with Contract Provisions. In order that the County may determine whether the Design Builder has complied or is complying with requirements of Contract not readily enforceable through inspection and tests of Work and materials, the Design Builder shall at any time when requested submit to the County properly authenticated documents or other satisfactory proofs of compliance with all applicable requirements.

- 9.8 Acceptance. Neither inspection by the County or its authorized agents or representatives, nor any order or certificate for the payment of money, nor any payment, nor acceptance of the whole or any part of the Work by the County, nor any extension of time, nor any verbal statements issued by the County or its authorized agents or representatives shall operate as a waiver of any provisions of this Agreement or that any part of the Work complies with the requirements of the Contract Documents, or of any power herein reserved by the County or any right to damage herein provided, nor shall any waiver of any breach of this Agreement be held to be a waiver of any other subsequent breach, nor shall County be thereby estopped from bringing any action for damages or enforcement arising from the failure to comply with any of the terms and conditions hereof.

- 9.9 Maintenance of Work. Up to the time of Completion, as defined in Section 014200 (References and Definitions), the Design Builder shall maintain all Materials and Equipment in accordance with manufacturer's requirements, including but not limited to, while such Materials and Equipment are in transit or otherwise are in the care and custody of the Design Builder.

10. **DESIGN BUILDER'S ORGANIZATION AND EQUIPMENT.**

- 10.1 Design Builder's Legal Address. The address and telecopy number given in Design Builder's Proposal hereby designated as the legal address and telecopy number of the Design Builder, but such address and/or number may be changed at any time by notice in writing, delivered to the County, which in conspicuous language advises the County of

a change in legal address or telecopy number. Delivery to the Design Builder's legal address or depositing in any post office or post office box regularly maintained by United States Postal Service, in a postpaid wrapper, directed to the Design Builder at the legal address, of any plan, notice, letter or other communication, shall be deemed legal and sufficient service thereof upon the Design Builder. Telecopy to the Design Builder's designated telecopy number of any letter, memorandum, or other communication on standard or legal sized paper, with proof of telecopy transmission, shall also be deemed legal and sufficient service thereof upon the Design Builder.

- 10.2 Design Builder's Office at the Site. The Design Builder is required to maintain an office at the Site, which office shall be headquarters of representative authorized to transmit and receive instructions, drawings or other communications to and from the County. Instructions, drawings, or other communications given to the Design Builder's representative or delivered at the Site office in representative's absence shall be deemed to have been given to the Design Builder.
- 10.3 Design Builder's Superintendents or Forepersons. The Design Builder 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 may be given to them by the County and the Design Builder shall be liable for faithful observance of instructions delivered to the Design Builder or to its authorized representative or representatives on Site.
- 10.4 Proficiency in English. Supervisors, forepersons, security guards, safety personnel and employees who have unescorted access to the Site must 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.
- 10.5 Design Builder's and Subcontractors' Employees. The Design Builder shall employ, and shall permit its Subcontractors to employ, only competent and skillful personnel to do the Work. If the County notifies the Design Builder that any of its employees, or any of its Subcontractors' employees employed on the 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 the Work (including persons representing County), or violates sanitary rules, or is otherwise unsatisfactory in the reasonable opinion of the County, and if the County requests that such person be discharged from the Work, then the Design Builder or its Subcontractor shall immediately discharge such person from the Work and the discharged person shall not be re-employed on the Work except with written consent of the County.
- 10.5.1 Skilled and Trained Workforce Requirement. Unless exempt by law, Design Builder commits that Design Builder and its subcontractors at every tier will use a skilled and trained workforce for work on the Project that falls within an apprenticeable occupation in the building and construction trades in accordance with California law.
- 10.5.2 "Skilled and trained workforce" shall be given the meaning defined in Public Contract Code section 2601 (Section 2601), which may be amended from time to time. Design Builder agrees that 60 percent of skilled journeypersons employed to perform work on the Project by Design Builder or its subcontractors at every tier are graduates of an apprenticeship program for the applicable occupation per Section 2601.

- 10.5.3 The apprenticeship graduation requirements are satisfied for a particular calendar month if either of the following is true:
- (1) At least the required percentage of the skilled journeypersons employed by the Design Builder or subcontractor to perform work on the Project meet the graduation percentage requirement; or
 - (2) For the hours of work performed by skilled journeypersons employed by the Design Builder or subcontractor on the Project, the percentage of hours performed by skilled journeypersons who met the graduation requirement is at least equal to the required graduation percentage.
- 10.5.4 The Design Builder or subcontractor need not meet the apprenticeship graduation requirements of Section 2601, if during the calendar month, the Design Builder or subcontractor employs skilled journeypersons to perform fewer than 10 hours of work on the Project.
- 10.5.5 The subcontractor need not meet the apprenticeship graduation requirements of Section 2601 if both of the following are met:
- (1) The subcontractor was not a listed subcontractor under Section 4104 or a substitute listed subcontractor; and
 - (2) The subcontract does not exceed one-half of 1 percent of the original price of the prime contract.
- 10.5.6 Design Builder's commitment that a skilled and trained workforce will be used to perform the Project shall be established by providing a monthly report demonstrating that the Design Builder and its subcontractors at every tier are complying with the requirements of Section 2601 while the Project is being performed. A monthly report shall be provided thirty (30) Days after the end of the month for which work is being reported or as otherwise agreed between Design Builder and Owner. If Design Builder fails to provide a monthly report, Owner shall withhold payment for the portion of the monthly pay application related to the non-compliance of the Design Builder or portion of the monthly pay application related to the non-compliance of any subcontractor.
- 10.5.7 Upon notice to the Design Builder of withholding for non-compliance, the non-compliant Design Builder and/or subcontractor may cure the non-compliance. If Design Builder and/or any subcontractor cures the non-compliance or substantially complies with required percentages of Section 2601, any monies withheld by the Owner will be released no later than the next pay application. If Design Builder and/or any subcontractor fails to cure the non-compliance or substantially comply with the requirements within 60 Days of notice of the non-compliance, the Design Builder and/or non-compliant subcontractor shall meet and confer with the Owner to demonstrate the Design Builder's and/or subcontractor's efforts and plan to achieve substantial compliance with the requirements, on a cumulative basis, by completion of the Project. A meet and confer may be held earlier upon Design Builder's written request to the Owner. The Owner, after reasonable demonstration by the Design Builder and/or subcontractor that good faith and best efforts have been and are being made to substantially comply with the requirements of Section 2601, shall release any monies withheld.

- 10.5.8 The Section 2601 percentages shall not apply to punchlist or warranty for a Design Builder and/or subcontractor if that Design Builder and/or subcontractor has otherwise substantially complied with the requirements of Section 2601 during the Project.
- 10.5.9 If Design Builder and/or subcontractor is unable to substantially comply with the required percentages, on a cumulative basis, by completion of the Project, the Owner, in its discretion may assess a charge to the non-compliant party of \$1,000.00 per percentage that the Design Builder and/or subcontractor fails to meet the graduation percentage requirements, not to exceed \$5,000.00 or 10 percent of the total contract or subcontract value, whichever is less. This shall be the sole and exclusive remedy for Design Builder's and/or any subcontractor's non-compliance with this section.

10.6 Design Builder to Supply Sufficient Workers and Materials.

- 10.6.1 Unless otherwise required by the County pursuant to the terms of the Contract Documents, the Design Builder shall at all times keep on the Site a sufficient amount of equipment and materials and employ a sufficient number of qualified workers to prosecute the Work at a rate and in a sequence and manner necessary to complete the Work herein required within the Contract Time. This obligation shall remain in full force and effect notwithstanding disputes or claims of any type.
- 10.6.2 At any time during progress of the Work should the Design Builder directly or indirectly (through Subcontractors or subconsultants) refuse, neglect, or be unable to supply sufficient materials or employ qualified workers to prosecute the Work as required, then the County may require the Design Builder to accelerate the Work and/or furnish additional qualified workers or materials as the County may consider necessary, at no cost to County. If the Design Builder does not comply with the notice within five (5) Business Days of date of service thereof, the County shall have the right (but not a duty) to provide materials and qualified workers to finish the Work or any affected portion of the Work, as the County may elect. The County may, at its discretion, exclude the Design Builder from the Site, or portions of the Site or separate work elements during the time period that the County exercises this right. The County shall deduct from moneys due or become due under the Contract Documents, the sums necessary to meet expenses thereby incurred and paid to persons supplying materials and doing the Work. The County shall deduct from funds or appropriations set aside for purposes of Contract Documents the amount of such payments and charge them to the Design Builder as if paid to the Design Builder. Design Builder shall remain liable for resulting delay, including liquidated damages and indemnification of the County from claims of others.
- 10.6.3 Exercise by the County of the rights conferred upon it in this paragraph 10.6 (Design Builder to Supply Sufficient Workers and Materials) is entirely discretionary on the part of the County. The County shall have no duty or obligation to exercise the rights referred to in this paragraph 10.6, and the failure to exercise such rights shall not be deemed an approval of existing work progress or a waiver or limitation of the County's right to exercise such rights in other concurrent or future similar circumstances. The rights conferred upon the County under this paragraph 10.6 are cumulative to the County's other rights under the Contract Documents and law including, but not limited to, the County's right to terminate the Contract.

10.6.4 The County may, if it deems necessary for reasons other than as described in this paragraph 10.6 (Design Builder to Supply Sufficient Workers and Materials) of this Document 007200, direct the Design Builder to accelerate the Work by increasing crew sizes, working overtime (as permitted by law) and/or performing shift work. If directed to perform overtime and/or shift work, the Design Builder shall work said overtime and/or shift work, and the County shall pay the Design Builder solely for the additional premium wages paid, plus taxes imposed by law on such additional wages. Unless otherwise directed by the County, accelerated work shall be performed utilizing the most cost-effective available method. For example, the County shall not be responsible to pay the premium for overtime work if the same work could have been performed on second shift utilizing a lower premium.

10.7 Design Builder to List Trades Working. The Design Builder shall list the trades working on the Site and their scheduled activities on a daily basis and provide a copy of that list to the County on a daily basis.

10.8 Design Builder's Use of the Site.

10.8.1 The Design Builder shall not make any arrangements with any person to permit occupancy or use of any land, structure or building within the limit of the Work, for any purpose whatsoever, either with or without compensation, in conflict with any agreement between the County and any owner, former owner or tenant of such land, structure or buildings.

The Design Builder may not occupy County-owned property outside the limit of the Work as shown on the Drawings unless it obtains prior approval from the County. Personnel of the Design Builder and Subcontractors shall not occupy, live upon, or otherwise make use of the Project site during any time that Work is not being performed at the Site, except as otherwise provided in the Contract Documents.

10.8.2 The Design Builder shall, during performance of the Work, keep the Site and surrounding area free from the accumulation of excess dirt, waste materials, and rubbish caused by the Design Builder. The Design Builder shall remove all excess dirt, waste material, and rubbish caused by the Design Builder; tools; equipment; machinery; and surplus materials from the Site and surrounding area at the completion of the Work.

11. PROSECUTION AND PROGRESS OF THE WORK.

11.1 Schedules and Examinations of Contract Documents.

11.1.1 Before undertaking each part of the Work, the Design Builder shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon, all applicable field and engineering measurements and all actual conditions. The Design Builder shall promptly report in writing to the County any conflict, error, ambiguity or discrepancy which the Design Builder may discover and shall obtain a written interpretation or clarification from the County before proceeding with any the Work affected thereby.

11.1.2 The Design Builder shall submit an operating electronic version of an original, plus Hardcopies of the following schedules to the County:

11.1.2.1 Schedules and Reports as required by Sections 013216 (Schedules and Reports) and 013000 (Submittal Procedures).

11.1.2.2 Preliminary Schedule of Values for all the Work which will include quantities and prices of items aggregating the Contract Sum and will subdivide each schedule of value into component activities in sufficient detail to serve as the basis for progress payments during construction. Such Schedule of Values will include an appropriate amount of overhead and profit applicable to each item of work, will include a line item for project record documents and a line item for project scheduling, and will conform to Section 012900 (Payment Procedures).

11.1.3 Unless otherwise provided in the Contract Documents, at least fifteen (15) Days before submission of the first application for payment, a conference attended by the Design Builder, the County, and others as appropriate, will be held to review for acceptability the schedules submitted in accordance with paragraph 11.1.2 above and first reviewed at the Design Conference. Schedules shall be updated and completed as required by Sections 012900 (Payment Procedures), 013216 (Schedules and Reports) and 013000 (Submittal Procedures). No progress payment shall be due or owing to the Design Builder until the schedules are submitted to and reasonably acceptable to the County and/or the County consultants as meeting the requirements of the Contract Documents, including Sections 012900 (Payment Procedures), 013216 (Schedules and Reports) and 013000 (Submittal Procedures).

The County's acceptance of the Design Builder's schedules will not create any duty of care or impose on the County any responsibility for the sequencing, scheduling or progress of Work nor will it interfere with or relieve the Design Builder from the Design Builder's full responsibility therefore.

11.1.4 Before commencing any portion of the Work, the Design Builder shall, to permit proper inspection of the Work and to assure measurements necessary for record and payment, inform the County in writing as to time and place at which the Design Builder wishes to commence the Work and the nature of the Work to be done. Information shall be given to the County a reasonable time in advance of time at which the Design Builder proposes to begin Work, so that the County may make necessary preliminary work without inconvenience or delay to the Design Builder. If the County so requires, the Design Builder shall submit weekly, a rolling six (6) week schedule, listing the activities anticipated to be performed along with the dates for which work is expected to be performed.

11.1.5 The Design Builder shall submit submittals and shop drawings to the County for review in accordance with Section 013000 (Submittal Procedures). Submission of a Shop Drawing shall constitute the Design Builder's representation that all requirements of Section 013000 (Submittal Procedures) have been complied with. All Submittals will be identified as the County may require and in the number of copies specified in this Document 007200 or Section 013000.

11.1.6 The Design Builder shall not perform any Work requiring submission of a Shop Drawing or Sample or other submittal prior to submission and a favorable review thereof by the Architect, associated Engineer or design professional, and the County. Where a Shop Drawing or Sample or other Submittal is required by the Contract Documents or the final schedule of Shop Drawing and Sample submissions accepted by the County, any related Work performed prior to the

County's approval of the pertinent Submittal will be at the sole expense, responsibility and risk of the Design Builder.

- 11.1.7 The Design Builder shall utilize the Project Master Schedule in planning, scheduling, coordinating, performing and controlling the Work (including all activities of Subcontractors, assigned the Design Builders, equipment vendors and suppliers). The Design Builder shall update the Project Master Schedule on a monthly basis for purpose of recording and monitoring the progress of the Work and evaluating and preparing the Design Builder's monthly progress payments.
- 11.1.8 The Design Builder's failure to submit and maintain an acceptable Project Master Schedule may, in the County's discretion, and without limiting the materiality of the Design Builder's other obligations under the Contract Documents, constitute grounds to declare the Design Builder in material breach of the Contract Documents.

11.2 Lines and Grades, Measurements.

- 11.2.1 The Work shall be done to lines and grades established by the Design Builder at the Design Builder's cost in accordance with the Contract Documents, unless the County, in its discretion, directs in writing otherwise.
- 11.2.2 At times it may be necessary to discontinue portions of the Design Builder's work in order for the County to make measurements or surveys without interruptions or other interference that might impair accuracy of results. At any time, on request of the County, the Design Builder shall discontinue the Work to such extent as may be necessary for purposes of the County.
- 11.2.3 No direct payment will be made for cost to the Design Builder of any work or delay occasioned by establishing or checking lines and grades or making other measurements, or by inspection, and no extension of time will be allowed for such delays.

11.3 Cost Data.

- 11.3.1 The Design Builder shall maintain full and correct information as to number of workers employed in connection with each subdivision of the Work, classification and rate of pay of each worker in the form of certified payrolls, cost to Design Builder of each class of materials, tools and appliances used by Design Builder in the Work, and amount of each class of materials used in each subdivision of the Work. If Design Builder maintains or is capable of generating summaries or reports comparing actual project costs with Bid estimates or any budgets, it shall provide the County with a copy of such report whenever it is requested by or on behalf of the County.
- 11.3.2 The Design Builder shall maintain daily job reports recording all significant activity on the job, including the number of workers and specific equipment on Site, work activities, work accomplished, problems encountered and delays. The Design Builder shall provide the County with copies for each Day the Design Builder works on the Project, to be delivered to County either the same Day or the following morning before starting work at the Site. Design Builder shall take weekly progress photographs of all areas of the Work. The Design Builder shall maintain copies of all correspondence with Subcontractors and records of meetings with Subcontractors. The Design Builder shall report to the Surety

promptly upon receiving requests from the Surety to provide reporting. Design Builder shall provide copies of daily job reports as required by the County or specified in Section 013216 (Schedules and Reports).

- 11.3.3 The County shall have the right to audit and copy the Design Builder'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 the Design Builder'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, the County shall have the right to inspect and obtain copies of all Contract Documents, planning and design documents, Proposal documents (subject to Document 006130 (Escrow Bid 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 the Design Builder. Notwithstanding the foregoing, during construction, the County shall have the right to audit, inspect and obtain copies of cost records and job cost variance reports only to the extent such matters are applicable to a Design Builder Claim or specifically disputed cost item raised by the County, or as may otherwise be required by law.
- 11.3.4 The Design Builder shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Contract Modifications, Change Orders, Work Directives, Force Account orders, Construction Change Directives, and written interpretations and clarifications in good order and annotated to show all changes made during construction. These Project Record Documents, together with all approved Samples and a counterpart of all approved Shop Drawings and Submittals, shall be maintained and available to the County for reference and inspection.

Upon completion of the Work, Design Builder shall deliver to the County, the Project Record Documents, Samples and Shop Drawings, as-built drawings, and Record Drawings and Specifications. Except for materials and records delivered to County, Design Builder shall maintain and retain, for a period of at least five years after Contractor's receipt of the final payment under this Agreement, all records relating to this Agreement or to the Project, including without limitation estimates, bids, shop drawings, submittals, subcontracts, personnel and payroll records, job reports and diaries, receipts, invoices, cancelled checks and financial records. Upon request by County, at no additional charge, Contractor shall promptly make such records available to County, or to authorized representatives of the state and federal governments, at a convenient location within Contra Costa County designated by Public Agency, and without restriction or limitation on their use.

- 11.3.5 The County and any other applicable governmental entity shall have the right to inspect all information and documents maintained under this paragraph 11.3 (Cost Data) at any time during the Project and for a period of five (5) years following Completion. During this five (5) year period, Design Builder shall maintain information and documents in either paper or electronic form. This right of inspection shall not relieve the Design Builder 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.

12. CLAIMS BY DESIGN BUILDER.

12.1 Performance During Claim Process. The Contractor shall continue to perform its Work under the Contract and shall not cause a delay in the Work during any dispute, claims definition, negotiation, mediation, or arbitration proceeding, except by written agreement by the County. The provisions of this Section 12 shall survive termination, breach or completion of this Agreement, and constitute a claims procedure by agreement under Government Code Section 930.2. Design Builder shall bear all costs incurred in the preparation and submission of a Claim.

12.2 Definition of Claim.

12.2.1 For purposes of this section, a “Claim” means a separate demand by the Contractor for:

12.2.1.1 A time extension,

12.2.1.2 Payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or

12.2.1.3 Payment of money that the County disputes is owing.

12.3 Claim Presentations

12.3.1 The attention of the Contractor is drawn to Government Code Section 12650, et seq. regarding penalties for false claims.

12.3.2 Contractor shall file with the County any written Claim, including the documents necessary to substantiate it, on or before the Day of final payment on the Contract.

12.3.3 The Contractor shall not cause a delay in the Work during any dispute, claims definition, negotiation, mediation, or arbitration proceeding, except by written agreement by the County.

12.3.4 The Contractor shall bind all its Subcontractors, material persons, and suppliers to the provisions of this section on mediation and arbitration and will hold the County harmless against disputes and claims by Subcontractors, material persons, or suppliers. The claim notice and documentation procedure described in this Article 12 (Claims by Design Builder) 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 the Design Builder as provided in this Article 12. Under no circumstances shall any Subcontractor, subconsultant or supplier make any direct claim against the County.

12.4 Claim Resolution

12.4.1 In the event of a dispute between the parties as to performance of the Work, the interpretation of this Agreement, or payment or nonpayment for Work performed or not performed, the parties shall attempt to resolve the dispute by those

procedures set forth in Public Contract Code Section 9204, if applicable. Pending resolution of the dispute, if the dispute is not resolved, Contractor agrees it will neither rescind the Contract nor stop the progress of the Work but will allow determination by a court of the State of California having competent jurisdiction of the dispute, after the Project has been completed, and not before.

12.4.2 For all Claims which arise between a Contractor and a local agency, the procedure set forth in Public Contract Code Section 9204 shall apply:

12.2.1.3.1 The County shall respond in writing within forty-five (45) Days of receipt of the Claim identifying what portion of the Claim is disputed and what portion is undisputed.

(a) Upon receipt of a Claim, County, and Contractor may, by mutual agreement, extend the time period for County to respond.

(b) Any payment due on an undisputed portion of the Claim shall be processed and made within sixty (60) Days after the County issues its written response to the Claim.

12.4.2.1 If Contractor disputes County's written response, or if County fails to respond to a Claim issued pursuant to this Section 25 within the time prescribed, Contractor may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, County shall schedule a meet and confer conference within thirty (30) Days for settlement of the dispute.

12.4.2.2 Within fourteen (14) Days following the conclusion of the meet and confer conference, if the Claim or any portion of the Claim remains in dispute, the County shall provide Contractor a written statement identifying the portion of the Claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the Claim shall be processed and made within sixty (60) Days after the County issues its written statement.

12.4.2.3 Any disputed portion of the Claim, as identified by the statement referenced in Section 25.4.4 shall be submitted to nonbinding mediation, with the County and Contractor sharing the associated costs equally.

12.4.2.3.1 County and Contractor shall mutually agree to a mediator within fourteen (14) Days after the disputed portion of the claim has been identified in writing.

12.4.2.3.2 If County and Contractor cannot agree to a mediator, each party shall select a mediator, and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim.

12.4.2.3.3 County and Contractor shall each bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.

12.4.2.3.4 If mediation is unsuccessful, the parts of the claim remaining in dispute shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of the Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil Discovery Act of 1986, (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.

12.4.2.4 The County shall not fail to pay money as to any portion of a claim which is undisputed except as otherwise provided in the Contract Documents. Unpaid claim amounts not paid in a timely manner will accrue interest at seven percent (7%) per annum. In any suit filed pursuant to this section, the County shall pay interest at the legal rate on any arbitration award or judgment. Interest shall begin to accrue on the date the suit is filed in a court of law.

13. **LEGAL AND MISCELLANEOUS.**

13.1 Laws and Regulations.

13.1.1 The Design Builder shall keep fully informed of and shall comply with all statutes, laws, ordinances, codes, rules, regulations and orders of any properly constituted authority affecting the Work and persons connected with Work, and shall protect and indemnify the County and its officers, employees, consultants and agents against any claim or liability, including attorney's fees, arising from or based on violation of any statutes, laws, ordinances, codes, rules, regulations or orders, whether by the Design Builder or by Subcontractors, employees or agents. Authorized persons may at any time enter upon any part of the Work to ascertain compliance of all applicable statutes, laws, ordinances, codes, rules, regulations and orders.

13.1.2 Whenever the Drawings and Specifications require large sizes or higher standards than are required by any applicable statute, law, ordinance, code, rule, regulation or order, the Drawings and Specifications shall govern. Whenever the Drawings and Specifications require something, which will violate such statutes, laws, ordinances, codes, rules, regulations or orders, then such statutes, laws, ordinances, codes, rules, regulations or orders shall govern.

13.1.3 The Design Builder shall perform the Work in accordance with all laws, statutes, the most recent building codes, ordinances, rules, regulations, and lawful orders of all public authorities having jurisdiction over the County, the Design Builder, any Subcontractor, the Project, the Site, the Work, or the prosecution of the Work.

13.1.4 The Design Builder shall perform the Work in accordance with all requirements of any insurance company issuing insurance required hereunder.

- 13.1.5 The Design Builder shall perform the Work in accordance applicable sections in the Labor Code.
- 13.1.6 The Design Builder shall give notices required by all laws, statutes, the most recent building codes, ordinances, rules, regulations, and lawful orders of all public authorities, including all environmental laws and all notice requirements under the State of California Safe Drinking Water and Enforcement Act of 1986 (Health & Safety Code §§ 25249.5 et seq.). The Design Builder shall promptly notify County's Representative in writing if the Design Builder becomes aware during the performance of the Work that the Contract Documents are at variance with Applicable Code Requirements.
- 13.1.7 If the Design Builder performs Work which it knows or should know is contrary to any laws, statutes, the most recent building codes, ordinances, rules, regulations, and lawful orders, without prior notice to the County and the County's Representative, Design Builder shall be responsible for such Work and any resulting damages including, without limitation, the costs of correcting Defective Work.

13.2 Permits and Taxes.

- 13.2.1 The Design Builder shall: (a) identify and procure all permits and licenses applicable to the Work (including Regulatory Agency permits and, to the extent applicable, those for environmental matters), (b) comply with, implement and acknowledge effectiveness of all permits, (c) initiate and cooperate in securing all required notifications or approvals therefore, and (d) give all notices necessary and incident to due and lawful prosecution of the Work, unless otherwise provided herein. The County will pay all permit fees as indicated in Section 005200 (Agreement) required in securing such permits and licenses. For all such permits and licenses, the Design Builder shall prepare all forms and documentation necessary for any required submittal. The Design Builder shall calculate and confirm the fees due to Regulatory Agency and inform the County of the amount due to any entity for such permits and licenses no later than thirty (30) Days prior to when a check is required. The Design Builder shall pay all sales and/or use taxes levied on materials, supplies, or equipment purchased and used on or incorporated into the Work, and all other taxes properly assessed against equipment or other property used in connection with the Work, without any increase in the Contract Sum, including all increases in sales and/or use taxes and all other such taxes effective as of the date of Design Builder's Response to the relevant Request For Supplemental Information, as amended. The Design Builder 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 the County may have already obtained permits for the Work.
- 13.2.2 Except as is provided in paragraph 13.7 of Document 007200 (General Conditions), the Design Builder will be responsible for any documentary, excise, stamp and transfer taxes and any sales, use or other taxes imposed by reason of the design, delivery, sale, transfer, or installation of the Work (or any item of the Work) regardless of which party has liability for such tax under applicable law, and any deficiency, interest or penalty asserted with respect thereto.

Design Builder represents that it has, or will obtain prior to the transfer of title of Work (or any portion of the Work), the necessary seller's permit as required by the State of California. The Design Builder represents that it will collect, report, and pay all sales or use taxes to the State Board of Equalization. Upon full payment, the Design Builder will issue the County a receipt pursuant to Revenue & Taxation Code § 6203, relieving the County of all liability for any tax relating to the Work or any item of the Work.

13.3 Responsibility of Design Builder and Indemnification.

13.3.1 None of the State Agencies, the County, its Board of Supervisors, County's Representative, their officers, directors, representatives, agents, consultants, or employees associated with the Work shall be liable or accountable in any manner for:

13.3.1.1 loss or damage of any type that may happen to any part of the Work or any part thereof;

13.3.1.2 loss or damage of any type to materials or other things used or employed in performing the Work;

13.3.1.3 injury, sickness, disease, or death of any person, including, but not limited to, workers and the public;

13.3.1.4 damage of any type to property, and the Design Builder releases all of the foregoing persons and entities from any and all such claims;

13.3.1.5 or any claims or liabilities imposed or existing by virtue of the removal, abatement, and disposal of hazardous materials and waste including, but is not limited to, liabilities connected to the selection and use of a waste disposal facility, personal injury, property damage, loss of use of property, damage to the environment or natural resources, or "disposal" and "release" of materials associated with the Work (as defined in 42 U.S.C. § 9601 et seq.).

13.3.2 To the furthest extent permitted by law (including without limitation Civil Code sections 2782 and 2782.8), the Design Builder shall assume the defense of, and indemnify, and hold harmless the County of Contra Costa, and all of its officers, directors, representatives, attorneys, agents, employees and consultants, including but not limited to the County Board of Supervisors and all County Representatives from third party (not including the County and the Design Builder) claims, suits, actions, losses and liability of every kind, nature and description, including but not limited to claims and fines of regulatory agencies and attorneys' fees and consultants' 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 to the extent caused by any breach of contract, negligent act, error or omission of the Design Builder, Subcontractors (of any tier), subconsultants, designers, suppliers, any one directly employed by any of them or any one for whose acts any of them may be liable, regardless of whether it is caused by the concurrent negligent act or omission, of an indemnified party, and regardless of whether liability without fault or strict liability is imposed or sought to be imposed on the indemnified party. Provided, however, that Design Builder's indemnification obligations shall not apply to the extent that a final judgment of a court of competent

jurisdiction establishes that a claim against an indemnity was caused solely by the negligence or willful misconduct of that indemnity. In that event, however, Design Builder's indemnification obligations shall remain with respect to all other indemnities.

- 13.3.3 Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of the Design Builder, its Subcontractors of any tier, its designers or suppliers, or the officers, directors, representatives, employees, or agents of any of them.
- 13.3.4 To the furthest extent permitted by law (including, without limitation, Civil Code section 2782 and 2782.8), the indemnities, releases of liability and limitations of liability, claims procedures, and limitations of remedy expressed throughout the Contract Documents shall apply even in the event of breach of contract, negligence, fault or strict liability of the parties indemnified, released, or limited in liability, and shall survive the termination, rescission, breach, abandonment, or completion of the Work and the terms of the Contract Documents. If the Design Builder fails to perform any of its defense or indemnity obligations, the County may in its discretion back charge the Design Builder for the County's costs and damages resulting there from and withhold such sums from progress payments or other contract moneys which may become due.
- 13.3.5 Except to the extent, if any, prohibited by Civil Code Section 2782 or 2782.8, Design Builder's obligations under this section exist regardless of the existence or degree of fault of County or any indemnitee and shall be as broad and comprehensive as allowed by law.
- 13.3.6 The County and all of its officers, directors, representatives, agents, consultants, and employees associated with the Work, including, but not limited to, the County Board of Supervisors, County consultants, and each of the County's Representatives, the State Agencies, shall not owe any duty of care to Design Builder, its Subcontractors, subconsultants or suppliers, except as set forth in this Agreement.
- 13.3.8 With respect to third-party claims against Design Builder, Design Builder waives any and all rights to any type of express or implied indemnity against County and each of its officers, employees, consultants and agents including, but not limited to County, the County Board of Supervisors, County consultants, and all other County Representatives.
- 13.3.9 The Design Builder is responsible for any liability imposed by law and for injuries to or death of any person including, but not limited to, workmen and the public or damage to property resulting from defects or obstructions or from any cause whatsoever during the progress of the Work or at any time before its completion and final acceptance.
- 13.3.10 Design Builder and Design Builder's insurance carriers shall respond within fifteen (15) Days to the tender of any claim for defense and indemnity by County, unless this time has been extended by County.
- 13.4 Notice of Concealed or Unknown Conditions. If either of the following conditions is encountered at the Site when digging trenches or other excavations, the Design Builder shall give a written Notice of Differing Site Conditions to the County promptly before conditions are disturbed (except in an emergency as required by paragraph 16.4

(Emergencies) of this Document 007200), and in no event later than seven (7) Days after first observance of (a) subsurface or Latent physical conditions which differ materially from those indicated in the Contract Documents or information provided by the County; (b) 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.

13.4.1 In response to the Design Builder's written Notice of Differing Site Conditions under this paragraph 13.4 (Notice of Concealed or Unknown Conditions), the County will investigate the identified conditions, and if they differ materially and cause increase or decrease in the Design Builder's cost of, or time required for, performance of any part of the Work, the County will issue either a Request for Proposal or a Change Order under the procedures described in the Contract Documents, including without limitation Section 012600 (Contract Modification Procedures).

13.4.2 If the County determines that physical conditions at the Site are not latent or are not materially different from those indicated in the Contract Documents or information provided by the County; or that no change in terms of the Contract Documents is justified, the County shall so notify the Design Builder in writing, stating reasons. If the County and the Design Builder do not agree on an adjustment in Contract Sum or Contract Time, the Design Builder shall proceed with the Work as directed by the County and may file a claim as provided in Article 12 (Claims by Design Builder) of this Document 007200.

13.4.3 The Design Builder is not 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 (a) the Design Builder knew of the existence of such conditions at the time Design Builder submitted its Bid; or (b) the Design Builder should have known of the existence of such conditions as a result of having complied with the requirements of the Contract Documents, including without limitation Article 1 (Investigations and Subcontractors) and paragraph 8.4 (Existing Utilities) of this Document 007200; or (c) the information or conditions claimed by the Design Builder to be Latent or materially different consist of information, conclusions, opinions or deductions of the kind the Contract Documents, including without limitation Article 1 of this Document 007200 preclude reliance upon; or (d) the Design Builder was required to give written Notice of Differing Site Conditions under the Contract and failed to do so within the time required; or (e) the Design Builder could have reasonably inferred the existence of such conditions based on its experience and expertise on similar projects in urban areas.

13.4.4 If the County and the Design Builder 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 13.4 (Notice of Concealed or Unknown Conditions), the Design Builder shall proceed with the Work as directed by the County and may make a claim as provided in Article 12 (Claims by Design Builder) of this Document 007200.

13.5 Notice of Hazardous Waste or Materials Conditions.

13.5.1 Written Notice of Hazardous Materials Condition by the Design Builder shall be given to the County promptly, before any of the following conditions are disturbed (except in an emergency as required by paragraph 16.4 (Emergencies) below),

and in no event later than twenty-four (24) hours after first observance, of any (a) material that the Design Builder believes may be material that is hazardous waste or hazardous material, as defined in § 25117 of the Health & 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 Materials”); (b) other material which may present a substantial danger to persons or property exposed thereto in connection with Work at the Site (“other materials”).

- 13.5.2 Except as otherwise provided in the Contract Documents or as provided by applicable law, the Design Builder 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 the 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 the Design Builder complies with all requirements in the Contract Documents and applicable law respecting such Hazardous Materials.
- 13.5.3 The Design Builder’s written Notice of Hazardous Materials Conditions under this paragraph 13.5 (Notice of Hazardous Waste or Materials Conditions) 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 the Design Builder, its Subcontractors, subconsultants, suppliers, or anyone else for whom the Design Builder is responsible.
- 13.5.4 The Design Builder shall not be entitled to any adjustment in the Contract Sum or Contract Time regarding claimed Hazardous Materials if (a) the Design Builder knew of the existence of such Hazardous Materials or other materials at the time Design Builder submitted its bid; or (b) the Design Builder failed to give the written Notice of Hazardous Materials Conditions within the time required these General Conditions. Notwithstanding (a) and (b) above, the Design Builder may (subject to paragraphs 13.5.2 and 13.5.3 above) be entitled to adjustment in the Contract Sum or Contract Time regarding claimed Hazardous Materials if such Hazardous Material is not indicated on the reports and information provided by the County, other information reasonably available to the Design Builder, visual observation or reasonable investigation. If the County determines that conditions do involve Hazardous Materials or that change in Contract Document terms is justified, then the County will either issue a Request for Proposal or an appropriate Change Order under the procedures described in the Contract Documents, including without limitation Section 012600 (Contract Modification Procedures).
- 13.5.5 If the County determines that conditions do not involve Hazardous Materials that no change in Contract Document terms is justified, the County shall notify the Design Builder in writing, stating the reasons for its determination. If the County and the Design Builder cannot agree on any claimed adjustment in Contract Sum or Contract Time, the Design Builder shall proceed with the Work and as directed by the County and may file a claim as provided in Article 12 (Claims by Design Builder) of this Document 007200.

- 13.5.6 In addition to the parties' other rights, if the Design Builder 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, the County may order the disputed portion of work deleted from the Work, or performed by others, or the County may invoke its right to terminate the Design Builder's right to proceed under the Contract Documents pursuant to paragraph 13.8 (Termination of Contract for Cause and Written Adequate Assurances of Performance) or 13.9 (Termination of Contract for Convenience) of this Document 007200 as the facts may warrant. If Design Builder does not agree with the County's determination of any adjustment in the Contract Sum or Contract Time as a result, the Design Builder may make a claim as provided in Article 12 (Claims by Design Builder) of this Document 007200.
- 13.5.7 To the furthest extent permitted by law, the County shall assume the defense of, and indemnify, and hold harmless the Design Builder, and all of its, members, officers, directors, representatives, attorneys, agents, employees and consultants from and against all claims, suits, actions, losses, and liability of every kind, nature and description, including but not limited to claims and fines of regulatory agencies and reasonable attorneys' fees and consultants' fees, directly or indirectly arising out of, connected with or resulting from the exposure of persons or property to pre-existing Hazardous Substances, pollutants, or other toxic substances or contaminants encountered at the Site or the Project during the performance of the Work which were not indicated on the reports and information provided by the County, other information reasonably available to Design Builder, visual observation or reasonable investigation.
- 13.6 Suspension of Work. The County may, without cause, order the Design Builder in writing to suspend, delay, or interrupt Work in whole or in part for such period of time as the County may determine. An adjustment shall be made for increases in cost of performance of the Contract Documents caused by any such suspension, delay, or interruption calculated using the measures set forth in Section 012600 (Contract Modification Procedures). No adjustment shall be made to the extent that: (a) performance is, was or would have been so suspended, delayed, or interrupted by another cause for which the Design Builder is responsible; or (b) an equitable adjustment is made or denied under another provision of the Contract Documents; or (c) the suspension of work was the direct or indirect result of the Design Builder's failure to perform any of its obligations. Adjustments made in cost of performance may have a mutually agreed fixed or percentage fee but, if the parties cannot so agree, the Design Builder may file a claim under Article 12 (Claims by Design Builder) of this Document 007200.
- 13.7 Force Majeure.
- 13.7.1 Events. Neither the County or the Design Builder shall be in breach of this Agreement for a failure to perform any of their obligations under this Agreement to the extent the delay in performance or inability to perform is caused by flood, lightning,; earthquake, fire, explosion, epidemic, quarantine, hurricane, tornado, storm, war (declared or undeclared), riot or similar civil disturbance, strikes, work stoppages, lockouts and other labor disputes, acts of nature or the public enemy (including acts of terrorism), blockade, insurrection, revolution that is not within the party's reasonable control or reasonable advance planning and was not known as of the effective date of this Agreement (a "Force Majeure Event"). Neither the County nor the Design Builder shall be excused to the extent a Force Majeure Event results from that party's negligence or failure to perform any obligations under this Agreement

including failure to reasonably anticipate ascertainable events or its failure to utilize commercially reasonable work-around or alternate solutions.

13.7.2 Exclusions. None of the following are a Force Majeure Event:

- 13.7.2.1 Strikes, work stoppages and other labor disputes (including collective bargaining disputes and lockouts) directed at Design Builder or with regard to Work by a Subcontractor on the Project Site, unless part of a general strike;
- 13.7.2.2 Shortage, cost increases or unavailability of materials and equipment, except to extent due to Force Majeure otherwise excusable hereunder;
- 13.7.2.3 Shortage, unavailability, or cost of labor;
- 13.7.2.4 Breakage or improper handling of materials and equipment;
- 13.7.2.5 Conduct of any Subcontractors or Design Builder suppliers;
- 13.7.2.6 Reasonably foreseeable climatic conditions;
- 13.7.2.7 Delays in transportation, except to the extent due to an independent event of Force Majeure;
- 13.7.2.8 Delay or denial of any permit or utility approval Design Builder is required to obtain; or
- 13.7.2.9 Delays of delivery of equipment by any Subcontractor for any reason (unless due to a Force Majeure Event) or the failure of any such equipment to conform to the quality and specifications set forth in any subcontract.

13.7.3 Notice. Any party claiming excuse of nonperformance under this Agreement based on Force Majeure Event shall give the other party notice describing the particulars of the Force Majeure Event promptly after its occurrence, but in no event more than five (5) Days after the claiming party becomes aware of such occurrence.

- 13.7.3.1 Within fifteen (15) Days after giving notice of the Force Majeure Event, the claiming party shall give the other party an estimate of the Force Majeure Event's expected duration and probable impact on the Work. The claiming party shall continue to furnish the other party with timely regular reports during the continuation of the Force Majeure Event.
- 13.7.3.2 The claiming party shall give the other party notice within five (5) Days of the cessation of all or part of the Force Majeure Event.

13.7.4 Mitigation and Management. Both the County and the Design Builder shall immediately exercise commercially reasonable efforts to mitigate or limit the impact to the Work and damages to each other as a result of the Force

Majeure Event and shall begin activities to correct or cure the event or condition excusing performance.

- 13.7.4.1 Design Builder shall continue to perform any unaffected Work.
- 13.7.4.2 The Design Builder and the County shall meet to agree upon a course of action to manage the impact of the Force Majeure Event and provide information to all interested parties.
- 13.7.4.3 The claiming party's suspension of performance shall be of no greater scope and of no longer duration than is reasonably required by the Force Majeure Event.
- 13.7.4.4 No default of the claiming party which arose before the occurrence of the Force Majeure Event causing the suspension of performance shall be excused as a result of the Force Majeure Event.

13.7.5 Resulting Impact. If Design Builder, after performing the mitigation efforts described in paragraph 13.7.4, cannot, in the absence of incurring cost or impacting the critical path elements of the Project Master Schedule, overcome the effects of the Force Majeure Event, Design Builder will be entitled to a Change Order to the extent Design Builder can substantiate the adverse impact in accordance with Article 14 (Modifications of the Contract Documents) below. Changes resulting from Force Majeure Event shall be limited to schedule adjustments, to the extent Design Builder demonstrates actual schedule delay caused solely by the effects of the Force Majeure Event, unless the County elects to expedite or make other adjustments instead of adjusting the Project Master Schedule.

13.7.5.1 The County will compensate Design Builder for the direct costs it incurs as a result of Force Majeure Event, to the extent that the County is satisfied that such costs are (a) part of a County-approved mitigation/recovery plan, and (b) reasonable and do not include any profit/fee or overhead.

13.7.5.2 With respect to payments made by the County to the Design Builder for changes for a Force Majeure Event, Design Builder shall reimburse such amounts to the extent such amounts are recovered from insurance coverages provided under this Agreement or are reduced by any savings or costs not incurred.

13.7.6 Termination for Force Majeure. County may terminate this Agreement for convenience if delays to the entire Project due to a Force Majeure Event exceed eighteen (18) months in the aggregate.

13.8 Termination of Contract for Cause. The Design Builder shall be in default of this Agreement and the County may terminate Design Builder's right to proceed under the Contract Documents, for cause:

13.8.1 Should Design Builder 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 thirty (30) 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 the Design Builder in any such proceeding, or seek, consent to, or acquiesce in, the appointment of any trustee, receiver, custodian or liquidator of the Design Builder or of all or any substantial part of the properties of the Design Builder, or if the Design Builder, its officers, directors or shareholders, take action to dissolve or liquidate Design Builder; or

- 13.8.2 Should the Design Builder commit a breach of the Contract Documents, the County may declare the Design Builder in default due to the breach, however, the County shall allow the Design Builder an opportunity to cure such breach within ten Days of the date of written notice from the County to the Design Builder 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 promptly. In order for the Design Builder to avail itself of a time period in excess of ten Days, the Design Builder must provide the County within the ten Day period with a written plan acceptable to the County to cure said breach promptly 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 promptly the Design Builder must then diligently commence and continue such cure according to the written plan; or
- 13.8.3 Should Design Builder violate or allow 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 such violation within ten Days of the date of the written notice from the County to Design Builder demanding such cure; or, if such failure is curable but not curable within such ten Day period, within such period of time as is reasonably necessary to promptly accomplish such cure promptly. In order for the Design Builder to avail itself of a time period in excess of ten Days, the Design Builder must provide the County within the ten Day period with a written plan to cure said violation acceptable to the County, and then diligently commence and continue performance of such cure according to the written plan.
- 13.8.4 Should Design Builder at any time refuse or neglect to supply sufficient materials or workers to complete this Agreement and the Work as provided herein, for a period of 10 Days or more after written notice thereof by County, County at its option may furnish the same and deduct the reasonable expenses thereof from the Contract Sum, may terminate this Agreement after notice to Design Builder, or may pursue any other remedies available at law or equity.
- 13.8.5 If the County at any time reasonably believes that the Design Builder is or may be in default under its Contract, the County may in its sole discretion notify the Design Builder of this fact and request written assurances from the Design Builder of performance of the Contract and a written plan from the Design Builder to remedy any failures to perform the terms of the Contract which the County may advise the Design Builder of in writing. The Design Builder shall, within ten Days of the County's request, deliver a written cure plan which meets the requirements of the written plan deliverable under paragraphs 13.8.2 or 13.8.3 above. Failure of the Design Builder to provide written adequate assurances of performance and the required written plan will constitute a material breach of this Agreement.

- 13.8.6 In event of termination for cause, the County shall immediately serve written notice thereof upon Surety and the Design Builder. Design Builder and Surety shall have the rights and obligations set forth in the Performance Bond. Subject to the Surety's rights under the Performance Bond (which rights are waived upon a default under the Performance Bond), the County may take over the Work and prosecute it to completion by contract or by any other methods it may deem advisable.
- 13.8.7 In the event of termination by the County for cause,
- 13.8.7.1 The County shall compensate Design Builder for the value of the Work delivered to the County no earlier than the expiration of thirty five (35) Days after Completion and acceptance of all Work by the County as determined in accordance with the Contract Documents, subject to all rights of offset and back charges, and provided that Design Builder provides the County with updated as-built and project record documents showing the work performed up to the date of termination. However, the County shall not compensate the Design Builder for its costs in terminating the Work or any cancellation charges owed to third parties;
- 13.8.7.2 The Design Builder shall deliver to the County within three (3) Business Days possession of the Work in its then condition, including but not limited to, all designs, engineering, project records, cost data of all types, Drawings and Specifications and contracts with vendors and Subcontractors, and all other documentation associated with the Project, and all construction materials, supplies and aids dedicated solely to performing Work which, in the normal course of construction, would be consumed or only have salvage value at the end of the construction period. The Design Builder 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 Section 13.8 (Termination of Contract for Cause) shall not be interpreted to diminish any right which the County may have to claim and recover damages for any breach of this Agreement, but rather, the Design Builder shall compensate the County for all loss, cost, damage, expense, and/or liability suffered by the County as a result of such termination and failure to comply with the Contract Documents.
- 13.8.7.3 Except as otherwise provided in the Contract Documents, the County's rights under this paragraph 13.8.6 shall be specifically enforceable to the greatest extent permitted by law. The County shall, to the extent applicable, have all other rights and remedies set forth in any other Contract Document.
- 13.8.8 The County may terminate for cause portions or parts of the Work, 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 Builder shall cooperate with a completing contractor as required under Article 6 (Construction by the County or by Separate Contractors) of this Document 007200.

13.8.9 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 the Design Builder shall have only the recovery rights specified in paragraph 13.9 (Termination of Contract for Convenience) below. Any Design Builder claim arising out of a termination for cause, however, shall be made in accordance with Article 12 (Claims by Design Builder) of this Document 007200. No other loss cost, damage, expense or liability may be claimed, requested or recovered by the Design Builder.

13.9 Termination of Contract for Convenience.

13.9.1 The County may terminate performance of the Work under the Contract Documents in accordance with this clause in whole, or from time to time in part, whenever the County shall determine that termination is in the County's best interest. Termination shall be effected by the County delivering to the Design Builder written 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.

13.9.2 After receiving a notice of termination under paragraph 13.9.1 above, and except as otherwise directed by the County, the Design Builder shall:

- 13.9.2.1 Stop Work under the Contract Documents on date and to extent specified in the notice of termination;
- 13.9.2.2 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;
- 13.9.2.3 If not directed by the County to assign the same, terminate all orders and Subcontractors, or assign to the County in manner, at times, and to extent directed by the County, all right, title, and interest of the Design Builder under orders and subcontracts. The County shall have the right, in its sole discretion, to settle or pay any or all claims arising out of termination of orders and subcontracts;
- 13.9.2.4 Settle all outstanding liabilities and all claims arising out of any termination of orders and subcontracts, with approval or ratification of the County to extent the County may require. The County's approval or ratification shall be final for purposes of this paragraph 13.9 (Termination of Contract for Convenience);
- 13.9.2.5 Transfer title to the County, and deliver in the manner, at the times, and to the extent, if any, directed by the County, 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 the County;
- 13.9.2.6 Use its best efforts to sell, in manner, at times, to extent, and at price or prices that the County directs or authorizes, any property of types

referred to in this paragraph 13.9.2, but the Design Builder 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 the County. Proceeds of transfer or disposition shall be applied to reduce payments to be made by the County to the Design Builder under the Contract Documents or shall otherwise be credited to the price or cost of Work covered by the Contract Documents or paid in such other manner as the County may direct;

- 13.9.2.7 Complete performance of the part of the Work which was not terminated by the notice of termination; and
 - 13.9.2.8 Take such action as may be necessary, or as the County may direct, to protect and preserve all property related to the Contract Documents which is in the Design Builder's possession or control and in which the County has or may acquire an interest.
- 13.9.3 After receipt of a notice of termination under paragraph 13.9.1 above, the Design Builder shall submit to the County its termination claim, in form and with all certifications required by the Contract Documents. The Design Builder's termination claim shall be submitted promptly, but in no event later than two (2) months from effective date of the termination. The Design Builder and the County may agree upon the whole or part of the amount or amounts to be paid to the Design Builder because of a total or partial termination for convenience of Work. If the Design Builder and the County fail to agree on the whole amount to be paid to the Design Builder because of the termination for convenience of the Work, County's total liability to Design Builder by reason of the termination shall be the total (without duplication of any items) of:
- 13.9.3.1 The reasonable cost to the Design Builder, without profit, for all Work performed prior to the effective date of the termination, including the Work done to secure the Project for termination. Reasonable cost may not exceed the applicable percentage completion values derived from the Project Master Schedule and the Schedule of Values. Deductions shall be made for cost of materials to be retained by the Design Builder, cost of Work defectively performed, amounts realized by sale of materials, and for other appropriate credits or offsets against cost of Work. Reasonable cost will include reasonable allowance for Project overhead and general administrative overhead.
 - 13.9.3.2 When, in the County'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 the Contract Documents and excessive actual cost shall be disallowed.
 - 13.9.3.3 Reasonable costs to the Design Builder of handling material returned to vendors, delivered to the County or otherwise disposed of as directed by the County.
 - 13.9.3.4 A reasonable allowance for the Design Builder's internal administrative costs in preparing termination claim.

- 13.9.3.5 The County shall have no obligation to pay the Design Builder under this paragraph 13.9 (Termination of Contract for Convenience) unless and until the Design Builder provides the County with updated and acceptable as-builts and Project record documents for Work completed prior to termination.
- 13.9.3.6 Reasonable demobilization costs, and reasonable payments made to Subcontractors or suppliers on account of termination.
- 13.9.4 In no event shall the County be liable for unreasonable costs incurred by the Design Builder or Subcontractors after receipt of a notice of termination. Such non-recoverable costs include, but are not limited to, the cost of or anticipated profits on Work not performed as of the date of termination, post-termination employee salaries, unreasonable post-termination administrative expenses, post-termination overhead or unabsorbed overhead, surety costs of any type, costs of preparing and submitting the Design Builder's Proposal, attorney fees of any type and all other costs relating to prosecution of claim or lawsuit.
- 13.9.5 In arriving at the amount due the Design Builder under this clause there shall be deducted in whole or in the appropriate part(s) if the termination is partial:
 - 13.9.5.1 All unliquidated advances or other payments on account previously made to the Design Builder, including without limitation all payments which are applicable to the terminated portion of the Contract Documents,
 - 13.9.5.2 Any claim which the County may have against the Design Builder in connection with the Contract Documents, and
 - 13.9.5.3 The agreed price for, or proceeds of sale of, any materials, supplies, or other things kept by the Design Builder or sold under provisions of paragraph 13.9 (Termination of Contract for Convenience), and not otherwise recovered by or credited to the County.
- 13.10 Contingent Assignment of Subcontracts. The Design Builder hereby assigns to County all of its right, title and interest in, to and under each Subcontract, including any agreement for the provision of Project services by the Architect, now or hereafter entered into by Design Builder for performance of any part of the Work, provided that:
 - 13.10.1 The assignment shall only be effective after the County's termination of the Design Builder's right to proceed under the Contract Documents (or portion thereof relating to that Subcontract) pursuant to paragraphs 13.8 (Termination of Contract for Cause) or 13.9 (Termination of Contract for Convenience) above;
 - 13.10.2 The assignment is effective only for the Subcontracts which the County expressly accepts by notifying the Subcontractor in writing;
 - 13.10.3 The assignment is subject to the prior rights, if any, of the Surety, obligated by the Performance Bond provided under the Contract Documents, where the Surety exercises its rights to complete the Contract;
 - 13.10.4 After the effectiveness of an assignment, the Design Builder shall, at its sole cost and expense (except as otherwise provided in paragraphs 13.8

(Termination of Contract for Cause and Written Adequate Assurances of Performance) or 13.9 (Termination of Contract for Convenience)), sign all instruments and take all actions reasonably requested by the County to evidence and confirm the effectiveness of the assignment in the County; and

- 13.10.4.1 Nothing in this paragraph 13.10 (Contingent Assignment of Subcontracts) shall modify or limit any of the Design Builder's obligations to the County arising from acts or omissions occurring before the effectiveness of any Subcontract assignment, including but not limited to all defense, indemnity and hold harmless obligations arising from or related to the assigned Subcontract;
- 13.10.4.2 The County may accept the assignment at any time during the course of the Work and prior to Completion in the event of a suspension or termination of Design Builder's rights under the Contract Documents. Such assignment is part of the consideration to the County for entering into the Contract with the Design Builder and may not be withdrawn prior to Completion.

13.11 Remedies and Contract Integration.

- 13.11.1 Subject to the Contract Document provisions regarding the Design Builder 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 the County and the Design Builder arising out of or relating to Contract Documents, any breach thereof or the Project, shall be decided in the applicable court of competent jurisdiction located in the State of California, County of Contra Costa. Each of County and Design Builder hereby waive its rights under Code of Civil Procedure Section 394 to file a motion to transfer any action or proceeding arising out of the Contract Documents to another venue. All County 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 the County and the Design Builder shall have any and all other equitable and legal rights and remedies which it would have according to law that are not inconsistent with the provisions of the Contract Documents.
- 13.11.2 The Contract Documents, any Contract Modifications and Change Orders shall represent the entire and integrated agreement between the County and the Design Builder 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. The County and the Design Builder 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.
- 13.11.3 In any proceeding to enforce the Contract Documents, the Design Builder and the County 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.

13.11.4 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.

13.11.5 No action or failure to act by the County or the County's Representative will constitute a waiver of a right afforded them under the Contract, nor will such action or failure to act constitute approval of or acquiescence in a condition or breach thereunder, except as may be specifically agreed in writing. No waiver by the County or County's Representative of any condition, breach or default will constitute a waiver of any other condition, breach or default; nor will any such waiver constitute a continuing waiver. No provision contained in the Contract Documents shall create or give to third parties any claim or right of action against the County, the County's Representative, or the Design Builder.

13.12 Patents. 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 Bid price for doing the Work. The Design Builder shall defend, indemnify and hold harmless the County and each of its officers, employees, consultants (including without limitation County consultants) and agents, including, but not limited to, the County Board of Supervisors and each County 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, 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 Builder agrees to indemnify and hold harmless the above indemnitees 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.

13.13 Substitution for Patented and Specified Articles.

13.13.1 Except as noted specifically in Specifications, whenever in Specifications, 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" and the Design Builder may offer any substitute material or process that the Design Builder considers equal in every respect to that so designated and if material or process offered by the Design Builder is, in opinion of the County, equal in every respect to that so designated, its use will be approved. However, the Design Builder may utilize this right only by timely submitting a substitution request consistent with Section 016000 (Product Requirements) as provided in Document 002100 (Request for Proposals from Bidders). A substitution will be approved only if it is permitted under Document 002100 following award of the Contract and 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, impact on contiguous construction elements, overall schedule and design.

- 13.14 Interest of Public Officers. No representative, officer, or employee of the County, no member of the governing body of the locality in which the Project is situated, no member of the locality in which the County 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 (1) year thereafter, shall, as principal, agent, attorney or otherwise, be directly or indirectly interested, in the Contract Documents or the proceeds thereof.
- 13.15 Limit of Liability. NEITHER THE COUNTY, COUNTY BOARD OF SUPERVISORS, NOR THEIR RESPECTIVE EMPLOYEES, OFFICERS, DIRECTORS, REPRESENTATIVES, CONSULTANTS OR AGENTS (INCLUDING WITHOUT LIMITATION COUNTY CONSULTANTS) SHALL HAVE ANY LIABILITY TO DESIGN BUILDER FOR SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES, EXCEPT TO THE LIMITED EXTENT THAT THESE CONTRACT DOCUMENTS OR APPLICABLE PUBLIC CONTRACTING STATUTES MAY SPECIFY THEIR RECOVERY.
- 13.16 Severability. Any provisions or portions thereof of these 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 this Agreement. If the provisions of such applicable law may be waived, they are hereby waived to the end that this Agreement may be deemed to be a valid and binding agreement enforceable in accordance with its terms. If any provisions or portions thereof of this Agreement are prohibited by, unlawful, or unenforceable under any applicable law and are therefore stricken or deemed waived, the remainder of the provisions and this Agreement shall be interpreted to achieve the goals or intent of the stricken or waived provisions or portions thereof to the extent such interpretation is consistent with applicable law.
- 13.17 Contract Documents and Exercise of Contract Responsibilities.
- 13.17.1 The Contract Documents shall not be construed to create a contract of any kind (a) between the County or its representatives and a Subcontractor of any tier (including, but not limited to, designers, architects and engineers) or (b) between any persons or entities other than the County and the Design Builder. The Design Builder is fully responsible for all acts, omissions or negligence of its Subcontractors of any tier, suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with the Design Builder just as the Design Builder is responsible for the Design Builder's own acts, omissions or negligence.
- 13.17.2 The County and its agents do not, in exercising their responsibilities and authorities under the Contract Documents, assume any duties or responsibilities to any Subcontractor, subconsultant or supplier, nor does the County or its agents assume any duty of care to the Design Builder, its Subcontractors, or suppliers.
- 13.18 Title to Work: No Liens. Legal title to all Work shall pass to and vest in the County as Work is performed, and title to all materials and equipment shall pass to and vest in the County when such materials and equipment are delivered to the Site (or as soon as title passes from the vendor or supplier thereof). To the extent of payment by the County, the

Design Builder shall keep the Site and all materials and equipment free and clear of all liens, stop notices and charges arising out of performance of this Agreement, and shall indemnify, defend and hold harmless those identified in paragraph 13.3.1 above from the claims, suits, actions, losses and liabilities described therein, including those which are a result of any breach of this responsibility and shall defend any claim or suit brought against any party required to be indemnified hereunder based upon any such claim of title or lien. The Design Builder shall promptly pay each Subcontractor the amount to which such Subcontractor is entitled, and shall, by an appropriate agreement with each Subcontractor, require each Subcontractor to make payments to its sub-Subcontractors in a similar manner.

- 13.19 Proprietary or Confidential Information of County. The Design Builder understands and agrees that, in the performance of the services under this Agreement or in the contemplation thereof, the Design Builder may have access to private or confidential information, which may be owned or controlled by the County, and that such information may contain proprietary or confidential details, the disclosure of which to third parties may be damaging to the County. The Design Builder agrees that all information disclosed by the County to the Design Builder shall be held in confidence and used only in performance of the Contract. Design Builder shall exercise the same standard of care to protect such information, as a reasonably prudent consultant would use to protect its own proprietary data.

13.20 Ownership of Results/Works for Hire.

13.20.1 The Contract Documents, and all copies thereof, furnished to, or provided by, the Design Builder are and shall remain the property of the County. The County and the Design Builder explicitly agree that all materials and documents developed in the performance of this Agreement are the property of the County. The County shall have unlimited rights, for the benefit of the County, in all engineering analysis, drawings, designs, specifications, notes and any other documentation and other Work developed in the performance of this Agreement for the Project, including the right to re-use details of the design on any other County work at no additional cost to the County. The Design Builder agrees to, and hereby does, grant to the County a royalty-free license to all such data that the Design Builder may cover by copyright and to all designs as to which the Design Builder may assert any right or establish any claim to under the patent or copyright laws. The Design Builder, for a period up to ten (10) years from the date of Completion of the Project, agrees to furnish and to provide access to the originals or copies of all such materials immediately upon the request of the County. Design Builder, its Subcontractors, and its Subconsultants, shall have the right, subject to the County's prior written approval for accuracy of representation and content, to include images or the likeness of the Project in any of its publications or marketing materials.

13.20.2 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 Builder or its Subcontractors or designers in connection with services performed under this Agreement 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 the County.

In the event that it is ever determined that any works created by Design Builder or its Subcontractors or designers under this Agreement are not works for hire

under U.S. law, Design Builder hereby assigns all copyrights to such works to the County. With the prior written approval of the County, Design Builder may retain and use copies of such works for reference and as documentation of its experience and capabilities.

13.20.3 The Design Builder agrees to reasonably assist the County in every proper way to secure the County's rights in any copyrights, patents, mask work rights or other intellectual property rights relating, including the disclosure to the County of all pertinent information and data with respect thereto, the execution of all applications, specifications, oaths, assignments and all other instruments which the County shall deem necessary in order to apply for and obtain such rights and in order to assign and convey to the Company, the sole and exclusive rights, title and interest in and to such copyrights, patents, mask work rights or other intellectual property rights relating thereto. The Design Builder further agrees that its obligation to execute or cause to be executed, any such instrument or papers shall continue after the termination of this Agreement. If the County is unable to secure the Design Builder's signature to apply for or to pursue any application for any United States or foreign patents or copyright registrations covering the original works of authorship assigned to the County as above, then it hereby irrevocably designates and appoints the County and as the agent and attorney in fact to execute and file any such applications and to do all other lawfully permitted acts to further the prosecution and issuance of letters patent or copyright registrations thereon with the same legal force and effect as if executed by the Design Builder.

13.20.4 To the furthest extent permitted by law, the County shall assume the defense of, and indemnify and hold harmless, the Design Builder and all of its member, officers, directors, representatives, attorneys, agents, employees, and consultants from and against all claims, suits, actions, losses, and liability of every kind, nature and description, including but not limited to claims and fines of regulatory agencies directly or indirectly arising out of or connected with or resulting from: (a) amendments or modifications of any Design Deliverables made without the prior written consent of Design Builder; and (b) County's use of the Design Deliverables or any part of the Design Deliverables on a project other than the Project.

13.21 Compliance with Americans with Disabilities Act. The Design Builder 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 contractor, must be accessible to the disabled public. The Design Builder shall provide the services Specified in this Agreement in a manner that complies with the ADA and any and all other applicable federal, state and local disability rights legislation. The Design Builder agrees not to discriminate against disabled persons in the provision of services, benefits or activities provided under this Agreement and further agrees that any violation of this prohibition on the part of the Design Builder, its Subcontractors, subconsultants, designers, employees, representatives, agents or assigns shall constitute a material breach of this Agreement.

13.22 Disputes. Nothing in this Paragraph shall allow the Design Builder to discontinue the Work during the course of any dispute and the Design Builder's failure to continue the Work during any and all disputes shall be considered a material breach of this Agreement. The Design Builder agrees that the existence or continued existence of a dispute does not excuse performance under any provision of this Agreement, including but not limited to, the time to complete the Work. The Design Builder also agrees that

should the Design Builder discontinue the Work due to a dispute or disputes, the County may terminate this Agreement for cause. The Design Builder further agrees that should the Design Builder not properly perform the Work due to a dispute or disputes, any and all claims, whether in law or in equity, the Design Builder may have against the County and its officers, directors, agents, representatives, consultants and employees, whether such claims are pending, anticipated or otherwise, shall be deemed to have been waived and forever foreclosed. Notwithstanding the above, the Design Builder, pursuant to paragraph 1.7.4.4.1 of Section 012900 (Payment Procedures), will be entitled to be paid by the County for all undisputed work and will have the right to stop work, and ultimately to terminate this Agreement, if not timely paid by the County for any undisputed work.

- 13.23 Statute of Limitations. As between the parties to this Agreement: as to all acts or failures to act by either party to this Agreement, any applicable statute of limitations shall commence to run on the date of issuance by County of the final Certificate for Payment, or the effective date of a termination of all of this Agreement, whichever is earlier, except for Latent defects, in which case the cause of action shall accrue on discovery of the Latent defect and its cause. Nothing herein will modify any right or obligation under Code of Civil Procedure §§ 337.1 and 337.15.
- 13.24 Waivers. Either party's waiver of any breach, or the omission or failure of either party, at any time, to enforce any right reserved to it, or to require performance of any of the terms, covenants, conditions or other provisions of this Agreement, including the timing of any such performance, shall not be a waiver of any right to which any party is entitled, and 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.
- 13.25 Beneficial Occupancy. The County reserves the right, at its option and convenience, to occupy any part of the Work at any time prior to Completion upon ten (10) Days' notice to the Design Builder. Such occupancy is herein referred to as "Beneficial Occupancy." Beneficial Occupancy shall be subject to the following conditions:
- 13.25.1 The County Representative will make an inspection of the portion of the Project to be Beneficially Occupied and prepare a list of items to be completed or corrected prior to Completion. Prior to Beneficial Occupancy, County will issue a Certificate of Beneficial Occupancy on County's form.
- 13.25.2 Beneficial Occupancy by the County shall not be construed by the Design Builder as an acceptance by County of that portion of the Work which is to be occupied.
- 13.25.3 Beneficial Occupancy by the County shall not constitute a waiver of existing claims of the County or the Design Builder against each other.
- 13.25.4 Unless otherwise agreed to by the parties, Design Builder shall provide, in the areas beneficially occupied by County and on a twenty-four (24) hour and seven (7) Day week basis as required until the Work is complete and final acceptance, utility services, heating, and cooling in the areas beneficially occupied and for systems in such areas which are in operable condition at the time of Beneficial Occupancy. All costs of and responsibility for the maintenance of beneficially occupied areas and for the operation and maintenance of Design Builder's equipment in such areas shall remain with the

Design Builder during Beneficial Occupancy until the Work is completed and final acceptance.

- 13.25.5 The guarantees to repair as defined in this Agreement, will commence upon the first dates of Beneficial Occupancy of any portions of the Construction Work actually occupied by the County pursuant to this paragraph 13.25 and equipment or systems “fully utilized” by the County. Equipment or systems shall not be considered “fully utilized” for the purpose of this paragraph 13.25.5 until all parts of the Project served by the equipment or systems are Beneficially Occupied.
- 13.25.6 The County shall pay for any costs arising from County's Beneficial Occupancy, including the costs of providing security, janitorial and utility services in areas that are Beneficially Occupied by the County.
- 13.25.7 The County will use its best efforts to prevent its Beneficial Occupancy from interfering with the conduct of the Design Builder's the remaining Work.
- 13.25.8 The Design Builder shall not be required to repair damage caused by the County in its Beneficial Occupancy.
- 13.25.9 Except as may be required pursuant to paragraphs 13.25.4, 13.25.6 and 13.25.8 above, there shall be no added cost to County due to Beneficial Occupancy.
- 13.25.10 During Beneficial Occupancy, Design Builder shall continue to maintain all insurance required by the Contract in full force and effect.
- 13.26 Successors and Assigns. The County and the Design Builder respectively bind themselves and their successors, permitted assigns, and legal representatives to the other party and to the successors, permitted assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract, in whole or in part, without prior written consent of the other party. Notwithstanding any such assignment, each of the original contracting parties shall remain legally responsible for all of its obligations under the Contract.
- 13.27 Correction of Errors and Omissions. The Design Builder agrees to correct any error or omission in the Construction Documents or Contract Documents at no additional cost to the County.
- 13.28 Endorsements. Design Builder shall not in its capacity as a contractor with County publicly endorse or oppose the use of any particular brand name or commercial product without the prior approval of the Board of Supervisors. In its County contractor capacity, Design Builder shall not publicly attribute qualities or lack of qualities to a particular brand name or commercial product in the absence of a well-established and widely-accepted scientific basis for such claims or without the prior approval of the Board of Supervisors. In its County contractor capacity, Design Builder shall not participate or appear in any commercially-produced advertisements designed to promote a particular brand name or commercial product, even if Design Builder is not publicly endorsing a product, as long as Design Builder's presence in the advertisement can reasonably be interpreted as an endorsement of the product by or on behalf of County. Notwithstanding the foregoing, Contractor may express its views on products to other contractors, the Board of

Supervisors, County officers, or others who may be authorized by the Board of Supervisors or by law to receive such views.

- 13.29 Use of Private Property. Design Builder shall not use private property for any purpose in connection with the Project absent a prior, written agreement with the affected property owner.

14. MODIFICATIONS OF THE CONTRACT DOCUMENTS.

14.1 Alterations, Modifications and Force Account Work.

- 14.1.1 No modification or deviation from the Contract Documents, including but not limited to the Drawings and Specifications will be permitted except by written Change Order or written Field Change, collectively referred to as a "Contract Modification."
- 14.1.2 The County may, without notice to the Sureties, make alterations, deviations, additions to, or deletions from the 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. The Design Builder 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, the County reserves the right to furnish all or portions of associated labor, material, and equipment, which the Design Builder shall accept and use without payment for costs, markup, profit, or otherwise for such County-furnished labor, materials, and equipment.
- 14.1.3 Changes affecting the Contract Time or Contract Sum of the Work shall be set forth in a written Change Order that shall specify: (a) the work performed in connection with the change to be made; (b) the amount of the adjustment of the Contract Sum, if any, and the basis for compensation for the work ordered; and (c) the extent of the adjustment in the Contract time, if any. A Change Order will not become effective until signed by the County.
- 14.1.4 A Change Order will become effective when signed by the County. If the County exercises its right to decide disputed issues pertaining to changed Work as set forth in Articles 12 (Claims by Design Builder) and 14 (Modifications of the Contract Documents) of this Document 007200, then the resulting Change Order shall be effective when signed by County, notwithstanding that the Design Builder has not signed it.
- 14.1.5 Changes not affecting the Contract Time or Contract Sum of the Work, in the County's discretion, may be set forth in a written RFI-Reply executed by the County. Execution of a RFI-Reply constitutes the Design Builder's agreement to make the specified change without change to the Contract Sum or the Contract Time.
- 14.1.6 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 012600 (Contract Modification Procedures), except in cases of emergency discussed in paragraph 16.4 (Emergencies) of this Document 007200.

- 14.1.7 All Contract Modifications shall be diligently carried out by the Design Builder in accordance with the Contract Documents. 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 the Design Builder and the County may agree upon as a reasonable and proper allowance for the cost increase or decrease.

If an agreement cannot be reached, then the County shall reach a determination, which shall be final, subject to the Design Builder's rights under Article 12 (Claims by Design Builder) of this Document 007200. In all cases the Design Builder shall perform the changed work as directed by the County subject to the Design Builder's rights under Article 12. In cases where the County reaches such a determination, a Change Order shall be effective even if signed by the County only.

- 14.1.8 The Design Builder shall, upon the County's request, permit inspection of the original unaltered Project Bid 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.
- 14.1.9 Changes in the Work made pursuant to this Article 14 (Modifications of the Contract Documents) and extensions of Contract Time necessary by reason thereof shall not in any way release the guarantees/warranties given by the Design Builder 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.
- 14.1.10 Procedures for Modifications of Contract Documents and for calculating the cost of extra Work are given in Section 012600 (Contract Modification Procedures). Regarding delay and impact costs of any nature, the Design Builder may not seek delay compensation for on-Site or off-Site costs based on formulas, e.g., "Eichleay" or other formula. Rather, the Design Builder shall prove actual costs that were actually caused by the County caused delays. If the Design Builder requests compensation for delay to the construction, then the Design Builder shall prove and document actual costs plus markup per the cost categories and procedures in Section 012600 in order to request, claim or prove compensation for delay.
- 14.1.11 Change Orders in excess of the County's approved limit must be approved by the County Board of Supervisors and a performance bond rider covering the changed Work executed before proceeding with the changed Work. The Design Builder is charged with knowledge of the County's approved Change Order limits and procedures in effect at the applicable time.

14.2 Entire Agreement.

- 14.2.1 The Contract Documents, and any Contract Modifications, shall represent the entire and integrated agreement between the County and Design Builder regarding the subject matter of this Agreement and shall constitute the exclusive statement of the terms of the parties' agreement.

14.2.2 The Contract Documents, and any Contract Modifications, shall supersede any and all prior negotiations, representations or agreements, either written or oral, express or implied, that relate in any way to the subject matter of this agreement or written modifications. The County and Design Builder represent and agree that they are entering into this Agreement and any subsequent written modification in sole reliance upon the information set forth in the Contract Documents or Contract Modifications and the parties are not and will not rely on any other information.

14.3 Modifications. The Contract Documents may be amended or modified only by a written amendment, Change Order, Field Change or directive issued in accordance with the provisions of the Contract Documents, and particularly this Article 14 (Modifications of the Contract Documents) and Section 012600 (Contract Modification Procedures). The Contract Documents may not be modified or supplemented orally or by implication. To be effective, any modification to the Contract Documents must be in writing and must be signed by an authorized representative of the County and satisfy all other requirements of this Document 007200.

15. **TIME ALLOWANCES.**

15.1 Time Allowance for Performance of Contract.

15.1.1 When the Contract has been signed by Design Builder and the County, and funds necessary to make payments as required under Contract are available, the County will serve a Notice to Proceed upon Design Builder to that effect, either by depositing notice in a post office or post office box regularly maintained by United States Postal Service in a pre-paid wrapper directed to Design Builder at its legal address, or (at the County's option) by delivery by other means at the Design Builder's legal address.

15.1.2 The start date for Contract Time shall be the date indicated in the applicable Notice to Proceed.

15.1.3 By signing the Agreement, the Design Builder represents to the County that the Contract Time is reasonable for performing the Work and that the Design Builder is able to perform the Work within the Contract Time. Design Builder agrees that the County is purchasing the right to have the Design Builder present on the Project site for the full duration of the Contract Time applicable to the Construction Phase, even if Design Builder could finish the Contract in less than the Contract Time.

15.1.4 The Design Builder shall not, except by agreement or instruction of the County in writing, commence operations on the Site or elsewhere prior to the effective date of insurance required by the Contract Documents to be furnished by the Design Builder. The dates of commencement and completion of the Work shall not be changed by the effective date of such insurance.

15.1.5 The Design Builder shall proceed expeditiously with adequate forces and shall achieve Completion of the Work within the Contract Time. If the County's Representative determines and notifies the Design Builder that the Design Builder's progress is such that the Design Builder will not achieve Completion of the Work within the Contract Time, the Design Builder shall immediately and at no additional cost to the County, take all measures necessary, including working such overtime, additional shifts, Sundays, or holidays as may be

required to ensure that the entire Project is completed within the Contract Time. Upon receipt of such notice from the County's Representative, the Design Builder shall immediately provide a recovery schedule and notify the County's Representative of all measures to be taken to ensure full Completion of the Work within the Contract Time.

The Design Builder shall reimburse the County for any extra costs or expenses (including the reasonable value of any services provided by County's employees) incurred by the County as the result of such measures.

15.2 Entitlement to Change of Contract Time.

15.2.1 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 the Contract Documents.

15.2.2 The Contract Time will be adjusted in an amount equal to the time lost on the critical path of the Project due to the following:

15.2.2.1 Changes in the Work ordered by the County;

15.2.2.2 Acts or neglect by the County, or its agents, employees or consultants, acts or neglect of utility owners, acts or neglect of other contractors performing other Work under contract with the County, provided the Design Builder has substantially performed its responsibilities under the Contract Documents, including but not limited to, its cooperation and coordination responsibilities required by the Contract Documents;

15.2.2.3 A Force Majeure as defined in paragraph 13.7 (Force Majeure) above.

15.2.2.4 Impacts to the Project Master Schedule caused by Regulatory Agency review of County-initiated Change Orders in accordance with Section 012600 (Contract Modification Procedures).

15.2.2.5 Impacts to the Project Master Schedule caused solely by Regulatory Agency review of Change Orders that result from Governmental or Regulatory Agency requirements in accordance with Section 012600 (Contract Modification Procedures).

15.2.2.6 Delays caused by Regulatory Agency's failure or inability to review the Design Builder's complete and coordinated documents within the Regulatory Agency review durations published in the Design Builder's Project Master Schedule in accordance with the requirements of paragraph 1.3.7 of Section 013216 (Schedules and Reports).

15.2.3 The Contract Time shall not be extended for any cause identified in paragraph 15.2.2 above, however, unless:

15.2.3.1 The Design Builder actually has been prevented from completing any part of the Work within the Contract Time due to delay that is beyond the Design Builder's control and due to reasons for which the Design

Builder is not responsible. (In this regard, 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 the Design Builder);

15.2.3.2 A claim for delay is made as provided herein; and

15.2.3.3 The Design Builder submits a Time Impact Evaluation as required under Section 013216 (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.

15.3 Weather Delays.

15.3.1 Delays due to abnormal or adverse weather conditions will not be allowed for weather conditions, which fall within parameters listed in this paragraph 15.3 (Weather Delays). Adverse weather delays may be allowed only if the number of Days of Project delay due to adverse weather exceeds these parameters on a monthly basis and the Design Builder proves that the adverse weather actually caused delay to the completion of the Project. The Design Builder shall give written notice of intent to claim an adverse weather day within one (1) Day of the adverse weather day occurring. Rain parameters are as follows, prorated in the individual month the Design Builder starts and finishes Work:

15.3.1.1 Rain Days: January, [7]; February, [6]; March, [6]; April, [3]; May, [1]; June, [0]; July, [0]; August, [0]; September, [0]; October, [2]; November, [5]; December, [6].

15.3.1.2 In order to qualify as an adverse weather day with respect to the foregoing parameters, daily rainfall must exceed one-tenth (0.10) of an inch or more at the Oakland WSO AP, California, station, as measured by the National Oceanic & Atmospheric Administration, and Design Builder must prove that the rain actually caused delay as set forth above.

15.3.2 The Design Builder shall include the foregoing rain parameters as a monthly activity in its Project Master Schedule. If Work on the critical path is affected by rain, the Design Builder shall notify the County and request that the Days be moved to the affected activities. Any adverse weather Days remaining shall be considered Project float.

15.3.3 Adverse weather delay for rain shall be recognized for the actual period of time the Design Builder proves the Completion of the Project was delayed by rain exceeding the Specified parameters. For example, and not by way of limitation, if rain exceeding the Specified parameters does not in fact delay the Design Builder's progress on the critical path, then no time extension shall be recognized; and conversely, if the Design Builder proves that rain exceeding the Specified parameters causes delay to the Design Builder for a period longer than the number of rain Days incurred (e.g., if it rains during grading work), then the Design Builder shall be entitled to a time extension equal to the actual period of such delay. Design Builder must verify that adverse weather caused delays in excess of seventy-five percent (75%) of the normal labor and equipment force working on current critical path work items on the accepted

Project Master Schedule for a period of at least five hours, and the crew is dismissed as a result thereof.

- 15.3.4 The Design Builder shall take reasonable steps to mitigate potential weather delays, such as de-watering the Site, and covering the Work and material that could be affected adversely by weather. Failure to do so shall be cause for the County to not grant a time extension due to adverse weather, where the Design Builder could have avoided or mitigated the potential delay by exercising reasonable care.

15.4 Notice of Delay. Within ten (10) Days of the beginning of any delay or of becoming aware of any delay, whichever is later, the Design Builder shall notify the County, in writing by submitting a notice of delay that shall include a full statement of all anticipated delays resulting from the delay event in question.

- 15.4.1 The notice shall constitute application for an extension of time only if the notice requests an extension and sets forth the impact of the delay on the critical path and Design Builder's estimate of additional time required together with a full recital of causes of unavoidable delays relied upon. The Design Builder shall comply with Section 013216 (Schedules and Reports).

- 15.4.2 After receipt of a request for a time extension, with verifiable documents and justifications included, the County will make a decision thereon, and will advise the Design Builder in writing.

- 15.4.3 No time extensions shall be considered without related documents and justifications necessary for the County to make a determination.

- 15.4.4 No time extensions shall be granted for delays for which the Design Builder fails to give timely and proper notice and the Design Builder hereby waives any and all damages or other remedies for delay for which timely and proper notice is not given.

- 15.4.5 Any request for extension of time shall be accompanied by the Design Builder's written statement that the adjustment claimed is the entire adjustment to which the claimant is entitled as a result of the occurrence of said event, and shall include a written schedule document that demonstrates delay to the critical path using a Time Impact Evaluation as specified in Section 013216 (Schedules and Reports). The County 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 15.4 (Notice of Delay).

15.5 No Damage for Design Builder Caused Delay. The Design Builder shall not be entitled to any time extension or compensation, including without limitation extended field or home office overhead, field supervision, costs of capital, interest, escalation charges, acceleration costs or other impacts for any the Design Builder caused delays.

15.6 Time Extension Without Compensation. The Design Builder may receive, in County's sole discretion, a time extension without compensation for: (a) delays resulting from causes beyond the reasonable control of the Design Builder and the County, including a Force Majeure (see paragraph 13.7 above), (b) periods of delay caused jointly by the Design Builder and either the County or Regulatory Agency, or (c) periods of concurrent delay which include both delay for which Design Builder is entitled to time extension and

delay for which Design Builder is not entitled to any time extension. In such cases, a time extension without compensation shall constitute the Design Builder's sole and exclusive remedy for such delays.

- 15.7 Compensable Delay. The Design Builder may receive a time extension and an adjustment in the Contract Sum as compensation in conformance with Section 012600 (Contract Modification Procedures) for delays caused by Regulatory Agency, to the extent permitted by the Contract Documents, or delays caused by the County or by the County's contractors, except that the Design Builder shall not be entitled to damages for delay to the Work caused by the following reasons:

- 15.7.1 The County's enforcement of any government act or regulation, or the provisions of the Contract Documents, Design Builder's failure to perform its cooperation and coordination responsibilities required by the Contract Documents, and the County's right to sequence the Work in a manner which would avoid disruption to the County's tenants and their contractors or other prime contractors and their respective Subcontractors, exercised as a result of the Design Builder's failure to perform its cooperation and coordination responsibilities required by the Contract Documents. .
- 15.7.2 Granting of extension of Contract Time for any reason shall in no way operate as a waiver on the part of the County, of its right to collect liquidated damages for other delays or of its right to collect other damages or other rights to which the County is entitled.

15.8 Liquidated Damages.

- 15.8.1 Execution of the Contract by the Design Builder shall constitute acknowledgement by Design Builder that Design Builder understands, has ascertained and agrees that the County will actually sustain damages in the amount fixed in the Contract for each and every Day during which completion of the Work is delayed beyond the expiration of the time fixed for completion or extensions of time allowed pursuant to provisions hereof. The Design Builder and the County agree that such specified measures of liquidated damages shall be presumed to be the damages actually sustained by the County as defined below, and that because of the nature of the Project, it would be impracticable or extremely difficult to fix the actual damages, and shall be the County's sole remedy for recovery of damages it directly incurs due to delays.
- 15.8.2 There shall be deducted from any money due or to become due to Design Builder all sums representing liquidated damages. Should Design Builder be inexcusably delayed in the performance of the Work, County may deduct liquidated damages based on its estimated period of late completion. County need not wait until Completion to withhold liquidated damages from Design Builder.
- 15.8.3 Liquidated damages shall be considered not as a penalty but as agreed monetary damage for all actual damages sustained by the County for delay, including but not limited to loss of revenue and increased Project administration expenses, including extra inspection, construction management and architectural and engineering expenses. Except as against delay claims by the Facility that are deemed to be included therein, liquidated damages shall not be deemed to include within their scope claims of third parties against the County.

15.8.4 Should money due or to become due to Design Builder be insufficient to cover aggregate liquidated damages due, then Design Builder forthwith shall pay the remainder of the assessed liquidated damages to County.

15.8.5 Design Builder and County agree that time is of the essence for completion of the Project pursuant to these Contract Documents.

16. WORKING CONDITIONS AND PREVAILING WAGES.

16.1 Use of Site/Sanitary Rules.

16.1.1 All portions of the Work shall be maintained at all times in neat, clean and sanitary condition.

16.1.2 Toilets shall be furnished by the Design Builder where needed, for use of the Design Builder's, Subcontractors' employees on Site, 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 approval of the County.

16.1.3 The Design Builder shall confine construction equipment, the storage of materials and equipment and the operations of workers to the Site and other land or areas identified in and permitted by the Contract Documents and other land or areas permitted by applicable laws and regulations, rights of way, permits and easements, or as designated by the County, and shall not unreasonably encumber any of the foregoing premises with construction equipment or other materials or equipment. The Design Builder shall assume full responsibility for any damage to any such land or area, or any improvement located thereon, or to the owner or occupant thereof or of any adjacent areas, resulting from the performance of the Work.

16.1.4 During the progress of the Work, the Design Builder shall keep the Site and foregoing areas free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work, the Design Builder shall remove from and about the Site and other areas all waste materials, rubbish and debris, as well as all tools, appliances, construction equipment and machinery and surplus materials. The Design Builder shall leave the Site clean and ready for occupancy by the County at Beneficial Occupancy and Completion of Work. The Design Builder shall restore to original and clean condition all structures or property not designated for alteration by Contract Documents.

16.1.5 The Design Builder 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 the Design Builder subject any part of the Work structures or adjacent property to stresses or pressures that will endanger it. The Design Builder shall conduct all necessary existing conditions investigation regarding structural, mechanical, electrical or any other system existing, shall perform the 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.

16.2 Protection of Work, Persons and Property. The Design Builder shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection

with Work. The Design Builder shall comply with all safety requirements specified in any safety program established by County, or required by state, federal or local laws and ordinances. The Design Builder shall be responsible for all damage to Work, property or structures, all injuries to persons, and all damage and interruptions to the County's operations, arising from the performance of Work of the Contract Documents. Except as otherwise expressly approved by the County in writing, the Design Builder shall at all times perform all Work in a manner which does not interrupt, damage or otherwise adversely impact any existing County facilities or operations.

- 16.2.1 The Design Builder 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. The Design Builder 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.
- 16.2.2 The Design Builder shall remedy all damage, injury or loss or interruption to any property or operations referred to in this paragraph 16.2 (Protection of Work, Persons and Property), caused, directly or indirectly, in whole or in part, by the Design Builder, 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. The Design Builder'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. The County and its agents do not assume any responsibility for enforcing any rights against any person or persons causing damage to Design Builder's work.
- 16.2.3 The Design Builder 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.
- 16.2.4 The County may, at its option, retain such monies due or to become due under the Contract Documents as the County deems necessary until any and all suits or claims against Design Builder for injury to persons or property or operations shall be settled and the County receives satisfactory evidence to that effect.

16.3 Responsibility for Safety and Health.

- 16.3.1 The Design Builder shall insure that the Design Builder (and its employees, agents and invitees), Subcontractors (and each tier of Subcontractors' employees, agents, invitees), and subconsultants (and their employees, agents and invitees) while at the Site comply with applicable health and safety laws including, without limitation, the federal Occupational Safety and Health Act of 1970 (and all rules and regulations issued pursuant thereto) and any of the County's safety regulations, as amended from time to time. The Design Builder shall further comply with any directions of the County regarding protective clothing, head covering, eye protection, etc. The County shall have no duty to issue such directions.
- 16.3.2 Safety of all persons employed by the Design Builder or Subcontractors or designers and their respective agents and invitees on the Site shall be the full

responsibility of the Design Builder. The Design Builder shall notify the County, in writing, of the existence of hazardous conditions, property or equipment at the Site, which are not under the Design Builder's control. However, it shall be the Design Builder's responsibility to take necessary precautions against injury to persons or damage to property from recognized hazards until corrected by the responsible party.

- 16.3.3 Design Builder is required to ensure Material Safety Data Sheets are available in a readily accessible place at the Work Site for any material requiring a Material Safety Data Sheet per the Federal "Hazard Communication" standard, or employees right to know law. Design Builder is also required to ensure proper labeling on substance brought onto the job site and that any person working with the material or within the general area of the material is informed of the hazards of the substance and follows proper handling and protection procedures. Two additional copies of the Material Safety Data Sheets shall also be submitted directly to the County.
- 16.3.4 Design Builder shall confine all persons under the Design Builder's employ or employ of its Subcontractors, designers or any other person acting on behalf of the Design Builder or Subcontractors or designers to that portion of the Site where the Work under the Contract Documents is to be performed, to routes to be designated by the County for ingress and egress thereto and to any other areas the County may expressly permit the Design Builder to use. Within such areas, except those routes for ingress and egress over which the Design Builder has no right of control, the Design Builder shall provide safe means of access to all places at which persons may at any time have occasion to be present.
- 16.3.5 Design Builder shall submit a Safety Plan consisting of Illness and Injury Prevention Program (IIPP), Emergency Response Action Plan, and 24-Hour Contact List. Design Builder shall include flowcharts/"decision tree" data that may be posted strategically throughout the project site.
- 16.4 Emergencies. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, the Design Builder, without special instruction or authorization from the County, is obligated to act to prevent threat and damage, injury or loss, until directed otherwise by the County. Design Builder shall give the County prompt written notice if the Design Builder believes that any significant changes in the Work or variations from Contract Documents have been caused thereby. If the County determines that a change in the Contract Documents is required because of the action taken by the Design Builder in response to such an emergency, a Contract Modification, Change Order or Field Change will be issued to document the consequences of such action.
- 16.5 Use of Roadways and Walkways. The Design Builder shall not unnecessarily interfere with use of any roadway, walkway or other facility for vehicular or pedestrian traffic, by any party entitled to use it. Wherever interference becomes necessary for proper and convenient performance of the Work, and no satisfactory detour route exists, the Design Builder shall, before beginning interference, and with the County's prior concurrence, provide a satisfactory detour, temporary bridge, or other proper facility for traffic to pass around or over the interference and shall maintain it in satisfactory condition as long as the interference continues, all without additional compensation unless otherwise provided in the Contract Documents.

- 16.5.1 Design Builder shall submit a Traffic Management Plan as needed to facilitate completion of project scope.
- 16.6 Nondiscrimination. No discrimination shall be made 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 Government Code § 12940, and every contractor for public works violating the provisions of Labor Code § 1735 is subject to all the penalties imposed for a violation of Chapter 1, Part 7, Division 2 of the Labor Code.
- 16.7 Prevailing Wages.
- 16.7.1 Pursuant to Labor Code §§ 1770 et seq., the Design Builder shall pay to persons performing labor in and about the Work provided for in the Contract an amount equal to or more 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 legal holiday and overtime work in said locality, which per diem wages shall be equal to or more than the stipulated rates contained in a schedule thereof which has been ascertained and determined by the Director of the State Department of Industrial Relations to be the general prevailing rate of per diem wages for each craft or type of workman or mechanic needed to execute this Agreement. The Design Builder shall also cause a copy of this determination of the prevailing rate of per diem wages to be posted at each Site.
- 16.7.2 The Design Builder shall forfeit, as a penalty to the County, Fifty Dollars (\$50.00) for each laborer, workman, or mechanic employed in performing labor in and about the work provided in the Contract Documents for each Day, or portion thereof, on which such laborer, workman or mechanic is paid less than the said stipulated rates for any work done under these Contract Documents by him or her or by any Subcontractor or designer under him or her, in violation of Articles 1 and 2 of Chapter 1 of Part 7 of Division II of the Labor Code. The sums and amounts which shall be forfeited pursuant to this paragraph 16.7.2 and the terms of the Labor Code shall be withheld and retained from payments due or to become due to the Design Builder under this Agreement and the terms of 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 the County. The final amount of forfeiture shall be determined by the Labor Commissioner pursuant to Labor Code § 1775. Without in any way limiting the foregoing or any other provisions of the Agreement, the parties specifically stipulate that the relevant penalties and forfeitures provided in the Labor Code, especially in Sections 1775 and 1813 concerning prevailing wages and hours, as well as Section 1776 concerning certified payroll records apply to this Agreement.
- 16.7.3 The Design Builder shall insert in every subcontract, design agreement or other arrangement which Design Builder may make for performance of work or labor on the Work provided for in the Contract Documents, a provision that the Subcontractor or designer 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 as provided in the Labor Code.

- 16.7.4 Contractor stipulates that it shall comply with all requirements of PROJECT LABOR AGREEMENT of the COUNTY OF CONTRA COSTA, and shall pay to persons performing labor in and about the Work provided for in the Contract an amount equal to or more than the following:
 - 16.7.4.1 Wage rate and fringe benefit payments and classification for that person's corresponding labor classification as required by the Department of Industrial Relations;
 - 16.7.4.2 Wage rate and fringe benefit payments and classification for that person's corresponding labor classification as required under the PROJECT LABOR AGREEMENT of the COUNTY OF CONTRA COSTA and California Labor Code.
- 16.7.5 If there are conflicts between the Wage rate and fringe benefit payments and classification between the Department of Industrial Relations and the PROJECT LABOR AGREEMENT of the COUNTY OF CONTRA COSTA, Contractor shall pay the higher wage rate and fringe benefits.
- 16.7.6 The Design Builder shall comply with all applicable federal, state and local laws and regulations regarding wage and hour laws, including without limitation Labor Code § 1813.
- 16.7.7 Design Builder shall and shall cause its Subcontractors to comply with the requirements of Labor Code section 1771.1 pertaining to the registration of contractors pursuant to Labor Code section 1725.5. Registration and all related requirements of those sections must be maintained throughout the term of this Agreement.
- 16.8 Environmental Controls. The Design Builder shall comply with all rules, regulations, ordinances and statutes that apply to any work performed under the Contract Documents including, without limitation, the storm water general permit, any toxic, water and soil pollution controls and air pollution controls specified in Government Code Section 11017. Contractor is responsible for insuring that Contractor'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. Contractor shall implement conditions on the Project to ensure that any environmental impact is minimized in accordance with the Notice of Determination dated July 28, 2015 for the Project.
 - 16.8.1 Hazardous Waste or Materials Disposal.
 - 16.8.1.1 Design Builder has the sole responsibility for determining current waste storage, handling, transportation, and disposal regulations for the Site and for each waste disposal facility. Except for generation fees and costs to be borne by the County, Design Builder must otherwise comply fully and at its sole cost and expense with these regulations and any applicable law. County may, but is not obligated to, require submittals with this information for it to review consistent with the Contract Documents.
 - 16.8.1.2 Design Builder shall develop and implement a system acceptable to County to track hazardous waste from the Site to disposal, including appropriate "Hazardous Waste Manifests" on the relevant federal

Environmental Protection Agency ("EPA") form, so that County may and is able to track the volume of Project waste delivered to and deposited in each landfill or disposal facility. Design Builder shall deliver to County upon its request each original landfill or disposal facility certificate of receipt.

- 16.8.1.3 Design Builder shall provide County with the name and address of each waste disposal facility prior to any disposal, and County shall have the express right to reject any proposed disposal facility. Design Builder shall not use any disposal facility to which County has objected. Design Builder shall document actual disposal or destruction of waste at a designated facility by completing a disposal certificate or certificate of destruction forwarding the original to the County upon its request.

16.9 Shoring Safety Plan.

- 16.9.1 At least five (5) Days in advance of excavating any trench five (5) feet or more in depth, the Design Builder shall submit to the County 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 § 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.
- 16.9.2 During the course of the Work, the Design Builder shall submit shoring plans to Regulatory Agency as required. The Design Builder shall allow adequate time for Regulatory Agency review and approval of all plans
- 16.9.3 During the course of the Work, the Design Builder 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 (5) feet in depth. Design Builder will be solely responsible for any damage or injuries that may result from excavating or trenching. The County's acceptance of any drawings showing the shoring or bracing design or work schedule shall not relieve the Design Builder of its responsibilities under this paragraph 16.9 (Shoring Safety Plan).

END OF DOCUMENT

DOCUMENT 007320

INSURANCE REQUIREMENTS

1. At or before the date specified in Document 002100 (Request for Proposals), Design Builder shall furnish to County satisfactory proof that Design Builder has in full force and effect the following classes of insurance in the form and with limits and deductibles specified below:
 - 1.1 Commercial General Liability insurance covering liability for personal injury, advertising injury, bodily injury and property damage and in a form providing coverage not less than that of a standard Commercial General Liability Insurance coverage form providing coverage for: (a) premises and operations, (b) independent contractors, (c) products and completed operations which shall remain in force for at least ten (10) years after Final Completion and acceptance of the final payment for the Work, (d) blanket contractual liability, (e) personal and advertising injury, and (f) explosion, collapse, and underground hazards. Such insurance shall have limits of not less than one million dollars (\$1,000,000) each occurrence, one million dollars (\$1,000,000) Personal and Advertising Injury, two million dollars (\$2,000,000) Annual General Aggregate and two million dollars (\$2,000,000) Products and Completed Operations Aggregate and any applicable deductible shall not exceed fifty thousand dollars (\$50,000).
 - 1.2 Commercial Automobile Liability Insurance covering all owned, non-owned, and hired vehicles. Such insurance shall provide coverage not less than the standard combined single limit of not less than one million dollars (\$1,000,000.00) each accident for Bodily Injury and Property Damage.
 - 1.3 **Builder's Risk Course of Construction Insurance will be provided by the Design Builder.** The Builder's Risk Insurance policy provided by the Design-Builder shall include the following provision: "Design Builder and its Subcontractors of any tier, including Design Builder's Architect and Engineers, will be named insureds, but not first named insureds, on the Builder's Risk Insurance policy." Coverage will include all risks of direct physical loss or damage to the insured property, with options for: delay in completion coverage [at a maximum of five million dollars (\$5,000,000)], land movement (including earthquake), and water damage (including flood). County will not hold the Design Builder liable under Public Contract Code § 7105 for damage due to earthquake or tidal wave. Major exclusions will include, but will not be limited to, wood frame construction projects, damage to existing property, Flood Zones A & V, reusable forms, contractor's tools and equipment, asbestos, dioxins, PCB's, mold, fungus, and testing of any used or rebuilt equipment not under manufacturer's warranty. Any deductible or self-insured retention under such insurance shall not exceed one hundred thousand dollars (\$100,000).
 - 1.4 Workers' Compensation Insurance for all persons whom the Design Builder may employ in carrying out Work contemplated under the Contract Documents, in accordance with the laws of the State of California and including Employer's Liability insurance in the amount of one million dollars (\$1,000,000) each accident, one million dollars (\$1,000,000) bodily injury each employee by disease. This insurance is primary for all covered employees' injuries at the Project Site. Prior to execution of this Agreement, Design Builder shall give Public Agency (1) a certificate of consent to self-insure issued by the Director of Industrial Relations, or (2) a certificate of Workers' Compensation insurance issued by an admitted insurer, or (3) an exact copy or duplicate thereof certified by the Director or the insurer. Design Builder is aware of and complies with Labor Code Section 3700 and the Workers' Compensation Law.

- 1.5 Umbrella/Excess Liability insurance over the Employer's Liability and Commercial General Liability insurance on a following form basis, extending coverage for ten (10) years after Final Completion and acceptance of the final payment for the Work. The total umbrella/excess liability limits shall be not less than Twenty-Six Million Two Hundred Thousand Dollars (\$26,200,000) combined single limit each occurrence and Twenty-Seven Million Dollars (\$27,000,000) annual aggregate.
 - 1.6 Contractors Pollution Legal Liability Insurance with limits of at least one million dollars (\$1,000,000) each pollution incident and annual aggregate, extending to cover remediation costs and third party bodily injury and property damage resulting from pollution conditions, including mold, fungus and lead based paint, and such insurance must remain in force until one year after Final Completion and acceptance of the final payment of the Work. Such insurance shall not limit claims by County against Design Builder or any Subcontractor insured thereunder. Any deductible or self-insured retention under such insurance shall not exceed one hundred thousand dollars (\$100,000).
 - 1.7 Commercial General Liability insurance applicable to operations of the Design Builder occurring off the Project Site, covering liability for personal injury, advertising injury, bodily injury, and property damage, in a form providing coverage not less than that of a standard Commercial General Liability Insurance coverage form providing coverage for: (a) premises and operations (b) independent contractors, (c) products and completed operations, and (d) blanket contractual liability. Such insurance shall have limits of not less than one million dollars (\$1,000,000) each occurrence, one million dollars (\$1,000,000) Personal and Advertising Injury, two million dollars (\$2,000,000) Annual General Aggregate and two million dollars (\$2,000,000) Products and Completed Operations Aggregate and shall remain in full force and effect until Final Completion and acceptance of final payment for the Work.
 - 1.8 PROFESSIONAL LIABILITY INSURANCE to insure Design Builder's activities in connection with this Agreement. If the insurance under this Section [1.6] is written on a claims-made basis, it shall be maintained continuously for a period no less than five (5) years following termination of this Agreement or Final Completion, whichever occurs later. The insurance shall have a retroactive date of placement prior to or coinciding with the date services are first provided that are governed by the terms of this Agreement and shall include, without limitation coverage insuring against professional errors and omissions arising from Design Builder's work on the Project, in an amount not less than five million dollars (\$5,000,000) per claim and ten million dollars (\$10,000,000) annual aggregate. Design Builder shall provide insurance covering claims made as a result of performance of Work on this Project. Any deductible or self-insured retention on such insurance shall be in an amount acceptable to the County.
2. All policies of insurance placed by the Design Builder or any of its Subcontractors shall be placed with insurers acceptable to County. Such insurance policies shall be placed with A.M. Best-rated A-X (or higher) insurance companies. The insurance required by paragraphs 1.1 and 1.5, above shall be non-cancelable except for non-payment of premium and shall provide thirty (30) Days written notice to County of cancellation, non-renewal or reduction of coverage. Required minimum amounts of insurance may be increased should conditions of Work, in opinion of County, warrant such increase. Design Builder shall increase required insurance amounts upon direction by County.
 - 2.1 County may consider policies placed by Design Builder with higher deductibles or self-insured retentions than stated herein as meeting these requirements, subject to review by County to determine that the self-insured retention or deductible is adequately funded. Design Builder may seek such a determination by submitting, either the most recent

actuarial report for the Design Builder's self-insurance plan or, if funded via a captive insurance company ("Captive"), the most recent financial statement for such Captive, a copy of the document creating or organizing the Captive, a written narrative summarizing how the Captive works and describing in detail any loss reserve fund associated with the Captive, and any reinsurance or other agreement for the Captive as well as any letter of credit or other agreement securing such reinsurance agreement. The request must be submitted to the County at the Department of Public Works by Monday, **October 12th, 2026 by 2:00 PM**, and may be marked as confidential or proprietary as appropriate.

3. Required Endorsements: The policies required above shall contain the following provisions:
 - 3.1 Insurance policies required under paragraphs 1.1, 1.2, 1.5, and 1.6 shall provide a blanket additional endorsement to include the County of Contra Costa, the Board of Supervisors, and their employees, representatives, consultants, and agents as additional insureds and each policy shall also provide for the naming of additional insureds throughout the duration of the Project.
 - 3.2 Such policies required under paragraphs 1.1, 1.2, 1.5, and 1.6 shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurance.
 - 3.3 Each such insurance policy required under paragraphs 1.1, 1.2, 1.4, 1.5, and 1.6 shall be primary and no other insurance or self-insured retention carried or held by County shall be called upon to contribute to a loss covered by insurance for the named insured.
 - 3.4 Each such policy required under paragraphs 1.2 and 1.4 shall provide that each insurance underwriter waives all of its rights of recovery by subrogation, or otherwise, against the County and all additional insureds described in paragraph 3.1.
4. Prior to the commencement of any Work, Design Builder shall deliver to County Certificates of Insurance for all required coverages on a standard ACORD Form 25-S, or other form as required by County, along with all required endorsements which shall have clearly typed thereon the County Contract Number and title of the Project. Written notice of cancellation, non-renewal, or reduction in coverage of any policy shall be mailed to the County (Attention: Contract Administration/Inspection) at the address for notice listed in Article 2 of Document 005200 (Agreement), thirty (30) Days in advance of the effective date of the cancellation, non-renewal, or reduction in coverage. Design Builder shall maintain insurance in full force and effect during entire period of performance of Contract Documents, during warranty and guarantee periods, and for such additional periods as required more specifically herein, specifically including the requirements of paragraphs 1.1, 1.5 and 1.6. At the time of making application for an extension of time, and during all periods exceeding the Contract Time resulting from any cause, Design Builder shall submit evidence that insurance policies will be in effect during requested additional period of time. Upon County's request, Design Builder shall submit to County, within thirty (30) Days, copies of the actual insurance policies or renewals or replacements. Upon County's request, Design Builder shall submit, within thirty (30) Days, copies of all documentation that the County deems necessary to determine the ongoing funding adequacy of any self-insured retention or deductible higher than stated herein. Such documentation may include the most recent actuarial report for the Design Builder's self-insurance plan or, if funded via a Captive, the most recent financial statement for such Captive, a copy of the document creating or organizing the Captive, a written narrative summarizing how the Captive works and describing in detail any loss reserve fund associated with the Captive, and any reinsurance or other agreement for the Captive as well as any letter of credit or other agreement securing such reinsurance agreement.

5. Design Builder shall pay all insurance premiums, including any charges for required waivers of subrogation or the cost to add additional insureds. If Design Builder fails to maintain insurance, County may take out comparable insurance, and deduct and retain amount of premium from any sums due Design Builder under Contract Documents.
6. If injury occurs to any employee of Design Builder, Subcontractor of any tier for which the employee or the employee's dependents (in the event of employee's death) is entitled to compensation from County under provisions of the Workers' Compensation Insurance and Safety Act, as amended, or for which compensation is claimed from County, County may retain out of sums due Design Builder under Contract Documents, amount sufficient to cover such compensation, as fixed by the Act, as amended, until such compensation is paid, or until it is determined that no compensation is due. If County is compelled to pay compensation, County may, in its discretion, either deduct and retain from the Contract Sum the amount so paid, or require Design Builder to reimburse County.
7. Nothing in this Document 007320 shall be construed as limiting in any way the extent to which Design Builder or any Subcontractor may be held responsible for payment of damages resulting from their operations.
8. If any Subcontractor is not an insured under the insurance policies of Design Builder described in paragraphs 1.1 and 1.5, above, each such Subcontractor must obtain and maintain a minimum of one million dollars (\$1,000,000) of Commercial General Liability insurance and five million dollars (\$5,000,000) of Umbrella/Excess Liability insurance. At the sole discretion of County, such limits for Subcontractor coverage may be reduced based on the size and scope of the subcontract. If any Subcontractor is not an insured under the insurance policy described in paragraph 1.6, each such Subcontractor whose work involves: the removal of asbestos, lead, or other toxic substance; the removal or replacement of underground tanks; or the use of toxic chemicals or substances must obtain a minimum of ten million dollars (\$10,000,000) in Contractors Pollution Legal Liability insurance. Except as required by this Article 8, all Subcontractors shall otherwise maintain the same types, terms and amounts of insurance required to be maintained by Design Builder with respect to their portions of the Work and all other provisions of this Document 007320 shall apply to such subcontractors. Design Builder shall cause the Subcontractors to furnish proof of such insurance to the County within ten (10) Days of the County's request.
9. The following provisions apply to any licensed professional engaged by Design Builder to perform portions of the Work ("Professional").
 - 9.1 Each Professional shall maintain the following insurance at its sole cost and expense:
 - 9.1.1 Provided such insurance is customarily required by County when professionals engaged in the profession practiced by Professional directly contract with County, Professional Liability Insurance, insuring against professional errors and omissions arising from Professional's work on the Project, in an amount not less than five million dollars (\$5,000,000) per claim and ten million dollars (\$10,000,000) annual aggregate. Professional shall provide insurance covering claims made as a result of performance of Work on this Project and shall maintain such insurance in effect for not less than five (5) years following Final Completion of the Project. Any deductible or self-insured retention on such insurance shall be in an amount acceptable to the County.
 - 9.1.2 Each Professional not covered by the insurance carried by Design Builder as described in paragraphs 1.1, and 1.5, shall satisfy the provisions of Article 8 with respect to Commercial General Liability limits and shall otherwise meet the requirements in paragraphs 1.2, 1.4 and 1.7. Each Professional shall satisfy all

other provisions of Articles 2, 3, 4, 5 and 6 above relating to that insurance, including without limitation providing required insurance certificates (containing the required endorsements) before commencing its Work on the Project.

10. Design Builder, any Subcontractor and any Professional whose work involves the removal of asbestos, lead, or other toxic substance; removal or replacement of underground tanks; shall obtain and maintain Pollution Legal Liability insurance including coverage for loss or damage arising out of professional liability, with a limit not less than five million dollars (\$5,000,000) per pollution incident and annual aggregate in a form and from an insuring entity acceptable to the County.

END OF DOCUMENT

DOCUMENT 007349

PROJECT LABOR AGREEMENT

for the

LOS MEDANOS RECOVERY CENTER PROJECT

2311 LOVERIDGE RD, PITTSBURG, CALIFORNIA

PREAMBLE

This Agreement is made and entered into the _____ day of _____, 2026, by and between _____, together with other contractors and/or subcontractors who shall become signatory to this Agreement by signing the "Agreement To Be Bound" (Attachment A), (hereinafter referred to as "Contractor(s)"); the local unions signatory hereto and those affiliated with the Building & Construction Trades Department of the American Federation of Labor Congress of Industrial Organizations and the Contra Costa Building and Construction Trades Council, all on their behalf and on behalf of the various local unions involved, (hereinafter referred to as "Union(s)"); _____ (hereinafter referred to as "Project Manager"); and _____ (hereinafter referred to as "Coordinator"). The parties further agree that the provisions of this Agreement shall apply to the following construction project:

1. Los Medanos Recovery Center Project at 2311 Loveridge Rd, Pittsburg, CA 94565 (hereinafter referred to as "Project").

WHEREAS, the successful completion of the Project is of the utmost importance to the County of Contra Costa (hereinafter referred to as "Public Agency" or "Owner"); and

WHEREAS, a skilled labor pool represented by the Unions will be required to complete the work involved; and

WHEREAS, the Unions agree to cooperate in every way possible with employees of the Contractors; and

WHEREAS, the parties to this Agreement mutually agree that safety, quality, productivity and labor harmony are primary goals; and

WHEREAS, the parties recognize the need for safe, efficient and speedy construction in order to reduce unnecessary delays and result in timely completion of the Project; and

WHEREAS, it is recognized that on a project of this magnitude with multiple contractors and bargaining units on the job site at the same time over an extended period of time, the potential for work disruption is substantial without an overriding commitment to maintain continuity of work; and

WHEREAS, the interests of the general public, the Public Agency, the Unions, and the Contractors would be best served if the construction work proceeded in an orderly manner without disruption because of strikes, sympathy strikes, work stoppages, picketing, lockouts, slowdowns or other interferences with work; and

WHEREAS, the Contractors and the Unions desire to mutually establish and stabilize wages, hours and working conditions for the workers employed on the Project by the Contractors, and further, to encourage close cooperation among the Contractors and the Unions to the end that a satisfactory, continuous and harmonious relationship will exist among the parties to this Agreement; and

WHEREAS, the Agreement is not intended to replace, interfere, abrogate, diminish or modify existing local or national collective bargaining agreements in effect during the duration of the Project, insofar as a legally binding agreement exists between the Contractors and the affected Unions except to the extent that the provisions of this Agreement are inconsistent with said collective bargaining agreements, in which event, the provisions of this Agreement shall prevail; and

WHEREAS, the contract for the Project will be awarded in accordance with the applicable provisions of the California State Public Contract Code; and

WHEREAS, the Public Agency has the absolute right to select the lowest reliable and responsible bidder for the award of the construction contract on the Project; and

WHEREAS, the parties' signatory to this Agreement pledge their full good faith and trust to work towards a mutually satisfactory completion of the Project;

NOW THEREFORE, the parties, in consideration of the mutual promises and covenants herein contained, mutually agree as follows:

PURPOSE

The purposes of this Agreement are to promote efficient construction operations on the Project, to ensure an adequate supply of skilled craftspeople and to provide for peaceful, efficient and binding procedure for settling labor disputes. In so doing, the parties to this Agreement establish the foundation to promote the public interest, to provide a safe work place, to assure high quality construction, to ensure an uninterrupted construction project, and to secure optimum productivity, on-schedule performance and the Public Agency's satisfaction.

It is the intent of the parties to set out uniform and fair working conditions for the efficient completion of the Project, maintain harmonious labor/management relations and eliminate strikes, lockouts and other delays.

It is in the interest of the parties to this Agreement to utilize all resources available in the local area, including those provided by minority-owned, women-owned, small, disadvantaged, and other businesses.

ARTICLE 1

DEFINITIONS

"Public Agency" or **"Owner"** means the County of Contra Costa;

"Coordinator" means the individual, company or entity responsible for the administration and application of this Agreement;

"Contractor" means a general contractor and/or subcontractor, at any tier, performing covered construction work on the Project;

“Project” means the LOS MEDANOS RECOVERY CENTER at 2311 Loveridge Rd, Pittsburg, CA 94565 as described in these Project Documents and identified as Contra Costa County Public Works Department project number 270-2601.

“Building Trades Council” or “Council” means the Contra Costa County Building and Construction Trades Council;

“Union” means the Unions that are signatory to this Agreement;

“Master Collective Bargaining Agreement” or “Local Collective Bargaining Agreement” means the local collective bargaining agreements for the affected crafts negotiated by the historically recognized collective bargaining parties in the area. Copies of all such collective bargaining agreements shall be on file with the Building Trades Council and are incorporated herein by reference.

ARTICLE 2

SCOPE OF AGREEMENT

- 2.1 This Agreement shall apply to all construction work including demolition, site preparation, alteration and repair on the above-described Project awarded by the Owner and/or Construction Manager, and any related change order(s).
- 2.2 This Agreement shall apply only to construction/craft employees working on this Project represented by the Unions signatory hereto, and shall not apply to Contractors' technical or non-manual employees including, but not limited to, executives, engineers, office and clerical employees, drafters, supervisors above the classification of general foreman, timekeepers, messengers, or inspectors, material testers, and/or x-ray technicians, except to the extent that such inspectors, material testers, and/or x-ray technicians are customarily covered by the Local Collective Bargaining Agreement and as to which classification a prevailing wage determination has been published.
- 2.3 Except as required otherwise by the Project documents or accepted construction practices, there shall be no limitation or restriction upon the choice of materials or upon the full use and installation of equipment, machinery, package units, factory pre-cast, prefabricated or preassembled materials, tools or other labor-saving devices. Lawful fabrication provisions of the appropriate national or Local Collective Bargaining Agreements shall be applicable.
- 2.4 It is recognized by the parties to this Agreement that the signatory Coordinator and Contractor(s) are acting only on behalf of said Coordinator and Contractor(s), and said Coordinator and Contractor(s) have no authority, either expressed, implied, actual, apparent or ostensible, to speak for or bind the Owner.
- 2.5 It is expressly agreed and understood by the parties hereto that the Owner shall retain the right at all times to perform and/or subcontract all portions of the construction and related work on the Project site not covered by this Agreement.
- 2.6 The working conditions and hours of employment herein provided have been negotiated between the parties' signatory to this agreement.
- 2.7 Without limiting the foregoing, items specifically excluded from the scope of this Agreement include the following:
 - (a) Equipment and machinery owned or controlled and operated by the Owner;

- (b) All employees of any Contractor, design team or any other consultant of the District not performing manual labor within the scope of this Agreement;
 - (c) Any work performed on or near or leading to the site of work covered by this Agreement and undertaken by state, county, city or other governmental bodies, or their contractors, or by public utilities or their contractors, and/or by the Owner or its contractors (for work which is not part of the scope of this Agreement);
 - (d) Off-site maintenance of leased equipment and on-site supervision of such work;
 - (e) Laboratory or specialty testing or inspection not ordinarily done by the signatory local unions;
 - (f) Non-construction support services contracted by the Owner or any Contractor in connection with this Project; and
 - (g) All work by employees of the Owner.
- 2.8 Work covered by the Project Labor Agreement within the craft jurisdiction of the Elevator Constructors will be performed under the terms of the National Agreement of the International Union of Elevator Constructors, except that Articles 5, 6, and 11 of the Project Labor Agreement will apply to such work.

ARTICLE 3

SUBCONTRACTS

- 3.1 Each Contractor(s) agrees that neither it nor any of its subcontractors will subcontract any work to be done on the Project except to a person, firm, or corporation who is or becomes party to this Agreement. Any Contractor(s) or subcontractor working on the Project shall, as a condition working on the Project, become signatory to and perform all work under the terms of this Agreement.
- 3.2 A subcontractor is defined as any person, firm or corporation who agrees under contract with the Contractor(s), or a subcontractor of the Contractor, at any tier, to perform on the Project, any part or portion of the construction work covered by the prime contract, including the operating of construction equipment, performance of labor and/or installation of materials.
- 3.3 The Contractor(s) has the primary obligation for performance of all conditions of this Agreement. This obligation cannot be relieved, evaded or diminished by subcontracting. Should the Contractor(s) elect to subcontract, the Contractor(s) shall continue to have such primary obligation.
- 3.4 The Contractor shall provide in the subcontract that the subcontractor will pay the wages and benefits and will observe the hours and all other terms and conditions of this Agreement. The Contractor shall remain liable for any delinquency by such subcontractor in the payment of any wages or fringe benefits provided herein, including payments to Health & Welfare, Pension, Vacation/Holiday, Dues and Training & Retraining Funds to the extent provided by law.
- 3.4.1 The Contractor(s) will give written notice to the Union(s) of any subcontract involving the performance of work covered by this Agreement within either five (5) days of entering such subcontract or before the subcontractor commences work on the Project, whichever occurs first, and shall specify the name and address of the subcontractor. Written notice at a Pre-Job

Conference shall be deemed written notice under this provision for those subcontractors listed at the Pre-Job only.

- 3.4.2 The provisions of this Section 3.4 shall be applied only to the extent permitted by law and, notwithstanding any other provision of this Agreement, no aspect of the subcontractors' clause, including its enforcement, may be enforced by or subject to strike action or any other labor disruption.

ARTICLE 4

RELATIONSHIP BETWEEN PARTIES

- 4.1 This Agreement shall only be binding on the signatory parties hereto, and shall not apply to parents, affiliates, subsidiaries, or other divisions of the Coordinator and signatory Contractor(s) unless signed by such parent, affiliate, subsidiary, or other division of such company.
- 4.2 Each Contractor(s) shall alone be liable and responsible for its own individual acts and conduct and for any breach or alleged breach of this Agreement except as modified by Article 3. Any alleged breach of this Agreement by a Contractor(s) or any dispute between the signatory Union(s) and the Contractor(s) respecting compliance with the terms of this Agreement, shall not affect the rights, liabilities, obligations and duties between the signatory Union(s) and each other Contractor(s) party to this Agreement.
- 4.3 It is mutually agreed by the parties that any liability by a signatory Union(s) to this Agreement shall be several and not joint. Any alleged breach of this Agreement by a signatory Union(s) shall not affect the rights, liabilities, obligations and duties between the signatory Contractors and the other Unions party to this Agreement.

ARTICLE 5

NO STRIKES - NO LOCKOUTS

- 5.1 During the life of this Agreement, the Union(s) and its members, agents, representatives and employees shall not incite, encourage, condone or participate in any strike, walkout, slowdown, boycott, sympathy strike, picketing or other work stoppage of any nature whatsoever, for any cause whatsoever, or any other type of interference of any kind, coercive or otherwise, and it is expressly agreed that any such action is a violation of this Agreement.
- 5.1.1 Withholding employees for failure of a Contractor(s) to tender trust fund contributions as required in accordance with Article 16 or failure to meet its weekly payroll obligations is not a violation of this Article 5.

Should a Contractor performing work on this Project be delinquent in the payment of Trust Fund contributions required under this Agreement with respect to employees represented by the Union, the Union may request, that the General Contractor issue joint checks payable to the Contractor and the appropriate employee benefit Trust Fund(s) until such delinquencies are satisfied. Any Trust Fund claiming that a Contractor is delinquent in its fringe benefit contributions to the funds, will provide written notice of the alleged delinquency to the affected Contractor, with copies to the General Contractor and or the Owner. The notice will indicate the amount of delinquency asserted and the period that the delinquency covers. It is agreed, however, with respect to contractors' delinquent in trust or benefit contribution payments, that nothing in this Agreement shall affect normal contract remedies available under the local collective bargaining agreements. If the General Contractor is delinquent in the payment of Trust Fund(s) contributions for covered

work performed on this project, the General Contractor agrees that the affected Trust Fund(s) may place the Owner on notice of such delinquencies and the General Contractor further agrees that the Owner may issue joint checks to the General Contractor and the Trust Fund(s) until the delinquency is satisfied.

5.1.2 Expiration of Local and Other Applicable Agreements. It is specifically agreed that there shall be no strike, sympathy strike, picketing, lockout, slowdown, withholding of work, refusal to work, walk-off, boycott or other work stoppage of any kind as a result of the expiration of any local, regional or other applicable labor agreement having application at the Project and/or failure of the parties to that agreement to reach a new contract. In the event that such a local, regional, or other applicable labor agreement does expire and the parties to that agreement have failed to reach agreement on a new contract, work will continue to the Project on one of the following two bases, both of which will be offered by the Union(s) involved to the General Contractor and the Contractors affected:

- (a) Each of the Union(s) working with a contract expiring must offer to continue working on the Project under interim agreements that retain all the terms of the expiring contract, except that the Union(s) involved in such expiring contract(s) may each propose wage rates and Contractor contribution rates to employee benefits funds different from what those rates were under the expiring contract(s). Said interim agreement(s) would be superseded by any subsequently reached industry agreement(s) as of the date the industry agreement is reached. The terms of the Union's interim agreement offered to the Contractor will be no less favorable than the terms offered by the Union to any other Contractor or group of Contractors covering commercial construction work in Contra Costa County; or
- (b) Each of the Union(s) with a contract expiring must offer to continue working on the Project under all the terms of the expiring contract, including the wage rates and Contractor contribution rates to the employee benefit funds, if the Contractor(s) affected by that contract agree to the following retroactivity provisions; if a new local, regional or other applicable labor agreement for the industry having application at the Project is ratified and signed during the term of this Agreement and if such new labor agreement provides for retroactive wage increases, then each affected Contractor shall pay to its employees who performed work covered by this Agreement at the Project during the period between the effective dates of such labor agreements, an amount equal to any such retroactive wage and benefit increases established by such new labor agreement, retroactive to whatever dates are provided by the new local, regional or other applicable agreement for such increase to go into effect, for each employee's hours of work on the Project during the retroactivity period. All parties agree that such affected Contractor shall be solely responsible for any retroactive payments to its employees and trust funds and that neither the General Contractor nor the Owner has any obligations, responsibility or liability whatsoever for any such retroactive payments or collection of any such retroactive payments from any other Contractor.

The General Contractor and the affected Union will mutually decide for each affected subcontractor (after consultation with each such subcontractor) between the above two options of having its subcontractor continue to work on the Project under the terms of the interim agreement offered under paragraph (a) above by the Union, or having its subcontractor continue to work on the Project on the retroactivity basis established under paragraph (b) above. The General Contractor and the affected Union may mutually decide upon the interim agreement option for some subcontractors and the retroactivity option for other subcontractor(s). To decide between the two options, the General Contractor will be given one week after the particular labor agreement has expired or one week after the Union has personally delivered to the General Contractor in writing its

specific offer of terms of the interim agreement pursuant to paragraph (a) above, whichever is the later date.

- 5.2 If a violation of this Article occurs, upon written facsimile or telegraphic notice of such violation to the Local and International Union(s) offices, the Union(s) and its officers shall take immediate action and will prevent, end or avert any such aforementioned activity or the threat thereof by any of its officers, members, representatives or employees, either individually or collectively, including but not limited to, publicly disavowing any such action and ordering all such officers, representatives, employees or members who participate in such unauthorized activity to cease and desist from same immediately and to return to work and comply with its orders. The Contractor(s) shall have the right, in the event of a work stoppage by the Union(s) to replace the employees represented by the Union(s) in violation of this Agreement in any way the Contractor(s) chooses, until the Union(s) effects the return to work of such employees. Nothing in this Agreement shall be construed to limit or restrict the right of any of the parties to this Agreement to pursue fully any and all remedies available under law in the event of a violation of this Article 5.
- 5.3 In consideration of the foregoing, the Contractor(s) shall not incite, encourage or participate in any lockout or cause to be locked out any employee covered under the provisions of this Agreement. The term "lockout" does not refer to the discharge, termination or layoff of employees by the Contractor(s) for any reasons in the exercise of its rights as set forth in any provision of this Agreement, nor does "lockout" include the Owner's or Contractors' decision to terminate or suspend work on the site or any portion thereof for any reason.
- 5.4 Any employee or employees inciting, encouraging or participating in any strike, slowdown, picketing, sympathy strike or other activity in violation of this Agreement is subject to immediate discharge and the procedure of Article 11, if invoked.
- 5.5 Any party to this Agreement may institute the following binding arbitration procedure when such a breach is alleged. In the event a party institutes this procedure, arbitration shall be mandatory.
- 5.5.1 The party invoking this procedure shall immediately notify Thomas Angelo, who the parties agree shall be the permanent Arbitrator under this procedure. In the event that the permanent Arbitrator is unavailable at any time, Robert Hirsch is appointed as the back-up Arbitrator. Notice to the Arbitrator shall be by the most expeditious means available, with notice by facsimile, telegraph or similar means to the party alleged to be in violation and the involved Union General President.

The contact information for the permanent Arbitrator and the back-up Arbitrator is:

Thomas Angelo
Arbitrator
P.O. Box 1937
Mill Valley, CA 94942
Phone: (415) 381-1701
Mobile: (415) 699-6527
Fax: (415) 380-9792
Email: tangelomv@gmail.com

Robert Hirsch
Back-Up Arbitrator
P.O. Box 170428
San Francisco, CA 94117
Phone: (415) 362-9999
Mobile: (415) 676-9619
Fax: (415) 752-7678
Email: rmhirsch@gmail.com

- 5.5.2 Upon receipt of said notice the Arbitrator named above or the alternate shall designate a place for, schedule and hold a hearing within twenty-four (24) hours.

- 5.5.3 The Arbitrator shall notify the parties by facsimile, telegram or similar means of the place and time chosen for the session. A failure of any party or parties to attend said hearing shall not delay the hearing of evidence or issuance of an award by the Arbitrator.
- 5.5.4 The sole issue at the hearing shall be whether or not a violation of this Article has in fact occurred, and the Arbitrator shall have no authority to consider any matter in justification, explanation or mitigation of such violation or to award damages, which issue is reserved for court or other arbitration proceedings, if any. The award shall be issued in writing within three (3) hours after the close of the hearing and may be issued without a written opinion. If any party desires a written opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with, or enforcement of, the award. The Arbitrator shall order cessation of the violation of this Article and other appropriate relief, and such award shall be served on all parties by hand or registered mail upon issuance.
- 5.5.5 The award shall be final, binding and non-reviewable as to the merits, and may be enforced by any court of competent jurisdiction, upon the filing of this Agreement and all other relevant documents referred to hereinabove in the following manner. Facsimile, telegraphic or similar notice of the filing of such enforcement proceedings shall be given to the other party. In the proceeding to obtain a temporary order enforcing the Arbitrator's award as issued under Section 5.6.4 of the Article, all parties waive the right to a hearing and agree that such proceedings may be ex parte. Such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the Arbitrator's award shall be served on all parties by hand or by delivery to their last known address or by registered mail.
- 5.5.6 Any rights created by statute or law governing arbitration or injunction proceedings inconsistent with the above procedure, or which interfere with compliance therewith, are hereby waived by the parties to whom they accrued.
- 5.5.7 The costs of the arbitration, including the fee and expenses of the Arbitrator, shall be divided equally between the parties to the arbitration.
- 5.5.8 The procedures contained in Section 5.6 shall be applicable only to alleged violations of this Article. Discharge or discipline of employees for violation of this Article shall be subject to the grievance and arbitration procedures of Article 11.

ARTICLE 6

WORK ASSIGNMENTS AND JURISDICTIONAL DISPUTES

- 6.1 All Contractors and subcontractors shall stipulate to and have the responsibility for making work assignments in accordance with the rules, regulations and procedures of the Plan for Settlement of Jurisdictional Dispute in the Construction Industry approved by the Building & Construction Trades Council AFL-CIO, June 14, 1984, or any successor plan.
- 6.2 There will be no strikes, no work stoppages or slowdowns or other interferences with the work because of jurisdictional disputes.
- 6.3 Where a jurisdictional dispute exists and cannot be resolved by the Local Unions involved, it shall be referred for resolution to the International Unions. The resolution of the dispute shall be reduced to writing, signed by the authorized representative of the International Unions and the Contractor(s). The original assignments made by the Contractor(s) shall be followed until such time as the dispute is resolved in accordance with this Section.

- 6.3.1 In the event that the respective International Unions of the disputing Locals and the Contractor(s) are unable to resolve the dispute within five (5) days from the date of referral, the dispute may be referred by any of the Interested Parties to the arbitration system of the Plan for the Settlement of Jurisdictional Disputes referred to in Section 6.1 of this Article.
- 6.4 There shall be no work stoppage, work interruption, strike, sympathy strikes, picketing, hand-billing or public notices of any kind while any jurisdictional dispute is being resolved. Pending resolution of the dispute, the work shall continue uninterrupted as originally assigned by the Contractor(s). The Contractor(s) shall have the right, in the event of a work stoppage by the Union(s), to replace the employees represented by the Union(s) in violation of this Agreement in any way the Contractor(s) choose, until the Union(s) effects the return to work of such employees.

ARTICLE 7

COORDINATOR

- 7.1 The above-named Coordinator is responsible for the administration and application of this Agreement, but neither the Coordinator nor the Public Agency shall incur any liability as a consequence of such administration or application.
- 7.2 The Coordinator shall endeavor to facilitate harmonious relations between the Contractors and Unions signatory hereto and will conduct the monthly joint Labor/Management meeting referred to in Article 8 below. The Coordinator shall not be responsible for the acts of the Contractors or Unions signatory hereto, and will not be a party to any arbitration or litigation arising out of this Agreement.

ARTICLE 8

JOINT LABOR/MANAGEMENT MEETINGS

- 8.1 A joint Labor/Management meeting will be held on a monthly basis between the Coordinator, the Contractors and the signatory Unions. The purpose of these meetings is to promote harmonious labor/management relations, ensure adequate communications and advance the proficiency and efficiency of the Craftsperson and the Contractors on the Project. These monthly meetings will also include discussion of the scheduling and productivity on work performed on the Project.
- 8.2 A Pre-Job Conference will be held prior to the commencement of work to establish the scope of work in each Contractor's contract. When a contract has been let to a Contractor(s) covered hereby, a Pre-Job Conference and/or Mark-Up Meeting shall be required upon request of any Union(s), Contractor(s) or the Coordinator.
- 8.3 The Contractor performing the work shall have the responsibility for making work assignments in accordance with Section 6.1 of this Agreement. The work assignments shall be made in writing. Any craft objecting to the Contractor's proposed assignment of work shall have ten (10) working days from the date of the mark-up meeting to submit written objections to the Contractor before the Contractor makes the work assignments final.
- 8.4 The Coordinator will schedule and attend all Pre-Job and Mark-Up Meetings and participate in discussions as they pertain to the terms and conditions of this Agreement.

ARTICLE 9

MANAGEMENT RIGHTS

- 9.1 The Contractor(s) retains full and exclusive authority for the management of their work forces for all work performed under this Agreement. This authority includes, but is not limited to the right to:
- A. Plan, direct and control the operation of all the work.
 - B. Decide the number and types of employees required to perform the work safely and efficiently.
 - C. Hire, promote and lay off employees as deemed appropriate to meet work requirements and/or skills required.
 - D. Require all employees to observe the Contractors' Project Rules, Security and Safety Regulations, consistent with the provisions of this Agreement. These Project Rules and Regulations shall be reviewed and mutually agreed upon at the Pre-Job meeting and supplied to all employees and/or posted on the jobsite. The Contractor may implement drug testing on the job consistent with the drug testing procedures contained in the applicable craft agreement.
 - E. Discharge, suspension or discipline will be handled under the applicable craft agreement.
 - F. Assign and schedule work at its sole discretion and determine when overtime will be worked. There shall be no refusal by a craft to perform work assigned, including overtime work, however, individual craftspeople shall not be required to work overtime unless specifically dispatched for overtime work. Any cases of a craft's refusal to work overtime shall be subject to the grievance procedure.
 - G. Utilize any work methods, procedures or techniques and select and use any type or kind of materials, apparatus or equipment regardless of source, manufacturer or designator (in accordance with Article 21), except as required otherwise by the Project documents or accepted construction practices.
 - H. The foregoing listing of management rights shall not be deemed to exclude other functions not specifically set forth herein.

ARTICLE 10

WORK RULES

- 10.1 The selection of craft foremen and general foremen shall be entirely the responsibility of the Contractor(s), it being understood that in the selection of such foremen, the Contractor(s) will give first consideration to the qualified individuals available in the local area and in accordance with the Craft's local Collective Bargaining Agreement. Foremen and general foremen shall take orders from the designated Contractor(s) representatives.
- 10.2 There shall be no limit on production by employees nor restrictions on the full use of tools or equipment. Craft persons using tools shall perform any of the work of the trade and shall work under the supervision of the craft foremen.

- 10.3 Security procedures for control of tools, equipment and materials are solely the responsibility of Contractor(s).
- 10.4 A badge system may be used to check in and out. Each employee must personally check in and out. The Contractor(s) will provide adequate facilities for check in and out in an expeditious manner.
- 10.5 Employees shall be at their place of work (as designated by the Contractor at the pre-job meeting) and ready to work at the starting time and shall remain at their place of work performing their assigned functions until quitting time. A reasonable time will be allowed for employees to put company and personal tools in secured storage and return to the parking lot by quitting time. The parties reaffirm their policy of a fair day's work for a fair day's wage.
- 10.6 Slowdowns, standby crews and featherbedding practices will not be tolerated.
- 10.7 It is understood by the Contractor(s) and agreed to by the Union(s), that the employees of the Contractor(s) will perform the work requested by the Contractor(s) without having any concern or interference with any other work performed by any employees of the Owner or others who are not covered by this Agreement including, but not limited to, maintenance and operations.
- 10.8 Rest periods shall be provided in accordance with Industrial Welfare Commission Wage Order. Employees will be permitted to have personal thermos bottles, the contents of which may be consumed during working hours at their assigned work locations.
- 10.9 All foremen will remain with their crews and supervise such crews in the performance of their duties.
- 10.10 There shall be no interference with vendor or supplier deliveries of equipment, apparatus, machinery and construction materials to the jobsite since such deliveries shall not fall under this Agreement. Unloading of the above will be performed by signatory Contractors' employees.
- 10.11 The Contractor(s) will furnish facilities for storage of tools, adequate sanitary facilities and clean, heated, dry change rooms. However, Contractor(s) will incur no liability for loss, theft, or damage to personal tools left in tool storage not provided by the Contractor(s). The Contractor(s) has the right to take any reasonable action deemed necessary to control tool losses. Personal tools when brought onto the jobsite at time of employment may be inventoried as to type and number of tools and condition. Tool provision and losses will be handled according to the individual craft local agreements.
- 10.12 The Contractor(s) and the Unions recognize the necessity for promoting efficiency and agree that no rules, customs or practices shall be permitted that cause overmanning, limit production or increase the time required to do the work, and no limitation shall be placed upon the amount of work which an employee shall perform, nor shall there be any restrictions against the use of any kind of machinery, tools or labor-saving devices, except as required by the Project documents or accepted construction practices. However, the lawful manning provisions of the Craft local agreements shall be recognized.
- 10.13 Employees shall receive a one-half hour lunch period with pay and meals at the expense of the Contractor(s) if the employee is required to work beyond ten (10) consecutive hours (not including the regular one-half hour lunch period), and after working each additional four (4) hours. If meals are not provided, a meal allowance of \$10.00 will be paid in lieu thereof.

ARTICLE 11

GRIEVANCE PROCEDURE

- 11.1 All disputes concerning the interpretation and/or application of this Agreement which do not fall within the Article 5 No-Strike No-Lockout procedure shall be governed by the following grievance and arbitration procedures. All other disputes shall be governed by the grievance and arbitration procedures contained in the applicable local collective bargaining agreement.
- 11.2 A grievance shall be considered null and void if not brought to the attention of the Contractor(s) within five (5) working days after the grievance is alleged to have occurred or within five (5) working days after the Union's first knowledge of the grievance. Similarly, a grievance shall be considered null and void if not brought to the attention of the Union(s) within five (5) working days after the grievance is alleged to have occurred or within five (5) working days after the Contractor(s)' first knowledge of the grievance.
- 11.3 Grievances shall be settled according to the following Steps:
- Step 1: The steward or business representative and the grievant shall attempt to resolve the grievance with the craft supervisor.
- Step 2: In the event the matter remains unresolved for five (5) working days in Step 1 above, within five (5) working days thereafter, the grievance shall be reduced to writing and may then be referred by the Union to the Contractor(s) for discussion and resolution.
- Step 3: In the event the matter remains unresolved for five (5) working days in Step 2, either Party may request, within five (5) working days thereafter, that the dispute be submitted to arbitration.
- Step 4. The Parties agree that the Arbitrator who will hear the grievance shall be selected from among the following: William Riker, Barry Winograd, Thomas Angelo, Robert Hirsch, and Jeri-Lou Cossack. The Arbitrator shall be selected on a rotating basis and the Coordinator shall be responsible for advising the parties as to which Arbitrator is next in line to resolve the dispute. If the Arbitrator next in line is unavailable to hear the dispute within a reasonable time period in the opinion of the parties, the next Arbitrator in line shall serve as the Arbitrator of the dispute.
- The addresses, telephone numbers, and fax numbers for the above-named Arbitrators are listed in Attachment B.
- 11.4 The arbitration procedure contained herein, once invoked, shall be mandatory. Should a Party to the procedure fail or refuse to participate in the hearing, if the Arbitrator determines that proper notice of the hearing has been given, said hearing shall proceed in to a default award. The Arbitrator's award shall be final and binding on all Parties to the arbitration. The costs of the arbitration, including the arbitrator's fee and expenses, shall be borne equally by the Parties. The Arbitrator's decision shall be confined to the question(s) posed by the grievance and the Arbitrator shall not have authority to modify amend, alter, add to, or subtract from, any provisions of this Agreement.
- 11.5 The time limits set out in this procedure may, upon mutual agreement, be extended. Any request for arbitration, request for extension of time limits, and agreement to extend such time limits shall be in writing.
- 11.6 The Contractor(s), as well as the Union, may bring forth grievances under this Article.

ARTICLE 12

UNION RECOGNITION AND REPRESENTATION

- 12.1 All employees working on the project shall be governed by the applicable union security clause of the applicable craft's Schedule A Agreement.

Employees hired by the Contractor(s) shall, as a condition of employment, be responsible for the payment of the applicable monthly dues, working dues and any associated fees uniformly required for union membership in the local union which is signatory to this agreement. Further, there is nothing in this Agreement that would prevent non-union employees from joining the local union.

- 12.2 The Contractor(s) recognizes the Unions signatory hereto as the sole and exclusive collective bargaining representatives for its craft employees on the Project.
- 12.3 Authorized representatives of the Unions shall have access to the site during established working hours, provided they do not unduly interfere with the work of the employees.
- 12.4 A Steward shall be a working journeyman appointed by the authorized union representative of the Local Union(s) who shall, in addition to work as a journeyman, be permitted to perform during working hours such Union(s) duties as cannot be performed at other times which consists of those duties assigned by the Business Manager or Business Agent. The Union(s) agrees that such duties shall be performed as expeditiously as possible and the Contractor(s) agrees to allow the Steward a reasonable amount of time for the performance of such duties. It is understood and agreed that the Steward's duties do not include any matters relating to referral or hiring. The Steward shall not leave the work area without notifying the appropriate supervisor.
- 12.5 The Steward will be paid at the journeyman wage for the job classification in which the Steward is employed.
- 12.6 The treatment of stewards shall be in accordance with the applicable craft agreement.

ARTICLE 13

REFERRAL

- 13.1 Contractors performing construction work on the Project described in the Agreement shall, in filling craft job vacancies, utilize and be bound by the registration facilities and referral systems established or authorized by the Unions signatory hereto when such procedures are not in violation of Federal law. The Contractor(s) shall have the right to reject any applicant referred by the Union(s), in accordance with Article 19.
- 13.2 The Contractor(s) shall have the unqualified right to select and hire directly all supervisors above general foreman it considers necessary and desirable, without such persons being referred by the Union(s).
- 13.3 In the event referral facilities maintained by the Union(s) are unable to fill the requisition of a Contractor(s) for employees within a forty-eight (48) hour period after such requisition is made by the Contractor(s) (Saturday, Sunday and holidays excluded), the Contractor(s) shall be free to obtain employees from any source.

- 13.4 The Unions shall exert their utmost efforts, including requesting assistance from other Local Unions, to recruit sufficient number of skilled Craft persons to fulfill the labor requirements of the Contractors.
- 13.5 Recognizing the special needs of this Project and the acute shortage of skilled craftspeople, the Unions shall consider a Contractor's request to transfer key employees to work on this Project in a manner consistent with the Union's referral procedures.

ARTICLE 14

NON-DISCRIMINATION

- 14.1 The Unions and Contractors shall not discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, age, religion, Vietnam veteran or Vietnam Era status, disability as identified in the Americans with Disabilities Act or any other basis recognized by law.

ARTICLE 15

APPRENTICES

- 15.1 Recognizing the need to maintain continuing support of programs designed to develop adequate numbers of competent workers in the construction industry, the Contractor(s) will employ apprentices in the respective crafts to perform such work as is within their capabilities and which is customarily performed by the craft in which they are indentured.
- 15.2 The apprentice ratios will be in compliance with the applicable provisions of the California Labor Code and Prevailing Wage Rate Determination.
- 15.3 There shall be no restrictions on the utilization of apprentices in performing the work of their craft provided they are properly supervised.

ARTICLE 16

WAGE SCALES and FRINGE BENEFITS

- 16.1 All employees covered by this Agreement shall be classified and paid in accordance with the classification and wage scales contained in the appropriate local agreements which have been negotiated by the historically recognized bargaining parties and in compliance with the applicable general prevailing wage determination made by the Director of Industrial Relations pursuant to California Labor Code.
- 16.2 During the period of construction on this Project, the Contractors agree to recognize and put into effect such increases in wages and recognized fringe benefits as shall be negotiated between the various Unions and the historically recognized local bargaining parties on the effective date as set forth in the applicable collective bargaining agreement. The Unions shall notify the Contractors in writing of the specific increases in wages and recognized fringe benefits and the date on which they become effective.
- 16.3 The Contractors hereby adopt and agree to be bound by the written terms of the legally established local trust agreements specifying the detailed basis on which payments are to be made into, and benefits paid out of, such appropriately qualified employee fringe benefit funds established by such appropriate local agreements. The Contractors authorize the parties to such

local trust agreements to appoint Trustees and successor Trustees to administer the trust funds, and hereby ratify and accept the Trustees so appointed as if made by the Contractors.

- 16.4 Wages due shall be paid to all employees weekly, not later than on Friday, and not more than three (3) days' wages may be withheld and shall be paid before the end of the work shift. Payment shall be made by check with detachable stub.
- 16.5 When an employee is discharged, the employee shall be paid wages due immediately. If an employee voluntarily terminates, wages due shall be paid in accordance with California State Law.

ARTICLE 17

HOURS OF WORK, OVERTIME and SHIFTS

- 17.1 Hours or Work: The work week will start on Monday and conclude on Sunday. Eight (8) hours per day shall constitute a standard workday between the hours of 6:00 a.m. and 5:30 p.m. with one-half (1/2) hour designated for lunch midway through the shift. Forty (40) hours per week, Monday through Friday, shall constitute a regular week's work. The foregoing provisions of this Article are applicable unless otherwise provided in the General Prevailing Wage Determinations made by the Director of Industrial Relations pursuant to California Labor Code. Nothing herein shall be construed as guaranteeing any employee eight (8) hours per day or forty (40) hours per week.
- 17.2 Overtime: Overtime will be in compliance with the applicable General Prevailing Wage Determination made by the Director of Industrial Relations pursuant to California Labor Code.
- 17.3 Shifts: The Contractor(s) shall have the right to establish shifts for any portion of the work in accordance with this Section.
- 17.3.1 If two (2) or three (3) shifts are worked, the first shift shall consist of eight (8) hours of continuous work exclusive of a one-half (1/2) hour non-paid lunch period, the second shift shall consist of seven and one-half (7 1/2) hours of continuous work exclusive of a one-half (1/2) hour non-paid lunch period and the third shift shall consist of seven (7) hours of continuous work exclusive of a one-half (1/2) non-paid lunch period for eight (8) hours pay.
- 17.3.2 Shift work may be performed at the option of the Contractor(s) but, when performed, it must continue for a period of not less than five (5) consecutive working days. The straight time work week shall be considered to start with the day shift on Monday and end with the conclusion of the second or third shift on the fifth consecutive day.

ARTICLE 18

HOLIDAYS

- 18.1 Holidays will be in compliance with the applicable General Prevailing Wage Determination made by the Director of Industrial Relations pursuant to California Labor Code.

ARTICLE 19

REPORTING PAY

- 19.1 Any employee reporting for work and for whom no work is provided, except when given prior notification not to report to work, shall receive two (2) hours pay at the regular straight time hourly rate. Any employee who starts work shall receive at least four (4) hours pay at the regular straight time hourly rate. Any employee who works beyond four (4) hours shall be paid for actual hours worked.
- 19.1.1 Whenever minimum reporting pay is provided for employees, they will be required to remain at the project site available for work for such time as they receive pay, unless released sooner by the principal supervisor of the Contractor(s) or its designated representative.
- 19.1.2 The provisions of this Section are not applicable where the employee voluntarily quits, in which case the employee shall be paid for the actual time worked.
- 19.2 It will not be a violation of this Agreement when the Owner or Contractor(s) consider it necessary to shut down because of an emergency situation that could endanger life or property. In such cases, employees will be compensated only for the actual time worked. In the case of a situation described above whereby the Owner or Contractor(s) request employees to wait in a designated area available for work, the employees will be compensated for the waiting time.

ARTICLE 20

TRAVEL, SUBSISTENCE and ZONE PAY

- 20.1 Travel, subsistence and zone pay will be in compliance with the applicable General Prevailing Wage Determination made by the Director of Industrial Relations pursuant to California Labor Code.

ARTICLE 21

HEALTH AND SAFETY

- 21.1 The employees covered by the terms of this Agreement shall at all times, while in the employ of the Contractor(s), be bound by the safety rules and regulations as established by the Owner and Contractor(s) and in accordance with OSHA/Cal-OSHA. These rules and regulations will be published and posted at conspicuous places throughout the Project.
- 21.2 In accordance with the requirements of OSHA/Cal-OSHA, it shall be the exclusive responsibility of each Contractor(s) on the Project to assure safe working conditions for its employees and compliance by them with any safety rules contained herein or established by the contractor(s). Nothing in this Agreement will make the Union(s) or owner liable to any employee or to other persons in the event that injury or accident occurs.
- 21.3 A convenient supply of cold and potable drinking water shall be provided by the Contractor(s).
- 21.4 The Contractor(s) and Union(s) agree to abide by the substance abuse policy contained in the respective Master Collective Bargaining Agreements for the affected crafts.

ARTICLE 22

SECURITY OF MATERIAL, EQUIPMENT and TOOLS

- 22.1 Security procedures for the control of tools, equipment and materials shall be solely the responsibility of the Contractor(s).
- 22.2 All employees will comply with the security procedures established by the Contractor(s) and the Owner.
- 22.3 Theft and/or loss of the Owner's tools and equipment is a major concern on the Project. The Owner's Security Regulations will be strictly enforced.
- 22.4 Violations or failure to comply with the Owner's Security Regulations while on the Project jobsite may result in termination and/or exclusion from the Project jobsite.

ARTICLE 23

CALL-INS

- 23.1 Call-ins will be governed by the applicable craft collective bargaining agreement.

ARTICLE 24

ENTIRE AGREEMENT

- 24.1 This Agreement represents the complete understanding of the parties but shall not affect the validity of the Public Agency's Project documents. In the event of conflict between this Agreement and the Project documents, the Project documents shall take precedence.
- 24.2 The Unions agree that this Agreement covers all matters affecting wages, hours and other terms and conditions of employment, and that during the terms of this Agreement, neither the Contractor(s), nor the Union(s) will be required to negotiate on any further matters affecting these or any other subject not specifically set forth in this Agreement except by mutual agreement of the Unions involved and the Coordinator.
- 24.3 Any other agreement or modification of this Agreement must be reduced to writing and signed by the Coordinator and the Unions involved.

ARTICLE 25

GENERAL SAVINGS CLAUSE

- 25.1 It is not the intention of either the Contractor(s) or the Union(s) parties to violate any laws governing the subject matter of this Agreement. If any Article or provision of this Agreement shall be declared invalid, inoperative, or unenforceable by any competent authority of the executive, legislative, judicial or administrative branch of the federal, state or local government, the parties shall suspend the operation of each such article or provision during the period of invalidity. Such suspension shall not affect the operation of any provision covered in this Agreement to which the law or regulation is not applicable. Further, the Contractor(s) and Union(s) agree that if and when any or all provisions of this Agreement are finally held or determined to be illegal or void by a Court of competent jurisdiction, the parties will promptly enter into negotiations concerning the

substance affected by such decision for the purpose of achieving conformity with the requirements of an applicable law and the intent of the parties hereto.

- 25.2 In the event that a decision of a Court of competent jurisdiction materially alters the terms of the Agreement such that the intent of the parties is defeated, then the entire Agreement shall be null and void.

ARTICLE 26

DURATION OF AGREEMENT

- 26.1 This Agreement shall become effective on the day the Owner awards the first contract covered by the scope of this Agreement and shall continue in full force and effect until completion of the scope of the Project. The parties may mutually agree in writing to amend, extend or terminate this Agreement at any time.

DATE: _____, 20____

CONTRACTOR

CONTRA COSTA BUILDING & CONSTRUCTION TRADES COUNCIL

By: _____
(Signature)

By: _____
Name: Tim Sbranti,

Name: _____

Capacity: Executive Director

Capacity: _____

PROJECT MANAGER CONTRA COSTA COUNTY

DEPUTY DIRECTOR CONTRA COSTA COUNTY

By: _____
(Signature)

By: _____
(Signature)

Name: Jeffrey K. Acuff

Name: Sarah Price

Capacity: Associate Capital Facilities PM

Capacity: Deputy Director of Public Works

**PROJECT LABOR AGREEMENT
SIGNATURES**

Signatory Unions:

Asbestos Workers Local #16

Hod Carriers Local #166

Bricklayers & Allied Craft Workers Local #3

Iron Workers Local #378

Northern California Carpenters Regional
Council

Northern California District Council of Laborers

Millwrights Local #102

Operating Engineers Local #3

District Council of Plasterers & Cement Masons

Painters & Allied Trades District Council #6

Electricians Local #301

Pile Drivers Local #34

Plasterers Local #66

Sheet Metal Workers Local #104

Plumbers Local #159

Sprinkler Fitters Local #483

Roofers Local #81

Steamfitters Local #342

Teamsters Local #315

Underground Utility/Landscape #355

Boilermakers Local #549

Elevator Construction Local #8

Laborers Local #324

Lathers Local #68L

ATTACHMENT "A"
PROJECT LABOR AGREEMENT
FOR
Los Medanos Recovery Center Project at 2311 Loveridge Rd, Pittsburg, CA 94565
BETWEEN
<<Contractor>>
AND
SIGNATORY CONTRA COSTA COUNTY BUILDING CONSTRUCTION
TRADES UNIONS
AGREEMENT TO BE BOUND

The undersigned, as a Contractor or Subcontractor (CONTRACTOR) on the **Los Medanos Recovery Center Project at 2311 Loveridge Rd, Pittsburg, CA 94565** (hereafter PROJECT), for and in consideration of the award to it of a contract to perform work on said PROJECT, and in further consideration of the mutual promises made in the "Project Labor Agreement" (hereinafter AGREEMENT), a copy of which was received and is acknowledged, hereby:

Accepts and agrees to be bound by the terms and conditions of the AGREEMENT, together with any and all amendments and supplements now existing or which are later made thereto:

The CONTRACTOR agrees to be bound by the legally established local trust agreements as set forth in Article 16 of this AGREEMENT.

The CONTRACTOR authorizes the parties to such local trust agreements to appoint trustees and successor trustees to administer the trust funds and hereby ratifies and accepts the trustees so appointed as if made by the CONTRACTOR;

Certifies that it has no commitments or agreements which would preclude its full and complete compliance with the terms and conditions of said AGREEMENT.

Agrees to secure from any CONTRACTOR(S) (as defined in said AGREEMENT) which is or becomes a Subcontractor (of any tier) to it, a duly executed Agreement to be Bound in form identical to this document.

Dated: _____

(Name of Contractor)

(Name of Prime Contractor or Higher
Level Subcontractor)

(Authorized Officer & Title)

(Address)

(Phone) _____

MEMORANDUM OF UNDERSTANDING

PROJECT LABOR AGREEMENT

Notwithstanding any provision to the contrary in the Project Labor Agreement (Project Labor Agreement), this memorandum will confirm that work covered by the Project Labor Agreement within the craft jurisdiction of the Elevator Constructors will be performed under the terms of the National Agreement of the International Union of Elevator Constructors, except that Articles 5, 6 and 11 of the Project Labor Agreement will apply to such work.

INTERNATIONAL UNION OF
ELEVATOR CONSTRUCTORS
LOCAL UNION NO. 8

Date _____

ATTACHMENT 'B'

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Arbitrator
P.O. Box 1937
Mill Valley, CA 94942
(415) 381-1701 General
(415) 699-6527 Mobile
(415) 380-9792 Fax
tangelomv@gmail.com

Ms. Jerilou Cossack
Arbitrator
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Lafayette, CA 94549
(925) 939-1904 General
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(925) 939-1904 Fax
jhc@jerilou-cossack.com

Mr. Robert M. Hirsch
Attorney at Law/ Arbitrator/ Mediator
P.O. Box 170428
San Francisco, CA 94117
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(415) 676-9619 Mobile
(415) 752-7678 Fax
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1999 Harrison Street, Suite 1400
Oakland, CA 94612-3517
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(510) 393-7283 Mobile
(510) 273-8746 Fax
winmedarb@aol.com

END OF DOCUMENT

DOCUMENT 007350

APPRENTICESHIP PROGRAM

1. Design Builder and subcontractors shall comply, and are responsible for ensuring their compliance, with the requirements of Labor Code concerning the employment of apprentices by Design Builder or subcontractors, including Labor Code §§ 1776, 1777.5 and 1777.6. Willful failure to comply may result in penalties, including loss of the right to bid on or receive public works contracts.
2. Labor Code § 1777.5 requires a Design Builder 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. Pursuant to § 1777.5, the certificate will fix the ratio of apprentices to journeypersons that will be used in performance of the Contract. The ratio of apprentices to journeypersons in such cases shall not be less than one to five unless:
 - 2.1 Unemployment for the previous three-month period in the area exceeds an average of 15 percent, or
 - 2.2 The number of apprentices in training in the area exceeds a ratio of 1 to 5, or
 - 2.3 There is a showing that the apprenticeable craft or trade is replacing at least one-thirtieth of its journeymen annually through apprenticeship training, either on a statewide basis or on a local basis, or
 - 2.4 Assignment of an apprentice to any work performed under a public works contract would create a condition that would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large, or the specific task to which the apprentice is to be assigned is of a nature that training cannot be provided by a journeyman.
3. Design Builder is required to make contributions to funds established for administration of apprenticeship programs if Design Builder employs registered apprentices or journeypersons in any apprenticeable trade on such contracts and if other Design Builders on the public works site are making such contributions.
4. 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

SECTION 011110

SUMMARY OF WORK

PART 1 - GENERAL

1.1 SUMMARY

1.1.1 This Section includes summary of work including:

- 1.1.1.1 Work covered by Contract Documents
- 1.1.1.2 Alternate Work
- 1.1.1.3 Work under other contracts
- 1.1.1.4 Future work
- 1.1.1.5 Work sequence
- 1.1.1.6 Cooperation of Design Builder and coordination with other work
- 1.1.1.7 Maintenance
- 1.1.1.8 Occupancy requirements
- 1.1.1.9 Reference Standards
- 1.1.1.10 Summary of Work – Attachment A

1.1.2 Related Sections:

- 1.1.2.1 Section 011110A Attachment A
- 1.1.2.2 Section 011114 (Summary of Work - Design and Deliverables)

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- 1.2.1 Work of Contract comprises, but is not limited to, the design, abatement, demolition of existing structures, and new construction of the **Los Medanos Recovery Center Project** (the "Project") to be permitted by the Office of the State Fire Marshal ("AUTHORITY HAVING JURISDICTION (AHJ)") as well as the Contra Costa County Department of Conservation and Development ("REGULATORY AGENCY"). The Contract requires Design Builder to commission and turn over the Project to County as a "turnkey" project in accordance with the terms and conditions of the Contract Documents. The Project is more fully described in the Criteria Documents, and associated Exhibits included in this Criteria Manual.
- 1.2.2 Notwithstanding other descriptions in the Criteria Documents, the **Los Medanos Recovery Center Project** will be located at 2311 Loveridge Rd, Pittsburg, CA 94565. As outlined in the criteria documents any/all requirements for the installation of new work and systems at the Los Medanos project site, as required to complete construction of the Project.

Construction of the Project shall be understood to be included in the Design Builder's contract as part of the "turnkey" project.

All costs related to the installation of below and above ground infrastructure on site and in public right-of-way for utilities such as power, water, sanitary sewer, storm drain, low voltage, etc. are the responsibility of the Design Builder. Design Builder will be responsible for demolition, excavation, backfill, concrete pads, vaults, etc. Utility agencies will be responsible for transformers, primary and secondary conductors, meters, terminations, and any other work identified and/or outlined by the respective utility in their procedures and guidelines.

The County anticipates that, at the discretion of the Design Builder, separate building permits and incremental permitting packages within the Project Phases may be developed to facilitate the permitting approval process with the Contra Costa County Department of Conservation and Development (DCD) as outlined below.

- 1.2.2.1 Phase 1: Scope of work to include demolition of the site and construction of relocated parking on the north side of the existing campus.
- 1.2.2.2 Phase 2: Scope of work shall include Underground Utilities for the entire site & Foundation Package "Make-Ready".
- 1.2.2.3 Phase 3: Scope of work shall include structural framing, building envelope, major building core and systems.
- 1.2.3 Site Work — including but not limited to Demolition of the Existing Building, Abatement & Soil Remediation, and Installation of Underground Utilities for the entire site — shall be included as part of the main Project scope of work and not considered as Alternate Work.
- 1.2.4 Unless provided otherwise in the Contract Documents, all risk of loss to Work covered by the Contract Documents shall rest with Design Builder until Final Completion and Acceptance of the Work or termination.

1.3 ALTERNATE WORK

- 1.3.1 The Criteria Documents identify work to be done per "Alternate". This work for Alternates is outside of the Project scope of work until such time as it is accepted by the County as part of the Design Builder's proposal or through an approved change order. Each alternate shall be priced as part of the Design Builder's proposal as spelled out in Section 004200 (Proposal Form)
- 1.3.2 Alternate work for the **Los Medanos Recovery Center Project** is as called-out in the Criteria Documents and generally as follows:
 - 1.3.2.1 Alternate #1 (Additive): Contra Costa County (CCC) is requesting Design Builder prepare an alternate price to provide Design-Build services for the design and construction of an installed 250kW diesel engine generator with two (2) output breakers, one (1) 100A automatic transfer switch (ATS) for Article 700 loads, and one (1) 400A automatic transfer switch (ATS) for Article 702 loads. Article 700 (emergency systems) loads shall include egress lighting and fire alarm systems. Article 702 (optional standby systems) loads shall include select plug loads, mechanical and plumbing equipment, and IDF room equipment in which the Owner would like

emergency backup where not required by code. Alternate price shall include all Escalation, General Requirements, General Conditions, Design Contingency, Insurance & Subguard, Contractor Fee, Preconstruction Services, A/E Fees, all Labor, Material and Bond costs.

Alternate #2 (Additive): Contra Costa County (CCC) is requesting Design Builder prepare an alternate price to provide Design-Build services for the design and construction of a full-building backup power system consisting of an installed 500kW diesel engine generator with two (2) output breakers, one (1) 100A automatic transfer switch (ATS) for Article 700 (emergency systems) loads, and one (1) 600A automatic transfer switch (ATS) for Article 702 (optional standby systems) loads. Article 700 (emergency systems) loads shall include egress lighting, fire alarm systems, and smoke control. Article 702 (optional standby systems) loads shall include lighting, plug loads, mechanical and plumbing equipment, IDF room equipment, etc. Alternate price shall include all Escalation, General Requirements, General Conditions, Design Contingency, Insurance & Subguard, Contractor Fee, Preconstruction Services, A/E Fees, all Labor, Material and Bond costs.

1.3.3 Desired County Building Enhancements are as called out in the Criteria Documents and generally as follows:

- 1.3.3.1 Enhancement 1: Design Builder to prepare pricing to provide Design-Build services for the design and construction of **Lower Cost/SF for Recovery Center**. Reference Criteria Documents . Enhancement pricing shall include all Escalation, General Requirements, General Conditions, Design Contingency, Insurance & Subguard, Contractor Fee, Preconstruction Services, A/E Fees, all Labor, Material and Bond cost.
- 1.3.3.2 Enhancement 2: Design Builder to prepare pricing to provide Design-Build services for the design and construction of **Additional EV Parking Spaces Beyond Minimum Code**. Reference Criteria Documents . Enhancement pricing shall include all Escalation, General Requirements, General Conditions, Design Contingency, Insurance & Subguard, Contractor Fee, Preconstruction Services, A/E Fees, all Labor, Material and Bond cost.
- 1.3.3.3 Enhancement 3: Design Builder to prepare pricing to provide Design-Build services for the design and construction of **Energy-efficient Systems**. Reference Criteria Documents. Enhancement pricing shall include all Escalation, General Requirements, General Conditions, Design Contingency, Insurance & Subguard, Contractor Fee, Preconstruction Services, A/E Fees, all Labor, Material and Bond cost.
- 1.3.3.4 Enhancement 4: Design Builder to prepare pricing to provide Design-Build services for the design and construction of **Water Conservation**. Reference Criteria Documents. Enhancement pricing shall include all Escalation, General Requirements, General Conditions, Design Contingency, Insurance & Subguard, Contractor Fee, Preconstruction Services, A/E Fees, all Labor, Material and Bond cost.

1.4 WORK UNDER OTHER CONTRACTS

1.4.1 Testing and Inspections.

1.4.2 Hazardous Material Monitoring.

1.4.3 Commissioning.

1.5 FUTURE WORK

Design Builder is alerted to the fact that additional County maintenance and modernization projects may be performed at related or adjacent facilities over the duration of this project. As projects are known and funded, the work will be identified to the Design Builder so that necessary coordination can be performed.

1.6 WORK SEQUENCE

The Design Builder shall design and construct the Work in stages and at times to accommodate County operational requirements during the design and construction period and shall coordinate its design and construction schedule and operations with the County.

1.7 COOPERATION OF DESIGN BUILDER AND COORDINATION WITH OTHER WORK.

1.7.1 Should construction work, or work of any other nature, be underway by other forces or by other contractors within or adjacent to the limits of the Work at the time of executing the Contract, or should work be performed under the contracts listed in paragraphs 1.3 and 1.4 above, the Design Builder shall cooperate with all such other contractors or forces to the end that any delay or hindrance to their work will be avoided. The cost of such cooperation will be considered as included in the contract price and no additional payment will be made therefor. Design Builder shall coordinate with such other contractors and forces as required by the General Conditions.

1.7.2 County reserves the right to perform other or additional work, within or adjacent to the limits of the Work specified, at any time by the use of other forces. Design Builder shall coordinate with County and any of County's forces, or other forces engaged by County, as required by the General Conditions. In the event that the performance of such other or additional work materially increases or decreases Design Builder's costs, the work and the amount to be paid therefor will be appropriately adjusted as determined by County.

1.7.3 Design Builder shall limit use of the Site for the Work and for construction operations to allow for:

1.7.3.1 Work by other contractors as provided for under paragraph 1.6.

1.7.4 Design Builder shall coordinate use of and access to the Site with other contractors, utilities, and County's forces, as required by the General Conditions. Health Services Office has final authority over coordination, use of premises, and access to the Site.

1.7.5 Design Builder shall cooperate with County and others who may occupy or begin work on site and inside any other areas thereon prior to completion of Work of this Contract.

1.7.6 Design Builder shall cooperate with contractors for other areas of work, not included in Contract, but which may take place during construction period.

1.7.7 Design Builder, and all design consultants and major subcontractors shall participate in partnering sessions with County, at such time and date as shall be reasonably requested by County. The format, organization, facilitation, and activities of the partnering session to

be determined through negotiation between the County and the Design Builder. The facilitator of the events to be selected by the County. Design Builder costs for participation in partnering sessions to be covered by the Partnering Allowance as defined in Section 012100 (Allowances).

- 1.7.8 Any work to be performed as part of the **LOS MEDANOS RECOVERY CENTER PROJECT** outside of Design Builder's designated work area or outside of normal work hours will require coordination with the Contra Costa County Public Works Office (CCCPW) via the Method of Procedure (MOP) process. MOPs must be submitted at least 72 hours prior to proposed start of work.

1.8 MAINTENANCE

Cost of maintenance of systems and equipment prior to Substantial Completion, and during the warranty period as indicated in Section 006530 (Project Guaranty), and as defined in paragraph 9.9 of Section 007200 (General Conditions), is included in the Contract Price and no additional payment will be made therefor.

1.9 OCCUPANCY REQUIREMENT

- 1.9.1 Whenever, in the opinion of County, Work or any part thereof is in a condition suitable for use, and the best interest of County requires such use, County may take Beneficial Occupancy of and connect to, open for public use, or use the Work or such part thereof pursuant to the General Conditions. In such case, County will inspect the Work or part thereof, and issue a Certificate of Beneficial Occupancy for that part of Work.
- 1.9.2 Prior to date of Final Acceptance of the Work by County, all necessary repairs or renewals in Work or part thereof so used, not due to ordinary wear and tear, but due to defective design, materials or workmanship or to operations of Design Builder, shall be made at expense of Design Builder, as required in the General Conditions.
- 1.9.3 Use by County of Work or part thereof as contemplated by this Section shall in no case be construed as constituting acceptance of Work or any part thereof. Such use shall neither relieve Design Builder of any responsibilities under Contract, nor act as waiver by County of any of the requirements thereof.
- 1.9.4 County may specify in the Contract Documents that portions of the Work, including electrical and mechanical systems or separate structure, shall be substantially completed on milestone dates prior to the Substantial Completion of all of the Work. Design Builder shall notify County in writing when Design Builder considers any such part of the Work ready for its intended use and substantially complete and request County to issue a Certificate of Substantial Completion for that part of the Work.

PART 2 - PRODUCTS

2.1 REFERENCE STANDARDS

For products specified by association or trade standards, comply with requirements of standards, except where more rigid requirements are specified or are required by applicable codes.

2.2 PRODUCTS OR SERVICES ORDERED IN ADVANCE

County-furnished products listed in paragraph 2.3 below will be procured under separate contracts and provided by County or vendor to Design Builder for installation under the terms of paragraph 1.6 above. Design Builder to provide anchorages, utility service and stub out connections as necessary for the installation of County furnished products.

2.3 COUNTY-FURNISHED PRODUCTS

- 2.3.1 The Design Builder shall provide Furniture, Fixtures, and Equipment (FF&E) planning services for architecturally significant FF&E. Design Builder's FF&E planner shall meet with the County and its end-users to assess the County's FF&E needs. Design Builder shall specify all FF&E, including all necessary related elements including, but not limited to, installation and operational clearances, anchorages, backing, and connections to building systems, required to meet the County's FF&E needs. It will be the responsibility of County and Health Services to procure FF&E specified by the Design Builder as is indicated in the Criteria Documents. Project FF&E shall be delivered, placed, and installed by the County and Health Services, its vendor, or the Design Builder as is indicated in the Criteria Documents.
- 2.3.2 All FF&E and incidental items' seismic anchorages shall be provided and installed by the Design Builder. Design Builder must review all FF&E and incidental item product information as well as REGULATORY AGENCY and AHJ requirements in order to determine adequate anchorages.
- 2.3.3 All FF&E and incidental items' infrastructure shall be provided and installed by the Design Builder. Design Builder must review all FF&E and incidental item product information as well as REGULATORY AGENCY and AHJ requirements in order to determine adequate connection to infrastructure, e.g. power, data.
- 2.3.4 The Design Builder shall provide all Interior Design services for the Project. This includes, but is not limited to, the selection of REGULATORY AGENCY and AHJ approved materials.

PART 3 - EXECUTION

Internet/Web-Based Project Management Software. The Design Builder shall implement and utilize an Internet/Web-based project management software to track and manage the project. Design Builder shall provide any licenses necessary for County and County consultants to access and participate in the project management software. Design Builder shall provide (16) hours of group project management software training and technical support for County and County consultant staff as needed.

END OF SECTION

DOCUMENT 011110 - SUMMARY OF WORK
EXHIBIT "A"

Los Medanos Recovery Center Project
Low Voltage Systems Responsibilities

LOW VOLTAGE SYSTEM RESPONSIBILITY MATRIX

CCTV = County Public Access TV
D/B = Design / Build Entity Responsibility
DoIT = County IT Department Responsible
ESS = County Electronic Security Systems Responsible
NA = Not Applicable

System

IT

Element	Provider	Installer	Manufacturer to be Provided per specifications.	Comments
Equipment, Design & Construction Standard	DoIT/ CCH IT (<i>CCH IT needs to consult for AP install and final data layout</i>)	NA	DoIT	D/B shall coordinate with County DoIT for final layout and service type. D/B to provide study and design wireless coverage to include both voice and data traffic for full building coverage. Access points to be Aruba, and model to be confirmed by D/B. D/B will direct County DoIT regarding quantity and model of required access points for County procurement. County to provide conceptual rack layouts. No centralized UPS; Owner to provide and install rack-mounted UPS in MPOE/MDF room.
System & Distribution Design	D/B	D/B	Commscope Sysimax	Contractor to design structured cabling per County standards with 20-year CommScope warranty; plenum-rated cables required.
Headend Equipment	CCH IT	CCH IT	CCH IT	County responsible for servers and switches. D/B to supply and install racks, ladder racks, and grounding bus bar. D/B to perform final cable termination and testing. All electrical to be completed by D/B.
Rough-In	D/B	D/B	Commscope Sysimax	4" conduits to site utilities (AT&T and Comcast). J-hook system for cable support every 48"-60". EZ Path penetrations into room. Per HSIT, conduits to be installed to the existing 1st floor, 2311 Loveridge Server Room. This will serve as the primary connection for this facility.

Cabling	D/B	D/B	Commscope Sysimax	Install per County standards. All cable Cat6A (no difference between voice/data). Provide Category 6A connections to EV charging stations.
Devices	CCH IT	D/B	Commscope Sysimax	D/B responsible for terminations. WAPs to be Aruba brand, Owner-Furnished, Contractor-Installed (OFI). Each AP shall have (2) CAT6A cables. APs are Aruba brand

- Notes
- 1) MDF/MPOE Room to include ¾" fire-rated plywood on all walls, (6) dedicated 20A circuits (6" minimum off FF), ; Consult CCH IT for additional power needs
 - 2) Independent HVAC zone for continuous operation (Per ASHRAE TC 9.9, Class 1, 64.4-80.6 degrees F).
 - 3) Minimum (2) 4" conduits for AT&T and Comcast entry.
 - 4) County DoIT to provide active network hardware, IP addresses, and configuration.
 - 5) UPS in MDF, IDF, and MPOE (if any equipment is present) as OFI. D/B responsible for infrastructure.

Phone	Element	Provider	Installer	Manufacturer to be Provided	Comments
	Equipment, Design & Construction Standard	D/B	NA	DoIT	Per County DoIT standards. Design to be completed by D/B and confirmed with DoIT. DoIT will procure, D/B will install.
	System & Distribution Design	D/B	NA	Commscope Systimax	Structured cabling per County requirements.
	Headend Equipment	DoIT	DoIT	DoIT	DoIT provides Cisco phones and configuration. D/B verifies system is operational.
	Rough-In	D/B	D/B	Commscope Systimax	Provide conduits and ¾" fire-rated plywood in MDF.
	Cabling	D/B	D/B	Commscope Systimax	Cat6a, plenum cabling by certified CommScope vendor. D/B provides testing cable certification reports.
	Devices	DoIT	D/B	Commscope Systimax	D/B terminates jacks; Owner provides Cisco phones. D/B verifies system is operational.

- Notes
- 1) Coordinate with DoIT for final rack layouts and port assignments. CCH IT needs to be involved in final rack layout

Security Alarm	Element	Provider	Installer	Manufacturer to be Provided	Comments
	Equipment, Design & Construction Standard	D/B	D/B	Lenel / HID RPK40 / GE Security 1079 / Bosch DS150i	Owner-furnished, Contractor-installed turnkey security system per Criteria E.5.3.5. D/B to coordinate with County ESS team.
	System & Distribution Design	D/B	ESS	Lenel	Provide complete design for Intrusion system integrated with Access Control and CCTV.

Headend Equipment	ESS	ESS	Lenel	Include control panel, power supply, and software for Intrusion system.
Rough-In	D/B	D/B		Provide conduits, J-boxes, and cable pathways to all security device locations.
Cabling	D/B	D/B		Provide all low-voltage cabling for Intrusion system as part of turnkey package.
Devices	ESS	ESS	GE Security 1079 door contacts / Bosch DS150i PIR sensors	Install devices per room data sheets. Duress buttons to be installed in all recommended areas, and coordinated with ESS.

Notes

- 1) Security Alarm shall be part of the integrated Access Control and CCTV system described in Criteria Section E.5.3.5.
 - 2) Contractor to provide complete programming, testing, and system verification for a fully functional turnkey system. ESS prefers to install and program their own equipment
- *Contractor should provide cable pull and mouting boxes. ESS to install and program all hardware and head end equipment for both Access Control and Security alarm

CCTV (Security)

Element	Provider	Installer	Manufacturer to be Provided	Comments
Equipment, Design & Construction Standard	ESS	ESS	Panasonic, Avigilon, or Verkada	Contractor-furnished, contractor-installed turnkey CCTV per Criteria E.5.3.5
System & Distribution Design	ESS	ESS	Panasonic, Avigilon, or Verkada	
Headend Equipment	ESS	ESS	Panasonic, Avigilon, or Verkada	
Rough-In	D/B	D/B		Provide conduits and cable pathways to all camera locations.
Cabling	D/B	D/B		
Devices	D/B	D/B	Panasonic WV-S2231L / WV-S2531LTN / WV-S6130	Install cameras per plans and room data sheets. No live viewing onsite.

Notes

- 1) CCTV system to operate on a dedicated network separate from County IT.
 - 2) Provide minimum 30 days of recorded video storage with remote access capability.
 - 3) All network equipment for CCTV shall be furnished and installed by the security contractor. ESS prefers to install and program their own equipment
- *Contractor should provide cable pull and mouting boxes. ESS to install and program all cameras and head end equipment for CCTV

Door Controls
(Security Electronics)

Element	Provider	Installer	Manufacturer to be Provided	Comments
Equipment, Design & Construction Standard	D/B	NA	Lenel / HID RPK40 / GE Security 1079 / Bosch DS150i	
System & Distribution Design	D/B	ESS	Lenel	Design to integrate card readers, door contacts, and motion sensors per room data sheets.

Headend Equipment	ESS	ESS	Lenel	
Rough-In	D/B	D/B		
Cabling	D/B	D/B		
Devices	ESS	ESS	HID RPK40 / GE Security 1079 / Bosch DS150i	Install Door Controls per plans and room data sheets

Notes

- 1) Door controls shall be part of the Lenel Access Control system described in Criteria Section E.5.3.5.
- 2) System shall be contractor-furnished, contractor-installed, and fully programmed as part of a turnkey security solution.

ESS prefers to install and program their own equipment
*Contractor should provide cable pull and mouting boxes. ESS to install and program all hardware and head end equipment for both Access Control and Security alarm

Card Access

Element	Provider	Installer	Manufacturer to be Provided	Comments
Equipment, Design & Construction Standard	D/B	NA	Lenel / HID RPK40	Contractor-furnished and installed Access Control per Criteria E.5.3.5.
System & Distribution Design	D/B	D/B	Lenel	
Headend Equipment	ESS	ESS	Lenel	Racks and plywood wall mounting panels will be provided and installed by D/B. Access control headend shall be Lenel 3300. ESS providing headend for Access control.
Rough-In	D/B	D/B		
Cabling	D/B	D/B		
Devices	ESS	ESS	HID RPK40 / GE Security 1079 / Bosch DS150i	

Notes

- 1) Access Control system shall be part of the integrated security system including CCTV and Intrusion per Criteria Section E.5.3.5.
- 2) System shall be fully programmed and tested by the D/B contractor as a turnkey installation.

ESS prefers to install and program their own equipment
*Contractor should provide cable pull and mouting boxes. ESS to install and program all hardware and head end equipment for both Access Control and Security alarm

CATV & A/V

Element	Provider	Installer	Manufacturer to be Provided	Comments
Equipment, Design & Construction Standard	D/B	NA		Coordinate with County DoIT for locations and connections.
System & Distribution Design	D/B	D/B		
Headend Equipment	D/B	D/B		D/B shall provide all AV equipment to be deployed as well as design and device config, training schedule, network requirements.
Devices	D/B	D/B		See FF&E schedule for any specific OFOC or OFCI items such as monitors.

Rough-In	D/B	D/B		
Cabling	D/B	D/B		

DOCUMENT 011114

SUMMARY OF WORK - SERVICES AND DELIVERABLES

PART 1 - GENERAL

1.1 SUMMARY

This Section includes summary of work including:

- 1.1.1 Design Services
- 1.1.2 Proposal Phase
- 1.1.3 Design Development Phase
- 1.1.4 Construction Documents Phase
- 1.1.5 Permit Phase
- 1.1.6 Construction Phase
- 1.1.7 Operation/Project Close Out

1.2 DESIGN SERVICES

1.2.1 Summary of Design and Technical Requirements

- 1.2.1.1 The County, their design consultant teams, user group representatives, project and construction management consultants, and supporting staff have invested substantial effort into the development of the 50% Schematic Design level Criteria Documents for the Project. The Design Builder shall provide all design, coordination, and pre-construction services needed to validate, evolve and complete the final Construction Documents necessary to permit, commission, and construct the Project in compliance with the Criteria Documents.

The Criteria Documents demonstrate the County's intent as to Project program, quality, functionality, general site configuration and building arrangement, departmental locations, configurations and adjacencies, materials and finishes, overall character and aesthetics, sustainability and energy efficiency, durability, and security.

The Design Builder, in conjunction and agreement with the County, and in keeping with the Contract Price, shall evolve and improve upon the characteristics outlined above. Design Builder may propose alternative systems, configurations, materials, and delivery strategies, subject to County approval, as long as they meet or exceed the performance and characteristics established by the same element in the Criteria Documents.

- 1.2.1.2 The Criteria Documents set forth the County's minimum design and construction requirements for the Project that the Design Builder shall meet in preparing designs and construction of the Project. Design Builder shall prepare designs to meet these requirements and submit deliverables as described in these requirements. The requirements of this Section 011114 supplement but do not supersede the requirements of the Criteria Documents.

Where Contract or Construction Documents do not fully define requirements for specific conditions, components, items, systems, details, performance or functionality that exist or may arise during the course of the Project, Design Builder is to provide a design build solution for a fully functional condition that is consistent with the level of quality, durability, maintainability, and performance reflected in the overall project, area, system, similar project condition or industry standard demonstrated in other similar facilities in the region at no additional charge to the Owner.

- 1.2.1.3 As required in this Criteria Manual, Design Builder shall submit designs and deliverables, for each and any incremental package, meeting the requirements of the Contract Documents at fifty percent (50%) Design Development, one hundred percent (100%) Design Development, and then fifty percent (50%) and one hundred percent (100%) Construction Document completion. If the Project has separate components or phases as defined in the Criteria Documents, the deliverables of this section shall be submitted in accordance with these components and phases. Design Builder may elect to create incremental packages of major building components or activities it deems advantageous towards scheduling or permitting efficiencies. Design Builder will be responsible for meeting County, Regulatory Agency, and Authority Having Jurisdiction (AHJ) one hundred percent (100%) Construction Documents submittal requirements for review and approvals.
- 1.2.1.4 Unless specifically and expressly limited, Design Builder's scope of work shall include all design, engineering, coordination, management, procurement, geotechnical, abatement, demolition, inspection, testing, commissioning, quality control, and construction necessary to complete the Project.
- 1.2.1.5 Ensure that design and construction administration are coordinated with the requirements of Section 018113 (Sustainable Design Requirements), and Section 019113 (General Commissioning Requirements).

1.2.2 Summary of Work

- 1.2.2.1 Unless specifically excluded from this Contract, Design Builder shall provide to County all professional architectural and engineering services necessary to perform Design Builder's obligations under the Contract Documents and to complete the Project including, but not limited to, the requirements of the Criteria Documents.
- 1.2.2.2 Design Builder shall perform the Services using the persons and subconsultants listed in Design Builder's Prequalification Questionnaire and Proposal and may substitute personnel or subconsultants only upon the County's written consent, which is in County's discretion but will not be unreasonably withheld. Design Builder represents that it and its subconsultants possess all necessary training, qualifications, licenses and permits to perform the Services, and that their performance of the Services will conform to the standard of practice of a professional that specializes in performing professional services of like nature and complexity of the Services. Design Builder's licensed subconsultants (architectural and

engineering) shall owe a duty of care to the County in performing their architectural and engineering portions of the Services.

- 1.2.2.3 Design Builder and its subconsultants shall make an independent assessment of the accuracy of the information provided by the County concerning existing conditions (including but not limited to existing utilities and structures and tie-ins to existing facilities) and the adequacy of available design information/technical reports. Design Builder shall rely on the results of its own independent investigations and not on information provided by County. Design Builder shall conduct such further investigations of existing conditions as are necessary for Design Builder to perform the Services and shall advise County of any further design or other services necessary to complete the Project.
- 1.2.2.4 Design Builder's design shall provide that all finish surfaces, fixtures and equipment are readily and safely accessible for maintenance, repair or replacement by ladders, power lifts, cat walks, and the like without exceeding clearances or the design loads of the floors, roofs, ceilings, and that such access is in conformance with Cal OSHA. All drawings and specifications in the Construction Documents, 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 Builder shall comply with any other requirements of public or private authorities with jurisdiction over the Project, the Construction Documents, or tie-ins to the Project. Design Builder shall comply with the applicable standard of care of a specialist when preparing Construction Documents 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 State and local Fire Marshals or other authorities having jurisdiction over the Project.
- 1.2.2.5 County at all times shall have the right (but not the duty) to review Design Builder's design work, whether performed by Design Builder or a subconsultant of any tier, and whether in a final or preliminary form, to determine progress and conformance to the requirements of the Contract Documents. In the event the County should ever dispute the conformance of any design work (at any stage) with the intent of the Contract Documents, then the County's determination shall control and the Design Builder and/or its subconsultants shall perform the disputed design services and/or work to completion in accord with the County's determination. The Design Builder shall, however, retain its rights as described in the General Conditions regarding claims and disputes, and Design Builder may under those procedures and in its name advance any claim of a subconsultant of any tier.
- 1.2.2.6 All work associated with the abatement of hazardous materials is the responsibility of the Design Builder.
- 1.2.2.7 Design Builder's subconsultant shall develop design documents to outline the requirements and design for abatement of hazardous materials.

- 1.2.2.8 The Design Builder shall employ an industrial hygienist to perform and monitor the work. Refer to Documents 018819 (Asbestos Containing Materials Performance Requirements), 018822 (Lead Hazard Control Performance Requirements), 018824 (PCB Containing Materials Abatement), and 018825 (Miscellaneous Hazardous Materials Performance Requirements) for additional information.
- 1.2.2.9 All work associated with permanent and interim wayfinding is the responsibility of the Design Builder.
- 1.2.2.9.1 The Design Builder's Wayfinding and Signage subconsultant will work closely with the County to develop intuitive wayfinding designs that meets the needs of the occupants, public, users, and staff of the facility. The Wayfinding and Signage subconsultant shall address the following items while developing their design:
- a. Branding – Coordinate the graphics and wayfinding to integrate with the overall branding strategy of the user organization of each facility.
 - b. Changeability – Design must allow for the cost-effective modification as the needs of the facility change over time. Signage should be specified so that the County can easily update signage on site.
 - c. Durability and Maintenance – Signage and wayfinding materials must be extremely durable and easily maintainable. In addition, materials must meet any specified sustainability requirements.
 - d. Coordination – Signage and wayfinding shall be coordinated with other disciplines such as architecture, interior design, and lighting design to ensure a clear, legible, coordinated and integrated wayfinding design.
 - e. Sign Quality Hierarchy – Signage and wayfinding shall appropriately address the public and service areas of the facility.
 - f. Code Compliance.
- 1.2.2.9.2 Permanent Wayfinding – Products may include, but are not limited to, the following:
- a. Exterior and site wayfinding that identifies the facility, main entry, vehicular access, pedestrian access, property address and boundaries, and relationship to surrounding government facilities.
 - b. Parking area signage that identifies access to the facility, pay station locations, and parking limitations or restrictions.

- c. Interior wayfinding that identifies the facility, department identification, room identification, and staff specific signage.
- d. Enhanced environmental graphics that consider appropriate application of electronic media, interactive technologies, and architectural solutions to address wayfinding challenges.

1.2.2.9.3 Interim Wayfinding – Products may include, but are not limited to, the following:

- a. Exterior and site wayfinding that identifies the Design Builder construction office, construction/delivery entry, vehicular access, pedestrian access, restricted zones, safety issues, and other site restrictions.
- b. Parking area signage that identifies access to facilities adjacent to the construction site and parking limitations.

1.2.2.9.4 The Wayfinding and Signage consultant will submit their design for permanent and interim wayfinding to the County in accordance with the provisions of this Section and the Criteria Documents.

1.2.2.10 Design Builder Interior Design Services.

1.2.2.10.1 All equipment and incidental item seismic anchorages shall be provided and installed by the Design Builder. Design Builder must review all equipment and incidental item product information as well as regulatory requirements in order to determine adequate anchorages.

1.2.2.10.2 The Design Builder shall provide all Interior Design services for the Project. Design Builder's interior designer shall meet with the County and its end-users to verify the County's interior design needs, e.g. furniture design and placement, color selection of fabrics and finish materials. Design Builder shall specify all interior items, including all necessary related elements including, but not limited to, anchorages and connections to building systems, required to meet the County's interior design needs.

1.2.2.11 Design Builder Low Voltage Design Services.

1.2.2.11.1 All infrastructure shall be provided and installed by the Design Builder. Design Builder must review all equipment and incidental item product information as well as regulatory requirements in order to determine adequate infrastructure.

1.2.2.11.2 The Design Builder shall provide all Low Voltage Design services for the Project. Design Builder's designers shall meet with the County and its end-users to verify the County's low voltage design needs, e.g. telecommunications, access control, security, audiovisual, and sound management. Design Builder shall

specify all equipment and systems, including all necessary related elements including, but not limited to, infrastructure, anchorages and connections to building systems, required to meet the County's low voltage design needs.

1.2.3 Coordination of Architectural and Engineering Subconsultants/Other Contractors

1.2.3.1 Design Builder shall assign a dedicated Design Project Manager to fully coordinate all architectural and engineering disciplines and subconsultants involved in completing the Work, including but not limited to, all subconsultants employed by Subcontractors or suppliers. Design Builder's subconsultants of all tiers shall fully coordinate with Design Builder and all architectural and engineering disciplines and subconsultants involved in completing the Work.

1.2.3.1.1 Design Builder shall require its subconsultants to agree in their subcontracts to coordinate with Design Builder and other subconsultants.

1.2.3.1.2 See Document 013119 (Project Meetings) for minimum meeting requirements.

1.2.4 Project Master Schedule

1.2.4.1 Design Builder shall complete or cause to be completed all services in accordance with Contract Time as defined in the Agreement as well as all approved project schedules and updates thereto.

1.2.4.2 Design Builder shall provide County with a Project Master Schedule, which shall include the Design and Construction schedules, outlining dates and time periods for the delivery of Design Builder's services and requirements for information from the County for the performance of its services. The Project Master Schedule will include activities for completing the project design documents (through release for construction), significant permitting and construction milestones, construction submittals and long lead item procurement, decision dates from County affecting schedule, and utility interruptions affecting facility operations. For more detailed information refer to Document 013216 (Schedules and Reports).

1.2.4.3 The Project Master Schedule shall be updated monthly and shall meet the requirements of Document 013216 (Schedules and Reports).

1.2.4.4 Design Builder shall adjust and cause its retained subconsultants and subcontractors to adjust activities, personnel levels, and the sequence, duration and relationship of services to be performed in a manner that will comply with the approved Project Master schedule.

1.2.4.5 Design Builder has no restraints on when it may bid or assign work to subcontractors.

1.2.5 Deliverables Required Under This Agreement - General

All deliverables required under this Agreement shall be submitted in full compliance with the Contract Documents and shall be submitted in accordance with this Section. In the event of a conflict between the electronic version and hard copy versions of Design Builder's documents, the hard copy shall govern.

Deliverables required under this Agreement shall be understood to be required separately for each Component of the Project where applicable.

Deficiencies in deliverables and modifications to conform to program requirements and modifications to achieve acceptability of deliverables to County, shall be promptly addressed and performed as part of the Contract Price.

1.3 PROPOSAL PHASE

1.3.1 Proposal Phase Documents:

In response to the Request for Proposal and the Technical Proposal documents required by Document 002100, the Design Builder shall submit Proposal Phase Design Documents consisting of design criteria, drawings, specifications, and renderings for each Component to communicate their design. Design Builder shall be required to cloud, highlight, list or otherwise call attention to any and/or all proposed deviations from the Criteria Documents. Unless expressly noted in Design Builders proposal phase documents, it will be understood that the Design Builder accepts design, construction and fiscal responsibility for any and/or all of the County's criteria information not expressly included, replicated or revised as part of the Design Builder's Proposal Phase submission.

1.4 DESIGN DEVELOPMENT PHASE

1.4.1 Period of Service.

1.4.1.1 After execution of the Agreement, and upon written authorization from the County, Design Builder shall proceed with the performance of the services called for in the Design Development Phase. The intent of the Design Builder's Design Development Phase submittal is to obtain County approval for design revisions, refinements, and concept elaborations produced by the Design Builder during Design Development of Documents prior to Construction Document Production. Design Builder may elect to submit Design Development Documents incrementally by major building phases, components, or areas to facilitate economy of schedule provided overall design concept is clear and adhered to.

1.4.1.2 Design Builder shall submit the deliverables required by the Design Development Phase including preliminary design documents and a revised detailed estimate and cost breakdown of Total Project Costs within the stipulated period required in the Project Master Schedule.

1.4.1.3 Design Builder shall at the outset of this Phase make full written disclosure to County, and obtain County's express written approval of, any deviations from

the County minimum requirements defined in the Criteria Document Exhibits and/or proposed innovative, unique, proprietary or sole source design features. County retains full discretion to disapprove such features.

1.4.2 Lifecycle and Alternates

1.4.2.1 See Document 018112 (Energy Performance Modeling and Verification Requirements)

1.4.2.2 See Document 018113 (Sustainable Design Requirements)

1.4.3 General Scope of Project and Final Design Criteria.

1.4.3.1 After consultation with County and on the basis of Criteria Documents, Design Builder shall determine the general scope, extent and character of the Project and establish final design criteria. Design Builder shall participate in or initiate periodic reviews or workshops as necessary with the County, County's Representative, Facility Users, and their consultants during the Design Development Phase. See Document 013119 (Project Meetings) for minimum meeting requirements.

1.4.4 Design Development Documents. Design Builder shall prepare Design Development Documents consisting of final design criteria, preliminary drawings, outline specifications and written descriptions of the Project, BIM Model and as appropriate with renderings and models. These Design Development Documents shall include, but are not limited to:

1.4.4.1 General

1.4.4.1.1 A tabulation of both gross and assignable floor areas as proposed by the Design Builder showing a comparison to the program area requirements established in the Criteria Documents. Such tabulation shall be submitted in both written and electronic format. Room Data Files shall be on USB flash drive in Microsoft Excel spreadsheets database files. It is encouraged that floor area tabulation files be linked to Revit and AutoCad drawing files to ensure accuracy through final design stages.

1.4.4.1.2 Design Builder shall provide a narrative that clearly delineates any changes to the documents that impacts program or performance requirements and describes the full impact of the change. Strike through and bold text in technical specifications is not an acceptable method of identification.

1.4.4.1.3 Design Builder shall provide an update to the Design Builder's Plan to Achieve Green Building Criteria outlined in Document 018113 (Sustainable Design Requirements) including, updated LEED™ Project Checklists identifying which credits will be achieved.

1.4.4.1.4 Design Builder shall provide to County's Representative for County approval two copies of a color matrix, samples of types and size acceptable to the County's Representative of textures and finishes of all materials in the Work at the Project.

1.4.4.2 Architectural

- 1.4.4.2.1 Scaled, dimensioned floor plans with final room locations including all openings.
- 1.4.4.2.2 Demolitions plans with locations of temporary fire rated walls needed to perform demolition.
- 1.4.4.2.3 1/8" scale building sections and elevations showing dimensional relationships, materials and component relationships.
- 1.4.4.2.4 Identification of fixed equipment to be installed in contract.
- 1.4.4.2.5 Site plan completely drawn with beginning notes and dimensions including grading and paving.
- 1.4.4.2.6 Preliminary development of typical major details, wall sections, and large-scale blow-ups.
- 1.4.4.2.7 Legend showing symbols used on drawings.
- 1.4.4.2.8 Floor plans identifying location of fixed equipment, quantity and sizes of County or Facility provided major movable equipment, and furniture.
- 1.4.4.2.9 Outline Specification for Architectural, structural, mechanical, electrical, civil and landscape manuals, systems and equipment.
- 1.4.4.2.10 Typical reflected ceiling development including, as applicable, ceiling grid and heights, showing:
 - (a) Light fixtures
 - (b) Ceiling registers or diffusers
 - (c) Access panels.
- 1.4.4.2.11 Identify proposed roof system, deck, insulation system and drainage techniques.
- 1.4.4.2.12 Finish, door, and window schedules.

1.4.5 Structural

- 1.4.5.1 Structural drawing with all major members located and sized.
- 1.4.5.2 Establish revised building and floor elevations.
- 1.4.5.3 Outline specifications.
- 1.4.5.4 Identify foundation system(s) including fill requirements and piles, with associated soil pressure, water table and seismic center.

1.4.6 Mechanical/Plumbing

- 1.4.6.1 Heating and cooling load calculations and major duct or pipe runs sized to interface with structural work.
- 1.4.6.2 Major mechanical equipment scheduled indicating size and capacity.
- 1.4.6.3 Ductwork and piping substantially located and sized.
- 1.4.6.4 Devices in ceiling located.
- 1.4.6.5 Legend showing symbols used on drawings.
- 1.4.6.6 Outline Specifications indicating quality level and manufacturer of equipment and fixtures.

1.4.7 Electrical

- 1.4.7.1 Written design criteria for electrical systems.
- 1.4.7.2 All lighting fixtures located and scheduled showing all types and quantities of fixtures to be used, including proposed lighting levels for each usable space.
- 1.4.7.3 All major electrical equipment scheduled indicating size and capacity.
- 1.4.7.4 Complete electrical distribution including a one-line diagram indicating final location of switchboards, communications, controls (high and low voltage), motor control centers, panels, transformers and emergency generators, if required.
- 1.4.7.5 Legend showing all symbols used on drawings.
- 1.4.7.6 Outline Specifications indicating quality level and manufacturer.

1.4.8 Low Voltage

- 1.4.8.1 Written design criteria for low voltage systems, including but not limited to telecommunications, audiovisual, access control, security, and sound masking.
- 1.4.8.2 All wiring and devices located and scheduled showing all types and quantities of devices to be used.
- 1.4.8.3 All major equipment scheduled indicating size and capacity.
- 1.4.8.4 Outline Specifications indicating quality level and manufacturer.

1.4.9 Site/Civil

- 1.4.9.1 Further refinement of Proposal Phase documents of onsite and offsite utility systems for water, stormwater, fire water, irrigation, sewer, electrical. Includes, without limitation, pipe sizes, materials, invert elevation location and installation details.
- 1.4.9.2 Further refinement of Proposal Phase roadways and parking.
- 1.4.9.3 Outline Specifications indicating quality level and manufacturer.
- 1.4.10 Landscape
 - 1.4.10.1 Further refinement of Proposal Phase concepts, includes coordination of hardscape, landscape planting, ground cover and irrigation main distribution lines.
 - 1.4.10.2 Outline Specifications indicating quality level and manufacturer.
- 1.4.11 Attend Required Meetings. Design Builder shall attend meetings with the community, representatives of the County and its designated consultants, the Facility Users, and appropriate governmental agencies and provide information and diagrams to further develop the documents to meet the County and Facility User requirements, e.g. User Group Meetings. The Design Builder shall document these meetings with plans and meeting minutes that may be used to obtain County approval of the design. The Design Builder shall attend meetings with the community, representatives of the County and its designated consultants, the Facility Users, and appropriate governmental agencies to fully describe the project when the design development phase is complete.
- 1.4.12 Deliverables. Design Builder shall submit an electronic PDF generated copy of both the plans and specifications of the Construction Documents for review at the fifty percent (50%), and one hundred percent (100%) Design Development Phase.
- 1.4.13 Review of the Final Design by County. Design Builder shall submit final design to County. The final design shall be accompanied by a narrative outlining any changes to the design that have an impact to aesthetics or performance requirements. Specifications shall track changes made to the specifications and drawings shall cloud changes. Design Builder shall participate and cooperate fully in a review of the Final Design by County, the Facility Users, and any designated consultants. Design Builder shall make full written disclosure to County, and obtain County's express written approval of, any proposed innovative, unique, proprietary or sole source design features.
- 1.4.14 Constructability Review. The County will conduct a constructability review of the Design Development documents upon the Design Builder's completion of its 50% and 100% Design Development documents. Constructability Review Comments will be recorded by the County in a PDF and spreadsheet format. The Design Builder will utilize the spreadsheet format to provide written responses to County reviewer comments that identify how issues will be resolved by the Design Builder. If a Phased Plan Review is utilized by the Design Builder, a review of each submittal package may be performed by the County concurrent with the Design Builder's submittal to the regulatory agency.
- 1.4.15 Cost Estimate. The Design Builder shall submit to the County an updated Cost Estimate at 100% Design Development documents and identify cost changes since the Proposal

Estimate. This estimate shall be organized in a format acceptable to the County. The County will use this estimate for cost reconciliation and design change order reviews.

1.5 CONSTRUCTION DOCUMENTS PHASE

1.5.1 Validation

- 1.5.1.1 Upon written authorization from the County, Design Builder shall make full written disclosure to County, and obtain County's express written approval of, any proposed innovative, unique, proprietary or sole source design features. County retains full discretion to approve or disapprove such features.
- 1.5.1.2 Provide a tabulation of both gross and assignable floor areas as proposed by the Design Builder showing a comparison to the program area requirements established in the Criteria Documents. Such tabulation shall be submitted in both written and electronic format. It is encouraged that floor area tabulation files be linked to Revit and AutoCad drawing files to ensure accuracy through final design stages.
- 1.5.1.3 After consultation with County and on the basis of Criteria Documents and Proposal Documents, Design Builder shall determine the general scope, extent and character of the Project and establish final design criteria. Design Builder shall initiate and participate in periodic reviews or workshops as necessary with the County, County's Representative, Facility Users, and their consultants to confirm all aspects of the facility and systems. See Document 013119 (Project Meetings) for minimum meeting requirements.
- 1.5.1.4 Upon County approval, Design Builder shall proceed with the performance of the Services called for in the Construction Documents Phase. The intent of the Design Builder's Construction Documents Phase submittal is to obtain County approval for any further design revisions, refinements, and concept elaborations produced by the Design Builder during validation and design workshops prior to permitting and Construction. Design Builder may elect to submit Construction Documents Phase Documents incrementally by major building phases, components, or areas to facilitate economy of schedule provided overall design concept is maintained, clear, and adhered to.
- 1.5.1.5 Design Builder shall submit the deliverables required by the Construction Documents Phase including design documents and identification of any significant cost, scope, or delivery strategy adjustments within the stipulated period required in the Project Master Schedule.

1.5.2 General

- 1.5.2.1 Design Builder shall prepare Construction Documents consisting of final drawings, specifications, schedules, calculations, and written descriptions of the Project, BIM Model, finish boards, and renderings to fully deliver the Project.
- 1.5.2.2 Design Builder shall provide a narrative that clearly delineates any changes to the documents that impacts program or performance requirements and

describes the full impact of the change. Strike through and bold text in technical specifications is not an acceptable method of identification.

- 1.5.2.3 Design Builder shall provide an update to the Design Builder's Plan to Achieve Green Building Criteria outlined in Document 018113 (Sustainable Design Requirements) including, updated LEED™ Project Checklists identifying which credits will be achieved.

1.5.3 Lifecycle and Alternates

- 1.5.3.1 See Document 018112 (Energy Performance Modeling and Verification Requirements)

- 1.5.3.2 See paragraph 1.5 of Document 018113 (Sustainable Design Requirements)

- 1.5.3.3 See Document 011110 (Summary of Work) for description of Alternates

- 1.5.4 Construction Documents. Design Builder shall prepare for incorporation in the Contract Documents final completed Construction Documents to show the work to be furnished and performed by Design Builder. Construction Documents shall set forth in detail the requirements for construction of all work to be performed by Design Builder. Construction Documents shall not supersede the Contract Documents where the Contract Documents contain a more stringent requirement. At a minimum, Construction Documents shall include the following:

1.5.4.1 General

- (a) Design Builder shall provide a narrative that clearly delineates any changes to the documents that impacts program or performance requirements and describes the full impact of the change. Strike through and bold text in technical specifications is not an acceptable method of identification.
- (b) Complete Specifications for all Sections prepared in conformance with the 2020 Edition Master Format of the Construction Specification Institute.
- (c) Complete, live, functional electronic copy of the BIM model.
- (d) LEED Checklist for each Component identifying each credit targeted by the Design Builder to achieve proposed certification level compliance
- (e) Electronic files of color perspective renderings of key views.

1.5.4.2 Site / Civil

- (a) Construction Site Logistics and Staging Plan including temporary fencing, gates, access, worker parking, layout, storage, staging, job trailers, fire department access, temporary utilities, and security.
- (b) Site Demolition Plan.
- (c) Site Plan (includes project boundaries, building orientation, parking lot layouts, signage, service entrances, stormwater management, utility

services, curbing, walks, bollards, retaining walls, roadways, and site furniture and equipment).

- (d) Site Paving, Grading, Drainage Plan.
- (e) Site utilities plans, including storm sewer, sanitary sewer, electrical service, data/communications, domestic water, fire water, and gas.
- (f) Stormwater Control Plan (C3).

1.5.4.3 Landscaping

- (a) Landscape Plan including hardscape areas, site fixtures, furniture and equipment, fencing and planters.
- (b) Planting plan and details (including kind, size and type trees, shrubs, and ground covering).
- (c) Irrigation plans and details.

1.5.4.4 Architectural

- (a) General Project Information including project locations, project participants, abbreviations, symbols and materials legend, project data, document organization and Table of Contents.
- (b) Life Safety and Code Compliance information and plans
- (c) Demolition plans with locations and types of temporary walls needed to perform demolition and finish details of any existing building components to remain
- (d) Floor plans, reflected ceiling plans, elevations, and sections
- (e) Wall sections
- (f) Interior elevations
- (g) Millwork and casework details
- (h) Partition types
- (i) Stair and elevator sections and details
- (j) Furniture plans identifying location of fixed equipment, quantity and sizes of County provided major movable equipment, and furniture
- (k) Furniture, Fixture, and Equipment (FF&E) schedule
- (l) Architectural details and enlarged plans and elevations
- (m) Finish, door, and hardware schedules completed, including all details
- (n) Fixed equipment details

1.5.4.5 Interior Design

- (a) Finish Plans and room finish schedules
- (b) Finish Details including definition of all patterns, layouts, transitions, and special conditions

- (c) Furniture plans
- (d) Design Builder shall provide to County Representative for County approval two copies of a color palette, samples of types and size acceptable to the County Representative of textures and finishes of all materials (interior and exterior) in the Work of the Project.

1.5.4.6 Signage

- (a) Plans, schedules and details

1.5.4.7 Structural

- (a) Structural general notes, legends, codes, and calculations.
- (b) Structural foundation and framing plans
- (c) Sections and details
- (d) Schedules

1.5.4.8 Mechanical

- (a) Mechanical Plans, general notes, codes, legends, and calculations.
- (b) Large scale mechanical details.
- (c) Mechanical schedules for equipment.
- (d) Mechanical schematic for environmental cooling and exhaust equipment.
- (e) Energy conservation calculations and report necessary for compliance with California Title 24 energy requirements.
- (f) Controls diagram
- (g) Plumbing riser diagrams
- (h) Fixture schedules

1.5.4.9 Electrical

- (a) Electrical Plans, general notes, codes, legends, and calculations.
- (b) Site lighting and power plan
- (c) Building lighting and power plan showing all switching and controls.
- (d) Fixture schedule and lighting details.
- (e) Distribution information on power consuming equipment, including lighting, power, signal and communication device(s) branch wiring.
- (f) All electrical equipment schedules.
- (g) Special system components plans.

- (h) Electrical load calculations.

1.5.4.10 Fire Alarm

- (a) Plans, details, riser diagrams

1.5.4.11 Fire Protection

- (a) Plans, details, riser diagrams

1.5.4.12 Low Voltage

- (a) Telecommunications plans, details, diagrams, schedules, and legends
- (b) Audiovisual plans, details, diagrams, schedules and legends
- (c) Access control plans, details, diagrams, schedules and legends
- (d) Security/Camera plans, details, diagrams, schedules and legends
- (e) Enlarged IT/Communication rooms layouts

1.5.4.13 Security Controls

- (a) Security electronics site and floor plans, system & riser diagrams, schedules and security device legend
- (b) IP Camera schedule, mounting details
- (c) Programmable Logic Controllers (PLC) & fiber network riser diagram, UPS power & security electronics riser and installation diagrams
- (d) Door & Frame schedules, legends and conduit details
- (e) PLC/Video cabinet/rack layouts
- (f) Enlarged control room plans and panel layouts

1.5.5 Lead or attend Required Meetings. Lead or attend meetings with the community, representatives of the County and its designated consultants, the Facility Users, and appropriate governmental agencies and provide information and diagrams to fully describe the project.

1.5.6 Deliverables: Contractor shall submit electronic PDF generated copies of both the plans and specifications of the Construction Documents for review at the fifty percent (50%) and one hundred percent (100%) Construction Documents Phases.

1.5.7 Specifications shall be prepared in conformance with the 2020 Edition Master Format of the Construction Specification Institute.

1.5.8 Design Builder shall have complete responsibility to secure timely review and approval by all authorities with jurisdiction (AHJ), including but not limited to, other Regulatory

Agencies such as Contra Costa County Department of Conservation and Development (DCD), the Fire Protection District, the Contra Costa County Health Department, Contra Costa County Sanitary District, PG&E, ATT, Comcast, etc. It is the intent of the County to work in close coordination to assist the Design Builder in the Regulatory Agency plan review process to support a timely review and approval process schedule.

- 1.5.9 The same architectural and engineering team (and team personnel) that prepared the design deliverables submitted to authorities with jurisdiction shall complete the Construction Documents.
 - 1.5.10 Compliance with Codes, Regulations and Requirements. Prepare Construction Documents in full compliance with the Contract Documents, applicable building codes, ordinances, standards, governmental regulations and private restrictions, applicable to the Work.
 - 1.5.11 Special features. Make full written disclosure to County, and obtain County's express written approval of, any proposed innovative, unique, proprietary or sole source design features.
 - 1.5.12 Warranty. Design Builder warrants to County that the final design, as expressed in the Construction Documents:
 - 1.5.12.1 Will be constructible, workable, serviceable and within the Design Builder's detailed estimate of costs and schedule;
 - 1.5.12.2 Will comply in all respects with the requirements of the Contract Documents.
 - 1.5.12.3 Will not call for the use of hazardous or banned materials.
 - 1.5.12.4 Will fully comply with applicable building codes, ordinances, standards, governmental regulations and private restrictions, applicable to the Work.
 - 1.5.13 Constructability Review. The County will conduct a constructability review of the 50% and 100% Construction Documents upon the Design Builder's completion of its 50% and 100% Construction Documents. Constructability Reviews shall be provided via a collaborative online review tool such as a Bluebeam Revu Session or similar tool approved by the County and initiated by the Design Builder. The Design Builder will utilize the software to provide written responses to reviewer comments that identify how issues will be resolved by the Design Builder. If a Phased Plan Review is utilized by the Design Builder, a review of each submittal package may be performed by the County concurrent with the Design Builder's submittal to the regulatory agency.
- 1.6 PERMIT PHASE
- 1.6.1 Upon County's written acceptance of Design Builder's Construction Documents for technical divisions or other portions of the Work as Design Builder and County may agree, Design Builder may proceed with the Permit Phase.
 - 1.6.2 Design Builder shall have complete responsibility to secure timely review and approval by all authorities with jurisdiction (AHJ), including but not limited to, other Regulatory Agencies such as Contra Costa County Department of Conservation and Development (DCD), the Fire Protection District or local Fire Department, the Contra Costa County

Health Department, Contra Costa County Sanitary District, PG&E, AT&T, Comcast, etc. It is the intent of the County to work in close coordination to assist the Design Builder in the Regulatory Agency plan review process to support a timely review and approval process schedule.

- 1.6.3 Design Builder shall manage and coordinate with AHJs to secure permits for demolition, construction, removal of utility service, new utility service, etc. This shall include, but is not limited to, scheduling and attending design meetings and/or conferences, clarifying permitting requirements and processes, confirming design and specification requirements, and adhering to installation and inspection procedures and guidelines.
- 1.6.4 Design Builder shall prepare and submit all applications to AHJs for all work required for the project, e.g demolition, decommissioning, and construction work.
- 1.6.5 Design Builder shall coordinate with Regulatory Agency to provide appropriate permit application and required documentation for demolition and construction permits, e.g. C3 requirements, grading permits, fire protection district permits, PCBs Screening Assessment Form ([Applicant Pkg PCBs Demo August 2018](#)), Calgreen Plan ([Preconstruction Jobsite Landfill Diversion Plan \(ca.gov\)](#)).
- 1.6.6 Attend Required Meetings. Attend regular preliminary development, final submittal, and back-check meetings with representatives of the County and its designated consultants, the Facility Users, Regulatory Agency and AHJ to facilitate the issuance of a permit for construction.
- 1.6.7 Deliverables: Upon approval of any permitting or increment package, Contractor shall submit one (1) live electronic spreadsheet or PDF generated copy of the plan check comments received from the Regulatory Agency and the Design Builder's responses to the comments.
- 1.6.8 The same architectural and engineering team (and team personnel) that prepared the design deliverables submitted to authorities with jurisdiction shall obtain the permit for demolition or construction.

1.7 CONSTRUCTION PHASE

- 1.7.1 General Administration of Construction. Design Builder's architectural, design, and engineering subconsultants, including the industrial hygienist, shall make regular visits to the site at times and intervals appropriate to the various stages of construction as necessary to ensure that construction conforms to the final design of the Construction Documents as approved. Site visits shall occur no less than every two weeks during any period in which the construction activities affecting the Work of each designer's scope of services are in progress. Site visits shall be performed by the designer of record or their duly designated licensed representative. Designers of Record shall produce reports from all of their site visits. Copies of reports generated from visits by all of the above shall be provided to the County within one week of the site visit.
 - 1.7.1.1 Design Builder shall coordinate with all authorities having jurisdiction, utility companies, other agencies providing services to the project, e.g. DCD, Central San, PG&E, AT&T, Comcast, etc. to execute and complete their work in a timely manner within the project schedule requirements. Any delays, due

in no part to the negligence of the Owner or the Design Builder, will be considered for time only, no cost.

- 1.7.2 Quality Control and Reporting. Design Builder's architectural, design, and engineering subconsultants, including the industrial hygienist, shall participate fully in Design Builder's required quality control program and shall have a duty to advise Design Builder and County in writing of any observations of defective work, work not in conformance with Construction Documents, and lack of progress consistent with the schedule of work in areas associated with their services.

1.7.2.1 Design Builder's architectural, design, and engineering subconsultants, including the industrial hygienist, shall establish and maintain to the satisfaction of County, a quality control computer database. The Design Builder's database shall maintain complete and accurate records regarding its activities related to fulfilling the quality control requirements of the Project. Design Builder shall make such database available to County at all reasonable times and turn over the database in both hard and electronic format to County upon completion or termination of this Agreement.

1.7.2.2 Together with County, Design Builder and Design Builder's architectural, design, and engineering subconsultants, including the industrial hygienist, shall visit the Project to observe any apparent defects in the construction, correct such deficiencies, and supply information as needed regarding replacement, correction, or diminished value of defective work.

1.8 OPERATION/PROJECT CLOSEOUT PHASE

- 1.8.1 Design Builder and Design Builder's architectural, design, and engineering subconsultants shall, when requested by County, provide all necessary architectural, design, and engineering services, including services of its architectural, design, and engineering subconsultants, for:

1.8.1.1 Refining, adjusting and correcting any equipment or systems.

1.8.1.2 Start-up, testing, and placing in operation all equipment and systems.

1.8.1.3 Completion of punch list work and observation of any apparent defects in the completed construction, correction of such deficiencies, and supplying information as needed regarding replacement, correction, or diminished value of defective work.

1.8.1.4 Training County's staff to operate and maintain all equipment and systems.

1.8.1.5 Provide procedures and a tracking system the County will use to record the maintenance of key systems identified in Document 006530 (Project Guaranty) for the Warranty period of the Project.

1.8.1.6 Preparation and provision of complete and final electronic PDF record document sets of all Drawings and Specifications (including deferred submittals) showing those changes made during the construction process, based on the marked-up As-Built prints, RFI's, Drawings and other data.

1.9 DESIGN BUILDER'S OBLIGATION FOR FINISHED CONSTRUCTION

- 1.9.1 County's right to review Design Builder's design including, but not limited to, Construction Documents, shop drawings, samples and submittals, as specified in the Contract Documents, shall not relieve Design Builder 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 the County's monitoring and accepting the design as developed and issued by the Design Builder, consistent with these Contract Documents. Design Builder's responsibility to design and construct the Project in conformance with the Contract Documents including, but not limited to, the applicable performance standard 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.

PRODUCTS - Not used.

EXECUTION - Not used.

END OF DOCUMENT

SECTION 011216

WORK SEQUENCE

PART 1 - GENERAL

1.1 SUMMARY

- 1.1.1 This Section discusses the phasing and sequencing of the major site preparation, construction, and project completion components of the Project.
- 1.1.2 Related Sections include the following:
 - 1.1.2.1 Section 011110 (Summary of Work)
 - 1.1.2.2 Section 011114 (Summary of Work - Design Services and Deliverables)
 - 1.1.2.3 Section 013216 (Schedules and Reports)

1.2 PHASES

- 1.2.1 The Project has been organized as a multiple Phase to facilitate and expedite completion of the Work within the Project Schedule.
 - 1.2.1.1 Project Components: Each of the Project Components, identified in the Performance Criteria Documents shall be considered as an integral part of the multiple-phase Project. Work associated with completion of each component shall progress as needed to achieve on-time completion of the Project as a whole.

1.3 PHASING AND SEQUENCING

- 1.3.1 General phasing and schedule milestone information is provided in the County Project Milestone Schedule (attached to this Section) and in the Contract Documents. Design Builder shall be responsible for developing the detailed plan for sequencing of the design, permitting, and construction for completion of the Work. Final phasing, incremental permit approval packages, and sequencing must be approved by the County and Health Services Office.
- 1.3.2 The Design Builder's construction phasing for the Work must accommodate operational impacts for the existing occupied Facility, utilities, and systems. Sequencing coordination with the work and operational requirements outside of this contract will need to be established by the Design Builder in coordination with County and Health Services office.
- 1.3.3 The Design Builder's sequencing shall fit within and coordinate with the milestone and completion dates specified in the Milestone Schedule, and within constraints outlined in the Contract Documents. The Design Builder may improve upon the milestone and completion dates as part of their effort to provide Best Value Enhancements as specified in Section 002100 (Request for Proposals).

PRODUCTS - Not used.

EXECUTION - Not used.

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**Contra Costa County
Los Medanos Recover Center Project**

PROJECT MILESTONE SCHEDULE

1. Release of Request for Proposals	August 20, 2026
2. Proposals Due to County	October 29, 2026
3. Design Build Award by County (Board of Supervisors)	December 15, 2026
4. Notice to Proceed Start Date	December 21, 2026
5. Acquire Construction Permit for North Parking	February24, 2027
6. Noth Parking Construction Complete	June 2, 2027
7. Acquire Construction Permits	June 21, 2027
8. Occupancy / Substantial Completion	August 21, 2028
9. Final Completion	October 20, 2028
10. HS Team Move-in	February 20, 2029

END OF SECTION

SECTION 011400

WORK RESTRICTIONS

PART 1 - GENERAL

1.1 SUMMARY

1.1.1 Prior to the start of the project, the Design Builder shall comply with the Construction Logistic Plan and associated Drawing(s) in accordance with the provisions of this document. The Design Builder must obtain approval from the County Representative for any and all necessary arrangements for worker parking, routing equipment and material to the job location, and procedures within secure areas. In addition, the Design Builder shall become familiar with applicable County policies and procedures specific to the Site and comply with the following for the duration of the Project. The Design Builder's Quality Control Manager shall designate a person responsible for assuring the implementation of environmental controls needed for environmental control and mitigation.

1.1.2 Related Sections include the following:

1.1.2.1 Section 011110 (Summary of Work) for procedures regarding utility interruptions, County occupancy, Design Builder's use of premises, and work restrictions.

1.1.2.2 Section 014100 (Regulatory Requirements) for related codes.

1.1.2.3 Section 013100 (Project Management and Coordination) for meetings and communication.

1.1.2.4 Section 014500 (Quality Control and Assurance) for QC plan and personnel.

1.1.3 References

1.1.3.1 CEQA and Hazardous Material Surveys.

1.1.3.2 Contra Costa County Building Design and Construction Guidelines.

1.2 SUBMITTALS

Not Used.

1.3 UTILITY INTERRUPTIONS AND PRIOR NOTIFICATION

Shutdown or interruption of water, sewer, electrical services, natural gas, communications, or any utility system requires written notice a minimum of fifteen (15) Business Days in advance. Design Builder is not authorized to interrupt utility services without this advance notification and the prior written approval by the County Representative.

1.4 ENVIRONMENTAL CONTROLS

1.4.1 Noise: All work shall be performed with a minimum of noise or disruption to normal activities in the surrounding areas. If County indicates a problem due to construction, the

activity may be stopped until the County Representative is contacted, and satisfactory arrangements are determined. Design Builder will give thirty (30) Day notice for any work to be done outside the hours of 7am to 7pm on Weekdays and 8:30 am to 6 pm on Weekends. The following noise control procedures shall be employed:

- 1.4.1.1 For work in or adjacent to existing occupied and operating facilities, the maximum increase in noise shall be limited to approximately 15db over ambient and shall not exceed regulatory standards for noise. Impact devices and powder actuated tools shall not be used.
 - 1.4.1.2 The on-site construction supervisor shall have the responsibility and authority to receive and resolve noise complaints. A clear appeal process shall be established prior to construction commencement that will allow for resolution of noise problems that cannot be immediately solved by the site supervisor.
 - 1.4.1.3 All noise-producing project equipment and vehicles using internal combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specification. Mobile or fixed "package" equipment (e.g., arc-welders, air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment.
 - 1.4.1.4 All mobile or fixed noise-producing equipment used on the project, which is regulated for noise output by a local, state, or federal agency, shall comply with such regulation while in the course of project activity.
 - 1.4.1.5 Electrically powered equipment instead of pneumatic or internal combustion powered equipment shall be used, where feasible and needed to control excessive noise.
 - 1.4.1.6 Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.
 - 1.4.1.7 Construction site and access road speed limits shall be established and enforced during the construction period.
 - 1.4.1.8 The hours of material transport shall be restricted to the periods and days permitted by both this contract and local noise or other applicable ordinance.
 - 1.4.1.9 The use of noise producing signals, including horns, whistles, alarms, and bells shall be for safety warning purposes only.
 - 1.4.1.10 No project related public address or music system shall be audible at any adjacent noise-sensitive receptor.
- 1.4.2 Dust: Dust control is a critical activity given the proximity of construction to surrounding residential, business, and government service occupancies. The Design Builder shall prepare a submittal that identifies source air pollution and related pollution reduction measures. The following dust control measures shall be employed:
- 1.4.2.1 Implement fugitive dust control measures as provided in Bay Area Air Quality Management District (BAAQMD).

- 1.4.2.2 Develop a staging area, vehicle and truck routes, and ensure all applicable control measures are established for each workday. Ensure that staging areas are on already developed/disturbed areas and away from creeks or other environmentally sensitive habitats.
- 1.4.2.3 Dust barriers shall be provided by the Design Builder as necessary to contain dust within the construction site.
- 1.4.2.4 If necessary, install a water misting system along fence perimeter or any other necessary area to prevent fugitive dust from creating a nuisance to the public or adjacent County staff or operations.
- 1.4.2.5 Control fugitive dust at active soil grading/excavation areas using water in a manner that would not impact soil compaction. Continuous wet-down may be required in the area of construction activity.
- 1.4.2.6 Use ground-covering such as mulch, wood chips, straws, hydro-seeding, surfactants, or plastic sheeting to cover inactive exposed areas to minimize fugitive dust.
- 1.4.2.7 Provide drainage for erosion control measures. Ensure erosion control measures contain no plastic monofilament netting and use natural materials.
- 1.4.2.8 Use sandbags, as necessary, along site perimeter to keep soil on site.
- 1.4.2.9 Provide gravel entryway into construction site entrance to reduce/eliminate mud and sediment carried off site by vehicles.
- 1.4.2.10 Cover top of haul trucks to eliminate wind-blown fugitive dust and debris.
- 1.4.2.11 Schedule haul trucks and material delivery trucks to prevent traffic congestion and reduce impacts on the normal operation of adjacent facilities. Set up truck queuing area and have staff communicate via cell phone for efficiency and less traffic.
- 1.4.2.12 As necessary, use street sweepers along travel routes in general vicinity of project area.
- 1.4.2.13 All vehicle routes are to be watered for dust control. All existing roadway and parking surfaces impacted by construction activity are to be swept and kept free of debris and dust. All areas within the construction site are to be broom swept as required to keep dust and debris to a minimum.
- 1.4.2.14 Limit the number of haul trucks on site and establish a haul route. Install a gravel or base road on site for loading trucks.
- 1.4.2.15 Provide pavement maintenance where increased heavy vehicle traffic degrades the pavement.
- 1.4.2.16 All stockpiles shall be kept moist throughout the day to minimize particulate matter emissions. Wet down stockpiles on a regular basis including prior to end of workday.

- 1.4.2.17 Haul roads shall be paved, lined with gravel or base material, or kept moist to minimize particulate matter emissions.
- 1.4.2.18 Where practical, use paddle-wheel scrapers instead of traditional scrapers to minimize fugitive dust and reduce exhaust emissions.
- 1.4.2.19 Handling of soil shall be kept to a minimum.
- 1.4.3 Cutting and Patching: The Design Builder shall plan the cutting and patching activities to minimize facility impacts on Health Services staff operations in accordance with Sections 017329, (Cutting and Patching). In addition to the above mitigation measures, the following applies to the existing facility tie-in activities:
 - 1.4.3.1 Provide the County Representative and the Recovery Center with fifteen (15) Day advance written notice of planned tie-in activities. Schedule a meeting with County Representative and Recovery Center Office to review work schedule, sequencing and Design Builder/Subcontractor MOP.
 - 1.4.3.2 Identify if any hazardous materials may be encountered during tie-in activities. All work associated with the abatement of hazardous materials is the responsibility of the Design Builder. The Design Builder shall employ an industrial hygienist if hazardous materials are encountered.
 - 1.4.3.3 Refer to Sections 018819, Asbestos Containing Materials Performance Requirements, Section 018822, Lead Hazardous Control Performance Requirements, 018824 - PCB Containing Materials Abatement (bidding) and Section 018825, Miscellaneous Hazardous Materials Performance Requirements for additional information.
- 1.4.4 Odors: When odors are a concern, arrangements shall be made by the Design Builder for their containment or control. Where this is not feasible, specific arrangements should be made to minimize the disturbance of normal activities. Where controllable, fumes and odors shall not be allowed to migrate to occupied areas.
 - 1.4.4.1 Place on-site portable toilets away from building air intakes, windows, and entryways.
 - 1.4.4.2 Reduce the use of diesel fuel powered equipment and use equipment with alternative fuel whenever practical to minimize diesel exhaust emissions.
 - 1.4.4.3 Turn off equipment when not in use for long periods of time. No idling of diesel-fueled equipment for durations longer than five minutes when within 100 feet of any low-level air intake or building opening (doors and windows).
- 1.4.5 Vibrations: To the extent practicable, the impacts of vibration shall be limited. If vibration becomes an impact to County operations, the Design Builder shall stop operations, reschedule and/or implement the following with the approval of the County Representative:
 - 1.4.5.1 Route heavily loaded trucks and equipment away from the most sensitive facilities if possible.

1.4.5.2 Sequence demolition, earthmoving and ground-impacting operations so as not to occur in the same time period, to the extent practicable. The total vibration level produced could be less when each vibration source operates separately.

1.4.5.3 Select demolition methods not involving impact, where practicable.

1.4.5.4 Avoid vibratory rollers and packers near vibration-sensitive areas.

1.4.6 Environmental Construction Period Restrictions and Requirements: Design Builder shall become familiar with the full text of the project's Environmental Construction Period Restrictions and Requirements and take responsibility for implementation of outlined restrictions and requirements. Design Builder shall be responsible for the implementation of all listed restrictions and requirements.

1.5 SHIPMENTS AND MATERIALS

Construction equipment and materials shall be shipped or delivered to the Design Builder at the Project sites. The placement of such materials shall be limited to the specific lay-down and staging areas as defined in the Construction Logistic drawings unless approved in advance by the County. The County accepts no responsibility for the receipt, storage, or protection of the Design Builder's materials and equipment.

1.6 SALVAGE AND DISPOSAL

1.6.1 All existing property of the County that is to be removed from the construction site and has been identified to be salvaged by the County shall be moved by the Design Builder prior to the Design Builder commencing mobilization or site clearing activities.

1.6.2 Construction debris, or material that has no redeemable value, is to be placed in Design Builder-furnished refuse bins for safe and legal removal from the premises. County refuse or recycling bins may not be utilized by the Design Builder unless so authorized by the County.

1.7 PARKING

1.7.1 The Design Builder shall meet with the County Representative to determine any parking requirements in addition to those indicated on the project Construction Logistics drawing. The Design Builder is responsible for any temporary parking facilities and provision of shuttles required to accommodate construction workers during the course of the Project.

1.7.2 The primary parking and construction storage areas shall be as designated on the Construction Logistics drawing. Only Company insured Foreman/Superintendent vehicles or Company insured construction material delivery vehicles will be allowed into the secured Construction area.

1.7.3 The Design Builder will require County approval for any parking or storage areas proposed to be used by construction personnel if at variance with the Construction Logistics drawing.

1.7.4 Design Builder and related construction personnel shall park in authorized parking areas only.

- 1.7.5 Parking in parking spaces designated for the County or other public parking spaces is strictly prohibited.

1.8 SANITARY

- 1.8.1 Design Builder shall provide temporary toilet facilities inside the secured construction area and adjacent to any temporary facilities/offices located outside the construction area. The Design Builder will not be allowed to use County restroom facilities whether in the existing facilities or those being constructed.
- 1.8.2 Design Builder shall submit proposed location of temporary toilet(s) to the County Representative for approval.
- 1.8.3 Construction personnel will not be allowed to use restroom facilities for personal or equipment clean-up.
- 1.8.4 Sanitary Facilities shall be in accordance with OSHA regulations.

1.9 SMOKING AND TOBACCO

- 1.9.1 Smoking is not permitted anywhere on the property.
- 1.9.2 Smoking is not permitted within the facilities under construction.
- 1.9.3 All ashes and cigarette butts must be deposited in approved receptors.
- 1.9.4 No chewing tobacco or spitting of tobacco is permitted on the Project sites.

1.10 ELEVATORS

New elevators constructed for the project shall not be used by the Design Builder for construction related activities or deliveries without the permission of the County and protection of all new surfaces and finishes. Any damaged to equipment or new materials shall be repaired or replaced to like new condition.

1.11 SECURITY

- 1.11.1 All personnel must obey and act immediately upon any request by County security staff.
- 1.11.2 A list of emergency phone numbers will be provided by both the Design Builder and the County.

1.12 SAFETY

1.12.1 General

- 1.12.1.1 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, laws and ordinances.

1.12.1.2 Safety Program components:

- 1.12.1.2.1 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)
- 1.12.1.2.2 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, Section 5192, Item (b)(4) f.
- 1.12.1.2.3 Confined Space Program: The Site contains permit- and non-permit-confined spaces. Owner will provide Contractor 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, 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.
- 1.12.1.2.4 Designate one of Contractor'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 Contractor's intended traffic flow plan, security plan, program for temporary structures, housecleaning plan, 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 Contractor through the Site Safety Officer for written concurrence by Recovery Center Staff Office and County Representative.

1.12.1.3 Watch for any Public, or County personnel at and around the Project site.

1.12.1.4 Work only where there is a positive barrier separation between construction activities and other areas, activities, or personnel.

1.12.1.5 Clean up, remove, and properly dispose of any/all debris, materials, tools, or other related work items in any occupied areas or other areas of the

construction site which are adjacent to the security fencing of the facility each day.

1.12.1.6 Do not drape cords across corridors. All cords must be attached to the ceiling or taped to the floor (use tape with non-marring adhesive).

1.12.1.7 Design Builder shall be responsible to supply, install, maintain and remove any additional security fencing, barricades, lighting and other security measures as required to protect and control the site. (Reference Construction Logistics drawing)

1.12.2 Safety equipment and consideration should include, but are not limited to:

1.12.2.1 Anyone known to be under the influence of alcohol or drugs shall be dismissed from the Project at once and not be allowed to return.

1.12.2.2 Offensive language is not permitted in any area where it may be overheard by the public, staff or visitors.

1.12.2.3 Provide adequate emergency first aid equipment.

1.12.2.4 Post location and emergency phone numbers for local medical care and fire departments.

1.12.2.5 Monitor safe ladder usage.

1.12.2.6 Provide exhaust controls for equipment.

1.12.2.7 Monitor noise levels and establish safe limitations.

1.12.2.8 Ensure adequate ventilation for air contaminants.

1.12.2.9 Insist on personal protective equipment, such as hard hats, safety shoes, and eye, ear, and face protection equipment and proper gloves as appropriate. Design Builder shall supply sufficient hard hats, safety glasses, safety vests, ear protection, and gloves to properly equip job site visitors.

1.12.2.10 Safety nets, belts, and lifelines shall be used, as appropriate.

1.12.2.11 Provide adequate emergency fire protection equipment.

1.12.2.12 Provide safe storage for all flammable and combustible materials.

1.12.2.13 Train workers on safe and proper use of hand power tools and electrical drop cords.

1.12.2.14 Operation of cranes, derricks, lifts, and hoists should be in accordance with manufacturer's recommendations and appropriate ANSI and Cal/OSHA regulations.

1.12.2.15 All construction operations and personnel are subject to CAL-OSHA and APMC Environmental Health & Safety regulations.

- 1.12.2.16 Provide adequate barricades and safety lighting at all open trenches adjacent to public access (must accommodate proper warning for the visually impaired).
- 1.12.2.17 Properly fence entire confines of project site so as to avoid public access or unauthorized personnel.
- 1.12.2.18 Provide barricades and fencing in accordance with the Construction Logistic Drawings.
- 1.12.2.19 All wall, floor, and ceiling penetrations shall be sealed to maintain fire and smoke ratings in accordance with CBC, NFPA 99 and *Life Safety Code*.
- 1.12.2.20 All emergency exit passages must be maintained free of obstructions.
- 1.12.2.21 Insist on constant and continuous safety practices.

1.12.3 Fire Prevention During Welding, Cutting, and Other Hot Work

- 1.12.3.1 All hot work shall be in accordance with OSHA requirements, specifically those identified in Standard 1910.252
- 1.12.3.2 Hot work includes welding, soldering, heat treating, grinding, metal cutting, thawing pipe, powder-driven fasteners, hot riveting, and similar applications producing a spark, flame, or heat.
- 1.12.3.3 Hot work being done for extended durations shall be performed in a designated area that is approved for hot work by the Site Safety Officer and the County Representative.
- 1.12.3.4 The Design Builder shall ensure that only approved apparatus, such as torches, manifolds, regulators, or pressure-reducing valves, and acetylene generators, are used.
- 1.12.3.5 The Design Builder shall ensure that all individuals involved in hot work are:
 - 1.12.3.5.1 Trained in the safe operation of their equipment and the safe use of the process.
 - 1.12.3.5.2 Aware of the inherent risks involved and understand the emergency procedures in the event of a fire.
 - 1.12.3.5.3 Aware if any special risks, such as flammable materials or hazardous conditions at the hot work site.

1.12.4 Project Inspector

- 1.12.4.1 Provision of inspectors by the State, if any, by the County, if any, or by the Regulatory Agency pursuant to provisions of this section shall be subject to following:
 - 1.12.4.1.1 Design Builder shall allow inspectors full access to the project at all times while the Scope of Work is in progress.

1.12.4.1.2 Design Builder shall take direction and approvals or corrective action on work performed from inspectors. Means and methods to fix non-compliant work is the responsibility of the Design Builder. All inspection and corrective action reports will be provided to a County Project Representative who will provide final direction to the Design Builder.

1.12.4.1.3 Design Builder shall not rely on inspectors to ensure Work is completed in accordance with Contract documents. It is the Design Builders responsibility to provide their own QA/QC Program to comply with all Project Requirements, Specifications, and Contract Documents.

1.12.4.2 Acts or omissions of any inspector (including, without limitation, inspector's failure to observe or report deficiencies in Design Builder's Work) shall not relieve Design Builder from its responsibility to complete Work in accordance with Contract documents.

PRODUCTS - Not used.

EXECUTION - Not used.

END OF SECTION

SECTION 012100

ALLOWANCES

PART 1 - GENERAL

1.1 SUMMARY

- 1.1.1 All Allowances stated in the Contract Documents shall be added to the total Contract Sum. Items covered by Allowances shall be supplied for such amounts and by such persons or firms as County Representative may direct. Each allowance is for a lump sum. The allowances are for:

1.1.1.1 Owner Scope Contingency - \$ 503,000.00

- 1.1.2 Related Sections include the following:

Section 012600 (Contract Modification Procedures) for procedures for submitting and handling Change Orders for Allowances

1.2 PRICING OF ALLOWANCE ITEMS

- 1.2.1 Pricing of Allowance items shall be the sum of labor costs, material costs, equipment rental costs, specialist costs, delivery, installation, and all other direct and actual costs plus overhead and profit as allowed in Section 012600 (Contract Modification Procedures). This limit applies for all Allowance items. However, in lieu of the requirements of paragraph 1.3.2.4 of Section 012600, the Design Builder will provide three (3) competitive bids for the work performed by Subcontractors. Design Builder shall receive a five percent (5%) markup on Subcontractor's total costs. Design Builder shall not include, or be permitted to recover, as part of any Allowance other costs arising out of or connected with the performance of the Allowance Work.

1.3 SCHEDULE OF ALLOWANCES

- 1.3.1 Allowance 1: (Owner) Scope Contingency - This allowance shall cover costs for changes to the project scope as determined by the County.

PART 2 - PRODUCTS - Not used.

PART 3 - EXECUTION – Not used.

END OF SECTION

SECTION 012600

CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 GENERAL

Only Design Builder or the County may initiate changes in Scope of Work or deviation(s) from the Contract Documents.

1.1.1 Design Builder may initiate changes by submitting a Design Request for Information (DRFI), Notice of Concealed or Unknown Conditions, Notice of Hazardous Waste Conditions, or Notice of Regulatory Agency Field Change.

1.1.1.1 DRFIs shall be submitted to seek clarification of or request changes in the Contract Documents.

1.1.1.2 Notices of Concealed or Unknown Conditions shall be submitted in accordance with the General Conditions.

1.1.1.3 Notices of Hazardous Waste Conditions shall be submitted in accordance with the General Conditions.

1.1.1.4 Notices of Regulatory Agency Field Change shall be submitted when the permitting Regulatory Agency directs in the field a change in design previously approved by the Regulatory Agency, which change is not the result of Design Builder's design error or omission or defective Work.

1.1.2 The County may initiate changes by issuing a Supplemental Instruction, which may revise, add to or subtract from the Work.

1.1.3 The County may initiate changes in the Work or Contract Time by issuing Requests for Proposals (RFPs) to Design Builder. Such RFPs will identify the general scope of changes in the Work and will request from Design Builder a quotation of changes in Contract Sum and Contract Time.

1.1.4 The County may also, by Construction Change Directive (CCD), order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly. A CCD shall be used in the absence of total agreement on the terms of a Change Order and may, upon notice, consist of a Change Order executed by the County only.

1.2 PROCEDURES

1.2.1 Cost Proposal and Procedures: Whenever Design Builder is required in this Section to prepare a Cost Proposal, and whenever Design Builder is entitled to submit a Cost Proposal and elects to do so, Design Builder shall prepare and submit to the County for consideration a Cost Proposal identifying and summarizing each of the time and cost components and individual mark-ups allowed by the Contract in a form similar to that attached at the end of this Section. All Cost Proposals must contain a complete description of the scope of work with an associated breakdown of all actual, current costs

of credits, deducts, and extras; and itemized materials, labor, taxes, overhead and profit. All Subcontractor Work shall be so indicated. Individual entries on the Cost Proposal form shall be determined as provided in paragraphs 1.3 and 1.4 of this Section.

After receipt of a complete Cost Proposal with a detailed breakdown, the County will act promptly thereon.

- 1.2.1.1 If the County accepts a Cost Proposal, the County will prepare a Change Order for the County and Design Builder signatures.
- 1.2.1.2 If Cost Proposal is not acceptable to the County because it does not agree with cost and/or time included in Cost Proposal, the County will submit in a response what it believes to be a reasonable cost and/or time adjustment, if any. Except as otherwise provided in this Section, Design Builder shall have seven (7) Days in which to respond to the County with a revised Cost Proposal.
- 1.2.1.3 When necessity to proceed with a change does not allow the County sufficient time to conduct a proper check of a Cost Proposal (or revised Cost Proposal), the County may order Design Builder to proceed on basis to be determined at earliest practical date. In this event, value of change, with corresponding equitable adjustment to Contract, shall not be more than increase or less than decrease proposed.
- 1.2.2 Design Request for Information: Whenever Design Builder requires information regarding the Project or Contract Documents, or receives a request for information from a Subcontractor, Design Builder may prepare and deliver a DRFI to the County. Design Builder shall use DRFI format as approved by the County. Design Builder must submit time critical DRFIs at least thirty (30) Days before scheduled start date of the affected Work activity. Design Builder shall reference each DRFI to an activity of Progress Schedule and shall note time criticality of the DRFI, indicating time within which a response is required. Design Builder's failure to reference DRFI to an activity on the Progress Schedule and note time criticality on the DRFI shall constitute Design Builder's waiver of any claim for time delay or interruption to the Work resulting from any delay in County responding to the DRFI.
 - 1.2.2.1 The County will respond within seven (7) Days from receipt of DRFI with a written response to Design Builder. Design Builder shall distribute response to all appropriate Subcontractors and Subconsultants.
 - 1.2.2.2 If Design Builder is satisfied with the response and does not request change in Contract Sum or Contract Time, then the response shall be executed without a Change Order.
 - 1.2.2.3 If Design Builder believes the response is incomplete, Design Builder shall issue another DRFI (with the same DRFI number with the designation ".01" indicating that it is a follow-up DRFI) to the County clarifying original DRFI. Additionally, the County may return DRFI requesting additional information should original DRFI be inadequate in describing condition.
 - 1.2.2.4 If Design Builder believes that the response results in change in Contract Sum or Contract Time, Design Builder shall notify the County in writing within seven (7) Days after receiving the response, or within seven (7) Days of becoming aware of such changes in Contract Sum or Contract Time. If the

County disagrees with Design Builder, then Design Builder may give notice of intent to submit a Claim as described in the General Conditions, and submit its Claim within thirty (30) Days. If the County agrees with Design Builder, then Design Builder must submit a Cost Proposal within seven (7) Days of receiving the County's agreement.

Design Builder's failure to deliver either the foregoing notice and Claim or Cost Proposal by the respective deadlines stated in the foregoing statements shall result in waiver of the right to file a Cost Proposal or Claim.

1.2.3 Supplemental Instruction: The County may issue Supplemental Instructions to Design Builder.

1.2.3.1 If Design Builder is satisfied with Supplemental Instruction and does not request change in Contract Sum or Contract Time, then Supplemental Instruction shall be executed without a Change Order.

1.2.3.2 If Design Builder believes that Supplemental Instruction results in change in Contract Sum or Contract Time, then Design Builder must submit a Cost Proposal to the County within twenty-one (21) Days of receiving the Supplemental Instruction.

1.2.4 Construction Change Directives: If at any time the County believes in good faith that a timely Change Order will not be agreed upon using the foregoing procedures, the County may issue a CCD with its recommended cost and/or time adjustment. Upon receipt of CCD, Design Builder shall promptly proceed with the change of Work involved and concurrently respond to the County's CCD within ten (10) Days.

1.2.4.1 Design Builder's response must be any one of the following:

1.2.4.1.1 Return CCD signed, thereby accepting the County's response, time, and cost.

1.2.4.1.2 Submit a (revised if applicable) Cost Proposal with supporting documentation (if applicable, reference original Cost Proposal number followed by the designation .01, .02, etc. for each revision), if the County so requests.

1.2.4.1.3 Give notice of intent to submit a Claim as described in the General Conditions and submit its Claim within thirty (30) Days.

1.2.4.2 If the CCD provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

1.2.4.2.1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation.

1.2.4.2.2 Unit prices stated in the Contract Documents or subsequently agreed upon.

1.2.4.2.3 Cost to be determined in a manner agreed.

- 1.2.4.2.4 County directs the Design Builder to perform the work as “Force Account”. Upon receiving a “Force Account” directive Design Builder shall diligently perform the work by utilizing the time and materials method. Daily time and verification of all man hours and materials shall be submitted and approved by the County.
 - 1.2.4.3 CCD signed by Design Builder indicates the agreement of Design Builder therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.
 - 1.2.4.4 If Design Builder does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the method and the adjustment shall be determined by the County on the basis of reasonable expenditures and savings of those performing the Work attributable to the change including, and, in case of an increase in the Contract Sum, a reasonable allowance for overhead and profit. If the parties still do not agree on the price for a CCD, Design Builder may file a Claim in accordance with the General Conditions. Design Builder shall keep and present, in such form as the County may prescribe, an itemized accounting 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 in paragraphs 1.3 and 1.4 of this Section 012600.
 - 1.2.4.5 Pending final determination of cost to the County, amounts not in dispute may be included in Applications for Payment. The amount of credit to be allowed by Design Builder to the County for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the County. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.
- 1.2.5 County Requested RFP: Design Builder shall furnish a Cost Proposal within seven (7) Business Days of the County's RFP. Upon approval of Cost Proposal, the County will issue a Change Order directing Design Builder to proceed with extra Work. If the parties do not agree on the price for an RFP, the County may either issue a CCD or decide the issue in accordance with the General Conditions. Design Builder shall perform the changed Work notwithstanding any claims or disagreements of any nature.
- 1.2.6 Differing Site Conditions: Design Builder shall submit Notices of Differing Site Conditions to resolve problems regarding differing underground Site conditions encountered in the execution of the Work pursuant to the General Conditions, which shall govern. Design Builder shall furnish Notice within seven (7) business days of discovery of the differing condition. If the County determines that a change in Contract Sum or Contract Time is justified, the County will issue RFP or CCD.
- 1.2.7 Hazardous Waste Conditions: Design Builder shall submit Notices of Hazardous Waste Conditions to resolve problems regarding hazardous materials encountered in the execution of the Work pursuant to the General Conditions, which shall govern. Design Builder shall furnish Notice within seven (7) business days of discovery of the hazardous materials. If the County determines that a change in Contract Sum or Contract Time is justified, the County will issue RFP or CCD.

- 1.2.8 Compensation of Design Fees: For Tier 1 change orders resulting from County requested changes or changes resulting from differing or unknown conditions, Design Builder shall be compensated a total design fee based on the percentage specified herein of the direct change order costs (including allowed mark-ups) for all design, engineering, and coordination services, including those performed by subcontractors. Design service fee calculation shall not apply to costs associated with time extensions. The allowable fee percentage for Tier 1 change orders is as follows:

<u>Direct Change Order Cost</u>	<u>Not to Exceed Design Fee %</u>
\$1 - \$75,000	12.00%
\$75,001 - \$225,000	11.00%
\$225,001 - \$375,000	10.00%
\$375,001 - \$525,000	9.00%
\$525,001 - \$675,000	8.00%
\$675,001 - \$825,000	7.00%
\$825,001 - \$1,000,000	6.00%

For Tier 2 change orders, where the scope of the change, as determined by the County, requires no or minimal design effort, the Design Fee percentage for the change shall be half of that shown in the table above.

1.3 COST DETERMINATION

- 1.3.1 Total cost of extra Work or of Work omitted shall be the sum of labor costs, material costs, equipment rental costs, specialist costs, and all other direct and actual costs as defined herein, plus overhead and profit as allowed herein. This limit applies in all cases of claims for extra Work, whether calculating Cost Proposals, Change Orders or CCDs, or calculating contract claims of all types. Design Builder may recover no other costs arising out of or connected with the performance of extra Work, of any nature. No special, incidental or consequential damages may be claimed or recovered against the County, its representatives or agents, whether arising from breach of Contract, negligence, or strict liability, unless specifically authorized in the Contract Documents.
- 1.3.2 Overhead and Profit: (Overhead shall be as defined in paragraph 1.7 of this Section 012600)
- 1.3.2.1 Overhead and profit on labor for extra Work shall be fifteen percent (15%).
- 1.3.2.2 Overhead and profit on materials for extra Work shall be fifteen percent (15%).
- 1.3.2.3 Overhead and profit on equipment rental for extra Work shall be ten percent (10%).
- 1.3.2.4 When extra Work is performed by a first tier Subcontractor, Design Builder shall receive a five percent (5%) markup on Subcontractor's total direct costs of extra Work (not including subcontractor mark-up). First tier Subcontractor's markup on its Work shall not exceed fifteen percent (15%).

- 1.3.2.5 When extra Work is performed by a lower tier Subcontractor, Design Builder shall receive a total of five percent (5%) markup on the lower tier Subcontractor's total direct costs of extra Work. Design Builder and first tier Subcontractors and lower tier Subcontractors shall divide the fifteen percent (15%) markup as mutually agreed.
- 1.3.2.6 Notwithstanding the foregoing, in no case shall the total markup on any extra Work exceed twenty percent (20%) of the direct cost, notwithstanding the actual number of Contract tiers.
- 1.3.2.7 On proposals covering both increases and decreases in Contract Sum, overhead and profit shall be allowed on the net increase only as determined in this paragraph 1.3. When the net difference is a cost reduction, no percentage for overhead profit shall be applied, but rather the net cost change only shall be applied as a deduction.
- 1.3.2.8 The mark-up shall include overhead, profit, small tools and other consumables, cleanup, project management, supervision, warranties, cost of preparing the cost proposal, jobsite overhead, and home office overhead. No markup will be allowed on taxes, insurance, and bonds.
- 1.3.3 Taxes:
 - 1.3.3.1 All State sales tax, use tax, and County taxes shall be included.
 - 1.3.3.2 Federal and Excise tax shall not be included.
 - 1.3.3.3 No other taxes shall be included.
- 1.3.4 County-Operated Equipment: When owner-operated equipment is used to perform extra Work, Design Builder will be paid for operator as follows:
 - 1.3.4.1 Payment for equipment will be made in accordance with paragraph 1.4.3 below.
 - 1.3.4.2 Payment for cost of labor will be made at 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 is actually covered by such an agreement.
- 1.3.5 Accord and Satisfaction: Every Change Order and accepted CCD shall constitute a full accord and satisfaction, and release, of all Design Builder (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 Builder 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 CCD, but must do so expressly in writing delivered concurrently with the executed Change Order or approved CCD, and must also submit a Claim for the reserved disputed items pursuant to the General Conditions no later than thirty (30) Days after Design Builder's first written notice of its intent to reserve rights.

1.4 COST BREAKDOWN

- 1.4.1 Labor: Design Builder will be paid cost of labor for workers (including forepersons only when authorized by the County) used in actual and direct performance of extra Work. Contractor shall provide hourly wage rate breakdowns for all forces prior to acceptance by the County of any change orders and/or adjustments. Labor rate, whether employer is Design Builder, Subcontractor or other forces, will be the sum of following:
- 1.4.1.1 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.
- 1.4.1.2 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 in paragraph 1.4.1.1 above, such as taxes and insurance.
- 1.4.1.3 Upon receipt of the contract Notice to Proceed, Design-Builder shall submit a list of Labor Rates for all staff and trade positions that will be utilized on Project for County review and approval. The approved Labor Rates will be utilized for all project change orders.
- 1.4.2 Material: Only materials furnished by Design Builder and necessarily used in performance of extra Work will be paid for. Cost of such materials will be cost, including sales tax and delivery charges, to purchaser (Design Builder, Subcontractor or other forces) from supplier thereof, except as the following are applicable:
- 1.4.2.1 If cash or trade discount by actual supplier is offered or available to purchaser, it shall be credited to the County notwithstanding fact that such discount may not have been taken.
- 1.4.2.2 For materials salvaged upon completion of extra Work, salvage value of materials shall be deducted from cost, less discounts, of materials.
- 1.4.2.3 If cost of a material is excessive, then cost of material shall be deemed to be lowest reasonably available wholesale price at which material is available in quantities concerned delivered to Site, less any discounts as provided in paragraph 1.4.2.1 above.
- 1.4.3 Equipment Rental: For equipment owned by Design Builder or its Subcontractor, payment will be made at rental rates listed for equipment in California Department of Transportation official equipment rental rate schedule which is in effect on date upon which extra Work is accomplished and which schedule is incorporated herein by reference as though fully set forth herein. If there is no applicable rate for an item of equipment, then payment shall be made for utilization of equipment owned by Design Builder or Subcontractor at rental rate listed in the most recent edition of the Association of Equipment Distributors (AED) book. For rented equipment, payment will be made based on actual rental invoices. 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 the County. 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. 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. Rental time will not be allowed while equipment is inoperative due to breakdowns.

1.4.3.1 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 the County. The following shall be used in computing rental time of equipment:

1.4.3.1.1 When hourly rates are listed, less than thirty (30) minutes of operation shall be considered to be ½ hour of operation.

1.4.3.1.2 When daily rates are listed, less than four (4) hours of operation shall be considered to be one-half (1/2) day of operation.

1.4.3.2 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:

1.4.3.2.1 The County will pay for costs of loading and unloading equipment.

1.4.3.2.2 Cost of transporting equipment in low bed trailers shall not exceed hourly rates charged by established haulers.

1.4.3.2.3 Cost of transporting equipment shall not exceed applicable minimum established rates of California Public Utilities Commission.

1.4.3.2.4 The County 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.

1.4.3.3 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 the County directs Design Builder to discontinue use of equipment, whichever first occurs. Excluding Saturdays, Sundays, and the County's legal holidays, unless equipment is used to perform extra Work on such days, rental time to be paid per day shall be four (4) hours for zero (0) hours of operation, six (6) hours for four (4) hours of operation and eight (8) hours for eight (8) 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.

1.4.4 Work Performed by Special Forces or Other Special Services: When the County and Design Builder, by agreement, determine that special service or item of extra Work cannot be performed by forces of Design Builder or those of any Subcontractors, service or extra Work item may be performed by specialist. Invoices for service or item of extra Work on basis of current market price thereof may be accepted without complete itemization of labor, material, and equipment rental costs when it is impracticable and not in accordance with established practice of special service industry to provide complete itemization. In those instances wherein Design Builder is required to perform extra Work

necessitating a fabrication or machining process in a fabrication or machine shop facility away from Site, charges for that portion of extra Work performed in such facility may, by agreement, be accepted as a specialist billing. The County must be notified in advance of all off-Site Work. In lieu of overhead and profit provided in paragraph 1.3.2 above, fifteen percent (15%) will be added to specialist invoice price, after deduction of any cash or trade discount offered or available, whether or not such discount may have been taken.

1.5 FORCE-ACCOUNT WORK

- 1.5.1 If it is impracticable because of nature of Work, or for any other reason, to fix an increase or decrease in price definitely in advance, the Design Builder may be directed to proceed at a not-to-exceed ("NTE") maximum price. Subject to such limitation, such extra Work shall be paid for at actual necessary cost for Force-Account Work or at the negotiated cost, as determined by the County. The cost for Force-Account Work shall be determined pursuant to paragraphs 1.3 and 1.4 above.
- 1.5.2 Force-Account Work shall be used when it is not possible or practical to price out the changed Work prior to the start of that Work. In these cases, Force-Account Work will be utilized during the pricing and negotiation phase of the change. Once negotiations have been concluded and a bilateral agreement has been reached, the tracking of the Work under Force-Account is no longer necessary. Force-Account Work shall also be used when negotiations between the County and Design Builder have broken apart and a bilateral agreement on the value of the changed Work cannot be reached. The County may approve other uses of Force-Account Work.
- 1.5.3 Whenever any Force-Account Work is in progress, definite price for which has not been agreed on in advance, Design Builder shall report to the County each Business Day in writing in detail amount and cost of labor and material used, and any other expense incurred in Force-Account Work on preceding day, by using the Cost Proposal form attached hereto. No claim for compensation for Force-Account Work will be allowed unless report shall have been made.
- 1.5.4 Whenever Force-Account Work is in progress, definite price for which has not been agreed on in advance, Design Builder shall report to the County when seventy-five percent (75%) of the NTE amount has been expended.
- 1.5.5 Force-Account Work shall be paid as extra Work under this Section 012600. Methods of determining payment for Work and materials provided in this paragraph 1.5 shall not apply to performance of Work or furnishings of material that, in judgment of the County, may properly be classified under items for which prices are otherwise established in Contract Documents.

1.6 COUNTY-FURNISHED MATERIALS

The County reserves right to furnish materials as it deems advisable, and Design Builder shall have no claims for costs and overhead and profit on such materials.

1.7 OVERHEAD DEFINED

The following constitutes charges that are deemed included in overhead for all Contract Modifications, including Force-Account Work or CCD Work, whether incurred by Design Builder, Subconsultants, Subcontractors, or suppliers, and Design Builder shall not invoice or receive payment for these costs separately:

- 1.7.1 Drawings: field drawings, coordination drawings, Shop Drawings, etc., including submissions of drawings
- 1.7.2 Routine field inspection of Work proposed
- 1.7.3 General Superintendence
- 1.7.4 General administration and preparation of cost proposals, schedule analysis, Change Orders, and other supporting documentation as necessary
- 1.7.5 Computer services
- 1.7.6 Reproduction services
- 1.7.7 Salaries of project managers, engineers, superintendents, timekeepers, storekeepers, and clerical/administrative employees.
- 1.7.8 Janitorial services
- 1.7.9 Small tools, incidentals and consumables
- 1.7.10 Temporary on-Site facilities:
 - 1.7.10.1 Offices and furnishings
 - 1.7.10.2 Telephones
 - 1.7.10.3 Computers, Servers, Internet and WiFi
 - 1.7.10.4 Security
 - 1.7.10.5 Plumbing
 - 1.7.10.6 Electrical: Power, lighting
 - 1.7.10.7 Platforms
 - 1.7.10.8 Fencing, etc.
 - 1.7.10.9 Worker parking and/or shuttle services
 - 1.7.10.10 Worker shade structures
 - 1.7.10.11 Water
- 1.7.11 Home office expenses
- 1.7.12 Procurement and use of vehicles and fuel used coincidentally in Work otherwise included in the Contract Documents
- 1.7.13 Surveying
- 1.7.14 Estimating

1.7.15 Protection of Work or existing conditions to remain.

1.7.16 Material and waste handling and disposal or recycling fees

1.7.17 Final cleanup

1.7.18 Other incidental Work

1.7.19 Related warranties

1.8 RECORDS AND CERTIFICATION

1.8.1 Force-Account (cost reimbursement) charges shall be recorded daily and summarized in Cost Proposal form attached hereto. Design Builder or authorized representative shall complete and sign the form each day. Design Builder shall also provide with the form: the names and classifications of workers and hours worked by each; an itemization of all materials used; a list by size, type, and identification number of equipment and hours operated; and an indication of all Work performed by specialists.

1.8.2 No payment for Force-Account Work shall be made until Design Builder submits original invoices substantiating materials and specialists' charges.

1.8.3 The County shall have the right to audit all records in possession of Design Builder relating to activities covered by Design Builder's claims for Modification of Contract, including Force-Account Work and CCD Work.

1.8.4 Further, the County will have right to audit, inspect, or copy all records maintained in connection with this Contract, including financial records, bidding records, in possession of Design Builder relating to any transaction or activity occurring or arising out of, or by virtue of, the Contract. If Design Builder is a joint venture, right of the County shall apply collaterally to same extent to records of joint venture sponsor, and of each individual joint venture member. This right shall be specifically enforceable, and any failure of Design Builder to voluntarily comply shall be deemed an irrevocable waiver and release of all claims then pending that were or could have been subject to the Claims provisions in the General Conditions.

1.9 REGULATORY AGENCIES AND AHJ APPROVAL OF CHANGE ORDERS

1.9.1 The Design Builder shall be responsible for the submission and coordination of all Change Orders to both the authority having jurisdiction (AHJ) and the appropriate Regulatory Agencies. Changes in the approved plans and specifications for the Project shall be approved by both the Regulatory Agencies and the AHJ before proceeding with the Work. Submission to, and approval of AHJ and Regulatory Agencies for Change Orders to the Project shall not in any way invalidate or modify the General Conditions.

1.9.1.1 Change Orders submitted to the AHJ and Regulatory Agencies for review and approval shall state the reason for the change, show the related addition to or deduction from the current contract price, and shall be accompanied by supplementary plans, specifications, and other supporting documents, when necessary.

1.9.1.2 All Change Orders submitted to the AHJ and Regulatory Agencies shall be signed by the County Representative and the Design Builder, and approved

by both the AHJ and Regulatory Agencies prior to performance of the work described in the Change Order, except under the following circumstances:

- 1.9.1.2.1 Emergency changes to the Work relating to the safety of persons at the construction site. These changes may be made immediately and shall be documented by subsequent change orders.
- 1.9.1.2.2 To prevent undue delay, changes may be commenced following preliminary approval of an Instruction Bulletin or Supplemental Instruction by AHJ or Regulatory Agencies. Such changes shall be confirmed immediately by Change Order.

1.9.2 Impact of AHJ / Regulatory Agencies Review on Project Schedule. AHJ or Regulatory Agencies review of Change Orders is estimated to require from 40 to 80 calendar days. During this review period, the Design Builder cannot proceed with the work that is the subject of the Change Order, except as noted above in paragraphs 1.9.1.2.1 and 1.9.1.2.2. The responsibility for impacts to the Design Builder's Project Master Schedule that are attributable to AHJ or Regulatory Agencies review of Change Orders shall be assigned as follows:

- 1.9.2.1 Impacts to the Project Master Schedule caused by AHJ or Regulatory Agencies review of Design Builder requested Change Orders or Change Orders that result from any lack of quality, completeness, or coordination of any submittal by Design Builder to the AHJ or Regulatory Agencies, shall be the responsibility of the Design Builder.
- 1.9.2.2 The Design Builder shall be entitled to any extension of the Contract Time or additional compensation (including Compensable Delay) due to delays in the Contract Schedule caused by Regulatory Agencies reviews.
- 1.9.2.3 The Design Builder shall be entitled to an extension of the Contract Time due to delays in the Contract Schedule caused by AHJ reviews. The Design Builder may be entitled to additional compensation (including Compensable Delay) at the discretion of the County.

PART 2 - PRODUCTS - Not used.

PART 3 - EXECUTION - Not used.

END OF SECTION

COST PROPOSAL FORM FOLLOWS ON NEXT PAGE

COST PROPOSAL (CP)

[Contract Number]

Cost Proposal Number: _____

Date: _____

In Response To: _____

(RFP #, RFI #, etc.)

To: Vanir Construction Management

Phone: _____

Email: _____

From: [Insert Design Builder's Name/Address]

Brief description of change(s): _____

ITEM DESCRIPTION	DESIGN BUILDER	SUB 1	SUB 2	SUB 3	SUB 4	TOTAL
Material						
Direct Labor Cost						
Equipment						
Other (specify, such as Extended Overhead, mark- up for bonds and insurance or special fees.						
Total Cost						
Taxes (No mark-up allowed on taxes)						
Subcontractor's Overhead & Profit (15 % Labor & Materials, 10% Equipment)						
Design Builder's Overhead & Profit (15% Labor & Materials, 10% Equipment)						
Overhead & Profit to Design Builder for Subcontractor's Work (5%). No mark-up on Subcontractor's mark-up.						
Percent of Total Cost above not including any Overhead & Profit. (Not to exceed 20%)						
GRAND TOTAL						
REQUESTED CHANGE IN CONTRACT TIME (DAYS)						

By Design Builder:

Signature:

Date:

SECTION 012900

PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

1.1.1 This section describes requirements and procedures for determining amount of work done and for obtaining payment for work done.

1.1.2 Related Sections.

- 1.1.2.1 Section 011110 (Summary of Work)
- 1.1.2.2 Section 011114 (Summary of Work - Design Services and Deliverables)
- 1.1.2.3 Section 012600 (Contract Modification Procedures)
- 1.1.2.4 Section 013216 (Schedules and Reports)
- 1.1.2.5 Section 013000 (Submittal Procedures)
- 1.1.2.6 Section 017700 (Closeout Procedures)

1.2 REFERENCES

California Public Contract Code

1.3 SCOPE OF WORK

Work under the Contract Documents, or under any Bid item, allowance or alternate, shall include all design services, labor, materials, transport, handling, storage, supervision, administration and all other items necessary for the satisfactory completion of Work, whether expressly specified or shown.

1.4 DETERMINATION OF QUANTITIES

Quantity of work to be paid for under any item for which a unit price is fixed in the Contract Documents shall be the number, as determined by County, of units of work satisfactorily completed in accordance with Plans and Specifications and as directed pursuant to Plans and Specifications. Unless otherwise provided, determination of number of units of work so completed will be based, so far as practicable, on actual measurement or count within prescribed or ordered limits, and no payment will be made for work done outside of limits. Measurements and computations will be made by methods as County may consider appropriate for class of work measured.

1.5 SCOPE OF PAYMENT

1.5.1 Except as otherwise expressly stipulated in Section 011110 (Summary of Work), payment to Design Builder at the unit price or other price fixed in the Contract for performing the work required under any item, or (if the Contract is on a lump sum price basis) at the lump sum price fixed in the Contract for performing all work required under the Contract, and as either may be adjusted pursuant to any approved change order, shall be full compensation for completing, in accordance with the Contract Documents, all design services and work required under the item or under the Contract, and for all expense incurred by Design Builder for any purpose in connection with the performance

and completion of said work, including all incidental work necessary for completion of the Work.

- 1.5.2 The Contract Sum, whether lump sum, unit price or otherwise, shall be deemed to include all costs necessary to complete required Work.
- 1.5.3 Whenever it is specified herein that Design Builder is to do work or furnish materials of any class for which no price is fixed in the Contract Documents, it shall be understood that Design Builder is to do such work or furnish such materials without extra charge or allowance or direct payment of any sort, and that cost of doing work or furnishing materials is to be included in its Proposal price, unless it is expressly specified herein, in particular cases, that work or material is to be paid for as extra work.
- 1.5.4 For the materials and equipment referenced in Section 011110 (Summary of Work) as subject to payment prior to incorporation into the work, where Design Builder requests payment on the basis of such materials and equipment not incorporated in the Work, Design Builder must satisfy the following conditions and submit attached Stored Material Checklists:
 - 1.5.4.1 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 warehouse;
 - 1.5.4.2 Full title to the materials and/or equipment shall vest in County at the time of delivery to the Site, warehouse or other storage location;
 - 1.5.4.3 Design Builder shall obtain a negotiable warehouse receipt, endorsed over to County for materials and/or equipment stored in an off-site warehouse. No payment shall be made until such endorsed receipts are delivered to County;
 - 1.5.4.4 Design Builder shall provide photographs of materials with a date stamp, time stamp, and geotag.
 - 1.5.4.5 Stockpiled materials and/or equipment shall be available for County's inspection, but County shall have no obligation to inspect them and its inspection or failure to inspect shall not relieve Design Builder of any obligations under the Contract Documents. Materials and/or equipment shall be segregated and labeled or tagged to specifically identify these specific Project Contract Documents;
 - 1.5.4.6 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 Builder's expense;
 - 1.5.4.7 At its expense, Design Builder shall insure the materials and/or equipment against theft, fire, vandalism, and malicious mischief, as well as any other coverages required under the Contract Documents with the County named as additionally insured;
 - 1.5.4.8 Design Builder's application for payment shall be accompanied by a bill of sale, invoice or other documentation warranting that County 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 County's interest therein, all of which must be satisfactory to County. 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 applications for payment for which they have not already been provided.

1.6 BASIS OF PAYMENT

1.6.1 Unit Pay Quantities: Not applicable.

1.6.2 Lump Sum: When estimated quantity for specific portion of Work is not indicated and unit is designated as Lump Sum, payment will be on a Lump Sum basis for Work satisfactorily completed in accordance with Plans and Specifications.

1.6.3 Allowances: Allowance items will be paid for as provided in Sections 011110 (Summary of Work), if any. Funds authorized for allowance work will not be released for Contract payments unless allowance work has been authorized in writing by County.

1.7 PROGRESS PAYMENTS

1.7.1 If requested by Design Builder, progress payments will be made monthly.

1.7.2 Schedule of Values.

1.7.2.1 Within the time frame set in the General Conditions, Design Builder shall submit a detailed breakdown of its Proposal by scheduled Work items and/or activities, including coordination responsibilities and project record document responsibilities. The Project Master Schedule shall serve as the basis for developing the Schedule of Values. Design Builder shall furnish such breakdown, of the total Contract Sum, by assigning dollar values (cost estimates) to each applicable Progress Master Schedule network activity, which cumulative sum equals the total Contract Sum. The format and detail of the breakdown shall correspond directly with the Project Master Schedule and as directed by County to facilitate and clarify future progress payments to Design Builder for direct Work under the Contract Documents. This breakdown shall be referred to as the Schedule of Values.

1.7.2.2 Design Builder's overhead, profit, insurance, cost of bonds and/or other financing, as well as "general conditions costs," (e.g., site cleanup and maintenance, temporary power and lighting, security and the like), shall be prorated through Project duration.

1.7.2.3 County will review the breakdown in conjunction with the Project Master Schedule to ensure that the dollar amounts of this Schedule of Values are, in fact, fair market cost allocations for the Work items listed. County may request Design Builder provide copies of actual invoices, Subcontracts or Subcontractor schedules of values to substantiate cumulative values for the Project Master Schedule network activities. Upon favorable review by County, this Schedule of Values will be accepted for use by County. County shall be the sole judge of fair market cost allocations.

- 1.7.2.4 Any attempt to increase the cost of early activities, i.e., “front loading,” will be rejected by County, resulting in a complete reallocation of monies until such “front loading” is corrected.

1.7.3 Payment Requests

- 1.7.3.1 The Design-Builder shall track, prepare, and submit payment requests for the BHCIP Recovery Center in accordance with applicable funding source requirements. The Recovery Center is funded under the Behavioral Health Continuum Infrastructure Program (BHCIP) grant. This funding source carries distinct reporting, documentation, and payment timeline requirements; therefore, the Design-Builder shall maintain independent cost tracking and invoicing records. Payment applications shall clearly delineate costs, supporting documentation, and progress to facilitate accurate review, audit, and reimbursement consistent with the grant and program obligations.
- 1.7.3.2 Unless otherwise agreed, Design Builder shall submit to the County, during the final week of each payment period, an electronic and hard copy draft request for payment projected out through the end of the payment period.
- The County and Design Builder shall meet to review the draft request for payment to reach consensus on percentage completion. The Design Builder shall revise and resubmit request for payment to include agreed upon percentages complete.
- 1.7.3.3 Unless otherwise agreed, Design Builder shall submit to the County, on or before the first (1st) day of each payment period one (1) hard copy and one electronic copy of the revised request for payment for the cost of the Work put in place during the previous one-month payment period. Such requests for progress payments shall be 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. If Design Builder is late submitting its payment request, that payment request may be processed at any time during the succeeding one month period, resulting in processing of Design Builder's payment request being delayed for more than a day for day basis.
- 1.7.3.4 Payment requests may include, but are not necessarily limited to the following:
- 1.7.3.4.1 Material, equipment and labor incorporated into the Work, less any previous payments for the same;
- 1.7.3.4.2 Up to one hundred percent (100%) of the cost of major equipment identified in paragraph 1.5.4 above, if purchased and delivered to the Site or stored off site, as may be approved by County.
- 1.7.3.4.3 Up to one hundred percent (100%) of the cost of materials identified in paragraph 1.5.4 above specifically fabricated for the Project that are not yet incorporated into the Work, as may be approved by County.

- 1.7.3.5 Design Builder shall, at the time any payment request is submitted, certify in writing the accuracy of the payment request and that Design Builder has fulfilled all scheduling requirements of the General Conditions and Section 013216 (Schedules and Reports), including updates and revisions and Design Builder has updated As-Built documents to reflect current conditions. The certification shall be executed by a responsible officer of Design Builder.
- 1.7.3.6 No progress payment will be processed prior to the County receiving all requested, acceptable schedule updates and verifying As-Built information.
- 1.7.3.7 Each payment request shall be organized to provide amounts due for Work related to each major phase of work. Level of detail shall be consistent with the latest cost loaded schedule update as approved by the County. If amounts due are allocated between the work phases based on a formula, the formula must be provided to and approved by County before Design Builder submits the payment request.
- 1.7.3.8 Each payment request shall list each Change Order executed prior to date of submission, including the Change Order Number, and a description of the work activities, consistent with the descriptions of original work activities. Design Builder shall submit a monthly Change Order status log to County with their payment request.
- 1.7.3.9 If County requires substantiating data, Design Builder shall submit information requested by County, with cover letter identifying Project, payment request number and date, and detailed list of enclosures. Design Builder shall submit one copy of substantiating data and cover letter for each copy of Payment request submitted.
- 1.7.3.10 Monthly progress payments shall be made, based on total value of activities completed or partially completed, as determined by County with participation of Design Builder, and based upon approved activity costs. Accumulated retainage will be shown as separate item in payment summary. If Design Builder fails or refuses to participate in construction progress evaluation with County, Design Builder shall not receive current payment until Design Builder has participated fully in providing construction progress information and schedule update information for County.
- 1.7.3.11 Legal title to all Work shall pass to and vest in County as Work is performed, and title to all materials and equipment shall pass to and vest in County when such materials and equipment are delivered to the Site or as soon as title passes from the vendor or supplier thereof. Design Builder shall keep the Site and all materials and equipment free and clear of all liens, stop notices and charges arising out of performance of the Contract Documents, and shall indemnify, defend and hold harmless all those indemnified pursuant to the General Conditions from the claims, suits, actions, losses and liabilities described therein, including those which are a result of any breach of this responsibility and shall defend any claim or suit brought against any party required to be indemnified hereunder based upon any such claim of title or lien.
- 1.7.3.12 Design Builder shall promptly pay each Consultant, Subconsultant, and Subcontractor the amount to which each is entitled, and shall, by an appropriate agreement with each Consultant, Subconsultant, and

Subcontractor, require each to make payments to its sub-Subconsultants and sub-Subcontractors in a similar manner. Design Builder shall submit on its behalf and on behalf of each Subcontractor or consultant for which payment is being requested a conditional release of stop notice in statutory form for the Work which is the subject of each progress payment request and an unconditional release of stop notice in statutory form for the immediately preceding progress payment as to the Work of each. If the unconditional release of stop notice for the amount paid for the immediately preceding month is not reasonably available, it shall be submitted with the next progress payment request, such that it is submitted no more than two months after the date on which the conditional release of stop notice was submitted for the amount paid.

1.7.4 Progress Payments

- 1.7.4.1 Upon receiving Design Builder's payment request, County will review the payment request and make necessary adjustments to percent of completion of each activity. One copy will be returned to Design Builder with description of adjustments made. All parties will update percentage of completion values in the same manner, i.e., express value of an accumulated percentage of completion to date.
- 1.7.4.2 The payment request may be reviewed by County for the purpose of determining that the payment request is a proper payment request, and shall be rejected, revised or approved by County pursuant to the cost breakdown prepared in accordance with this Section.
- 1.7.4.3 If it is determined that the payment request is not a proper payment request suitable for payment, County shall return it to Design Builder as soon as practicable, but no later than seven (7) Days after receipt, together with a document setting forth in writing the reasons why the payment request is not proper. If County determines that portions of the payment request is not proper or not due under the Contract Documents, then County may approve the other portions of the payment request, and in the case of disputed items or defective work not remedied, may withhold up to one hundred fifty percent (150%) of the disputed amount from the progress payment.
- 1.7.4.4 Pursuant to Public Contract Code § 20104.50, if County fails to make any progress payment within thirty (30) Days after receipt of an undisputed and properly submitted payment request from a Design Builder, County shall pay interest to Design Builder equivalent to the legal rates set forth in subdivision (a) of Code of Civil Procedure § 685.010. The thirty (30) Day period shall be reduced by the number of days by which County exceeds the seven (7) Day return requirement set forth herein.
 - 1.7.4.4.1 If County fails to make a payment as described in paragraph 1.7.4.4 above, Design Builder may give County written notice of Design Builder's intent to suspend work for lack of payment. Only after having given such notice, and no earlier than thirty (30) Days after serving such notice on the County, Design Builder may suspend any or all work required of it by the Contract Documents for thirty (30) Days or for such other time as the County and Design Builder mutually agree. Following such noticed suspension of work, the Design Builder may terminate

this Agreement. Design Builder's compensation and damages related to a termination pursuant to this paragraph 1.7.4.4.1 shall be limited to that described in the General Conditions.

- 1.7.4.5 As soon as practicable after approval of each request for progress payment, County will pay to Design Builder in manner provided by law, an amount equal to ninety-five percent (95%) of County's estimate, or a lesser amount if so provided in Contract Documents and County shall retain the amount so withheld as retention. Provided that payments may at any time be withheld if Work is not proceeding in accordance with the Contract Documents, or Design Builder is not complying with requirements of the Contract Documents, or to comply with stop notices or to offset liquidated damages accruing or expected.
- 1.7.4.6 Retention will not be reduced if Design Builder is behind schedule, unless otherwise approved by the Contra Costa County Board of Supervisors. If retention is reduced at any point during performance of the Work and Design Builder subsequently falls behind schedule, retention may be raised back to original percentage specified in paragraphs 1.7.4.5 and 1.7.4.6 of this Section.
- 1.7.4.7 Before any progress payment or final payment is made, Design Builder may be required to submit satisfactory evidence that Design Builder is not delinquent in payments to employees, Subcontractors, suppliers, or creditors for labor and materials incorporated into Work.
- 1.7.4.8 County reserves and shall have the right to withhold payment for any equipment and/or specifically fabricated materials that, in the sole judgment of County, is not adequately and properly protected against weather and/or damage, prior to or following incorporation into the Work.
- 1.7.4.9 Granting of progress payment or payments by County, or receipt thereof by Design Builder, shall not be understood as constituting in any sense acceptance of Work or of any portion thereof, and shall in no way lessen liability of Design Builder to replace unsatisfactory work or material, though unsatisfactory character of work or material may have been apparent or detected at time payment was made.
- 1.7.4.10 When County shall charge a sum of money against Design Builder under any provision of the Contract Documents, amount of charge shall be deducted and retained by County from amount of next succeeding progress payment or from any other moneys due or that may become due Design Builder under the Contract Documents. If, on completion or termination of the Contract Documents, such moneys due Design Builder are found insufficient to cover County's charges against it, County shall have right to recover balance from Design Builder or Sureties.

1.8 SUBSTITUTION OF SECURITIES IN LIEU OF RETENTION

Pursuant to provisions of Public Contract Code § 22300, incorporated herein by reference, substitution of securities for any monies withheld under the Contract Documents to ensure performance is permitted under following conditions:

- 1.8.1 At request and expense of Design Builder, securities listed in Government Code § 16430, 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 Builder and County which are equivalent to the amount withheld under retention provisions of the Contract Documents shall be deposited with County or with a state or federally chartered bank in California, as the escrow agent, who shall then pay such monies to Design Builder. Upon satisfactory completion of the Contract Documents, securities shall be returned to Design Builder.
 - 1.8.2 Alternatively, Design Builder may request, and County shall make payment of retentions earned directly to the escrow agent at the expense of Design Builder. At the expense of Design Builder, Design Builder may direct the investment of the payments into securities and Design Builder shall receive the interest earned on the investments upon the same terms provided for in this section for securities deposited by Design Builder. Upon satisfactory completion of the Contract Documents, Design Builder shall receive from escrow agent all securities, interest, and payments received by the escrow agent from County, pursuant to the terms of this section. Design Builder shall pay to each Subcontractor, not later than twenty (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 Builder.
 - 1.8.3 Design Builder shall be beneficial owner of securities substituted for monies withheld and shall receive any interest thereon. Design Builder shall submit any form W-9 or other required tax form.
 - 1.8.4 Design Builder shall enter into escrow agreement according to Document 006140 (Escrow Agreement for Security Deposits in Lieu of Retention) as authorized under Public Contract Code § 22300, specifying amount of securities to be deposited, terms and conditions of conversion to cash in case of default of Design Builder, and termination of escrow upon completion of the Contract Documents.
- 1.9 FINAL PAYMENT
- 1.9.1 As soon as practicable after all required Work is completed in accordance with the Contract Documents, including delivery of all Record Documents, County will pay to Design Builder, in manner provided by law, unpaid balance of Contract price of Work, or whole Contract price of Work if no progress payment has been made, determined in accordance with terms of the Contract Documents, less sums as may be lawfully retained under any provisions of the Contract Documents or by law.
 - 1.9.2 Prior progress payments shall be subject to correction in the final payment. County's determination of amount due as final payment shall be final and conclusive evidence of amount of Work performed by Design Builder under the Contract Documents, and shall be full measure of compensation to be received by Design Builder.
 - 1.9.3 Design Builder 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 006510 (Agreement and Release of Any and All Claims), discharging County, its officers, agents, employees and consultants of and from liabilities, obligations, and claims arising under the Contract Documents.

1.10 EFFECT OF PAYMENT

Payment will be made by County, based on County's observations at the Site and the data comprising the application for payment. Payment will not be a representation that County has:

- 1.10.1 Made exhaustive or continuous on-site inspections to check the quality or quantity of Work;
- 1.10.2 Reviewed construction means, methods, techniques, sequences or procedures;
- 1.10.3 Reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by County to substantiate Design Builder's right to payment; or
- 1.10.4 Made an examination to ascertain how or for what purpose Design Builder has used money previously paid on account of the Contract Sum.

1.11 COUNTY PROJECT FINANCING AND PERFORMANCE OF PAYMENT OBLIGATIONS

Upon written request of the Design Builder, the County shall provide to Design Builder, not more frequently than quarterly, information concerning the status of its project financing. If Design Builder at any time reasonably believes that the County is or may be unable to make payment as payment becomes due under the Contract, Design Builder may notify the County of this fact and request written assurances from the County of performance of its payment obligations. The County shall, within ten (10) Days of Design Builder's request, provide written adequate assurances of performance of its payment obligations.

PART 2 - PRODUCTS - Not used.

PART 3 - EXECUTION - Not used.

END OF SECTION

SECTION 013000

SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

Design Builder and County will jointly develop a list of submittals and shop drawings that are to be submitted to the County for review. Upon completion of the list, Design Builder will provide County with a preliminary schedule of shop drawings and submittals, which will list each submittal in order by specification section and the times for submitting, reviewing, and processing each such submittal.

- 1.1.1 This section describes general requirements for submittals for the Construction Phase of the Work:

- 1.1.1.1 Procedures
- 1.1.1.2 Schedule of Shop Drawing and Sample Submittals
- 1.1.1.3 Safety Plan
- 1.1.1.4 Progress Schedule
- 1.1.1.5 Product Data
- 1.1.1.6 Shop drawings
- 1.1.1.7 Samples
- 1.1.1.8 Quality Control Submittals
 - 1.1.1.8.1 Engineering Data
 - 1.1.1.8.2 Test Reports
 - 1.1.1.8.3 Certificates
 - 1.1.1.8.4 Manufacturers' Instructions
- 1.1.1.9 Operation and Maintenance Manuals
- 1.1.1.10 Computer Programs
- 1.1.1.11 Project Record Documents

- 1.1.2 For Design Phase Deliverable Requirements, see Section 011114 (Summary of Work - Design Services and Deliverables). Submittals as described in this Document refer only to the Construction Phase of Work with the exception of Progress Schedules and Reports which is applicable throughout both Design and Construction Phases.

1.2 PROCEDURES

- 1.2.1 Provide submittals electronically via web-based project management system furnished by Design Builder. Some submittals shall also be provided in hard copy, at the County's request, such as Shop Drawings, Samples, Color Charts, Operation and Maintenance Manuals, Computer Programs, and Project Record Documents.
- 1.2.2 Transmit each item with a standard letter of transmittal in form approved by County, addressed to County Representative. Assign an identifying number to each submittal, including the Specification or Project Manual section to which the submittal applies. Utilize a system of tracking the submittal revision (e.g. .00 for the original submittal, .01 for revision 1, .02 for revision 2, etc.)
- 1.2.3 Identify Design Builder, Subcontractor, major supplier, pertinent drawing sheet and detail number, and specification section number as appropriate. Identify type of submittal (shop

drawings, product data, calculations, warranty, sample, etc.). Provide space for Architect, Engineer, and County review stamps.

- 1.2.4 Where manufacturers' standard drawings or data sheets are used, they shall be marked clearly to show those portions of the data that are applicable to this Project.
- 1.2.5 Submit shop drawings, samples, product data, and other submittals (collectively, "submittals") to County for review in accordance with accepted Schedule of Submittals. It is the intent that during the construction phase, the routing of submittals to the County is for informational purposes of coordination and communication to the County Representatives, except where such submittals represent deviations or substitutions from the approved construction documents, requiring County's review and approval. The County reserves the right to request clarification and reconsideration by the Design Builder and Architect or Engineer of Record when County disagrees with Architect's action on the submittal or feels further consideration or interpretation is warranted.
- 1.2.6 The data shown on all submittals shall be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show County the materials and equipment that the Design Builder proposes to provide and to enable County to review the information for the limited purposes specified below. Samples shall be identified clearly as to material, supplier, pertinent data such as catalog numbers, the use for which it is intended, and otherwise as County may require to enable County to review the submittal. The quantity of each sample to be submitted will be as indicated in the Specification Sections.
- 1.2.7 During their review, the Architect may request clarification or interpretation from the County prior to taking action on the submittal.
- 1.2.8 At the time of each submission, Design Builder shall give the County specific written notice of all variations, if any, that the submittal may have from the requirements of the approved Contract Documents or approved Construction Documents, and the reasons therefore. This written notice shall be in a written communication separate from the submittal. In addition, Design Builder shall cause a specific notation to be made on each submittal for the County's review and approval of each such variation.
- 1.2.9 Submittal coordination and verification is the responsibility of Design Builder. Before submitting, Design Builder shall have determined and verified:
 - 1.2.9.1 All field measurements (where possible), quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - 1.2.9.2 All materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 1.2.9.3 All information relative to Design Builder's sole responsibilities of design and means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
- 1.2.10 Design Builder also shall have reviewed and coordinated each submittal with other submittals and with the requirements of the Work and the Contract Documents.

- 1.2.11 Design Builder's submittal to County will constitute Design Builder's representation that it has satisfied its obligations under the Contract Documents, and as set forth immediately above, with respect to Design Builder's review and approval of that submittal.
- 1.2.12 Submittals received from sources other than Design Builder will be returned to Design Builder without County's review.
- 1.2.13 Designation of work "by others", if shown in submittals prepared by a Subcontractor, subconsultant or supplier, shall mean that work will be the responsibility of Design Builder or another Subcontractor rather than the Subcontractor, subconsultant or supplier who has provided the submittals.
- 1.2.14 Prior to submitting to County, each of Design Builder's submittals will have been reviewed by the Architect of Record and any other designer or engineer having responsibility for the relevant discipline covering the scope of work reflected in the submittal and it shall be marked from each of them with actions defined as follows:
 - 1.2.14.1 NO EXCEPTIONS TAKEN - Accepted subject to its compatibility with future submittals and additional partial submittals for portions of the Work not covered in this submittal. Does not constitute approval or deletion of specified or required items not shown on the submittal.
 - 1.2.14.2 MAKE CORRECTIONS NOTED (NO RESUBMISSIONS REQUIRED) - Same as NO EXCEPTIONS TAKEN as described above, except that minor corrections as noted shall be made by Design Builder and verified by the Architect of Record.
 - 1.2.14.3 REVISE AND RESUBMIT - Rejected because of major inconsistencies or errors which shall be resolved or corrected by Design Builder prior to subsequent review by Architect and County.
 - 1.2.14.4 REJECTED - RESUBMIT - Submitted material is incomplete, illegible, or does not conform to Drawings and Specifications in major respect, e.g., wrong size, model, capacity, or material.
 - 1.2.14.5 NOT REVIEWED - Submitted material is acknowledged by the Architect as being an informational or "for the record" submittal, has not been reviewed, and is being returned to be acted upon by Design Builder without review by Architect. NOT REVIEWED shall not be interpreted as Architect's acceptance or approval of the information presented in the submittal. Submittals possessing the NOT REVIEWED stamp by the Architect that later are found to contain data that is in conflict with the Contract Documents, if requested by the County shall be revised by the Design Builder to reflect the required corrections and shall be resubmitted by the Design Builder.
- 1.2.15 It shall be Design Builder's responsibility to copy, conform, and distribute reviewed submittals in sufficient numbers for Design Builder's files, County files, Subcontractors, and vendors.
- 1.2.16 After Architect's review of a Submittal, revise and resubmit as required. Identify changes made since previous Submittal.

1.2.16.1 Design Builder shall not begin fabrication or work that is dependent upon a submittal until Design Builder has received a response from the Architect that does not include a requirement for re-submittal.

1.2.16.2 Normally, submittals will be processed and returned to Design Builder within fifteen (15) Business Days of receipt and shall be processed by the Architect so as not to delay Design Builder's performance.

1.2.17 Distribute copies of reviewed submittals to concerned persons. Instruct recipients to promptly report any inability to comply with submittals.

1.3 SCHEDULE OF SHOP DRAWING AND SAMPLE SUBMITTALS

1.3.1 Submit preliminary Schedule of Submittals for County approval. Submit final and accepted Schedule of Submittals no later than thirty (30) Days following one hundred percent (100%) Construction Document approval of any phase or increment package.

1.3.2 The Schedule of Submittals will be used by County to schedule activities relating to review of submittals that may need County approval. County will need to review and act upon any shop drawing or submittal that constitutes substitution of products, systems or other deviation from approved Construction Documents. The Schedule of Submittals shall indicate a spreading out of submittals and early submittals of long lead-time items and of items requiring extensive review.

1.3.3 The Schedule of Submittals shall be reviewed by County and shall be revised and resubmitted until accepted by County.

1.4 SAFETY PROGRAM

1.4.1 Submit electronic copy and two (2) hard copies of a Safety Program specific to this Contract to County no later than fifteen (15) Days after Notice to Proceed (NTP). Reference Section 11400 - Work Restrictions for Safety Program requirements.

1.4.2 One (1) copy of the reviewed Safety Plan will be returned to Design Builder. Design Builder shall incorporate any comments from the County's and Sheriff's Office review of the Safety Program, into a final Safety Program document that shall be submitted to the County as follows: one (1) electronic file; and two (2) bound hard copies.

1.4.3 No on-site work shall be started until Safety Plan has been reviewed and accepted by County and Health Services Office. Acceptance of the Safety Plan shall not affect Design Builder's responsibility for maintaining a safe working place and instituting safety programs in connection with the Project. Neither the County nor any of its representatives assume any responsibility for Design Builder's safety related obligations. Design Builder shall have sole responsibility for safety on and off the Site.

1.4.4 In the event that County institutes an OCIP Program, the Design Builder's Safety Plan must meet approval of the County's OCIP Administrator.

1.5 PROJECT MASTER SCHEDULE

See Section 013216 (Schedules and Reports) for schedule and report requirements.

1.6 PRODUCT DATA

- 1.6.1 Within thirty (30) Days after County's approval of completed Construction Documents for either entire Project or each accepted phase or increment of work as may be defined by Design Builder, submit one (1) electronic version of complete list of major products proposed for use, with name of the manufacturer, trade name, and model number of each product.
- 1.6.2 For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.
- 1.6.3 Tabulate products by specification section number.
- 1.6.4 Supplemental Data: Submit one (1) electronic version, marked to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information unique to the Project.
- 1.6.5 Provide copies for Project Record Documents described in Section 017700 (Closeout Procedures).

1.7 SHOP DRAWINGS

- 1.7.1 Minimum Sheet Size: 8-1/2 inches by 11 inches. All others: Multiples of 8-1/2 inches by 11 inches, 34 inches by 44 inches maximum. All project submittals will include an approved project cover sheet for Design Builder, A/E and County stamps.
- 1.7.2 Submit the number of copies which Design Builder requires, plus one (1) electronic version and two (2) copies which will be retained by County and the Construction Manager.
- 1.7.3 The original will be marked with County's review comments and returned to Design Builder when required as outlined in paragraph 1.2 above.
- 1.7.4 Mark each copy to identify applicable products, models, options, and other data; supplement manufacturers' standard data to provide information unique to the Work.
- 1.7.5 Include manufacturers' installation instructions when required by Specification section.

1.8 SAMPLES

- 1.8.1 Submit full range of manufacturers' standard colors, textures, and patterns when County's selection is required as outlined in paragraph 1.2 above.
- 1.8.2 Submit samples to illustrate functional and aesthetic characteristics of each product, with integral parts and attachment devices. Coordinate submittal of different categories for interfacing work.
- 1.8.3 Include identification on each sample, giving full information.
- 1.8.4 Submit two (2) samples unless otherwise specified.
- 1.8.5 Sizes: Unless otherwise specified, provide the following:

- 1.8.5.1 Paint Chips: Manufacturers' standard
- 1.8.5.2 Flat or Sheet Products: Minimum 6 inches square, maximum 12 inches square
- 1.8.5.3 Linear Products: Minimum 6 inches, maximum 12 inches long
- 1.8.5.4 Bulk Products: Minimum 1 pint, maximum 1 gallon

1.9 QUALITY CONTROL SUBMITTALS

1.9.1 Design Data:

- 1.9.1.1 Indicate that the design data conforms to or exceeds the requirements of the Contract Documents.
- 1.9.1.2 Submit supporting reference data, affidavits, and certifications as appropriate.
- 1.9.1.3 Identify conflicts with test reports, certificates, manufacturer's instructions or specific aspect(s) of the Contract Documents.

1.9.2 Test Reports:

- 1.9.2.1 Indicate that the material or product conforms to or exceeds specified requirements.
- 1.9.2.2 Reports may be from recent or previous tests on material or product, but must be acceptable to County. Comply with requirements of each individual Specification.

1.9.3 Certificates:

- 1.9.3.1 Indicate that the material or product conforms to or exceeds specified requirements.
- 1.9.3.2 Submit supporting reference data, affidavits, and certifications as appropriate.
- 1.9.3.3 Certificates may be recent or from previous test results on material or product, but must be acceptable to County.

1.9.4 Manufacturers' Instructions:

- 1.9.4.1 Include manufacturers' printed instructions for delivery, storage, assembly, installation, startup, adjusting, and finishing.
- 1.9.4.2 Identify conflicts between manufacturers' instructions and Contract Documents.

1.10 OPERATION AND MAINTENANCE MANUALS

Refer to Section 017823 (Operation and Maintenance Data) for Operation and Maintenance Manual submittal requirements.

1.11 COMPUTER PROGRAMS

When any equipment requires operation by computer programs, submit a copy of the program on appropriate USB drive plus all user manuals and guides for operating the programs and making changes in the programs for upgrading and expanding the databases. Programs must be Microsoft Windows compatible, or in a form otherwise acceptable to County. Provide required licenses to County at no additional cost.

1.12 PROJECT RECORD DOCUMENTS

Refer to submittal requirements in Section 017839 (Project Record Documents).

1.13 DELAY OF SUBMITTALS

Delay of Submittals by Design Builder is considered avoidable delay. Liquidated damages incurred because of late Submittals will be assessed to Design Builder.

PART 2 - PRODUCTS - Not used.

PART 3 - EXECUTION - Not used.

END OF SECTION

SECTION 013100

PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS AND PROVISIONS:

1.1.1 All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1.1 General Conditions
- 1.1.1.2 Special Conditions

1.2 WEB-BASED PROJECT MANAGEMENT SOFTWARE

1.2.1 General Project Management Objectives

1.2.1.1 Mandatory Use of PMIS

1.2.1.1.1 The Contractor shall utilize the County's web-based Project Management Information System (PMIS), Kahua, for the submission, tracking, review, and management of all project documentation, communication, and reporting. Kahua shall be used for all formal project correspondence unless otherwise directed in writing.

1.2.1.2 Official System of Record

1.2.1.2.1 Kahua is the Official Record of the Work. If discrepancies arise between the Contractor's internal systems and Kahua, the data and timestamps contained in Kahua shall govern.

1.2.1.3 Dual Entry & Integration

1.2.1.3.1 The Contractor may maintain its own internal software systems (e.g., Procore, CMiC) at its own discretion. However, this does not relieve the Contractor of the obligation to populate Kahua. If a separate system is used, the Contractor is strictly responsible for the manual or automated transfer of data into Kahua concurrently with the creation of the record. All costs associated with dual entry, API integrations, or administrative time are the sole responsibility of the Contractor and shall be considered included in the Contractor's overhead

1.2.1.4 Contract Responsibilities

1.2.1.4.1 Use of this project management software will not replace or change any contractual responsibilities of the Contractor team members.

1.2.2 Software and Hardware Requirements

1.2.2.1 Device Requirements:

- 1.2.2.1.1 The Contractor is required to provide computer hardware and software that meet the requirements of Kahua. This includes a workstation, laptop, or tablet for each major team member.

1.2.2.2 Connectivity:

- 1.2.2.2.1 The Contractor shall have Internet access through an Internet service provider of their choice. A reliable connection to the Internet is required for the duration of the project.

1.2.2.3 Photo Documentation:

- 1.2.2.3.1 The Contractor is required to furnish and use a digital camera (or mobile device with camera capabilities) to photo-document job progress and upload the associated images on a regular basis to the Kahua app.

1.2.3 System Management and Licenses

1.2.3.1 Licenses:

- 1.2.3.1.1 The County will provide the Contractor with the required number of user licenses to use the existing project database for the duration of the project. These licenses will permit access only to this project, in accordance with permission levels configured by the County's Kahua administrator.

1.2.3.2 Additional Costs:

- 1.2.3.2.1 The Contractor may purchase their own Kahua software for internal use, but only the hardware and internet access required to access the County's system are strictly required. All costs associated with computer hardware, internet service, and additional licenses beyond those provided by the County are the responsibility of the Contractor.

1.2.3.3 User Accounts:

- 1.2.3.3.1 The County will administer the Kahua user accounts. The Contractor must provide the names, positions, and email addresses of all users immediately upon receipt of the Notice to Proceed.

1.2.4 Communication Process and Workflows

1.2.4.1 Digital Workflows:

- 1.2.4.1.1 Most project communication will take place in the Kahua system by creating and distributing documents directly within the system.

Most documents requiring formal signatures will be executed through Kahua.

1.2.4.2 Submittal Log:

1.2.4.2.1 The official submittal log will be maintained within Kahua. The Contractor will use Kahua to transmit submittals using bookmarked PDF files.

1.2.4.3 Required Modules:

1.2.4.3.1 The Contractor is required to utilize modules including but not limited to: Messaging, Architect's Supplemental Instructions (ASIs), Progress Payments, Change Orders, Construction Change Directives (CCDs), Punch Lists, Requests for Information (RFI), Daily Reports, Expenses, etc.

1.2.4.4 RFIs:

1.2.4.4.1 The Contractor (and their Designers) can respond to RFIs completely within Kahua without creating a hard copy.

1.2.4.5 Hard Copies:

1.2.4.5.1 Support documentation available only in hard copy format must be scanned into an electronic file and attached to the relevant document in Kahua.

PART 2 - PRODUCTS

2.1 PMIS Provider (No Substitutions):

2.1.1 Kahua – www.kahua.com

PART 3 - EXECUTION

3.1 Execution and Training

3.1.1 Training Provision:

3.1.1.1 The County will provide initial Kahua training for up to 3 Contractor staff members.

3.1.2 Mandatory Attendance:

3.1.2.1 The Contractor's Project Manager and Project Coordinator are required to attend these training sessions.

3.1.3 Training Costs:

- 3.1.3.1 While the training session is provided by the County, all costs associated with the Contractor's staff time and attendance shall be borne solely by the Contractor.

3.1.4 Staffing:

- 3.1.4.1 The Contractor shall provide an adequate number of users to properly manage the project in accordance with the Project Timetable. The Contractor shall ensure that all major team members on this project have Internet access and valid email addresses available during the duration of this project

END OF SECTION

SECTION 013216

SCHEDULES AND REPORTS

PART 1 - GENERAL

1.1 SUMMARY

1.1.1 Related Sections:

- 1.1.1.1 Section 011114 (Summary of Work – Design Services and Deliverables)
- 1.1.1.2 Section 013000 (Submittal Procedures)

1.1.2 Design Builder shall perform scheduling of Work under these Contract Documents in accordance with requirements of this Section 013216.

- 1.1.2.1 Project Master Schedule, including Design Schedule and Construction Schedule, shall be time-scaled, cost and crew size loaded. Monthly Schedule Updates shall be time-scaled, cost and crew size loaded. Cost loading shall be the basis of the Schedule of Values as specified in Section 012900 (Payment Procedures).

- 1.1.2.2 All Schedules shall be in Primavera® (latest edition) computer software format compatible with County's or County's Construction Management Consultant's existing computer software format.

- 1.1.2.3 All Schedules shall be submitted prior to the dates identified in Section 013000 (Submittal Procedures)

1.1.3 Design Builder's obligations under paragraph 1.1.2 of this Section 013216 are hereby deemed material obligations. Nothing in paragraph 1.1.2 or the lack of an express statement that any other Contract Documents provision is or is not material shall be considered in determining whether any such other provision is material.

1.1.4 Transmit each item under form approved by County or following Section 013000 (Submittal Procedures).

- 1.1.4.1 Identify Project with the County Contract number, and name of Design Builder.

- 1.1.4.2 Provide space for Design Builder's approval stamp and County's review stamps.

1.2 DEFINITIONS

1.2.1 Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Except for Milestone Activities, activities included in a schedule consume time and resources.

- 1.2.1.1 Critical Activity: An activity, if delayed, would result in the delay to the overall completion.

- 1.2.1.2 Predecessor Activity: An activity that precedes another activity in the network.
- 1.2.1.3 Successor Activity: An activity that follows another activity in the network.
- 1.2.2 Activity Codes: Values assigned to schedule activities to organize the schedule into groups for reporting and analysis. Examples include Responsibility, Building, and Site Area.
- 1.2.3 Calendar: Defines the week for different activities within the CPM schedule. Examples of calendars include 5-day week minus holidays, 7-day week, and 6-day week. Different calendar types may be used in the CPM schedule.
- 1.2.4 Constraint: In the CPM schedule, a constraint is used to affect the float, duration, or date of an activity.
- 1.2.5 CPM: Critical path method, which is a method of planning and scheduling a project where activities are arranged based on activity relationships.
 - 1.2.5.1 CPM Network: A sequence of inner-connected activities. Network calculations determine the Critical (Longest) Path and when activities can be performed.
- 1.2.6 Crew Size Loading: Each field work activity is assigned a value that accurately reflects the Contractor's average field labor crew size. CPM Schedules for this Contract shall be crew size loaded.
- 1.2.7 Critical (Longest) Path: The network of schedule activities that establishes the minimum overall Project duration.
- 1.2.8 Data Date: The date used as the starting point for schedule calculations. For baseline CPM schedules, the Data Date is the first date of Contract Time. For monthly updates, the Data Date is the first workday of the month.
- 1.2.9 Delay: An interruption of work.
- 1.2.10 Milestone: The starting or ending point of an activity or linked series of activities. A milestone in the schedule contains zero duration.
 - 1.2.10.1 Key Milestone: A major event. A Key Milestone includes but is not limited to the following: Notice to Proceed, Substantial Completion, Phase Start Date, and Phase Finish Date. The County Construction Manager may direct the Contractor to add additional Key Milestones.
 - 1.2.10.2 Contractual Milestone: A milestone tied to Liquidated Damages. Substantial Completion is both a Key and Contractual Milestones
- 1.2.11 Float: The measure of leeway in starting and completing an activity.
 - 1.2.11.1 Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.

- 1.2.11.2 Total float is the amount of time by which a part of the Work may be delayed from its early dates before it delays project completion.
- 1.2.11.3 Contract Float: The amount of time between the Contractor's anticipated dates for early completion of the Work, or specified part, and the corresponding Contract Time.
- 1.2.11.4 Ownership of Float: Total float and contract float belong to the project and are not for the exclusive benefit of any party. Total float and contract float are jointly owned and are resources available to the County or the Design Builder on a first-come-first-served-basis for the benefit of the project. The Design Builder and the County shall notify the other of any intent to utilize Project Float. The County Construction Manager shall monitor float to determine if any float erosion is for the benefit of the project
- 1.2.11.5 Float Manipulation: Utilizing unrealistic or inflated durations, imposed dates, artificial logic and/or lags, preferential logic, date constraints, and others that results in an impact to Float. Do not manipulate float. Instead, add detail within the schedule to mitigate the use of Float manipulation. Provide a detailed written explanation in the Baseline Narrative for items seen as potential float manipulation if directed by County Construction Manager. After a review of the Baseline Schedule and the detailed written explanation, any such actions ultimately seen as Float manipulation by the County Construction Manager may result in direction for a Baseline revision and re-submittal.
- 1.2.12 Lag: An adjustment of time between logically tied CPM schedule activities.
- 1.2.13 Near-Critical Activity: A non-critical activity with a Total Float value within 15 workdays of the Critical (Longest) Path.
- 1.2.14 P6: Primavera Professional Project Management, an industry standard CPM scheduling application.
- 1.2.15 Percent Complete: The portion of an activity that is complete based on the measurement of work accomplished. Percent completes are ultimately decided by the County Construction Manager.
- 1.2.16 Relationships: Logic ties between activities within the CPM schedule.
- 1.2.17 Target Schedule: A different version of the CPM schedule that can be used as a basis for comparison against another CPM schedule.
- 1.2.18 TIA: Time Impact Analysis

1.3 GENERAL SCHEDULE REQUIREMENTS

- 1.3.1 Schedules: The Design Builder shall submit an operating electronic version of an original, plus hardcopy versions, of the following schedules to the County:
 - 1.3.1.1 Proposed Schedule as included in the Design Builder's Proposal Package for the Request for Proposals as outlined in Article 20 of Section 002100. The

Proposed Schedule shall be in accordance with the requirements outlined in paragraph 1.4 below. The accepted Proposed Schedule shall serve as the basis for preparing the Project Master Schedule.

- 1.3.1.2 Schedule of Submittals, as required by Section 013000 (Submittal Procedures), including submittals of shop drawings, product data, and samples. Once approved by the County, the Schedule of Submittals shall be incorporated into the Project Master Schedule. All submittals shall be forwarded to the County by the date indicated on the approved Schedule of Submittals incorporated into the approved Project Master Schedule, unless an earlier date is necessary to maintain the Project Master Schedule, in which case those submittals shall be forwarded to the County so as not to delay the Project Master Schedule.
- 1.3.1.3 Project Master Schedule as required by Sections 011114 (Summary of Work - Design Services and Deliverables) and paragraph 1.5 below.
- 1.3.1.4 Design Schedule as required in paragraph 1.6 below.
- 1.3.1.5 Construction Schedule as required in paragraph 1.7 below.
- 1.3.2 Acceptance Procedures for “Baseline” Project Master Schedule:
 - 1.3.2.1 Submittal of the Project Master Schedule, including Design Schedule and Construction Schedule, shall adhere to the schedule submittal process outlined in Document 013000 (Submittal Procedures).
 - 1.3.2.2 Original Project Master Schedule including Design Schedule shall be reviewed at the Design Conference. Within seven (7) Days after the Design Conference, the County will review and either accept the Project Master Schedule or reject and provide comments, suggested changes, and revisions that must be addressed by the Design Builder to the satisfaction of the County. Design Builder shall correct and resubmit the Schedule within seven (7) Days.
 - 1.3.2.3 Within seven (7) Days of receipt of revised Project Master Schedule including Design Schedule, the County will either accept the Schedule or reject and request further information and justification. Design Builder shall, within three (3) Days, provide County with a complete written narrative response to the County’s request discussing how the baseline resubmittal addresses each of the contract conformance deficiencies noted in the original submittals.
 - 1.3.2.4 Detailed Project Master Schedule including Design and Construction Schedule shall be reviewed at Pre-Construction Conferences for each major phase of work outlined in Section 013119 (Project Meetings).

Within seven (7) Days after the Pre-Construction Conference, the County will review and either accept the Schedule or reject and provide comments, suggested changes, and revisions that must be addressed by the Design Builder to the satisfaction of the County. Design Builder shall correct and resubmit the Schedule within seven (7) days.

- 1.3.2.5 Within seven (7) Days of receipt of revised Project Master Schedule including detailed Construction Schedule, the County will either accept the Schedule or reject and request further information and justification. Design Builder shall, within three (3) Days, provide County with a complete written narrative response to the County's request discussing how the baseline resubmittal addresses each of the contract conformance deficiencies noted in the original submittals.
- 1.3.3 Completion Time: Overall time of completion and time of completion for each milestone shown on Project Master Schedule shall adhere to times in Document 005200 (Agreement). Notwithstanding any modification to the Contract Time, Design Builder may otherwise choose to work to an earlier (advanced) schedule, but should it choose to do so:
 - 1.3.3.1 County is not required to accept such an earlier (advanced) schedule, i.e., one that shows early completion dates for the Contract Times.
 - 1.3.3.2 Design Builder shall not be entitled to extra compensation in the event Design Builder completes its Work, for whatever reason, beyond completion dates shown in such an earlier (advanced) schedule but within the Contract Times.
 - 1.3.3.3 A schedule showing the work completed in less than the Contract Times shall be considered to have Project Float. The Project Float is the time between the scheduled completion of the Work and the Contract Time for completion of the Work. Project Float is a resource available to both County and Design Builder.
- 1.3.4 Float Ownership: Neither County nor Design Builder owns float. The Project owns the float. As such, liability for delay of any component of the Project rests with the party whose unexcused delay, actually causes delay to any component of the Project.
 - 1.3.4.1 For example, if Party A incurs unexcused delay and uses some, but not all of the float and Party B later incurs unexcused delay and uses the remainder of the float as well as additional time beyond the float, Party B shall be liable for the delay that represents a delay of the Project.
 - 1.3.4.2 Party A would not be responsible for the delay since it did not consume all the float and additional float remained; therefore, the Project component completion was unaffected by Party A.
- 1.3.5 The Project Master Schedule shall be the basis for evaluating job progress, payment requests, and time extension requests. Responsibility for developing the Project Master Schedule and monitoring actual progress rests with Design Builder.
- 1.3.6 Failure of the Project Master Schedule to include any element of the Work or any inaccuracy in the Project Master Schedule will not relieve Design Builder from responsibility for accomplishing the Work in accordance with the Contract Documents. The County's acceptance of the Project Master Schedule shall be for its use in monitoring and evaluating job progress, payment requests, and time extension requests, and shall not, in any manner, impose a duty of care upon County, or act to relieve Design Builder of its responsibility for means and methods of design and construction.

- 1.3.7 Regulatory Agency and AHJ Review Durations: The Design Builder shall consider the necessary Regulatory Agency and Authority Having Jurisdiction (AHJ) review durations to be a minimum of eight (8) weeks. The Design Builder shall have the responsibility to package and submit complete and coordinated documents to both the Regulatory Agency and AHJ. If, for reasons unrelated to either the quality, completeness, or coordination of Design Builder's Regulatory Agency or AHJ submittal, or the County's review thereof, and solely within the State's or Regulatory Agency's control, the Regulatory Agency or AHJ is unable to review Design Builder's complete and coordinated documents within the review durations published in the Design Builder's approved schedule, or in the absence of an approved schedule, within the eight (8) week minimum Regulatory Agency review durations, the Contract Time will be extended on a day-for-day basis to the extent Design Builder demonstrates any such "Regulatory Agency review delay" alone has delayed the Project's critical path. Unless otherwise mutually agreed to by the parties, when such an extension is granted pursuant to this paragraph 1.3.7, Design Builder shall be entitled to fifty percent (50%) of any cost adjustments to the Contract Sum attributable to the adjustment in Contract Time that may be allowed under Document 007200 (General Conditions).
- 1.3.8 Notwithstanding the provisions of paragraph 1.3.7 above, the County representative will perform a general completeness review concurrent with the Constructability Review described in paragraph 1.4.13 of Section 011114 (Summary of Work-Design Services and Deliverables). The purpose of such a review by the County is to assist the Design Builder in the Design Builder's verification that the Regulatory Agency or AHJ Submittal Document is sufficiently complete to allow for meaningful review by the Regulatory Agency or AHJ. If the Regulatory Agency or AHJ does not accept the Submittal Document for review solely because it is incomplete, Design Builder shall not be entitled to any cost adjustments to the Contract Sum attributable to the adjustment in Contract Time that may be allowed under Document 007200 (General Conditions). The parameters for Regulatory Agency or AHJ submittal documents completeness will be defined during the development of the Regulatory Agency or AHJ phased plan review process and initial Regulatory Agency or AHJ preliminary plan review submittal.

1.4 PROPOSED SCHEDULE

- 1.4.1 The Design Builder shall submit the Proposed Schedule as part of the Technical Proposal in response to the requirements specified in Section 002100 (Request for Proposals). The Proposed Schedule shall fit within and coordinate with the milestone and completion dates specified in the Milestone Schedule included in Section 011216 (Work Sequence) including any and all design interfaces. The Design Builder may improve upon the milestone and completion dates as part of their effort to provide Price/Best Value Enhancements as specified in Section 002100 (Request for Proposals).
- 1.4.2 Preparation: Indicate each significant Contract activity separately. Activities to be included in the Proposed Schedule will be as follows:
- 1.4.2.1 Detailed activities for Design of all phases of the project including but not limited to all design deliverables as required by Section 011114 (Summary of Work - Design Services and Deliverables), design coordination meetings, Regulatory Agency and AHJ reviews, Facilities Department review, other Agency reviews, other third-party reviews, and incorporation of comments, through Regulatory Agency and AHJ Permit and approval of the Construction Drawings for individual Regulatory Agency and AHJ Projects. For non-Regulatory Agency related project work, all activities described in this

paragraph, with the exception of Regulatory Agency related activities, shall be required in the Proposed Schedule.

- 1.4.2.2 Detailed Submittal, review, and procurement activities for all critical and near-critical submittals for the Work.
- 1.4.2.3 Detailed plan for mobilization, execution of contracts, design as described in Section 011114 (Summary of Work - Design Services and Deliverables), submittals, procurement, and all work that must be performed prior to the start of construction.

1.5 PROJECT MASTER SCHEDULE / PRELIMINARY CPM SCHEDULE

- 1.5.1 The Project Master Schedule shall be submitted for approval within sixty (60) days of the Notice to Proceed.
- 1.5.2 Prepare and submit a short-term CPM Schedule submittal to the County Representative. The short-term CPM Schedule shall be submitted for approval within twenty-eight (28) days of the Notice to Proceed. The short-term schedule shall detail the plan for the first (90) days of contract time and shall be used to measure performance and determine progress payments until the Contractor's Baseline Construction Schedule is accepted. Absent an approved baseline construction schedule, County will require Design Builder to substantiate monthly invoices by providing copies of Subcontractor/vendor invoices along with any applicable Subcontracts, quotes, schedules of values, purchase orders or Lien waivers associated with the source of the pay requests. Use of the short-term CPM schedule for progress payments shall not exceed ninety (90) days.
 - 1.5.2.1 The County Construction Manager will notify the Design builder that the Short-Term CPM schedule submittal has been accepted, accepted as noted, or requires a revision and re-submittal within seven (7) days of receipt. At the County's Construction Manager's discretion, the Design Builder, the Scheduler, and the County Construction Manager will have a Short-Term CPM Schedule Review Meeting to review and make any necessary adjustments. If a re-submittal is required, the Design Builder has five (5) days after the receipt of comments to submit a revision to the County's Construction Manager. The County Construction Manager will notify the Design Builder that the re-submittal has been accepted, accepted as noted, or requires a revision and re-submittal within five (5) days of receipt. At the County's Construction Manager's discretion, another Review Meeting may be required. The cycle of seven (7) days to prepare a re-submittal, and five (5) days for County Construction Manager review shall continue until the Short-Term CPM Schedule has been accepted. Because the cost-loaded CPM schedule is how progress payments are determined, no progress payments will occur until the County's Construction Manager accepts the Short-Term CPM Schedule.
 - 1.5.2.2 Upon acceptance, the Short-Term CPM Schedule shall represent the Contractor's plan for performance of the work during the first ninety (90) days of Contract Time. The Short-Term CPM Schedule shall be incorporated into first ninety (90) days of the Contractor's Baseline CPM Schedule. Submit to the County Construction Manager an update, for acceptance or rejection, of the short-term CPM schedule each month, until the complete Baseline Schedule is accepted. If a Short-Term CPM Schedule is accepted late in a

month, the Contractor is still required to submit a Monthly Schedule Update for the previous period (for example, if a Short-Term CPM Schedule is accepted on January 26, the Contractor is required to submit Monthly Schedule Update with a January 1 Data Date).

1.5.3 The Project Master Schedule shall adhere to times in Document 005200 (Agreement) and specified in the accepted Proposed Schedule. Project Master Schedule will outline all dates and time periods for the delivery of all Design Builder's services and requirements for information from the County for the performance of its services. Failure to include any work item required for performance of this Contract on the Schedule shall not excuse Design Builder from completing all work within applicable completion dates, regardless of County's approval of the schedule. The Project Master Schedule will include the following items, but not limited to:

- 1.5.3.1 Schedule for completing the project design documents, including any deferred submittals, (through release for construction), each required submittal and the times for submitting, reviewing and processing such submittal, as specified in Section 011114 (Summary of Work - Design Services and Deliverables).
- 1.5.3.2 Preparation and processing of Construction submittals.
- 1.5.3.3 Critical lead times.
- 1.5.3.4 Significant construction milestones (e.g., groundbreaking, completion of site utilities, completion of foundation, completion of structural frame, completion of exterior shell, substantial completion, testing & commissioning, licensing, move-in, Regulatory Agency project completion dates, etc.).
- 1.5.3.5 Date for decision from County on items affecting the Design Builder's schedule.
- 1.5.3.6 Utility interruptions, relocation, and connections affecting existing facility operations.

1.5.4 The Project Master Schedule shall be updated on a monthly basis.

1.6 DESIGN SCHEDULE

1.6.1 The Design Schedule shall adhere to times in Document 005200 (Agreement) and specified in the accepted Proposed Schedule. The Design Schedule shall include all activity detail for completing the design of all phases of the project. Failure to include any work item required for performance of this Contract on the Schedule shall not excuse Design Builder from completing all work within applicable completion dates, regardless of County's approval of the schedule. The Design Schedule shall include, but not be limited to the following:

- 1.6.1.1 Preparation and review of Design submittals and other critical design completion dates. Include all design deliverables as required by Section 011114 (Summary of Work - Design Services and Deliverables).
- 1.6.1.2 Design coordination meetings

- 1.6.1.3 Conference(s) with Regulatory Agency/AHJ, and Regulatory Agency/AHJ review times.
- 1.6.1.4 Dates for decision from County on designated items or orders affecting schedule.
- 1.6.1.5 Facility/User Group and County Staff review
- 1.6.1.6 Other Regulatory Agencies, Utility Company and Third-Party reviews
- 1.6.1.7 Time for incorporation of comments
- 1.6.1.8 Regulatory Agency and AHJ Permit
- 1.6.1.9 Approval of the Construction Drawings for each phase of construction
- 1.6.2 Design Builder shall resubmit original Schedule if requested by County.
- 1.6.3 The Design Schedule shall be incorporated (merged) into the Project Master Schedule.

1.7 CONSTRUCTION SCHEDULE, BASELINE

- 1.7.1 The Construction Schedule shall adhere to times in Document 005200 (Agreement) and specified in the accepted Proposed Schedule. The Construction Schedule (original and updates) shall indicate all separate fabrication, procurement and field construction activities required for completion of the Work. Failure to include any work item required for performance of this Contract on the Schedule shall not excuse Design Builder from completing all work within applicable completion dates, regardless of County's approval of the schedule.
- 1.7.2 Baseline Schedule: Prepare and submit a baseline CPM schedule that shows the breakdown of all work into activities to the extent required to effectively plan and execute the Project, track and report work progress, effectively analyze time impacts and show all logical relationships (ties) between activities. The County Construction Manager will accept, accept as noted, or direct the Design Builder to revise and re-submit, the Baseline Schedule submittal. The County Construction Manager's Baseline Schedule review will be based on the County Construction Manager's evaluation of the Baseline Schedule's reasonableness and compliance with the Contract Documents. The Contract CPM Schedule shall be the basis for monitoring the Design Builder's progress against milestone dates and Contract Time, and the evaluation and reconciliation of extensions in Contract Time. The Baseline Schedule shall communicate and constitute the Design Builder's detailed intent for planning and executing the work. Construct the Baseline Schedule based on the Contract Documents, including any addenda received during the Request for Proposal (RFP) phase. Coordinate with all subcontractors when developing the Baseline Schedule.
 - 1.7.2.1 Time Frame: Extend schedule from date established for the Notice to Proceed to date of Substantial Completion. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.

- 1.7.2.2 Early Completion: If the County Construction Manager accepts an early completion schedule and the County Construction Manager does not revise the Contract completion date, the Baseline must first include a float activity that fills the time between the early completion and the contractual substantial completion date. The Design Builder agrees to forego any extended overhead between early completion noted in the Baseline and the contractual substantial completion date.

1.7.3 Activities in the Baseline Schedule shall comply with the following:

- 1.7.3.1 Activity Duration: Estimate the amount of time to start and complete each activity. Define field work activities so no activity is longer than (15) workdays, unless specifically allowed by County Construction Manager.
- 1.7.3.2 Units of Time: Workdays shall be the default unit of time for an activity in the schedule. Indicate nonworking days and holidays incorporated into the schedule to correlate with Contract Time.
- 1.7.3.3 Critical (Longest) Path: Critical (Longest) Path is to be easily identifiable. Any part of the Baseline Schedule's Critical (Longest) Path deemed unreasonable by the County Construction Manager may result in direction for a Baseline Schedule revision and re-submittal.
- 1.7.3.4 Percentage of Activities within Critical (Longest) Path: Plan the Work and provide for and allocate resources in the execution of the Work so that the proportion of incomplete schedule activities with total float of 15 workdays or less within the Critical (Longest) Path shall not exceed 20 percent of all incomplete schedule activities, unless acceptance for a greater proportion is granted by the County Construction Manager.
- 1.7.3.5 Procurement Cycle Activities: Procurement cycle activities include, but are not limited to, outreach, solicitation, subcontracting, submittals, shop drawing submittals, submittal reviews and approvals, purchasing, fabrication, and delivery. Unless waived by the County Construction Manager, include detailed procurement cycle activities as separate activities in the Baseline Schedule for each Specification section number. The detailed Procurement Cycle activities shall conform to the Submittal Schedule and shall align with the Submittal Register. Procurement Cycle activities shall be logically tied in the Baseline Schedule to the associated construction activities. Unless waived by the County Construction Manager, include detailed procurement cycle activities as separate activities in the Baseline Schedule for each Specification Section number, with separate activities for the following:
 - 1.7.3.5.1 Outreach, Solicitation, and Subcontracting
 - 1.7.3.5.2 Submittal Preparation
 - 1.7.3.5.3 Submittal Review / Approval
 - 1.7.3.5.4 Procurement / Fabrication
 - 1.7.3.5.5 Delivery

Note: Design Builder shall include the Specification Section, WBS code, or Activity Code number either within the activity's identification number or the activity's name/description.

- 1.7.3.6 Submittal Review Time: Include specified submittal review times in Baseline Schedule as defined in Section 013000 (Submittal Procedures).
- 1.7.3.7 Relationships and CPM Network: CPM networks shall be closed, whereby every activity shall have, at a minimum, one predecessor and one successor relationship. The exceptions to this closed network rule are the network's start and finish milestones.
- 1.7.3.8 Constraints: Constraints shall be scrutinized and shall only be used to reflect contractually and/or environmentally imposed conditions. Add schedule activities and detail to mitigate the use of Constraints. Constraints are not permitted where an activity or logical relationship is appropriate, unless specifically accepted by the County Construction Manager. The County Construction Manager may direct the Design Builder to provide a detailed written explanation in the Baseline Narrative for any and all Constraints. After a review of the Baseline Schedule and the detailed written explanation, any Constraints ultimately deemed unreasonable by the County Construction Manager may result in direction for a Baseline revision and re-submittal.
- 1.7.3.9 Lags: Lags shall be scrutinized. Add schedule activities and detail to mitigate the use of Lags. The Construction Schedule must not include any negative lags or finish-to-start relationships with positive lag. Lags in start-to-start or finish-to-finish relationships must not exceed the duration of the predecessor or successor activity, respectively. Schedule Settings: The setting in the CPM scheduling software shall be set so that the logic is retained when calculating the schedule. Critical activities shall be defined as Critical (Longest) Path. The "progress override" option shall not be utilized, unless directed otherwise by the County Construction Manager. Autocost, Resource, and Schedule calculation rules shall be set to the default settings. Default percent complete to be used is the duration percent complete.
- 1.7.3.10 Activity Detail: Field work activities shall not reflect a combining of work located in separate buildings or site areas, work corresponding to different Specifications Sections or Uniformat Sections, work performed by different Subcontractors, or rough and finish work of the same trade. The CPM Schedule shall include activities and appropriate time for temporary items (for example, scaffolding and concrete formwork), curing, testing, items that interface with work performed by others (for example, Owner Furnished Owner Installed items), regulatory agency approvals, permitting, City and/or utility activities, physical checkout, startup, mobilization, final cleaning, operational and maintenance manual preparation, equipment and systems training, cleanup, and contractor's internal punch list.
- 1.7.3.11 Activity Descriptions: Descriptions for schedule activities shall provide adequate detail that fully defines the activity, scope and location. Notes shall be utilized to completely and clearly define each activity where the activity description itself is insufficient or would become overly lengthy.
- 1.7.3.12 Activity Coding: Activities shall be mapped to the Activity Code Format located at the end of this Section. Contractor may use Work Breakdown

Structure (WBS) functionality in lieu of Activity Codes, or a combination of Activity Coding and WBS coding.

- 1.7.3.13 Milestones: Include Key Milestones and Contractual Milestones indicated in the Contract Documents in Schedule.
- 1.7.3.14 Negative Float: The Baseline Schedule shall not contain negative float.
- 1.7.3.15 Weather: The Baseline Schedule shall include, during the period from the start of mobilization (or start of field work activity, whichever starts first) through the date of Substantial Completion, workdays for anticipated weather delays affecting the Critical (Longest) Path.
- 1.7.3.15.1 Normal inclement weather conditions, also referred to as anticipated weather days, will be considered and included in the planning and scheduling of all work influenced by high or low ambient temperatures, precipitation, and/or other conditions including wet conditions following rain, as well as conditions such as excessive heat and excessive winds to ensure completion of all Work within the contract time. Expected weather delays must 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 Builder and approved by the County Construction Manager in advance of adjusting the schedule.
- 1.7.3.15.2 The total duration of the weather Float activity will be based on the normal weather conditions expected by the County per the following table:

Weather Table												
	Month											
Anticipated Weather Days	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	7	6	6	3	1	0	0	0	0	2	5	6

- 1.7.3.15.3 If the Contract Time starts or ends in the middle of a month, the weather allowance shall be prorated. For example, if mobilization starts on February 1 and Substantial Completion is November 20 of the same year, the weather allowance is 21 workdays.
- 1.7.3.15.4 Unused weather allowance days may be used in succeeding months and will only become jointly owned Project float if not used for weather days within 60 days after the end of the month to which they are associated.
- 1.7.3.15.5 If the grand total of approved weather days exceed the number allotted in the contract, the number of weather days in excess are excusable and non-compensable.

- 1.7.3.15.6 Weather or the results of weather on non-scheduled workdays will not be considered. Reference documents shall include CPM schedules and Look Ahead schedules to determine scheduled workdays.
- 1.7.3.15.7 If the Contractor considers weather or the results of weather as an impact to the Critical (Longest) Path and/or a Contractual Milestone, the Contractor has two (2) workdays from the date in question to provide written justification for the weather day request, describing the Primavera activity/activities impacted, as well as describing how over 50 percent of the Critical (Longest) Path work for the requested day was impacted. Describe work done to mitigate weather impact.
- 1.7.3.15.8 The County Construction Manager determines if a weather day has been incurred, and the Critical (Longest) Path and/or Contractual Milestone so affected. If the Design Builder does not provide written justification regarding weather impacts, the County Construction Manager can still determine if weather days have been incurred.
- 1.7.3.15.9 If weather impacts a Contractual Milestone for a phase that is not on the Critical (Longest) Path, the County Construction Manager may grant excusable and non-compensable relief for the number of days impacted by weather.
- 1.7.3.16 Average Crew Size:
 - 1.7.3.16.1 Assign an average crew size per day for each field work activity, using the "CREW" activity code per Activity Codes Dictionary at the end of this Section. Round amounts off to the nearest integer.
 - 1.7.3.16.2 Non-field work activities, curing, milestones, work done by others (for example, inspections by Special Inspectors, Owner Furnished Owner Installed items), and allowances shall be excluded from the average crew size requirement.
 - 1.7.3.16.3 Time Impact Analyses: Provide average crew size amounts to field work activities that are part of any Time Impact Analysis.
- 1.7.3.17 Work Restrictions: Include any work restrictions indicated in the Contract Documents and as follows in schedule and show how the sequence of the Work is affected.
 - 1.7.3.17.1 Work by County: Include a separate activity for each portion of the Work performed by the County, including Owner Furnished Contractor Installed (OFCI) and Owner Furnished Owner Installed (OFOI) items.
 - 1.7.3.17.2 County-Furnished Products: Include a separate activity for each product. Delivery dates indicated stipulate the earliest possible delivery date.

- 1.7.3.17.3 Work Restrictions: Show the effect of the following items on the schedule:
 - 1.7.3.18.3.1 Coordination with existing construction
 - 1.7.3.18.3.2 Limitations of continued occupancies
 - 1.7.3.18.3.3 Partial occupancy before Substantial Completion
 - 1.7.3.17.5 Do not cost load submittal or procurement activities except as accepted or directed by the County Construction Manager.
 - 1.7.3.17.6 For materials that are eligible for payment as provided by the Contract Documents and deemed acceptable by the County Construction Manager, the Contractor may load the value of the materials on a one-day delivery activity.
 - 1.7.3.17.7 Payment for uninstalled materials/equipment is limited to major items as determined by the County Construction Manager. 80 percent of the material/equipment delivery cost shall be loaded on to the delivery activity, and the remaining 20 percent shall be loaded on to the associated construction activity/activities. Unless otherwise permitted, delivery costs are to be broken out by building.
 - 1.7.3.17.8 Mobilization: Mobilization shall be a separate activity in the CPM schedule and shall not exceed 1 percent (1%) of the Contract Price. If requested by the County Construction Manager, provide detailed backup documentation, at a level of detail to the satisfaction of the County Construction Manager, to substantiate the Design Builder's mobilization dollar amount.
 - 1.7.3.17.9 Demobilization and Close-Out Submittals each shall be separate activities in the CPM schedule and shall not be considered in any Critical (Longest) Path assessment.
 - 1.7.3.17.10 Allowances: If the Work includes items covered by allowances, include activities in the schedule for each allowance that is loaded with the cost of that allowance. Allowance expenditures will be authorized by no cost change orders and associated values deducted from these activities.
 - 1.7.3.17.11 Change Orders: Upon County approval of a Change Order, add separate cost loaded activities for each Change Order. Change Order activities shall have the activity identification prefix of "CO" plus the Change Order number. Change Order activities must also comply with the Activity Codes Dictionary at the end of this Section, as well as the Time Impact Analysis provisions described in this Section.
- 1.7.4 All Design Builder, Subcontractor, and assigned Design Builder work (including engineering and other professional services) shall be shown in a logical work sequence that demonstrates a coordinated plan of work for all Subcontractors. The intent is to

provide a common basis of acceptance, understanding, and communication, as well as interface among all Subcontractors. Indicate the estimated time duration, sequence requirements, and relationship of each activity in relation to other activities. Show dependencies and logic between activities so that the effect of progress (or lack of progress) on related activities and the overall schedule can be monitored. The list of activities shall include, but not be limited to, the following:

- 1.7.4.1 Significant construction milestones including but not limited to:
 - 1.7.4.1.1 Mobilization completion
 - 1.7.4.1.2 Off-site utility work completion
 - 1.7.4.1.3 Site Demolition completion
 - 1.7.4.1.4 Building/Structure demolition completion
 - 1.7.4.1.5 Earthwork and underground utility site work completion
 - 1.7.4.1.6 Foundation completion
 - 1.7.4.1.7 Structural frame completion
 - 1.7.4.1.8 Envelope completion
 - 1.7.4.1.9 Plumbing installation completion
 - 1.7.4.1.10 Fire protection installation completion
 - 1.7.4.1.11 HVAC installation completion
 - 1.7.4.1.12 Security Electronics Completion
 - 1.7.4.1.13 Low Voltage/Data/Comm Systems Completion
 - 1.7.4.1.14 Electrical installation completion
 - 1.7.4.1.15 Site/Landscape Completion
 - 1.7.4.1.16 Commissioning
 - 1.7.4.1.17 Substantial Completion
 - 1.7.4.1.18 Final Completion
 - 1.7.4.1.19 Demobilization
- 1.7.4.2 Date of request of designated working spaces, storage areas, access, and other facilities to be furnished by the County.
- 1.7.4.3 Dates for decision from County on designated items or orders affecting schedule.
- 1.7.4.4 Activities related to the delivery of Design Builder and County-furnished equipment to be Design Builder-installed per Contract shall be shown. Equipment requirements including, but not limited to, architecturally significant equipment, security equipment, communications equipment, kitchen equipment. Design Builder shall include the latest date that County-furnished products are required to allow completion of the Work on schedule.
 - 1.7.4.4.1 The latest date that installation details must be provided to the Design Builder to avoid schedule delays.
 - 1.7.4.4.2 The latest delivery dates that will allow the project to be completed according to schedule.
- 1.7.4.5 Utility interruptions, relocation, and connections.
- 1.7.4.6 Connecting to or penetrating existing structures.

- 1.7.4.7 Show the effect of the following factors on the construction schedule:
 - 1.7.4.7.1 Limitations of continued occupancies.
 - 1.7.4.7.2 Uninterruptible services.
 - 1.7.4.7.3 Use of premises restrictions.
 - 1.7.4.7.4 Environmental control.
- 1.7.4.8 Punch list preparation. The duration for Design Builder punchlist activities on the Critical Path, including preparation and correction of all items, shall not be less than 30 days.
- 1.7.4.9 Work by County and/or by other contractors that may affect or be affected by Design Builder's activities. Include a separate activity for each contract, which may include, but are not limited to, utility companies, communications systems providers, equipment providers, and others.
- 1.7.4.10 Testing and commissioning. Include sufficient time to comply with the requirements of the General Commissioning Requirements; and any regulatory requirements; and assure completion of the Work within the Contract Time.
- 1.7.4.11 Licensing: allow time for County's administrative procedures necessary for certification.
- 1.7.4.12 All regulatory agency approvals (e.g., Department, Fire Marshal, Public Works Agency, City, others).
- 1.7.4.13 Move-in.
- 1.7.5 Critical Path Activities: Identify critical path activities, including those for interim completion dates. Scheduled start and completion dates shall be consistent with Contract milestone dates. Show the critical path in red. For each activity, show early start, late start, early finish, late finish, durations measured in Days, total and available float, resources, predecessor, and successor activities, planned workday/week for the activity and scheduled/actual progress payments. A path with fifteen (15) workdays or less of float shall be considered a "near critical path" and shown in a lighter shade of red.
- 1.7.6 Seasonal weather conditions (which do not constitute a delay as defined herein) shall be considered in the planning and scheduling of all work influenced by high or low ambient temperatures, high winds, or presence of high moisture for the completion of the Work within the allotted Contract Time. The number of allowable days of adverse weather is outlined in Section 007200, Article 15.3 (General Conditions) and above in paragraph 1.7.3.15.2. The Design Builder shall adhere to procedures as specified in Section 007200 (General Conditions) for claiming delays resulting from adverse weather. This Section

013216, paragraph 1.7.3.15, outlines requirements for the Design Builder to include Weather Days in the Baseline schedule.

- 1.7.7 The Design Builder shall meet with the County to review and discuss each Project Master Schedule update (i.e., original Construction Schedule for each phase and each monthly update) within seven (7) Days after each Schedule has been submitted to County.

1.7.7.1 County's review and comment on any Schedule shall be limited to Contract conformance (with sequencing, coordination, and milestone requirements).

1.7.7.2 Design Builder shall make corrections to Schedule necessary to comply with Contract requirements and shall adjust Schedule to incorporate any missing information requested by County. Design Builder shall resubmit any schedules if requested by County.

- 1.7.8 If Design Builder is of the opinion that any of the Work included on its Schedule has been impacted such that there will be a delay to completion of any phase of the Project, submit to County a written Time Impact Analysis ("TIA") in accordance with paragraph 1.11 below. The TIA shall be based on the most current update of the Schedule immediately prior to the impact.

- 1.7.9 A six (6) week "Look Ahead Schedule," detailed daily bar chart schedule shall be updated and issued weekly.

1.7.9.1 Look Ahead Schedule shall cover a forty-nine (49) Day period, beginning with the week preceding the 6-week detailed look ahead.

1.7.9.2 Use the Project Master Schedule as the basis for generating the 6-week detailed schedule.

1.7.9.3 Format:

1.7.9.3.1 Provide bar chart using same logic as Project Master Schedule, with maximum fourteen (14) Day construction activity duration. Provide activity identification used on the accepted Project Master Schedule.

1.7.9.3.2 Provide daily resource allocation for each trade.

1.7.9.3.3 Provide exact activity location for scheduled Work.

1.7.9.4 Provide information for each significant activity, with special care taken to describe scheduling and coordination with other contracts, Work by the County, and normal campus or facility operations/functions, including but not limited to utility shutdowns, road closures, etc.

1.7.9.5 Show the status of all outstanding and pending submittals including scheduled and actual submittal dates, the durations and expiration of submittal review periods, etc.

- 1.7.10 The Construction Schedule shall be incorporated (merged) into the Project Master Schedule.

1.8 MONTHLY SCHEDULE UPDATE SUBMITTALS

1.8.1 Following acceptance of Design Builder's Project Master Schedule, including Design Schedule and Construction Schedule, Design Builder shall monitor progress of Work and update the Project Master Schedule each month to reflect actual progress on each activity and any anticipated changes to planned activities. Monthly Schedule Updates shall include the following:

1.8.1.1 Design Builder's estimated percentage complete for each activity in progress.

1.8.1.2 Actual start/finish dates for all activities shown on initial Project Master Schedule with all subsequent approved additions.

1.8.1.3 List of materials and/or equipment delivered for which Design Builder is requesting payment and original invoice verifying cost.

1.8.1.4 Identification of processing errors, if any, on the previous update reports.

1.8.1.5 Resolution of any conflicts between actual Work progress and schedule logic when out-of-sequence activities develop because of actual construction progress. Design Builder shall submit revisions to schedule logic to conform to current job status and directions, without changing original activity identification.

1.8.1.6 Each update shall include a written narrative report (as specified in Paragraph 1.12.1 below) with the updated progress analysis.

1.8.1.7 CPM Reports: Concurrent with CPM schedule, submit five (5) copies of each of the following computer-generated reports. Format for each activity in reports shall 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.

1.8.1.7.1 Provide printed report indicating actual versus planned resource loading for each trade and each activity. This report shall be provided on a monthly basis. Actual resource shall be accumulated in field by Design Builder and shall be as noted on Design Builder's daily reports. These reports will be basis for information provided in monthly printed reports. Explain all variances and mitigation measures.

1.8.1.7.2 A Predecessor / Successor Report: List of all activities showing associated predecessor / successor activities, their logical relationships, free float, total float, early start/early finish date.

1.8.1.7.3 Total Float Report: List of all activities sorted in ascending order of total float, and then early start/early finish date.

1.8.1.7.4 Earnings Report: Compilation of Design Builder's earnings from Notice to Proceed until the most recent Application for Payment. Show all activities sorted and grouped by project phase and location. For each activity show the Activity ID, description, budgeted cost, percent completed as of the last update, percent

completed to-date, cost as of the previous period, cost this period, and cost-to-date.

- 1.8.1.7.5 The Design Builder shall submit any other type of report as deemed necessary by the County.
- 1.8.1.8 The updated Project Master Schedule shall accurately represent the as-built condition of all completed Work and the percentage remaining of all in-progress Work activities as of the date of the updated Project Master Schedule.
- 1.8.1.9 The updated Project Master Schedule shall incorporate all changes mutually agreed upon by Design Builder and County during preceding periodic reviews, all changes resulting from Change Orders and Field Orders, and all remaining days of the inclement weather and regulatory review durations.
- 1.8.1.10 Design Builder shall perform the Work in accordance with the updated Project Master Schedule. Design Builder may change the Project Master Schedule to modify the order or sequence of accomplishing the Work only with the County's prior agreement.
- 1.8.1.11 Within the first (1st) week of each month, the County will administer a monthly schedule update meeting. At or before the monthly schedule update meeting, Design Builder shall submit a monthly updated schedule indicating activity status through the end of the previous month. Design Builder shall include in the monthly updated schedule any proposed schedule revisions as outlined in paragraph 1.8 below.
- 1.8.1.12 Procedures for review and acceptance of the monthly updated schedule are outlined in paragraph 1.9 below.
- 1.8.1.13 No Application for Payment will be processed, nor shall any progress payments become due, until updated Project Master Schedules are accepted by the County's Representative.
- 1.8.1.14 The accepted, updated Project Master Schedule shall be the contractual Project Master Schedule of record for the period it is current and shall be the basis for payment during that period.
- 1.8.1.15 Unless directed in writing by the County Construction Manager, the Monthly Schedule Update shall not be used to delete activities, add activities, make title changes, make activity coding changes, make Budgeted Cost changes, make Average Crew Size changes, or to make logic changes.
 - 1.8.1.15.1 If the Design Builder proposes to make activity additions/deletions and/or logic changes and/or duration changes within a Monthly Schedule Update, simultaneously submit two distinct Primavera schedules; 1) Monthly Schedule Update, showing progress in just-completed month, without proposed changes. 2) Monthly Schedule Update, showing progress in just-completed month, with proposed changes.

1.8.1.15.2 Other activities in Schedule: In addition to formally approved changes, the Monthly Schedule Updates may include tracking activities necessary for maintaining visibility into project progress. This may include pending Change Orders, ongoing risk mitigation efforts, corrective actions, and recovery measures, provided they are clearly documented and justified within the update.

1.8.1.16 A electronic copy containing the complete Primavera Project Planner data for the Project Master Schedule update and five (5) hard copies of computer-generated schedule and reports will be furnished to the County's Representative for processing the application for payment. The Design Builder shall provide full access to electronic Primavera schedule files for the County.

1.9 MONTHLY SCHEDULE REVISIONS/UPDATES

1.9.1 The County will administer a monthly schedule update meeting to review and discuss each monthly updated schedule submittal.

1.9.1.1 Included with each monthly updated schedule submittal, the Design Builder shall submit any proposed schedule revisions to the County's Representative, including, but not limited to, the following:

1.9.1.1.1 Actual Start and/or Actual Finish Dates of activities that have started and/or have been completed.

1.9.1.1.2 Actual and anticipated duration changes including revisions due to inclement weather or regulatory agency review delays;

1.9.1.1.3 TIAs for Change Orders and Time Extension Requests;

1.9.1.1.4 Submit schedule diagrams showing resolution of conflicts between actual Work progress and schedule logic when out-of-sequence activities develop because of actual construction progress. Design Builder shall submit revisions to schedule logic to conform to current job status and directions, without changing original activity identification;

1.9.1.1.5 Actual and anticipated Design Builder delays;

1.9.1.1.6 A narrative report with the updated progress analysis, which shall include, but shall not be limited to, a description of problem areas, current and anticipated delaying factors and their impacts, and explanations of corrective action taken and any proposed revisions for a Recovery Plan.

1.9.1.1.7 Identification and removal of days associated with any activities no longer necessary to the project due to design evolution, change in means and methods, or other similar changes agreed to by the County's Representative. Costs and resources associated with these activities shall be redistributed to other related activities or credited back to the County via Change Order.

1.9.1.2 These meetings are considered a critical component of overall monthly schedule update submittal; accordingly, Design Builder shall ensure that appropriate personnel from its organization attend. At a minimum, Design Builder's General Superintendent and professional Scheduling Consultant shall attend these meetings.

- 1.9.1.3 Monthly schedule update meetings will be scheduled as needed to facilitate the timely completion of the project.
- 1.9.2 Within seven (7) Days after the monthly schedule update meeting, the County will either accept the proposed schedule update as the new Project Master Schedule, or reject the proposed schedule update and provide comments, suggested changes, and revisions that must be addressed by the Design Builder to the satisfaction of the County. Design Builder shall correct and resubmit the schedule update within seven (7) Days.
- 1.9.3 The updating, changing, or revising of any report, curve, schedule or narrative submitted to County by Design Builder under this Contract, nor County's review or acceptance of any such report, curve, schedule, or narrative shall not have the effect of amending or modifying, in any way, Contract Time or milestone dates or of modifying or limiting, in any way, Design Builder's obligations under this Contract.
- 1.9.4 For rejected schedule update resubmittals that the County considers close to resolution, the County may request further information and justification and Design Builder shall, within three (3) Days, provide County with a complete written narrative response to the County's request discussing how the resubmittal addresses each of the remaining contract conformance deficiencies noted in the schedule update resubmittal.
- 1.9.5 If the County does not accept Design Builder's schedule update resubmittal, and Design Builder disagrees with County's position, Design Builder has seven (7) Days from receipt of County's letter rejecting the revision to provide a written narrative providing full justification and explanation for the revision. Design Builder's failure to respond in writing within seven (7) Days of County's written rejection of a schedule revision shall constitute Design Builder's acceptance of County's position, and Design Builder thereby waives its rights to subsequently dispute or file a claim regarding the County's position. If Design Builder files a timely response as provided in this paragraph, and the parties are still unable to agree, Design Builder's sole right shall be to file a Claim as provided in Article 12 (Claims by Design Builder) of Section 007200 (General Conditions).

1.10 RECOVERY SCHEDULE

- 1.10.1 If the monthly schedule update or Look Ahead Schedule shows Project completion date fourteen (14) Days beyond the Contract Time, or any individual milestone completion dates, Design Builder shall within seven (7) Days, submit to County a Recovery Plan to recover the lost time. As part of this Recovery Plan submittal, Design Builder shall provide a written narrative and a Recovery Schedule to recapture the lost time. The Recovery Plan consisting of a Recovery Schedule and written narrative shall propose revisions to the Contract Schedule for the next 60-day period to show how the Design Builder intends to bring the Work back on schedule. If the Recovery Schedule includes sequence changes, Design Builder shall provide a schedule diagram comparing the original Design Builder sequence to the revised sequence of the Work. The Recovery Schedule shall show the intended critical path; secure appropriate Subcontractor and supplier consent to the Recovery Schedule; the narrative shall explain trade flow and construction flow changes, duration changes, added/deleted activities, critical path changes and identify all near critical paths and resource loading assumptions for major Subcontractors. The Recovery Plan shall also describe how the measures that the Design Builder intends to take to regain schedule compliance will be accomplished without additional cost to the County.

- 1.10.2 The Recovery Schedule shall not be incorporated into any monthly schedule update until County has reviewed the Recovery Schedule.
- 1.10.3 If County does not accept Design Builder's Recovery Schedule, County and Design Builder shall follow the procedures outlined above.
- 1.10.4 At County's discretion, Design Builder can be required to provide Subcontractor certifications for any Recovery Schedule affecting said Subcontractors.
- 1.10.5 Design Builder shall provide supervision, labor, equipment and materials, as necessary, to recover the lost time.
- 1.10.6 If Design Builder believes that any portion of the delay addressed in the Recovery Schedule is due to circumstances entitling Design Builder to additional time or money, it may seek a modification of the Contract Documents under Article 14 (Modifications of the Contract Documents) of Document 007200 (General Conditions), or make a Claim for the same pursuant to Article 12 (Claims by Design Builder) of Document 007200, and other applicable provisions of the Contract Documents.

1.11 TIME IMPACT ANALYSIS FOR CHANGE ORDERS, AND OTHER DELAYS

- 1.11.1 Any request for an adjustment of the Contract Time for completion submitted by Design Builder for changes or alleged delays shall be accompanied by a complete Time Impact Analysis ("TIA") which includes both a written narrative and a hard and fully operational electronic copy of a schedule diagram depicting how the changed work affects other schedule activities. The schedule diagram shall show how Design Builder proposes to incorporate the changed work in the schedule, and how it impacts the critical path on the most recent accepted schedule prior to the occurrence of the delay. Design Builder is also responsible for requesting time extensions based on the TIA's impact on the critical path. The diagram must be tied to the main sequence of schedule activities to enable County to evaluate the impact of changed work to the scheduled critical path.
- 1.11.2 Design Builder shall comply with the requirements of Paragraph 1.11 for all types of delays such as, but not limited to, Design Builder/Subcontractor delays, asserted County or third party caused delays, adverse weather delays, strikes, procurement delays, fabrication delays, etc.
- 1.11.3 Design Builder shall be responsible for all costs associated with the preparation of TIAs, and the process of incorporating them into the current schedule update. Design Builder shall provide County with an electronic copy of each TIA. Design Builder's TIAs must be based on the as-built critical path. The TIA shall also show the as-planned critical path.
- 1.11.4 Once agreement has been reached on a TIA, the Contract Time will be adjusted accordingly. If agreement is not reached on a TIA, the Contract Time may be extended in an amount County allows, and Design Builder may submit a Claim for additional time claimed by Design Builder as provided in Document 007200 (General Conditions).

1.12 TIME EXTENSIONS

- 1.12.1 Design Builder is responsible for requesting Contract Time extensions for time impacts that, in the opinion of Design Builder, impact the critical path of the current schedule

update. Notice of time impacts shall be given in accord with Document 007200 (General Conditions).

- 1.12.2 Where an event for which either Design Builder or County is responsible impacts the projected Contract Time, Design Builder shall provide a written mitigation plan, including a schedule diagram, which explains how (e.g., increase crew size, overtime, etc.) the impact will be mitigated. Design Builder shall also include a detailed cost breakdown of the labor, equipment and material Design Builder would expend to mitigate the delay. Design Builder shall submit its mitigation plan to County within seven (7) Days from the date of discovery of said impact. Design Builder is responsible for the cost to prepare the mitigation plan.
- 1.12.3 Design Builder's failure to request time, provide TIA, or provide the required mitigation plan will result in Design Builder waiving its right to a time extension and cost to mitigate the delay.
- 1.12.4 Design Builder shall be responsible to provide timely and proper notice to the County of all impacts that could result in Contract Time extensions and shall comply with requirements as specified in Document 007200 (General Conditions), Paragraph 4, Article 15.
- 1.12.5 No time will be granted under the Contract Documents for cumulative effect of impacts or changes.
- 1.12.6 County will not be obligated to consider any time extension request unless requirements of Contract Documents are complied with.
- 1.12.7 Failure of Design Builder to perform in accordance with the current schedule update shall not be excused by submittal of time extension requests.

1.13 PROJECT STATUS REPORTING

- 1.13.1 Monthly. In addition to submittal requirements for scheduling identified in this Section 013216, provide a monthly project status report (i.e., written narrative report) to be submitted in conjunction with each Schedule as specified herein in electronic and hard copy. Written status reports shall include:
 - 1.13.1.1 Status of major Project components (percent complete, amount of time ahead or behind schedule) and an explanation of how Project will be brought back on schedule if delays have occurred.
 - 1.13.1.2 Progress made on critical activities indicated on each Schedule, including inspections.
 - 1.13.1.3 Explanations for any lack of work on critical path activities planned to be performed during last month.
 - 1.13.1.4 Explanations for any schedule changes, including changes to logic or to activity durations.
 - 1.13.1.5 List of critical activities scheduled to be performed during the next month.
 - 1.13.1.6 Status of major material and equipment procurement.

- 1.13.1.7 Description of problem areas, current and anticipated delaying factors and their impacts, and an explanation of corrective action taken.
 - 1.13.1.8 Any proposed revisions for a Recovery Plan.
 - 1.13.1.9 Design Builder shall produce additional status reports as requested by County at no additional cost.
 - 1.13.1.10 Status reports, and the information contained therein, shall not be construed as claims, notice of claims, notice of delay, or requests for changes or compensation.
- 1.13.2 Daily Construction Reports: At the close of each workday provide County with report (on Design Builder's County-approved form) of a description of work activities by location for the previous workday including the following:
- 1.13.2.1 List of subcontractors at Project site and their associated scheduled activities.
 - 1.13.2.2 List of separate contractors at Project site.
 - 1.13.2.3 List of visitors to Project Site.
 - 1.13.2.4 Count of personnel by company at Project site.
 - 1.13.2.5 Equipment at Project site.
 - 1.13.2.6 Material deliveries.
 - 1.13.2.7 High and low temperatures and general weather conditions.
 - 1.13.2.8 Rainfall, if any
 - 1.13.2.9 Total number of inclement weather days to date
 - 1.13.2.10 Accidents, Near Misses and other Safety issues.
 - 1.13.2.11 Meetings and significant decisions.
 - 1.13.2.12 Unusual events (refer to special reports).
 - 1.13.2.13 Stoppages, delays, shortages, and losses.
 - 1.13.2.14 Meter readings and similar recordings.
 - 1.13.2.15 Inspections
 - 1.13.2.16 Emergency procedures.
 - 1.13.2.17 Orders and requests of authorities having jurisdiction.
 - 1.13.2.18 Change Orders received and implemented.
 - 1.13.2.19 Services connected and disconnected.
 - 1.13.2.20 Equipment or system tests and startups.
 - 1.13.2.21 Partial Completions and occupancies.
 - 1.13.2.22 Substantial Completions authorized.
 - 1.13.2.23 Results of construction monitoring activities including, at a minimum:
 - 1.13.2.23.1 Noise control
 - 1.13.2.23.2 Dust control
 - 1.13.2.23.3 Stormwater control
 - 1.13.2.24 Any major off-site construction or fabrication
- 1.13.3 Material Location Reports: At weekly intervals, prepare and submit a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site.
- 1.13.4 Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare and submit a detailed report. Include

a detailed description of the differing conditions, together with recommendations for mitigating measures or changing or proposed changes to the Construction Documents.

- 1.13.5 Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit an Incident Report. List chain of events, date and time of initiating event as well as subsequent activities, persons involved, response by Design Builder's personnel, evaluation of results or effects, and similar pertinent information. Advise County in advance when these events are known or predictable. Incident Reports shall be numbered sequentially and shall be submitted within three (3) days of occurrence.

ACTIVITY CODES FORMAT (REQUIRED)

Code	Description
BID	PROPOSAL LINE ITEM NUMBER Note: Align with Proposal Form / Line Items
PHAS	PROJECT PHASE Key Milestones and Summaries Design General Conditions Allowances Preconstruction Mobilization Construction Testing Commissioning Completion and Closeout Note: Include any Work Phases, Sequences, etc. called out in Proposal Documents
PCKG	WORK PACKAGE Major Milestones and Summaries Submittal / Procure / Fabricate / Deliver On-Site Work Off-Site Work Building Work Sitework Other Allowances
AREA	BUILDING / SITE AREA Key Milestones and Summaries Submittal Prepare & Submit Submittal Review & Approval Procurement & Fabrication

Delivery
Building (Name)
Bedrooms
Lounges
Living Room
Dinning Area
Kitchen
Pantry
Shared Office
Offices
Group Room
Interview Rooms
Med Room
Records
Art Room
Library
Housekeeping
Laundry
Biohazard Room
Storage
Main Entrance

Patio
Mechanical yard
Security Fence / Security Gate
Site Work

Note: Create additional codes as needed or determined by the County CM.

LOC1 LOCATION LEVEL 1
Underground Utilities
Under-slab Utilities
Foundation
Structure
1st Floor

Exterior
Roof

Hardscaping
Landscape

Note: Create additional codes as needed or determined by the County CM.

CREW AVERAGE CREW SIZE PER DAY

RESP RESPONSIBILITY
Contra Costa County
Criteria Architect
General Contractor
Architect of Record
Survey
Demolition
Abatement

Relocation
Concrete
Structural Steel
Metals
Carpentry
Roofing
Openings
Finishes
Specialties
Furniture & Equipment
Special Construction
Fire Suppression
Plumbing
Heating Ventilating & Air Conditioning
Automation
Electrical
Communications
Electronic Safety & Security
Earthwork
Exterior Improvement
Utilities
City of Pleasant Hill
Pacific Gas & Electric
State Fire Marshall's Office (SFMO)
Department of Conservation and Development (DCD)
Board of State & Community Corrections (BSCC)
Commissioning Agent (CxA)

Note: May substitute generic trade with subcontractor name; Add other Responsibility code values as needed or determined by the County Construction Manager. If there is a subcontractor substitution, new subcontractor must be incorporated into this Activity Code.

UNIF	UNIFORMAT
A1010	Standard Foundations
A1020	Special Foundations
A1030	Slab-On-Grade
A2010	Basement Excavation
A2020	Basement Walls
B1010	Superstructure – Floor Construction
B1020	Superstructure – Roof Construction
B2010	Exterior Walls
B2020	Exterior Windows
B2030	Exterior Doors
B3010	Roof Coverings
B3020	Roof Openings
C1010	Interior Construction – Partitions
C1020	Interior Doors
C1030	Interior Construction – Fittings
C2010	Stair Construction
C2020	Stair Finishes
C3010	Wall Finishes
C3020	Floor Finishes
C3030	Ceiling Finishes

D1010	Elevators & Lifts
D1020	Escalators & Moving Walks
D1090	Other Conveying Systems
D2010	Plumbing Fixtures
D2020	Domestic Water Distribution
D2030	Sanitary Waste
D2040	Rainwater Drainage
D2090	Other Plumbing Systems
D3010	HVAC – Energy Supply
D3020	Heat Generating Systems
D3030	Cooling Generating Systems
D3040	HVAC – Distribution Systems
D3050	Terminal & Package Units
D3060	Controls & Instrumentation
D3070	Systems Testing & Balancing
D3090	Other HVAC Systems & Equipment
D4010	Fire Protection – Sprinklers
D4020	Fire Protection – Standpipes
D4030	Fire Protection Specialties
D4090	Other Fire Protection Systems
D5010	Electrical Service & Distribution
D5020	Lighting and Branch Wiring
D5030	Electrical – Communications & Security
D5090	Other Electrical Systems
D8020	Technology Electrical Infrastructure
D8021	Structured Cabling
D8022	Low Voltage – Main Distribution Frames
D8023	Wireless LAN Systems
D8024	Multimedia Technology Systems
D8041	Intrusion Detection and Access Control
D8042	Video Surveillance and Control Systems
D8060	Local Sound Systems
D8061	VoIP Systems
D8062	Campus-Wide Emergency Communications
D8063	Clock and Bell Systems
D8064	Video Communications / CATV Systems
E1010	Commercial Equipment
E1020	Institutional Equipment
E1030	Vehicular Equipment
E2010	Fixed Furnishings
E2020	Moveable Furnishings
F1010	Special Structures
F1020	Integrated Construction
F1030	Special Construction
F1040	Special Facilities
F1050	Special Controls and Instrumentation
F2010	Building Elements Demolition
F2020	Hazardous Components Abatement
G1010	Site Clearing
G1020	Site Demolition and Relocation
G1030	Earthwork
G1040	Hazardous Earth Remediation
G2010	Roads
G2020	Parking Lots

G2030	Pedestrian Paving
G2040	Site Development
G2050	Landscaping
G3010	Water Supply
G3020	Sanitary Sewer
G3030	Storm Sewer
G3040	Heating Distribution
G3050	Cooling System
G3060	Fuel Distribution
G3090	Other Site Mechanical Utilities
G4010	Electrical Distribution
G4020	Site Lighting
G4030	Site Communications and Security
G4090	Other Site Electrical Utilities
G9010	Service Tunnels
G9090	Other Site Systems
Z1010	Administration
Z1020	Quality Requirements
Z1030	Temporary Facilities
Z1040	Project Closeout
Z1050	Permit, Insurance and Bonds
Z9999	Allowances

Note: Only use Z9999 if an Allowance cannot be coded to a single Unifomat Level 3 code.

PART 2 - PRODUCTS - Not used.

PART 3 - EXECUTION - Not used.

END OF SECTION

SECTION 013234

CONSTRUCTION WEBCAM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

1.1.1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.1.1.1. Related Sections:

- 1.1.1.1.1. Division 017700 Section "Closeout Procedures" for submitting digital photographs as Project Record Documents at Project closeout.
- 1.1.1.1.2. Division 013433 "Photographic Documentation"
- 1.1.1.1.3. Division 26 Sections for electrical service and connections, as needed.

1.2. SUMMARY

- 1.2.1. Section includes an integrated, professional-grade, high resolution digital webcam system as a turnkey package including camera(s) and related hardware, mounting equipment, software, wireless cellular data transmission service, website hosting, image hosting and storage, online interface for the system and technical support sufficient to provide a live video stream of the Los Medanos Recovery Center accessible via password by County Representatives during the entirety of the construction work and a time-lapse video of same. Camera(s) to be suitable and compatible for use with Owner's security camera system.

1.3. DEFINITIONS

- 1.3.1. CCD: Charge-coupled device.
- 1.3.2. System Vendor: Provider of camera system hardware and software and host maintaining offsite server, data storage devices, and troubleshooting software and equipment. Contractor shall maintain an active contract for System Service for duration of Contract Time, based on substantial completion plus 90 days, unless other term is agreed upon in writing by the Owner. Cost for System Service shall be included in the Contract Sum.
- 1.3.3. System Service: Host services provided by System Vendor including image acquisition, transfer, backup, periodic upgrades to the system, viewing access via a maintained interface on the Internet and on-line storage of images for duration of the Service Contract.

1.4. SUBMITTALS

1.4.1. Shop Drawings:

- 1.4.1.1. Key Plan: Submit key plan of Project site and building with notation of vantage points marked for location and direction of each camera. Indicate camera mounting heights relative to ground and roof elevation.

1.4.1.2. Mounting details: Provide details showing how any device will be installed if located on any Owner facilities for Owner review and approval prior to installation.

1.4.2. Quality Assurance Submittals:

1.4.2.1. Manufacturer's Instructions: Follow manufacturer's installation and testing instructions.

1.4.3. Time-Lapse "Movie": After construction is complete, compile select digital still images from daylight hours into a time-lapse movie of the construction period. Optimize images included and run-time length of movie to suit Owner's requirements. Provide updated compiled time-lapse movie during construction every 4 months.

1.4.4. Closeout Submittals:

1.4.4.1. Digital Images: Submit digital still images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.

1.4.4.1.1. Date and Time: Include date and time in filename for each image.

1.4.4.1.2. Format: Submit a sortable/identifiable archive of all digital still images on an external hard drive or DVD format.

1.4.4.2. Time-Lapse "Movie": Compile select digital still images into a time-lapse movie of the construction period. Optimize images included and run-time length of movie to suit Owner's requirements.

1.5. QUALITY ASSURANCE

1.5.1. Electrical Components: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

1.5.1.1. Factory assemble camera system from components bearing UL Classification Marking indicating that materials have been produced under UL's Classification and Follow-Up Service.

1.5.2. Comply with NECA 1, "Standard Practices for Good Workmanship in Electrical Construction."

1.5.3. Comply with NFPA 70, "National Electrical Code."

1.5.4. Manufacturer Qualifications: Company specializing in manufacturing Products specified in this Section with minimum five years documented experience.

1.6. DELIVERY, STORAGE, AND HANDLING

1.6.1. Deliver materials in original packages and containers with seals unbroken and bearing manufacturer's labels.

1.6.2. Store materials to comply with manufacturer's directions to prevent deterioration from moisture, heat, cold, direct sunlight, or other causes.

1.7. PROJECT CONDITIONS

- 1.7.1. Environmental Conditions: Capable of withstanding the following environmental conditions without mechanical or electrical damage or degradation of operating capability:

- 1.7.1.1. Exterior Environment: System components installed in locations exposed to weather shall be rated for continuous operation in ambient temperatures of minus 10 to plus 120 deg F dry bulb and 20 to 90 percent relative humidity, condensing. Rate for continuous operation when exposed to rain as specified in NEMA 250, winds up to 85 mph. NEMA 250, Type 3R enclosures.

1.8. COORDINATION

- 1.8.1. Coordinate layout and installation of cameras to avoid interference from trees and to prevent sunlight and light from fixtures entering directly into the camera lens.
- 1.8.2. Camera is to be mounted at existing Los Medanos Recovery Center at 2311 Loveridge Rd. Pittsburg, CA, 94565 in a location approved by the County and Health Services Department, such as the adjacent existing light pole.

1.9. WARRANTY

- 1.9.1. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of cameras and equipment related to camera operation that fail in materials or workmanship within specified warranty period. Failures include, but are not limited to, the following:
 - 1.9.1.1. Failure of system to meet performance requirements.
 - 1.9.1.2. Faulty operation of hardware and software.
 - 1.9.1.3. Defects in other components of the work.
- 1.9.2. Warranty Period: Lifetime product warranty required.

1.10. USAGE RIGHTS

- 1.10.1 Obtain and transfer copyright usage rights to Owner for unlimited reproduction of photographs and archives generated by the system.
- 1.10.2 Contractor shall understand that photographs and archives generated by the camera system become the mutual property of the Owner and System Vendor and cannot be used for advertisement or publicity reasons without the expressed written consent of the Owner and System Vendor.

1.11. MAINTENANCE

- 1.11.1. Maintenance Service: Provide service and maintenance of camera system for entire Construction period.
 - 1.11.1.1. Examine monthly; clean and adjust equipment.
 - 1.11.1.2. Provide remote emergency repair service by System Vendor 24 hours a day, seven days a week to ensure uninterrupted camera service. Provide personnel on-site to assist System Vendor as needed during working hours. Provide replacement parts and components due to system failure, damage, or theft within two business days.

- 1.11.1.3. Maintenance service shall not be assigned or transferred to another agent or subcontractor without prior written consent of Owner.
- 1.11.1.4. Require system vendor to proactively monitor the system by means of service and maintenance contract. If no connection is made within a span of time not to exceed 24 hours during regular business days, require system vendor to notify Contractor and commence troubleshooting.
- 1.11.1.5. Provide necessary staff during troubleshooting to verify power availability, to remove and replace system, and to verify functioning phone lines or internet access for dialup and Ethernet based systems.

PART 2 - PRODUCTS

2.1. MANUFACTURERS

- 2.1.1. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - 2.1.1.1. OxBlue, Inc., 888-849-2583, <http://www.OxBlue.com/>, or approved equal.
 - 2.1.1.2. Substitutions: Comply with provisions of Division 01 Section "Product Requirements."

2.2. SYSTEM REQUIREMENTS

- 2.2.1. The indoor/outdoor camera system shall consist of a tamper and impact resistant, discreet, fixed pole or wall-mount enclosure with integrated fixed camera, lens and controller to match existing County security cameras.
- 2.2.2. The cameras shall have the ability to take a high-resolution 8.0 Megapixel digital still images of the construction site at a set time interval, every 15 minutes, and upload the still images over a wireless cellular modem to a secure, password-protected website.

2.3. EQUIPMENT

- 2.3.1. Camera: Integrated high-definition camera and lens assembly consisting of a charge coupled device (CCD) camera with a remotely controlled focal length lens mounted as a permanent module with the following features:
 - 2.3.1.1. Digital Still Image Resolution: Minimum sensor size of 8.0 megapixels, and an image resolution of not less than 3264 x 2448 pixels.
 - 2.3.1.2. Memory: Unlimited remote storage provided by the system vendor.
 - 2.3.1.3. Lens: 6.3 - 63 mm (38-380mm equivalent in 35mm photography), system capable of ten times (10x) optical zoom. Include a wide-angle conversion lens with a 0.66x factor. Provide capability to remotely control focal length lens to change resolution and focus. Adjustable optical zoom available.
 - 2.3.1.4. Focus Mode: iESP auto, Spot AF, Selective AF target, Manual.
 - 2.3.1.5. Metering Mode: Digital iESP multi-pattern auto TTL, Spot metering, Center Weighted metering.

2.3.1.6. Data Connection: Provide one of the following:

- 2.3.1.6.1. In areas with cellular coverage, operate cameras via built-in cellular data connection provided and maintained by the system vendor.
- 2.3.1.6.2. In areas without cellular coverage, operate cameras via an RJ-45 Ethernet data connection over broadband or satellite internet access provided and maintained by the Contractor.

2.3.1.7. Electrical Operation: 120 VAC at maximum 83 Watts.

2.3.2. Quantity of Cameras: Two (2).

2.3.3. Camera Enclosure: Construct tamper and impact resistant housing of extruded aluminum, die cast aluminum, and sheet aluminum body with factory-applied powder coated finish.

- 2.3.3.1. Construct with forward opening, front hinged lid, allowing easy access to camera mounting sled.
- 2.3.3.2. Provide rear link-lock latch, manufactured from stainless steel, suitable for use with pad lock.
- 2.3.3.3. Equip with heater, blower, and thermostat.
- 2.3.3.4. Size: 25-1/4 inches long by 6-7/8 inches wide by 5 inches high.

2.4. INTERFACE AND ONLINE ACCESS

2.4.1. Remote Access: Contractor's System Vendor shall provide an online interface system to allow viewing of all high-definition digital still images captured and stored during construction, from any location with internet access and with password protection.

- 2.4.1.1. Maintain images on the System Vendor's website for reference available at all times during construction and for not less than 90 days after Final Completion.

2.4.2. Online Interface:

- 2.4.2.1. The online interface system shall be accessible by an unlimited number of users.
- 2.4.2.2. System shall display Project name and Owner Logo.
- 2.4.2.3. The system shall display online time-lapse videos and allow for videos to be downloaded by users.
- 2.4.2.4. Navigation: Provide calendar-based navigation system for selecting specific images.
- 2.4.2.5. Zoom: Provide pan and zoom capability for zooming into high-definition images.
- 2.4.2.6. User Screen Viewing Options:

- 2.4.2.6.1. Dynamic Calendar: Provide screen showing calendar in which each day displays an image for that day.
- 2.4.2.6.2. Project Dashboard: Provide screen allowing user to view multiple sites at one time.
- 2.4.2.6.3. Quad View: Provide screen showing four windows, allowing user to view last four days, weeks, or months on one screen.
- 2.4.2.6.4. Split Screen: Provide screen showing two discrete images side by side, from same camera or from two different cameras.
- 2.4.2.6.5. Overlay Mode: Provide screen showing two discrete images overlaid, allowing user to determine differences between the two.
- 2.4.2.6.6. Full-Screen: Provide screen maximizing view of images on users monitor.
- 2.4.2.7. Email: Provide capability to email photos with comments from within the system.
- 2.4.2.8. Slideshow: Provide capability to browse through images, moving forward and backward in time by individual image and by day.

PART 3 - EXECUTION

3.1. PREPARATION

- 3.1.1. Unpack camera system components and save packing materials (box and foam) for future shipment of camera system including associated appurtenances and mounting equipment to Owner or Manufacturer as required.

3.2. INSTALLATION

- 3.2.1. General:
 - 3.2.1.1. No installation to occur without Owner approval of locations and mounting details.
 - 3.2.1.2. Install camera system in accordance with manufacturer's printed instructions, State and Municipality codes and requirements and approved submittals.
 - 3.2.1.3. Install units plumb and at proper angle to provide maximum field of view of on-site operations.
 - 3.2.1.4. Securely and rigidly anchor products in place. All device mounting to be per Owner approved details.
 - 3.2.1.5. Connect cameras to power.
- 3.2.2. Position camera so that field of view of approximately 77 degrees covers intended area of site.
 - 3.2.2.1. Install camera at elevation that will provide uncompromised visual coverage.

- 3.2.2.2. Install camera so that position of sun or manmade light sources will not come into direct contact with field of view of camera at any time during construction.

3.3. FIELD QUALITY CONTROL

- 3.3.1. Preinstallation Testing: Test camera on site at ground level prior to mounting unit in its intended elevated position.
 - 3.3.1.1. Contact System Vendor not less than 24 hours in advance of installation for testing.
 - 3.3.1.2. Connect unit.
 - 3.3.1.3. After 30 minutes contact System Vendor and require System Vendor to remotely confirm camera is operating properly.
 - 3.3.1.4. Install cameras in approved locations.

3.4. CLEANING

- 3.4.1. Clean installed items using methods and materials recommended in writing by manufacturer.
- 3.4.2. Clean camera system components, including camera-housing windows, lenses, and monitor screens.

3.5. INSTRUCTION

- 3.5.1. Engage a factory-authorized service representative by phone to instruct Contractor's personnel in procedures to adjust and maintain camera equipment.
 - 3.5.1.1. Instruct personnel on procedures and schedules for troubleshooting and maintaining equipment.
 - 3.5.1.2. Explain methods of determining optimum alignment and adjustment of components.

3.6. OPERATION, TERMINATION, AND REMOVAL

- 3.6.1. Maintenance: Maintain camera equipment in good operating condition on a 24-hour basis until removal or turn-over to the County.
- 3.6.2. Upon project completion, camera system including associated appurtenances and mounting equipment shall become property of County.
- 3.6.3 Termination and Removal: If requested by County, remove camera system prior to Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with camera system. Repair or replace any damaged Work or existing Owner property or materials, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

END OF SECTION

SECTION 013433

PHOTOGRAPHIC DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- 1.1.1 Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- 1.2.1 This Section includes administrative and procedural requirements for the following:
 - 1.2.1.1 Preconstruction photographs.
 - 1.2.1.2 Periodic (Monthly) Construction photographs.
 - 1.2.1.3 Final Completion Construction photographs.
- 1.2.2 Related Sections include the following:
 - 1.2.2.1 Division 013000 Section "Submittal Procedures" for submitting photographic documentation.
 - 1.2.2.2 Division 017332 Section "Selective Demolition" for photographic documentation before any selective demolition operations commence.
 - 1.2.2.3 Division 017700 Section "Closeout Procedures" for submitting digital media as Project Record Documents at Project closeout.
 - 1.2.2.4 Division 017900 Section "Demonstration and Training" for submitting videos of demonstration of equipment and training of Owner's personnel.

1.3 SUBMITTALS

- 1.3.1 Qualification Data: For photographer.
- 1.3.2 Key Plan: Submit key plan of the Los Medanos Recovery Center Project component with notation of at least four (4) vantage points marked for location, elevation and direction of each photograph. Include same label information as corresponding set of photographs.
- 1.3.3 Construction Phase Photographs: Submit digital and three (3) hard copies (8 x 10 minimum) of each photographic view within seven days of taking photographs.
 - 1.3.3.1 Identification: On back of each print, provide an applied label or rubber-stamped impression with the following information:
 - 1.3.3.1.1 Name of Project
 - 1.3.3.1.2 Name and address of photographer.

- 1.3.3.1.3 Name of Architect and Construction Manager.
- 1.3.3.1.4 Name of Design Builder.
- 1.3.3.1.5 Date photograph was taken.
- 1.3.3.1.6 Description of vantage point, indicating location, direction (by compass point), and elevation.
- 1.3.3.1.7 Unique sequential identifier.
- 1.3.3.1.8 Digital Images: Submit a complete set of digital image electronic files as a Project Record Document on USB flash drive or portable hard drive. Identify electronic media with date photographs were taken. Submit images that have same aspect ratio as the sensor, uncropped.

1.4 QUALITY ASSURANCE

- 1.4.1 Photographer Qualifications: An individual who has been regularly engaged as a professional photographer of construction projects for not less than three years.

1.5 COORDINATION

- 1.5.1 Auxiliary Services: Cooperate with photographer and provide auxiliary services requested, including access to Project site and use of temporary facilities, including temporary lighting required to produce clear, well-lit photographs without obscuring shadows.

1.6 USAGE RIGHTS

- 1.6.1 Obtain and transfer copyright usage rights from photographer to Owner for unlimited reproduction of photographic documentation.

PART 2 - PRODUCTS

1.7 PHOTOGRAPHIC MEDIA

- 1.7.1 Digital Images: Provide images on USB or hard drive in uncompressed TIFF format, produced by a digital camera with minimum sensor size of 16.0 megapixels, and at an image resolution of not less than 1024 by 768 pixels and suitable for enlargement to a minimum of 16 x 20 inches.

PART 3 - EXECUTION

1.8 CONSTRUCTION PHOTOGRAPHS

- 1.8.1 Photographer: Engage a qualified commercial photographer to take construction photographs.
- 1.8.2 General: Utilizing fixed-wing aircraft, helicopter, or drone, take aerial photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work from

at least three (3) vantage points. Photographs with blurry or out-of-focus areas will not be accepted.

1.8.2.1 Maintain key plan with each set of construction photographs that identifies each photographic location.

1.8.3 Digital Images: Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software.

1.8.3.1 Date and Time: Include date and time in filename for each image.

1.8.3.2 Field Office Images: Maintain one set of images on file in the field office at Project site, available at all times for reference. Identify images same as for those submitted to County.

1.8.4 Preconstruction Photographs: Before commencement of Design Builder mobilization or make-ready work take color, digital, aerial videos of the Project site and surrounding properties, including existing adjacent streets and parking areas to be utilized during construction. Provide copies of all videos to the Sheriff's Office and County Construction Manager on (2) separate Flash drives prior to mobilization or commencement of any make ready work.

1.8.5 Periodic Construction Photographs: Take sets of aerial photographs monthly, coinciding with the cutoff date associated with each Application for Payment. To the extent possible, utilize the same vantage points to show status of construction and progress since last photographs were taken.

1.8.6 Final Completion Construction Photographs: Take six (6) aerial color photographs and six (6) interior color photographs and six (6) exterior color photographs after date of Substantial Completion for submission as Project Record Documents. County shall select three (3) desired vantage points and Design Builder shall provide three (3) copies of each at minimum of 16 x 20 inches, matted and professionally framed and suitable public display.

1.8.6.1 Do not include date stamp.

END OF SECTION

SECTION 014100

REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- 1.1.1 This section includes regulatory requirements applicable to the Contract Documents.
- 1.1.2 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 date of submission to Regulatory Agency for plan review even if an earlier version was used in development of, and/or specified elsewhere in, the Project Manual or Bridging Documents.
- 1.1.3 Should any conditions develop not covered by the Contract Documents wherein the finished work will not comply with current codes, a Supplemental Instruction or Bulletin detailing and specifying the required work shall be submitted to and approved by the County before proceeding with the Work.

1.2 REFERENCES TO REGULATORY REQUIREMENTS

- 1.2.1 Codes, laws, ordinances, rules and regulations referred to shall have full force and effect as though printed in full in these specifications. Codes, laws, ordinances, rules and regulations are not furnished to the Design Builder, since the Design Builder is assumed to be familiar with their requirements. The listing herein of applicable codes, laws and regulations for hazardous waste abatement work in the Contract Documents is supplied to the Design Builder as a courtesy and shall not limit the Design Builder's responsibility for complying with all applicable laws, regulations or ordinances having application to the Work. Where conflict among the requirements or with these specifications exists, the most stringent requirements shall be used.
- 1.2.2 Conform to referenced codes, laws, ordinances, rules and regulations.
- 1.2.3 Precedence:
 - 1.2.3.1 Where specified requirements differ from the requirements of applicable codes, ordinances and standards, the more stringent requirements shall take precedence.
 - 1.2.3.2 Where the Drawings, Plans or Specifications require or describe products or execution of better quality, higher quantity, higher standard, or greater size than required by applicable codes, ordinances and standards, the Drawings, Plans and Specifications shall take precedence so long as such increase is legal.
 - 1.2.3.3 Where no requirements are identified in the Drawings, Plans or Specifications, comply with all requirements of applicable codes, ordinances and standards of governing authorities having jurisdiction.

1.3 CODES

1.3.1 Codes which apply to the Contract Documents include, but are not limited to, the following:

- 1.3.1.1 California Building Code (Title 15, Part 2, Title 24, C.C.R., including, without means of limitation, sections 16A, 102A.23, 308, 420A, 504-506, 904.2.6, 1019 and 1604)
- 1.3.1.2 California Electrical Code (Part 5, Title 24, C.C.R.)
- 1.3.1.3 California Mechanical Code (Part 3, Title 24, C.C.R.)
- 1.3.1.4 California Plumbing Code (Part 4, Title 24, C.C.R.)
- 1.3.1.5 California Elevator Safety Regulations (Part 7, Title 24, C.C.R.)
- 1.3.1.6 International Building Code
- 1.3.1.7 Uniform Plumbing Code
- 1.3.1.8 Uniform Mechanical Code
- 1.3.1.9 National Electrical Code
- 1.3.1.10 California Energy Code
- 1.3.1.11 California Fire Code

1.4 LAWS, ORDINANCES, RULES AND REGULATIONS

1.4.1 During execution of Work to be done under the Contract Documents, comply with applicable laws, ordinances, rules and regulations, including, but not limited to, the following:

1.4.2 Federal

- 1.4.2.1 Americans With Disabilities Act of 1990 ADA
- 1.4.2.2 29 CFR, Section 1910.1001, Asbestos
- 1.4.2.3 40 CFR, Subpart M, National Emission Standards for Asbestos
- 1.4.2.4 Executive Order 11246
- 1.4.2.5 Federal Endangered Species Act
- 1.4.2.6 Clean Water Act
- 1.4.2.7 Federal Occupational Safety & Health Administration Act

1.4.3 State of California

- 1.4.3.1 California Code of Regulations, Titles 5, 8, 12, 13, 15, 17, 19, 20, 21, 22, 23 24 and 25
- 1.4.3.2 California Public Contract Code
- 1.4.3.3 California Health and Safety Code
- 1.4.3.4 California Government Code
- 1.4.3.5 California Labor Code
- 1.4.3.6 California Civil Code
- 1.4.3.7 California Code of Civil Procedure
- 1.4.3.8 CPUC General Order 95, Rules for Overhead Electric Line Construction
- 1.4.3.9 CPUC General Order 128, Rules for Construction of Underground Electric Supply and Communications Systems
- 1.4.3.10 California Occupational Safety and Health Administration (Cal OSHA)
- 1.4.3.11 Occupational Safety and Health Administration (OSHA): Hazard Communications Standards
- 1.4.3.12 California Endangered Species Act
- 1.4.3.13 Water Code
- 1.4.3.14 Fish and Game Code

1.4.4 State of California Agencies

- 1.4.4.1 State and Consumer Services Agency
- 1.4.4.2 California Department of Transportation (“Cal-Trans”)
- 1.4.4.3 Department of Fish and Game

1.4.5 Local Agencies:

- 1.4.5.1 Bay Area Air Quality Management District
- 1.4.5.2 County of Contra Costa
- 1.4.5.3 Contra Costa County Fire Marshal
- 1.4.5.4 Contra Costa County Department of Conservation and Development
- 1.4.5.5 Pleasant Hill Fire Department

1.4.6 Other Requirements:

- 1.4.6.1 National Fire Protection Association (NFPA): Pamphlet 101, Life Safety (2025).
- 1.4.6.2 The following NFPA Standards apply:

	NFPA Standard	Edition
13	Installation of Sprinkler Systems	2025
14	Installation of Standpipes and Hose Systems	2024 (with CA amendments)
20	Installation of Centrifugal Fire Pumps	2025
24	Installation of Private Fire Service Mains	2025 (with CA amendments)
50	Bulk Oxygen Systems	2024
72	National Fire Alarm Code (as amended)	2025
80	Fire Doors and Fire Windows	2025
92	Smoke Control Systems	2024
99	Health Care Facilities, Chapter 4 – Gas & Vacuum Systems	2024
2001	Clean Agent Fire Extinguishing Systems	2025 (with CA amendments)

- 1.4.6.3 The Design Builder shall comply with Standard Specifications such as California Standard Specification, ASTM, ANSI, AASHTO, AISC, Commercial or Industry Standards, Federal Specifications, NFPA, NEMA, AWWA, UL, and the like
- 1.4.6.4 References on the Drawings, Plans or in the Specifications to “code” or “building code” not otherwise identified shall mean the codes specified in this Section, together with all additions, amendments, changes, and interpretations adopted by code authorities of the jurisdiction.
- 1.4.7 Design Builder shall provide the County copies of, or access to, any of the foregoing items listed in this Article 1.4 for the duration of the Project within twenty-four (24) hours of any request.

- 1.4.8 It shall be understood that manufacturers, producers, and their agents of materials are required either to have such specifications available for reference or to be fully familiar with their requirements as pertains to their project or material.
- 1.4.9 Other Applicable Laws, Ordinances and Regulations:
 - 1.4.9.1 Work shall be accomplished in conformance with all applicable laws, ordinances, rules and regulations of Federal, State and local governmental agencies and jurisdictions having authority over the Project.
 - 1.4.9.2 Work shall be accomplished in conformance with all rules and regulations of public utilities and utility districts.
 - 1.4.9.3 Where such laws, ordinances rules and regulations require more care or greater time to accomplish Work, or require better quality, higher standards or greater size of products, Work shall be accomplished in conformance to such requirements with no change to the Contract Time and Contract Sum, except where changes in laws, ordinances, rules and regulations occur subsequent to the time of Proposal submittal.
- 1.4.10 Change Orders and Claims:
 - 1.4.10.1 The Public Contract Code, including but not limited to § 7105(d)(2), and Government Code § 930.2 et seq., apply to all contract procedures for changes, time extensions, change orders (time or compensation) and claims. Federal law [United States v. Joseph A. Holpuch Co., 328 US 234 (1946)] shall supplement but not supersede California law on these requirements.
 - 1.4.10.2 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 County and approved in writing by the County Counsel.

1.5 REGULATORY AGENCY

- 1.5.1 Contra Costa County Department of Conservation and Development (DCD), located at 30 Muir Road, Martinez, CA, is the Regulatory Agency over project design and construction.
- 1.5.2 Regulatory Agency will designate an inspector or inspectors for project who shall be allowed access to Project site at any time.
- 1.5.3 Regulatory Agency will require verified report forms to be filed during construction as required by the Testing, Inspection, and Observation Program established by the Design Builder's Architect of Record and approved by Regulatory Agency. Separate verified reports are required from Architect, each Consultant, Project Inspector, and Contractor.
- 1.5.4 Regulatory Agency will require Building Permits for Project Components. No fees are required from Design Builder for Regulatory Agency Permits.
- 1.5.5 Regulatory Agency will require material changes to the project documented by RFI, Supplemental Instruction, or Change Orders stamped by the AOR or EOR to be submitted and approved prior to construction.

- 1.5.6 Regulatory Agency will require a Licensed Contractors' Declaration and a Worker's Compensation Declaration.

1.6 DEFERRED APPROVAL

Where noted in Technical Specification sections, certain items of material may require Regulatory Agency and AHJ deferred approval pending submittal of shop drawings. It is the County's intent to minimize the number of deferred submittals for this project. For these items, Design Builder shall submit details and structural calculations for anchorage, and any other design documents or calculations to comply with State of California Code of Regulations Title 24, including the applicable provisions of CBC Chapter 16 and ASCE/SEI 7, Chapter 13 for seismic anchorage. Calculations shall be made by an Engineer registered in the State of California.

1.7 CONFLICTS

- 1.7.1 Between referenced regulatory requirements: Comply with the one establishing the more stringent requirement.
- 1.7.2 Between referenced regulatory requirements and the Contract Documents: Comply with the one establishing the more stringent requirement.

1.8 REQUIRED PROVISIONS ON CONTRACT CLAIM RESOLUTION

- 1.8.1 The Public Contracts Code specifies required provisions on resolving contract claims less than \$375,000, which are set forth below, and constitute a part of the Contract Documents.
 - 1.8.1.1 For the purposes of this Section 014100, "Claim" means a separate demand by the Design Builder 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 the Design Builder 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 the County. In order to qualify as a Claim, the written demand must state that it is a claim submitted under Article 12 (Claims by Design Builder) of Document 007200 (General Conditions) and be submitted in compliance with all of the requirements thereof. 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.
 - 1.8.1.2 A voucher, invoice, payment application, 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 Contract Documents claim submission requirements.
 - 1.8.1.3 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 Government Code.

1.8.2 PROCEDURE

- 1.8.2.1 The Claim must be in writing, submitted in compliance with all requirements of Article 12 (Claims by Design Builder) of Document 007200 (General Conditions) including, but not limited to, the time prescribed by and including the documents necessary to substantiate the Claim, pursuant to paragraph 12.2.2. 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 Article 12 or elsewhere in the Contract Documents.
- 1.8.2.2 For Claims of fifty thousand dollars (\$50,000) or less
 - 1.8.2.2.1 The County shall respond in writing within forty-five (45) Days of receipt of the Claim, or
 - 1.8.2.2.2 The County 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 the County may have against Claimant.
- 1.8.2.3 If additional information is thereafter required, it shall be requested and provided in accordance with this section, upon mutual agreement of the County and the Claimant.
- 1.8.2.4 The County'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.
- 1.8.2.5 For Claims over Fifty Thousand Dollars (\$50,000) and less than or equal to Three Hundred Seventy-Five Thousand Dollars (\$375,000):
 - 1.8.2.5.1 The County shall respond in writing within sixty (60) Days of receipt of the Claim, or
 - 1.8.2.5.2 The County 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 the County may have against the Claimant.
 - 1.8.2.5.2.1 If additional information is thereafter required, it shall be requested and provided in accordance with this section, upon mutual agreement of County and Claimant;
 - 1.8.2.5.2.2 The County's written response to the Claim, as further documented, shall be submitted to the Claimant within thirty (30) Days after receipt of further documentation or within a period of time no greater than taken by the Claimant in producing the additional information, whichever is greater.

1.8.2.6 Meet and Confer

- 1.8.2.6.1 If the Claimant disputes the County's written response, or the County fails to respond within the time prescribed above, the Claimant shall notify the County, in writing, either fifteen (15) Days of receipt of the County's response or within fifteen (15) Days of the County's failure to timely respond, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon demand the County will schedule a meet and confer conference within thirty (30) Days for settlement of the dispute.
- 1.8.2.6.2 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 § 900) and Chapter 2 (commencing with § 910) of Part 3 of Division 3.6 of Title 1 of the 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 his or her written claim for negotiation as set forth above until the time that Claim is denied as a result of the meet and confer process herein, including any period of time utilized by the meet and confer process.

1.9 COMPLIANCE WITH AMERICANS WITH DISABILITIES ACT

- 1.9.1 The Design Builder 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 Builder, must be accessible to the disabled public.
- 1.9.2 The Design Builder shall provide the services specified in this Agreement in a manner that complies with the ADA and any and all other applicable federal, state and local disability rights legislation.
- 1.9.3 The Design Builder shall not discriminate against disabled persons in the provision of services, benefits or activities provided under this Agreement and further agrees that any violation of this prohibition on the part of the Design Builder, its employees, agents or assigns shall constitute a material breach of this Agreement.

PART 2 - PRODUCTS - Not used.

PART 3 - EXECUTION - Not used.

END OF SECTION

SECTION 014200

REFERENCES AND DEFINITIONS

PART 1 - GENERAL

1.1 SUMMARY

- 1.1.1 This section includes reference standards, abbreviations, symbols and definitions used in the Contract Documents.
- 1.1.2 Material and workmanship specified by reference to number, symbol, or title of specific standard such as state standard, commercial standard, federal specifications, technical society, or trade association standard, or other similar standard shall comply with requirements of standards except when more rigid requirements are specified or required by applicable codes.
- 1.1.3 Standards referred to, except as modified herein, shall have full force and effect as though printed in the Contract Documents. Standards are not furnished to the Design Builder, since manufacturers and trades involved are assumed to be familiar with their requirements.

1.2 REFERENCE TO STANDARDS AND SPECIFICATIONS OF TECHNICAL SOCIETIES; REPORTING AND RESOLVING DISCREPANCIES

- 1.2.1 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 of opening of Proposals, except as may be otherwise specifically stated in the Contract Documents.
- 1.2.2 If during the performance of the Work, Design Builder 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, report it in writing at once by submitting a Design Request for Information (DRFI) to County, and do not proceed with the Work affected thereby until consent to do so is given by County.
- 1.2.3 Except as otherwise specifically stated in the Contract Documents or as may be provided by Change Order, Construction Change Directive (CCD), 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:
 - 1.2.3.1 The provisions of any such standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
 - 1.2.3.2 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).

- 1.2.4 No provision of any such standard, specification, manual, code, or instruction shall be effective to change the duties and responsibilities of County or Design Builder 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 County or any of its 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.
- 1.2.5 Design Builder shall comply with the applicable portions of standards and specifications published by the technical societies, institutions, associations, and governmental agencies referred to in Specifications. Design Builder's compliance with referenced standards and specifications shall be to the latest revision in effect at the time of opening of Proposals, unless otherwise identified by date.
- 1.2.6 Referenced Grades, Classes, and Types: 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.
- 1.2.7 Jobsite Copies:
- 1.2.7.1 Design Builder shall provide copies or access to reference standards identified on Drawings and in Specifications at the site as needed or requested by the County in order to properly execute the Work.
- 1.2.7.2 At a minimum, Design Builder shall maintain at the Site the Safety Codes as prescribed by the State of California, Division of Industrial Safety regulations.
- 1.2.8 Edition Date of References:
- 1.2.8.1 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 of opening Proposals.
- 1.2.8.2 All amendments, changes, errata, and supplements as of the effective date shall be included.
- 1.2.9 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 Builder is familiar with and has access to these nationally- and industry-recognized specifications and standards.

1.3 ABBREVIATIONS

- 1.3.1 Listed hereinafter are the various organizations or references which may appear in the Contract Documents, along with their respective acronyms and/or abbreviations:

AA	Aluminum Association
AAADM	American Association of Automatic Door Manufacturers
AABC	Associated Air Balance Council

AAMA	Architectural Aluminum Manufacturers Association
AAP	Affirmative Action Program
AASHTO	American Association of State Highway and Transportation Officials
ABMA	American Boiler Manufacturers Association
ABPA	American Board Products Association
ACI	American Concrete Institute
ACPA	American Concrete Pipe Association
ADAAG	Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities
AED	Association of Equipment Distributors
AGA	American Gas Association
AGC	Association of General Contractors
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
AMCA	Air Moving and Conditioning Association, Inc.
ANSI	American National Standards Institute (formerly American Standards Association)
APA	American Plywood Association
ARI	Air-Conditioning and Refrigeration Institute
ASHRAE	American Society of Heating, Refrigeration, and Air-Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWCI	Association of the Wall and Ceiling Industries
AWPA	American Wood- Preservers Association
AWPB	American Wood Preservers Bureau
AWS	American Welding Society
AWWA	American Water Works Association
BIL	Basic Insulation Level
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	State of California, Department of Transportation
CBC	California Building Code
CCD	Construction Change Directive
CCR	California Code of Regulations
CEC	California Electric Code
CFR	Code of Federal Regulations
CGA	Compressed Gas Association
CISPI	Cast Iron Soil Pipe Institute
CLMFI	Chain Link Fence Manufacturers Institute
CMC	California Mechanical Code
CO	Change Order
CPC	California Plumbing Code
CPM	Critical Path Method
CPUC	California Public Utilities Commission
CRA	California Redwood Association
CRSI	Concrete Reinforcing Steel Institute
CS	Commercial Standards, U.S. Department of Commerce
CSA	Canadian Standards Association
CTI	Ceramic Tile Institute
DHI	Door and Hardware Institute
DSA	Division of State Architect (formerly known as the Office of the State Architect)

EPA	Environmental Protection Agency
FCI	Fluid Controls Institute
FGMA	Flat Glass Marketing Association
FM	Factory Mutual
FS	Federal Specifications
GA	Gypsum Association
HPMA	Hardwood Plywood Manufacturers Association
HVAC	Heating, Ventilating and Air Conditioning
I.D.	Identification
IACS	International Annealed Copper Standards
IAPMO	International Association of Plumbing and Mechanical Officials
ICBO	International Conference of Building Officials
ICEA	Insulated Cable Engineers Association
IEEE	Institute of Electrical and Electronic Engineers, Inc.
IES	Illuminating Engineering Society
ISA	Instrumentation Society of America
JATC	Joint Apprenticeship Training Committee
JCAHO	Joint Commission on Accreditation of Healthcare Organizations
JV	Joint Venture
LBE	Local Business Enterprise
M.I.	Middle Initial
M/WBE	Minority and/or Woman-Owned Business Enterprise
MBE	Minority Business Enterprise
MIA	Masonry Institute of America
MIA	Marble Institute of America
MLSFA	Metal Lath/Steel Framing Association
MS	Military Specifications
MSDS	Material Safety Data Sheet
MSS	Manufacturers Standardization Society of the Valve & Fitting Industry
NAAMM	National Association of Architectural Metal Manufacturers
NACE	National Association of Corrosion Engineers
NBS	National Bureau of Standards
NEC	National Electric Code
NEMA	National Electric Manufacturers Association
NESC	National Electrical Safety Code
NFPA	National Fire Protection Association
NFPA	National Forest Products Association
NIOSH	National Institute for Occupational Safety and Health
NIST	National Institute of Science and Technology (formerly the National Bureau of Standards)
NOFMA	National Oak Flooring Manufacturers Association
NSF	National Sanitation Foundation
NTMA	National Terrazzo & Mosaic Association
NWWDA	National Wood Windows and Doors Association
OSHA	Occupational Safety and Health Administration
OSHDP	Office of Statewide Health Planning and Department
HCAI	Health Care Access and information
PCA	Portland Cement Association
PCI	Prestressed Concrete Institute
PDI	Plumbing and Drainage Institute
PG&E	Pacific Gas and Electric Company
PM	Preventive Maintenance
PR	Proposal Request
PS	Product Standard, U. S. Department of Commerce

RFI	Request for Information
RFP	Request for Proposals
RFS	Request for Substitution
RIS	Redwood Inspection Service
SDI	Steel Deck Institute
SFM	State of California, Office of State Fire Marshal
SIGMA	Sealed Insulating Glass Manufacturers Association
SJI	Steel Joint Institute
SMACNA	Sheet Metal and Air Conditioning Contractors National Association
SPIB	Southern Pine Inspection Bureau
SSPC	Steel Structures Painting Council
SWI	Steel Window Institute
TCA	Tile Council of America
TIE	Time Impact Evaluation
UBC	Uniform Building Code
UFC	Uniform Fire Code
UL	Underwriters' Laboratories, Inc.
UMC	Uniform Mechanical Code
UPC	Uniform Plumbing Code
USA	Underground Service Alert
USC	United States Code
WCLIB	West Coast Lumber Inspection Bureau
WHI	Warnock Hersey International – a testing lab
WIC	Woodwork Institute of California
WWPA	Western Wood Products Association

1.3.2 Abbreviations in Specifications:

AWG	American Wire Gauge
accord	Accordance
Co.	Company
Corp.	Corporation
cm.	centimeter (centimeters)
cu.	Cubic
Div.	Division
dia.	Diameter
ft.	foot (feet)
g./gr.	gram (grams)
gal.	gallon (gallons)
gpd	gallons per day
gpm	gallons per minute
hr.	Hour
kg.	kilogram (kilograms)
in.	inch (inches)
Inc.	Incorporated
km.	kilometer (kilometers)
Kw	Kilowatt
l.	liter (liters)
lbs.	Pounds
m	meter (meters)
Mfg.	Manufacturing
Mg.	milligram (milligrams)
ml./mls.	milliliter (milliliters)
mm.	millimeter (millimeters)

No.	Number
o.c.	on center
O.D.	outside diameter
psi	pounds per square inch
psf	pounds per square foot
sq.	Square
T & G	tongue and groove
U.S.	United States
yd.	yard (yards)

1.3.3 Abbreviations on Drawings:

Additional abbreviations, used only on drawings, are indicated thereon.

1.4 SYMBOLS

1.4.1 Symbols in Specifications:

:	“shall be” or “shall” - where used within sentences or paragraphs
#1	Number
1#	Pound
&	And
%	Percent
C	Centigrade
F	Fahrenheit
°	Degree
/	per, except where used to combine words; example: power/fuel, and in that case it means and
“	inch (inches)
‘	foot (feet)
@	At

1.4.2 Symbols on Drawings:

Symbols, used only on Drawings, are indicated thereon.

1.5 DEFINITIONS

1.5.1 General terminology used throughout the documents is as indicated below:

- 1.5.1.1 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 the County is intended. Words “sufficient”, “necessary”, “proper”, determined and the like shall mean sufficient, necessary or proper in judgment of the County. 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 the County.
- 1.5.1.2 Wherever the word “may” is used, the action to which it refers is discretionary. Wherever the words “shall” or “will” are used, the action to which it refers is mandatory.

- 1.5.1.3 References throughout these documents to “Bidder”, “Submitter”, “Contractor”, “Design Build Entity”, or any variations thereof mean the same as DESIGN BUILDER.
- 1.5.2 Wherever any of the words or phrases defined below regardless of capitalization, or a pronoun used in place thereof, is used in any part of the Contract Documents, it shall have the meaning here set forth:
- 1.5.2.1 ADDENDUM: A document issued by the County during the bidding period which modifies, supersedes, or supplements the original contract documents.
- 1.5.2.2 AGREEMENT (Document 005200): The written document of agreement, as executed by the County and the Contractor, the Agreement is the basic contract document that binds the parties to construction Work. Agreement defines relationships and obligations between County and the Design Builder and by reference incorporates Conditions of Contract, Drawings, and Specifications; and contains Addenda and all Modifications subsequent to execution of Contract.
- 1.5.2.3 ALLOWANCE: Cost identified in their Proposal by the Design-Builder and included in the Contract Sum for a certain portion of the Work to be identified at a later date. Authorization to expend Allowance funds will be authorized via no-cost change orders.
- 1.5.2.4 APPROVED EQUAL: Approved in writing by County as being of equivalent quality, utility and appearance.
- 1.5.2.5 ARCHITECT: Unless otherwise designated, such as the Architect of Record for a specific portion of the Project or Criteria Architect, the “Architect” refers to the Design Builder’s lead architect as designated in the Design Builder’s Pre-Qualification Questionnaire submitted in response to County’s Request for Qualifications.
- ARCHITECT OR ENGINEER: Shall mean the architect, engineer individual or co-partnership, employed by the County of Contra Costa; as designated on the title sheet of these specifications. When Contra Costa County is designated as the Engineer, Engineer shall mean the Director of General Services, or his authorized representative.
- 1.5.2.6 AS-BUILT DRAWINGS: Up to date field drawings marked up to reflect current project changes (RFIs) and actual installation conditions that differ from the approved design or clarify undocumented conditions. These drawings will form the basis of the Architect’s Record Drawings and must be kept up to date and available for review on the job site. Also known as red-lines.
- 1.5.2.7 AUTHORITY HAVING JURISDICTION (AHJ): Any Agency, Board, Department, District, Organization, or similar entity responsible for enforcing the requirements of a code or standard, or for approving drawings, equipment, materials, an installation, or a procedure on the Project.
- 1.5.2.8 AutoCAD: AutoCAD software release 25 or later.

- 1.5.2.9 **BEST VALUE ENHANCEMENT:** Project enhancement submitted by Bidders on Document 002100-B (Best Value Enhancement Form) that provides scope, quality, schedule, measures, design concepts or approaches beyond the minimum requirements specified in the Request for Proposal Documents subject to County approval and at no additional cost to the County.
- 1.5.2.10 **BID:** has the same meaning as PROPOSAL set forth herein.
- 1.5.2.11 **BIDDER:** Any individual, partnership, corporation, association, joint venture, or any combination thereof, submitting a proposal for the work, acting directly, or through a duly authorized representative. See “DESIGN BUILDER”.
- 1.5.2.12 **BOARD OF SUPERVISORS or BOARD:** Shall mean the duly elected or appointed officials who constitute such a Board, who will act for the County in all matters pertaining to the Contract.
- 1.5.2.13 **CRITERIA DOCUMENTS:** The Criteria Documents describe the County's minimum performance and program requirements for each Component of the Project. They include the following documents:
 - 1.5.2.13.1 Los Medanos Recovery Center Project Narratives & Appendices by Vanir and BCRA Architects.
 - 1.5.2.13.2 Los Medanos Recovery Center Project Technical Specifications by BCRA Architects.
- 1.5.2.14 **CRITERIA MANUAL:** The Criteria Manual consists of the Division 0 - Bidding and Contracting Requirements and Division 1 Documents - General Requirements and associated Exhibits as listed in Document 000110 (Table of Contents) and any Addenda issued by the County as part of the Request for Proposals.
- 1.5.2.15 **BUSINESS DAY:** Any day other than Saturday, Sunday, and the following days that have been designated as holidays by County. If a holiday falls on a Saturday, the preceding Friday will be the holiday, except that if New Year's Day falls on a Saturday, January 3 will be the holiday. If a holiday falls on a Sunday, the following Monday will be the holiday.
 - 1.5.2.15.1 New Year's Day, January 1;
 - 1.5.2.15.2 Martin Luther King Jr.'s Birthday, third Monday in January;
 - 1.5.2.15.3 Presidents' Day, third Monday in February;
 - 1.5.2.15.4 Memorial Day, last Monday in May;
 - 1.5.2.15.5 Juneteenth, June 19;
 - 1.5.2.15.6 Independence Day, July 4;
 - 1.5.2.15.7 Labor Day, first Monday in September;
 - 1.5.2.15.8 Veterans' Day, November 11;
 - 1.5.2.15.9 Thanksgiving Day, fourth Thursday in November;
 - 1.5.2.15.10 The Day following Thanksgiving Day;
 - 1.5.2.15.11 Christmas Day, December 25; and
 - 1.5.2.15.12 Each day appointed by the Governor of California and formally recognized by the County as a day of mourning, thanksgiving, or special observance.

- 1.5.2.16 BY COUNTY: Work that will be performed by County or its agents at the County's expense.
- 1.5.2.17 BY OTHERS: Work that is outside scope of Work to be performed by the Design Builder under the Contract Documents, which will be performed by County, other contractors, or other means.
- 1.5.2.18 CHANGE ORDER: A written instrument prepared by County and signed by County and the Design Builder, stating their agreement upon all of the following:
 - 1.5.2.18.1 a change in the Work,
 - 1.5.2.18.2 the amount of the adjustment in the Contract Sum, if any, and
 - 1.5.2.18.3 the amount of the adjustment in the Contract Time, if any.
- 1.5.2.19 CHECKOUT: When used in Document 007200 (General Conditions), "Checkout" means the process of final setup, alignment, cleaning, operation, calibration and testing of individual components, subsystems, or systems within the Facility and tie-in to the Interconnection Facilities, all prior to Startup.
- 1.5.2.20 COMPLETION: The County's acceptance of the Work as satisfactorily completed in accordance with the Contract Documents. Requirements for Completion include, but are not limited to:
 - 1.5.2.20.1 All systems having been tested and accepted as having met requirements of the Contract Documents.
 - 1.5.2.20.2 All required instructions and training sessions having been given by the Design Builder.
 - 1.5.2.20.3 All As-Built drawings, Record Drawings, and Operations and Maintenance Manuals having been submitted by the Design Builder, reviewed by and accepted by the County.
 - 1.5.2.20.4 All punch list work, as directed by the County, having been completed by the Design Builder.
 - 1.5.2.20.5 Receipt of approved Regulatory Agency Construction Final certification, or its equivalent.
 - 1.5.2.20.6 Generally, all Work, except Design Builder maintenance after Final Acceptance, having been completed in accordance with the Contract Documents.
- 1.5.2.21 COMPONENT: Work of the Project associated with a specific site or building; i.e. "Martinez Detention Facility and West County Detention Facility Security System Upgrade Component."
- 1.5.2.22 CONCEALED: Work not exposed to view in the finished Work, including within or behind various construction elements.

- 1.5.2.23 CONSTRUCTION SCHEDULE: The construction schedule required by Section 1.6 of Section 013216 (Schedules and Reports).
- 1.5.2.24 CONSTRUCTION DOCUMENTS: Drawings (graphic and pictorial) and Specifications (written) prepared by the Design Builder after the Validation described in Section 011114 (Summary of Work-Design Services and Deliverables). The Drawings show the Design Builder's design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams. The Specifications consist of requirements for materials, equipment, construction systems, standards and workmanship for the Work, and performance of related services. **The Construction Documents will supplement and enhance, but not supplant the Contract Documents.** If a conflict is later discovered between the Contract Documents and the Construction Documents, the Contract Documents shall prevail unless the County has agreed in writing to specific revisions or deviations to the Contract Documents.
- 1.5.2.25 CONSTRUCTION MANAGER: Shall mean the authorized agent of the County at the site of the work.
- 1.5.2.26 CONTRACT CONDITIONS: Conditions of Contract define basic rights, responsibilities and relationships of the Design Builder and County and consists of two parts: General Conditions and Supplemental General Conditions.
- 1.5.2.26.1 General Conditions are general clauses, which are common to the County Contracts.
- 1.5.2.26.2 Supplemental General Conditions modify or supplement General Conditions to meet specific requirements for the Contract Documents. Supplemental General Conditions are sometimes also referred to Supplementary Conditions.
- 1.5.2.27 CONTRACT or CONTRACT DOCUMENTS: The Contract is comprised of the Contract Documents and shall consist of the documents identified as the Contract Documents in Document 005200 (Agreement), plus all changes, addenda and modifications thereto.
- 1.5.2.28 CONTRACT MODIFICATION: Modifications or alterations made to the Contract. A contract modification may introduce or cancel specifications or terms of the Contract, while leaving its overall purpose and effect intact.
- 1.5.2.29 CONTRACT SUM: The sum stated in the Agreement and, including authorized adjustments, the total amount payable by County to the Design Builder for performance of the Work and the Contract Documents. The Contract Sum is also referred to as the Fixed Project Price, Contract Price, or the Contract Amount.
- 1.5.2.30 CONTRACT TIME: The number or numbers of days or the dates stated in the Agreement (i) to achieve Completion of the Work or designated milestones and/or (ii) to complete the Work so that it is ready for final payment and is accepted.

- 1.5.2.31 **CONTRACTOR:** The individual, partnership, corporation, association, joint venture, or any combination thereof, who has entered into a contract with the County. See "DESIGN BUILDER".
- 1.5.2.32 **COUNTY:** means the County of Contra Costa, a political subdivision of the State of California and party of the first part, or its duly authorized agent acting within the scope of their authority.
- 1.5.2.33 **COUNTY-FURNISHED, DESIGN BUILDER-INSTALLED:** Items furnished by the County at its cost for installation by the Design Builder at its cost under the Contract Documents.
- 1.5.2.34 **COUNTY REPRESENTATIVE(S):** The person or persons assigned by the County to be the County's agent(s) for the Project.
- 1.5.2.35 **DAY:** One (1) calendar day, unless the word "day" is specifically modified to the contrary.
- 1.5.2.36 **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 it 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 County). The County is the judge of whether Work is defective.
- 1.5.2.37 **DESIGN BUILDER:** The person or entity identified as such in the Agreement and referred to throughout the Contract Documents as if singular in number and neuter in gender. The term "Design Builder" means the Design Builder or its authorized representative. References throughout these documents to "Bidder", "Submitter", "Contractor", "Design Build Entity", "Proposer", or any variations thereof shall mean the same as DESIGN BUILDER.
- 1.5.2.38 **DESIGN BUILDER'S EMPLOYEES:** Persons engaged in execution of Work under the Contract Documents as direct employees of the Design Builder, as Subconsultants, Subcontractors, or as employees of Subconsultants or Subcontractors.
- 1.5.2.39 **DESIGN DELIVERABLES:** The deliverables required by the Design-Build Agreement, including without limitation, the deliverables produced pursuant to Section 011114 (Summary of Work - Design Services and Deliverables), the Construction Documents, Plans, Project Manual, Specifications, engineering, calculations, schedules, estimates, Shop Drawings, Supplemental Instructions and coordination meetings.
- 1.5.2.40 **DESIGN SCHEDULE:** The design schedule required by Section 1.5 of Section 013216 (Schedules and Reports).
- 1.5.2.41 **DRAWINGS:** The graphic and pictorial portions of the Contract Documents provided in the Criteria Documents showing the design, location, and dimensions of the Work, generally including plans, elevations, sections, details, schedules, renderings and diagrams.

- 1.5.2.42 ENGINEER: A person designated by the County authorizing such person to act as the Engineer on its behalf.
- 1.5.2.43 EQUAL: Equal in the opinion of the County. Burden of proof of equality is responsibility of the Design Builder.
- 1.5.2.44 EXPOSED: Work exposed to view in the finished Work, including behind louvers, grilles, registers and various other construction elements.
- 1.5.2.45 FACILITY: Same as Project.
- 1.5.2.46 FIELD DIRECTIVE: A written work change directive to the Design Builder from the County, ordering alterations or modifications, which do not result in change in Contract Sum or Contract Times, and do not substantially change the Contract Documents.
- 1.5.2.47 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, as described in Section 012600 (Contract Modification Procedures).
- 1.5.2.48 FURNISH: To supply and deliver to project site, ready for installation.
- 1.5.2.49 GENERAL NOTES: The written instructions, provisions, conditions, or other requirements appearing on the drawings, and so identified thereon, which pertain to the performance of the work.
- 1.5.2.50 INDICATED: Shown or noted on the Drawings.
- 1.5.2.51 INSPECTOR: The person engaged by the County to inspect the workmanship, materials, or manner of construction of buildings or portions of buildings, to determine if such construction complies with the Contract Documents.
- 1.5.2.52 INSTALL: To transport and place in position, anchor, and connect and make ready for service or use.
- 1.5.2.53 INTERCONNECTION FACILITIES: Those protection devices, substation, metering, and other facilities that are required to permit an electrical interface to be established between the Facility and the interconnected electric grid system owned and operated by Pacific Gas & Electric.
- 1.5.2.54 LATENT: Not apparent by reasonable inspection, including but not limited to, the inspections and research required as a condition to bidding under the General Conditions.
- 1.5.2.55 LEGAL REQUIREMENTS: When used in Document 007200 (General Conditions), "Legal Requirements" means laws, ordinances, rules, codes, regulations, permits, licenses and Legal Requirements of any kind, issued by governmental Authorities or private authorities with jurisdiction (including utilities), to the extent they apply to the Facility, the Interconnection Facilities or the Work.

- 1.5.2.56 **MATERIAL OR MATERIALS:** These words 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.
- 1.5.2.57 **MATERIALS AND EQUIPMENT:** When used in Document 007200 (General Conditions), "Materials and Equipment" means all materials, supplies, apparatus, equipment, machinery, and parts required for the Facility and tie-in to the Interconnection Facilities (including, spare parts consumed before substantial completion, or required for Checkout, Startup or Testing, or required by the terms of supplier contractors or warranties to be at the Facility prior to the substantial completion date). Materials and Equipment does not include construction equipment, special testing apparatus, other spare parts, or other items that do not form a part of the permanent Facility or Interconnection Facilities.
- 1.5.2.58 **METHOD OF PROCEDURE (MOP):** Written document outlining steps to be taken when performing work outside the Design Builder's work area or outside the normal work hours. MOP will be developed by the Design Builder for review and acceptance by the County.
- 1.5.2.59 **MILESTONE:** A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all Work.
- 1.5.2.60 **MODIFICATION:** Same as Contract Modification.
- 1.5.2.61 **NOT IN CONTRACT:** Work that is outside the scope of Work to be performed by the Design Builder under the Contract Documents.
- 1.5.2.62 **NOTICE OF AWARD:** A written notice given by the County to the best value, responsible bidder advising that Bidder's proposal and other qualifying information is acceptable to the County, requiring Bidder to fulfill the requirements of Article 24 of Document 002100 (Request for Proposals from Bidders), see Document 005110 (Notice of Award).
- 1.5.2.63 **NOTICE TO PROCEED:** A written notice in the form of Document 005500 given by the County to the Design Builder fixing the date on which the Contract Time will commence to run and on which Design Builder shall start to perform the Design Builder's obligations under the Contract Documents.
- 1.5.2.64 **OFF SITE:** Outside geographical location of the Project.
- 1.5.2.65 **OWNER REQUEST FOR INFORMATION:** A document prepared by the County requesting information regarding the design intent of the Construction Documents. The RFI system is also a means for the County to submit Contract Document clarifications or supplements to the Design Builder.
- 1.5.2.66 **PDF: "Portable Document Format".** An electronic file format that has captured all the elements of a printed document as an electronic image that you can view, navigate, print, or forward. To the extent possible, PDF files required to be submitted as part of this project shall be formatted with text recognition such that the text can be readily searchable. Large files submitted for systems, complex equipment, containing multiple topics, or

otherwise comprised of numerous components, shall be bookmarked to allow for efficient navigation through the file.

- 1.5.2.67 **PERFORMANCE GUARANTEE:** When used in Document 007200 (General Conditions), "Performance Guarantee" means the performance criteria established by the Contract Documents.
- 1.5.2.68 **PLANS:** The official drawings including plans, elevations, sections, detail drawings, diagrams, general notes, information and schedules thereon, or exact reproductions thereof, adopted and approved by the County showing the location, character, dimension, and details of the work.
- 1.5.2.69 **PROGRESS REPORT:** a periodic report submitted by the Design Builder to the County with progress payment requests accompanying actual Work accomplished. See Section 013216 (Schedules and Reports).
- 1.5.2.70 **PROFESSIONAL:** A professionally licensed person or entity who has a direct contract with the Design Builder to perform design or engineering services or any other portion of the Work.
- 1.5.2.71 **PROJECT:** "Project" or "project" means the Project as further described in the Contract Documents, including but not limited to, Section 011110 (Summary of Work), Section 011114 (Summary of Work - Design Services and Deliverables), and the Criteria Documents, including the Drawings, Plans, Narratives, and Specifications. The Project will be constructed of new Materials and Equipment and is the end result of performing the Work.
- 1.5.2.72 **PROJECT MANUAL:** Project Manual consists of General Requirements and Technical Specifications and associated Exhibits for each Component issued by the Design Builder as part of the Construction Documents.
- 1.5.2.73 **PROJECT MASTER SCHEDULE:** The Project master schedule required by Section 1.4 of Section 013216 (Schedules and Reports).
- 1.5.2.74 **PROPOSAL:** The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices, schedule, and scope for the Work to be performed.
- 1.5.2.75 **PROPOSAL DOCUMENTS:** All documents comprising the Design Builder's response to the Request for Proposal, including but not limited to drawings, specifications, project manuals, renderings, narratives, building information models, exhibits, and completed forms and certificates required by Division 0 (Bidding and Contracting Requirements).
- 1.5.2.76 **PROVIDE:** Furnish and Install.
- 1.5.2.77 **REGULATORY AGENCY:** The Contra Costa County Public Works, Contra Costa County Fire Protection District, County Health.
- 1.5.2.78 **RECORD DOCUMENTS/RECORD DRAWINGS:** Final Plans and Specifications updated at the end of the Project by the Architect, Engineers, and Designers capturing all changes shown on the As-Builts and otherwise made during the course of the Project.

- 1.5.2.79 REQUEST FOR INFORMATION (“RFI”): A document prepared by the Design Builder requesting information regarding the Project or Contract Documents. The RFI system is also a means for the County to submit Contract Document clarifications or supplements to the Design Builder.
- 1.5.2.80 REQUEST FOR PROPOSAL (RFP) DOCUMENTS: All documents comprising the RFP including the Criteria Manual, Criteria Documents, building information models, and exhibit documents.
- 1.5.2.81 REQUEST FOR SUBSTITUTION (“RFS”): A document prepared by the Design Builder requesting substitution of any unlisted materials in lieu of materials named in the Specifications or Drawings.
- 1.5.2.82 RFI REPLY: A document consisting of supplementary details, instructions or information issued by the County which clarifies or supplements Contract Documents, and with which the Design Builder shall comply. RFI Replies do not constitute changes in Contract Sum or Contract Times except as otherwise agreed in writing by the County. RFI Replies will be issued through the RFI administrative system.
- 1.5.2.83 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.
- 1.5.2.84 SERVICES: When used in Document 007200 (General Conditions), “Services” means all planning, design, detailed engineering, procurement, permitting for construction or otherwise required for the project, project management and reporting, support services, construction, landscaping, cleanup, checkout, Startup, and Testing, construction supervision, training, provision of all necessary personnel, and all other related services, all as necessary to fulfill Design Builder’s obligations hereunder, whether such services and personnel are provided by Design Builder or its subcontractors or suppliers.
- 1.5.2.85 SHOP DRAWINGS: All drawings, diagrams, illustrations, submittals, schedules and other data or information which are specifically prepared or assembled by or for the Design Builder and submitted by the Design Builder to illustrate some portion of the Work.
- 1.5.2.86 SHOWN: As indicated on Drawings, photographs, or renderings.
- 1.5.2.87 SITE: The particular geographical location of the Work performed pursuant to the Contract Documents. Also referred to as the Facility Site or the Component Site.
- 1.5.2.88 SPECIFICATIONS: The instructions, provisions, conditions and detailed requirements pertaining to the methods and manner of performing the work, or to the qualities and quantities of work to be furnished and installed under this Agreement.
- 1.5.2.89 SPECIFIED: As written and described in the Criteria Manual, Project Manual, Design Deliverables, or Technical Specifications.

- 1.5.2.90 **START DATE:** The date specified by the County, in the Notice to Proceed or otherwise, for commencement of performing Work under the Contract Documents.
- 1.5.2.91 **STARTUP:** When used in Document 007200 (General Conditions), “Startup” means the process of starting and conducting initial operations of the aggregate of systems, subsystems and components of the Work. A necessary prerequisite of Startup of the is that Checkout on individual systems, subsystems, components, and auxiliaries of the Work, and on the Interconnection Facilities or other facility components with which it is connected has been completed.
- 1.5.2.92 **SUBCONTRACTOR or SUBCONSULTANT:** An individual, partnership, corporation, association, joint venture, or any combination thereof, who has a direct contract with the Design Builder to perform a portion of the Work. The term subcontractor shall not include those who supply materials only. Where the context requires, the term “subcontractor” also includes lower-tier subcontractors. The term “subcontractor” is referred to throughout the Contract Documents as if singular in number and neuter in gender and means a subcontractor or an authorized representative of the subcontractor. The term “subcontractor” does not include a separate contractor or subcontractors of the County.
- 1.5.2.93 **SUBSTANTIAL COMPLETION:** is defined as the date agreed to by County when the Work is sufficiently complete (all phases are sufficiently complete if phased construction is employed), in accordance with the Contract Documents such that County can occupy and utilize the facilities and all related equipment and systems for their intended use and such that only minor punch list items remain. All systems, including but not limited to security, electronics, mechanical and electrical, shall be fully operational and confirmed by commissioning to be operational in compliance with the approved Contract Documents. Substantial Completion does not constitute final Completion or acceptance of the Work. All remaining punch list items, omissions, and defects must be completed prior to final Completion and acceptance.
- 1.5.2.94 **SUPERINTENDENT:** The representative of the Contractor who shall be present at the work site at all times during performance of the work. Such Superintendent shall at all times be fully authorized to receive and act upon instructions from the County or its authorized agent and to execute and direct the work on behalf of the Contractor.
- 1.5.2.95 **SUPPLEMENTAL INSTRUCTION:** An instruction given during the course of the work (see Section 012600).
- 1.5.2.96 **TEST OR TESTING:** When used in Document 007200 (General Conditions), “Test” or “Testing” means the execution of all activities required for the performance tests.
- 1.5.2.97 **UNDERGROUND FACILITIES:** All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials: Electricity, gases, steam, liquid petroleum products, telephone or other communications,

cable television, sewage and drainage removal, traffic or other control systems or water.

- 1.5.2.98 WORK: The furnishing and installing of all labor, materials, articles, supplies, and equipment as specified, designated, or required by the Contract (see Document 005200, Agreement). Wherever the word “work” is used, rather than the word “Work”, it shall be understood to have its ordinary and customary meaning.

PART 2 - PRODUCTS - Not used.

PART 3 - EXECUTION - Not used.

END OF SECTION

SECTION 014339

MOCK-UPS

PART 1 - GENERAL

1.1 SUMMARY

1.1.1 This Section includes administrative and procedural requirements for the pre-construction and construction inspection of mock-ups.

1.1.2 Related sections include the following:

1.1.2.1 Section 011110 (Summary of Work).

1.1.2.2 Section 013000 (Submittal Procedures).

1.1.2.3 Section 014500 (Quality Control).

1.1.2.4 Bridging Documents for specific test and inspection requirements.

1.2 DEFINITIONS

1.2.1 Mock-ups: Full-size, physical assemblies that are constructed on-site and off-site to illustrate finished dimensions, colors, textures, furnishings, equipment and materials as required. Mock-ups are used to verify selections made under sample submittals, to demonstrate aesthetic effects, spatial relationships, and, where indicated, qualities of materials and execution, and to review construction, coordination, interfaces, testing, or operation; they are not Samples. Approved mock-ups establish the standard by which the Work will be judged.

1.2.2 There are two types of Mock-ups, Type 1 and Type 2:

1.2.2.1 Type 1 Mock-ups shall be unfinished and are utilized to verify the spatial quality and functionality of spaces.

1.2.2.2 Type 2 Mock-ups shall be finished spaces or components and may be located as part of the permanent structure and be utilized to verify materials, interfaces, and quality.

1.3 REQUIREMENTS

1.3.1 Requirements: Requirements of the mock-ups are in two basic categories, both of which are intended to establish that design intent has been met, establish review of basic quality control measures, and establish approval of installation means and methods by the County prior to mass construction:

1.3.1.1 Mock-up Type 1: This mock-up consists of the following areas / spaces / items / systems requiring approval by the County prior to Mock-up Type 2. It is the County's intent to verify the spatial quality, functionality, furniture layout, equipment and device location, and system placement so a review of the design can take place for validation of spaces, elements, and systems. It is also the County's intent to have regulatory agencies review for compliance as required. The components of each mock-up shall include but shall not be limited to: unfinished (i.e. plywood) materials to indicate all floor, wall, ceiling

surfaces, and structural elements. Locations of all communication and electrical devices, door and sidelight, windows, millwork and/or casework, mechanical devices, plumbing, furniture, equipment and all elements required to define the space shall be indicated within the mock-up.

1.3.1.1.1 A “Sleeping Room” identified by the County and Health Services.

1.3.1.1.2 An Interview Room.

1.3.1.2 Mock-up Type 2 – Large Independent Structure: This mock-up consists of independent structures or portions thereof, pre-ordered materials, and trades required to complete the mock-up. It is the County’s intent to verify materials, system interfaces, and to establish the minimum quality that is required. The Type 2 mock-ups are intended to be a part of the completed building or system within the building. The Type 2 mock-ups are not intended to replace the product samples that are required. The Type 2 mock ups shall meet the following requirements.

1.3.1.2.1 Type 2 mock-ups shall be post-review of shop drawings and prior to ordering of materials.

1.3.1.2.2 Exterior wall mock-ups shall be chosen to represent a composite of conditions and interfaces of systems to allow the County, Construction Manager, IORs, and Design Builder to review actual construction sequencing, tolerances, quality control, installation methodology, back-up systems, coping, flashing, counter flashing, finish appearance and other variables to maximize quality control and establish installation techniques prior to design completion, mass delivery, and ordering of components.

1.3.1.2.3 The exterior wall mock-up shall consist of the components listed in paragraph 1.3.1.2.2 above as a minimum. The drawings of all conditions for the mock-up shall be reviewed and approved by the County. The purpose of the Design Builder mock-up shall be to illustrate actual construction techniques and systems to be implemented on the Project.

1.3.1.3 Mock-up Type 2 - Small Independent Structure: This mock-up consists of the following areas, spaces, items, and systems. It is the County’s intent to verify materials, system interfaces, and to establish the minimum quality that is required with approval of the County prior to mass production/execution. It is also the County’s intent to have regulatory agencies review for compliance as required. The Type 2 mock-up is intended to be a part of the completed building or system within the building. The Type 2 mock-up is not intended to replace the product samples that are required.

1.3.1.3.1 Provide Type 2 mock-ups for the following rooms or areas. The intent of the following spaces is to verify the quality level, installation and placement of devices in the wall so a review of the locations can take place for validation of all elements and systems. The components of each mock-up shall include but shall not be limited to: communications, security, electrical, plumbing, drywall, door and sidelight, ceiling and finishes, millwork and/or

casework, communications devices, above-ceiling ductwork, furniture, equipment, waterproofing systems and all elements required to complete the space. If the County requests additional mock-up items other than that listed the Design Builder will make every effort to add such items or areas.

- (a) A Housing Unit Utility Chase
- (b) A “Sleeping Room” of specific type as identified by the County
- (c) An “Interview Room” of specific type as identified the County.

1.3.1.3.2 Provide and/or coordinate with County and equipment and furnishings vendors for placement.

1.3.1.3.3 Provide a ceiling system including diffusers, lights, sprinklers, alarms, detectors, cameras, speakers, and locations.

1.3.1.3.4 Provide blanks of all components in walls and wall systems.

1.3.1.3.5 Provide all floor and wall finishes.

1.4 SUBMITTALS

The Design Builder’s Project Manager in charge of Mock-ups shall submit a schedule for the construction of mock-ups, County review of the mock-ups, and approval of the mock-ups by the County prior to construction and in accordance with the Project Master Schedule.

1.5 QUALITY ASSURANCE

1.5.1 Design Builder’s Project Manager: The Design Builder shall designate a Project Manager, other than the superintendent, to oversee all work associated with this Section. The Project Manager will be the main contact throughout the process of building, revising, and approving all mock-ups.

1.5.2 Mock-ups: Before installing portions of the Work requiring mock-ups, build mock-ups for each form of construction and finish necessary to comply with the following requirements, using materials indicated for the completed Work:

1.5.2.1 Build mock-ups full-size and in the location secured by the Design Builder and approved by the County.

1.5.2.2 Notify County 14 days in advance of dates and times when mock-ups will be constructed.

1.5.2.3 Demonstrate the proposed range of aesthetic effects and workmanship.

1.5.2.4 Type 1 Mock-ups - Obtain County approval of mock-ups before starting work, fabrication, or construction of Type 2 Mock-Ups.

- 1.5.2.5 Type 2 Mock-ups: An in-place review of items, areas, devices and systems prior to execution, with approval by County. It is not the intent to modify materials or installation but to verify quality control expectations of the Design Builder. The mock-ups shall include all materials, finishes, outlets, fixtures, structural elements and construction details to complete the finished appearance of a room or area. The exact locations shall be verified with the Design Builder's sequencing and County. The inspection requests shall be at each key stage of development. It is the County's intent to establish quality and code compliance procedures with the approving agency.
- 1.5.2.6 Maintain mock-ups during construction in an undisturbed condition as a standard for judging the completed Work.
- 1.5.2.7 Demolish and remove Type 1 mock-ups when directed, unless otherwise indicated.

PART 2 - PRODUCTS

- 2.1 Materials and finishes for mock-ups shall comply with the requirements specified in the various applicable sections of the specifications, and shall match previously submitted and approved samples.
- 2.2 Type 2 Mock-ups shall incorporate all related construction materials and finishes upon the completed Work.

PART 3 - EXECUTION

3.1 MOCK-UP INSTALLATION

- 3.1.1 Mock-ups shall be constructed in accordance with the approved construction documents, specific mock-up drawings, and approved shop drawings and product data. If changes are required, the Design Builder shall complete modifications to all documents.
- 3.1.2 Type 1 Mock-ups will be built off-site in a location secured by the Design Builder. Type 1 Mock-ups shall be revised as required to achieve proper spatial and functionality goals outlined in the Performance Criteria Documents.
- 3.1.3 Type 2 Mock-ups shall be built "in place" as part of the permanent construction. Periodic inspections by the County and Design Builder will be made during the construction process to review the installation.
 - 3.1.3.1 Mock-ups shall illustrate contiguous materials and finishes, and be arranged in the same relationship, as they will appear in the finish construction.
 - 3.1.3.2 Each kind of material shall be fabricated, installed and finished by the various subcontractors or others who will be furnishing and performing the Work in the permanent construction.
 - 3.1.3.3 Protect and clean as required to leave the mock-up and adjacent areas in proper condition, upon completion of the Work.

3.1.3.4 Remedial measures, which may be necessary on mock-ups, shall maintain standards of quality and durability required by the Contract Documents, and shall be subject to approval by the County.

3.1.3.5 Type 2 Mock-ups shall be approved by the County, before materials are ordered for the Project.

3.2 MOCK-UP INSPECTION

3.2.1 Notify County at the start of construction of mock-ups and provide progress reports to allow the County to schedule inspections.

3.2.2 The County and other interested parties may visually examine the mock-ups during construction.

3.2.3 After approximately fifty percent (50%) of each mock-up has been built, request County preliminary review before completion. Incorporate visual and technical changes or variations requested by the County into mock-ups during their construction and prior to their completion, insofar as possible.

3.2.4 Obtain County acceptance of visual and technical qualities of mock-ups before commencing the corresponding Work for the Project. Revise the Project Master Schedule, as needed, to reflect required mock-up revisions.

3.2.5 Should the Type 1 or Type 2 mock-ups fail to meet County approval, they shall be taken down or dismantled, and reconstructed to the extent necessary, until acceptance has been obtained.

3.2.6 Time the completion and reworking of mock-ups necessary to obtain acceptance to avoid delay in the construction schedule of the Project. Update the Project Master Schedule to reflect required revisions to mock-ups.

3.3 REPAIR AND PROTECTION

3.3.1 Retain, maintain, and protect the mock-ups during construction to serve as a standard for judging work incorporated into the Project.

3.3.2 Maintain mock-ups and surrounding site in a safe and clean condition. Repair any damage to mock-ups immediately upon occurrence.

3.4 REMOVAL

3.4.1 Remove mock-ups at the completion of the Work upon the authorization of the County. Complete site work at the mock-up location in accordance with the Contract Documents.

END OF SECTION

SECTION 014500

QUALITY CONTROL AND ASSURANCE

PART 1 - GENERAL

1.1 SUMMARY

- 1.1.1 This Section includes administrative and procedural requirements for the following:
 - 1.1.1.1 Quality Assurance and Quality Control.
 - 1.1.1.2 Quality Control Plan.
 - 1.1.1.3 Special Testing and Inspection.
- 1.1.2 Materials to be furnished under the Contract Documents are subject to testing and inspection for compliance with the Drawings and Specifications. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Design Builder of responsibility for compliance with the Contract Document requirements.
 - 1.1.2.1 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.
 - 1.1.2.2 Specified tests, inspections, and related actions do not limit Design Builder's other quality assurance and control procedures that facilitate compliance with the Contract Document requirements.
 - 1.1.2.3 Requirements for Design Builder to provide quality assurance and control services required by County, AHJ or Regulatory Agency are not limited by provisions of this Section.
- 1.1.3 Related Sections include the following:
 - 1.1.3.1 Section 013216 (Schedules and Reports) for developing a schedule of required tests and inspections.
 - 1.1.3.2 Section 014339 (Mock-Ups) for the specific quality requirements associated with the construction and inspection of mock-ups.
 - 1.1.3.3 Section 017329 (Cutting and Patching) for repair and restoration of construction disturbed by testing and inspecting activities.
 - 1.1.3.4 Divisions 2 through 33 Sections for specific test and inspection requirements.

1.2 DEFINITIONS

- 1.2.1 Quality Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.

- 1.2.2 Quality Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by County Representative.
- 1.2.3 NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
- 1.2.4 NVLAP: A testing agency accredited according to the National Institute of Standards and Technology's (NIST's) National Voluntary Laboratory Accreditation Program.
- 1.2.5 Pre-Construction Testing: Tests and inspections that are performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.
- 1.2.6 Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to AHJ, Regulatory Agency, or County Representative, to establish product performance and compliance with industry standards.
- 1.2.7 Source Quality Control Testing: Tests and inspections that are performed at the source (i.e., a plant, mill, factory, or shop).
- 1.2.8 Field Quality Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- 1.2.9 Testing Agency: An entity engaged to perform specific tests, inspections, or both that is certified as meeting the requirements applicable to the Work. Testing laboratory shall mean the same as testing agency.
- 1.2.10 Testing, Inspection and Observation (TIO) Program: A program prepared by the Design Builder for Regulatory Agency approval prior to issuance of the building permit, pursuant to Section 7-141, California Building Standards Code, Part 1, Title 24, CCR. The program identifies the materials and tests to be performed on a project and the firm(s) and/or individual(s) responsible for performing those tests including, at a minimum, those required by applicable sections of the California Building Standards Code.
- 1.2.11 Installer/Applicator/Erector: Design Builder or another entity engaged by Design Builder as an employee or Subcontractor of any tier to perform a particular construction operation, including installation, erection, application, and similar operations.
- 1.2.12 Experienced: As used herein, an individual or entity that has successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction to work in California.

1.3 CONFLICTING REQUIREMENTS

- 1.3.1 General: 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 County Representative for a decision before proceeding.

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

1.4 QUALITY CONTROL PERSONNEL

- 1.4.1 Quality Control Manager: Provide a Quality Control Manager at the Site to manage and implement the Quality Control Plan. The duties and responsibilities of the Quality Control Manager will be to manage and implement the Quality Control Plan. The Quality Control Manager's duties and responsibilities include, but are not limited to:
- 1.4.1.1 Attending the Quality Control Meetings, Weekly Construction Progress Meetings, Pre-Installation Meetings, and Commissioning Meetings.
 - 1.4.1.2 Conducting Quality Control meetings.
 - 1.4.1.3 Reviewing submittals, monitoring and following through on Requests for Information, Bulletins, Regulatory Agency Change Orders, and Deferred Approvals.
 - 1.4.1.4 Preparing, coordinating, submitting, and following through on Requests for Inspection.
 - 1.4.1.5 Ensuring work is ready for testing and testing is performed.
 - 1.4.1.6 Preparing required Quality Control certifications and documentation.
- 1.4.2 No Work or testing may be performed unless the Quality Control Manager or a Designated Alternate Quality Control Manager is on the Site. The Quality Control Manager shall report directly to an officer of the Design Builder who shall not be the same individual as, nor be subordinate to, the Superintendent.
- 1.4.3 Qualifications: The Quality Control Manager must be 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 experience as a superintendent, inspector, Quality Control Manager, project manager, or construction manager on major and complex projects.
- 1.4.4 Other Quality Control Personnel: Provide additional quality control personnel (e.g., Quality Control Specialists, administrative support staff) as described in the Quality Control Plan and as required to implement the Quality Control Plan. The County, at its sole discretion, may require the Design Builder to assign additional quality control personnel to the Project if the County believes the Design Builder's assigned personnel are not capable of implementing the Quality Control Plan to the County's satisfaction. The Design Builder shall provide any additional personnel required by the County at no additional cost. Other active members of the Quality Control Program shall include a minimum of a full time architectural and engineering coordinator, Contractor's LEED Coordinator as defined in Section 018113 (Sustainable Design Requirements), and Contractor's Commissioning Coordinator as defined in Section 019113 (General Commissioning Requirements). The Quality Control Manager and supporting members'

responsibility is to ensure compliance with Contract Documents and is a requirement of the Contractor Quality Control Program.

1.5 SUBMITTALS

- 1.5.1 Qualification Data: For testing agencies specified in Article 1.6 (Quality Assurance) below, submit qualification data to demonstrate capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- 1.5.2 Testing, Inspection, and Observation Program (TIOP): Prepare according to the requirements contained in Section 7-141 of the California Building Standards Administrative Code (Part 1, Title 24, CCR). Submit to the Regulatory Agency for approval prior to issuance of the building permit.
- 1.5.3 Reports: Reports of all tests made shall be provided regardless of whether test results indicate that the material tested is satisfactory or unsatisfactory. Samples taken but not tested shall also be reported. Prepare and submit certified written reports that include the following:
 - 1.5.3.1 Date of issue.
 - 1.5.3.2 County's Project title and number.
 - 1.5.3.3 Regulatory Agency Project Number and increment number, if applicable.
 - 1.5.3.4 Name, address, and telephone number of testing agency.
 - 1.5.3.5 Dates and locations of samples and tests or inspections.
 - 1.5.3.6 Applicable Construction Drawing, detail, and Specification numbers.
 - 1.5.3.7 Names of individuals making tests and inspections.
 - 1.5.3.8 Description of the Work and test and inspection method.
 - 1.5.3.9 Identification of product and Specification Section including specified design strength or other applicable criteria.
 - 1.5.3.10 Complete test or inspection data.
 - 1.5.3.11 Test and inspection results and an interpretation of test results.
 - 1.5.3.12 Record of temperature and weather conditions at time of sample taking and testing and inspecting.
 - 1.5.3.13 Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 - 1.5.3.14 A statement that the material or materials were sampled and tested according to the requirements of the California Code of Regulations, Title 21 or 22 and 24.

- 1.5.3.15 Name and signature of laboratory inspector.
- 1.5.3.16 Recommendations on retesting and re-inspecting, if any.
- 1.5.3.17 Reports shall be prepared according to the requirements of the TIOP and sections 7-141 and 7-151 of the California Building Standards Code, Part 1, Title 24, CCR. Electronic copies and hard copies of each report shall be submitted as follows:
 - 1.5.3.17.1 County Representative
 - 1.5.3.17.2 Architect of Record (AOR)
 - 1.5.3.17.3 Structural Engineer of Record (SEOR)
 - 1.5.3.17.4 Design Builder (2 copies)
 - 1.5.3.17.5 Regulatory Agency & AHJ (2 copies)
 - 1.5.3.17.6 Inspector of Record (IOR)
- 1.5.4 Permits, Licenses, and Certificates: For County'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.
- 1.5.5 Quality Control Plan: Prepare a plan describing procedures and methods the Design Builder will utilize to control the quality of the Work. At a minimum the Quality Control Plan shall include:
 - 1.5.5.1 An organizational structure description, including Quality Control supervision, Regulatory Agency document control and inspection reporting structure. Delineate personnel training and qualification activities.
 - 1.5.5.2 Plans and procedures for testing and inspections to verify attributes delineated in the Contract Documents, including those specified in referenced Codes and standards. Include documents that identify individual inspection or testing points and acceptance criteria, and include provisions for recording results and the responsible inspection/test personnel. This documentation shall be traceable to the particular material, items, processes or systems evaluated, including notification requirements.
 - 1.5.5.3 Procedures for identifying and contractually invoking the applicable technical and quality requirements delineated in the Specifications on vendors supplying materials, parts and services.
 - 1.5.5.4 Plans and procedures for receiving, inspecting and accepting material and items. These shall include examination of physical condition and compliance with purchasing requirements, including markings for class type and grade, and conformance of supplied documentation. These shall also include provisions for:
 - 1.5.5.4.1 Identifying, controlling and processing non-conforming items, including notification of the County.
 - 1.5.5.4.2 Inspection of materials for authenticity to preclude counterfeit parts, for items and attributes of concern identified by County.

- 1.5.5.4.3 Verifying for compliance and traceability, maintaining, and turnover to the County, certificates of conformance and mill certificates required by Contract Documents or codes or standards invoked, for materials received.
- 1.5.5.5 Provisions for identifying defective Work. Bring to County's attention, for consultation and possible relief, those cases where correction within the specified requirements may introduce a significant schedule penalty, personnel hazard, or compromise the quality of installed items, or is otherwise impractical.
- 1.5.5.6 Controls to assure that only the "Approved for Inspection" construction documents are utilized in the Work. This includes provisions for removing superseded versions from the work area, except where explicitly and prominently marked "Void - For Information Only"; such as to retain annotated installation data.
- 1.5.5.7 Detailed formal procedures or instructions for the performance of special processes, such as welding or concrete placement. These procedures/instructions and personnel performing special processes shall be qualified and certified as required by codes and standards invoked in the Contract Documents.
- 1.5.5.8 Controls providing for periodic calibration of testing and measurement equipment, including unique equipment identification and calibration tracking.
- 1.5.5.9 Maintain records documenting the implementation of the above activities, including tests, inspections, special process qualification and execution, vendor documentation and defective Work resolution. These records shall be indexed, protected and retrievable for final submission to County.
- 1.5.5.10 Identify all tests and inspections that Design Builder proposes to be conducted by the County.
- 1.5.5.11 Approval: The Quality Control Plan must be approved before the start of construction and shall reflect the requirements of the Regulatory Agency-approved TIOP. The County reserves the right to require revisions of the Quality Control Plan that are necessary to ensure the specified quality of the Work. The County may interview Quality Control personnel at any time to verify their submitted qualifications.
- 1.5.5.12 Changes: The Design Builder shall submit any requested changes to the Quality Control Plan, including changes in personnel, to the County in writing. Proposed changes must be submitted at least seven (7) Days in advance of the desired effective date of the change. No change in the Quality Control Plan shall be implemented without the County Representative's written approval.

1.6 QUALITY ASSURANCE

- 1.6.1 General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.

- 1.6.2 Installer Qualifications: Documentation demonstrating firm or individual experience in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- 1.6.3 Manufacturer Qualifications: Documentation demonstrating firm experience in fabricating products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- 1.6.4 Fabricator Qualifications: Documentation demonstrating firm experience in procuring and fabricating products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- 1.6.5 Professional Engineer Qualifications: Documentation demonstrating professional engineer who is legally qualified to practice in California and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of systems, assemblies, or products that are similar to those indicated for this Project in material, design, and extent.
- 1.6.6 Specialists: Certain sections of the Specifications require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated. Requirement for specialists shall not supersede building codes and regulations governing the Work.
- 1.6.7 Testing Agency Qualifications: Documentation demonstrating NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, including the requirements of ASTM D3666, D3740, E329, E543, and E548 as applicable; and with additional qualifications specified in individual Sections; and that is acceptable to County. All testing shall be performed under the supervision and control of a California registered professional engineer employed by the testing agency.
- 1.6.8 Factory-Authorized Service Representative Qualifications: Documentation demonstrating authorized representative of a manufacturer who is trained and approved by the manufacturer to inspect installation of the manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- 1.6.9 Pre-Construction Testing: Where a testing agency is indicated to perform pre-construction testing for compliance with specified requirements for performance and test methods, comply with the following:
 - 1.6.9.1 Design Builder's responsibilities include the following:
 - 1.6.9.1.1 Provide test specimens representative of proposed products and construction.
 - 1.6.9.1.2 Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.

- 1.6.9.1.3 Provide sizes and configurations of test assemblies to adequately demonstrate capability of products to comply with performance requirements.
- 1.6.9.1.4 Build site-assembled test assemblies using installers who will perform same tasks for Project.
- 1.6.9.1.5 When testing is complete, remove test specimens and assemblies; do not reuse products on Project.
- 1.6.9.2 Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality assurance service to Design Builder, with a copy to the County. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.

1.7 QUALITY CONTROL

- 1.7.1 County Responsibilities: Where quality control services are indicated as County's responsibility, County will engage a qualified testing agency approved by the Regulatory Agency to perform these services.
 - 1.7.1.1 Specified inspection and testing shall be performed in accordance with Part 1, Title 24, Article 4, Paragraph 7-149, CCR.
 - 1.7.1.2 County will furnish Design Builder with names, addresses, and telephone numbers of testing agencies engaged and a description of the types of testing and inspections they are engaged to perform.
 - 1.7.1.3 Payment for these services will be by the County.
 - 1.7.1.4 Costs for canceled inspections, additional inspections for retesting and re-inspecting any corrective work, construction that was incomplete, or replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Design Builder, and the Contract Sum will be adjusted by Change Order.
 - 1.7.1.5 Inspection and associated cost of work related to means and methods that is not part of the permanent completed project such as temporary structures, bracing, shoring, fall protection, scaffolding, and the like is the responsibility of the Design Builder.
- 1.7.2 Special Inspector: The County shall employ and assign a Special Inspector to the Work in accordance with State and County requirements. The Inspector's duties are specifically defined in Title 24. The Work in all stages of progress shall be subject to the continuous observation of the Inspector. The Inspector shall have free access to all parts of the Work at any time. The Design Builder shall keep the Inspector fully informed regarding the progress and manner of the Work and the character of the materials. Inspection of the Work shall not relieve the Design Builder of any obligation contained in the Contract Documents.

- 1.7.3 Design Builder's Responsibilities: Tests and inspections not explicitly assigned to County are Design Builder's responsibility. Perform quality control services required by the Regulatory Agency, whether specified or not.
- 1.7.3.1 Where services are indicated as Design Builder's responsibility, engage a qualified testing agency to perform these quality control services. Design Builder shall not employ same entity engaged by County.
 - 1.7.3.2 Notify testing agencies, the IOR, and the County Representative at least seventy-two (72) hours in advance of time when Work that requires testing or inspecting will be performed.
 - 1.7.3.3 Where quality control services are indicated as Design Builder's responsibility, submit a certified written report, in duplicate, of each quality control service to the County Representative.
 - 1.7.3.4 Testing and inspecting requested by Design Builder and not required by the Contract Documents are Design Builder's responsibility.
 - 1.7.3.5 Submit additional copies of each written report directly to Authorities Having Jurisdiction, when so requested by the AHJ or directed by the County Representative.
 - 1.7.3.6 Do not cover work before required tests and inspections are performed (refer to General Conditions).
 - 1.7.3.7 The Design Builder shall schedule construction activities so that costs of inspection to the Owner will be kept to a minimum.
- 1.7.4 Disqualified Material: Material shipped or delivered to the site by the Design Builder from the source of supply prior to satisfactorily passing required tests or inspections, or prior to the receipt of a notice from the County Representative that such testing or inspection is not required, shall not be incorporated into the Work.
- 1.7.5 Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Section 013000 (Submittal Procedures).
- 1.7.6 Re-Testing / Re-Inspecting: Where the original tests or inspections were County's responsibility, the County will provide re-testing and re-inspection for construction that replaces Work that failed to comply with the Contract Documents. The Design Builder shall provide quality control services for the new work prior to County re-testing or re-inspection.
- 1.7.6.1 If such additional tests or inspections establish that such portion of the Work fails to comply with the Contract Documents, all costs of such additional tests and inspections, and all other costs resulting from such failure, including compensation for County Representative, County hired Inspectors and County's consultants shall be deducted from the Contract Sum by Change Order.
 - 1.7.6.2 In addition, the Design Builder shall pay for:

- 1.7.6.2.1 Additional costs, including compensation for travel and daily living expenses which are beyond normal inspection costs, when the County's Testing Agency is required to conduct inspections outside of the San Francisco Bay area.
 - 1.7.6.2.2 Cost of retesting construction revised or replaced by Design Builder, where required tests were performed on original construction.
 - 1.7.6.2.3 Cost of testing or retesting construction used as temporary facilities by the Design Builder.
 - 1.7.6.2.4 Costs of additional construction testing due to Design Builder's substitutions.
- 1.7.7 Testing Agency Responsibilities: Cooperate with County Representative and Design Builder in performance of duties. Provide qualified personnel to perform required tests and inspections:
 - 1.7.7.1 Notify County Representative and Design Builder promptly of irregularities or deficiencies observed in the Work during performance of services.
 - 1.7.7.2 Determine the location(s) from which test samples will be taken and in which in-situ tests are conducted.
 - 1.7.7.3 Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 - 1.7.7.4 Submit a certified written report, electronically and in duplicate, of each test, inspection, and similar quality control service
 - 1.7.7.5 Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 - 1.7.7.6 Do not perform any duties of Design Builder.
 - 1.7.7.7 Submit two copies of a verified report to the Regulatory Agency covering all tests and inspections that are required by the TIOP during the progress of the Work. The report shall be furnished each time that the Work is suspended, covering the tests completed up to that time, at the completion of the Work, covering all tests, and as otherwise required by the TIOP.
- 1.7.8 Associated Services: The Design Builder shall cooperate with agencies performing required tests, inspections, and similar quality control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
 - 1.7.8.1 Access to the Work.
 - 1.7.8.2 Incidental labor and facilities necessary to facilitate tests and inspections.
 - 1.7.8.3 Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.

- 1.7.8.4 Facilities for storage and field curing of test samples.
 - 1.7.8.5 Delivery of specified quantities of representative samples of materials proposed for use as specified to testing agencies.
 - 1.7.8.6 Preliminary design mix proposed for use for material mixes that require control by testing agency.
 - 1.7.8.7 Security and protection for samples and for testing and inspecting equipment at Site.
 - 1.7.8.8 The County will be responsible for all City of Richmond (e.g., Department of Public Works, Water Department, Fire Department) inspection, review, and construction permit costs. Costs for other construction process related permits such as encroachment permits for use of City parking space or street closures shall be the responsibility of the Design Builder.
- 1.7.9 Coordination: Coordinate sequence of activities to accommodate required quality assurance and quality control services with a minimum of delay and to avoid the need to remove and replace construction to accommodate testing and inspecting.
- 1.7.9.1 Schedule times for tests, inspections, obtaining samples, and similar activities.
 - 1.7.9.2 Do not cover any piping, wiring, ducts, or other installations until they have been inspected and approved by the Regulatory Agency Building Inspector or certified, if certification is required.
- 1.7.10 Implementation of the TIOP: If the Regulatory Agency requires a TIOP that lists the tests and inspections to be included in the Specifications for the project, the Design Builder will adhere to those requirements.

1.8 SPECIAL TESTS AND INSPECTIONS

- 1.8.1 Special Tests and Inspections: The County will engage a qualified special inspector to conduct special tests and inspections required by the California Building Codes. The responsibilities of the Special Inspector are as follows:
- 1.8.1.1 Verifying that manufacturer maintains detailed fabrication and quality control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.
 - 1.8.1.2 Notifying County Representative promptly of irregularities and deficiencies observed in the Work during performance of its services.
 - 1.8.1.3 Submitting a certified written report of each test, inspection, and similar quality control service to County Representative with copy to Design Builder.
 - 1.8.1.4 Submitting a final report of special tests and inspections at Completion, which includes a list of unresolved deficiencies.
 - 1.8.1.5 Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.

1.8.1.6 Retesting and re-inspecting corrected work, as needed.

1.8.2 The Regulatory Agency shall review and approve the list of special tests and inspections for accuracy and completeness as part of the TIOP.

1.8.3 The Regulatory Agency field staff shall review and approve the agencies and/or individuals conducting the special tests and inspections prior to issuing the building Permit or prior to the commencement of related work.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

3.1 INSPECTION

3.1.1 The Design Builder shall provide access to the Work including the shops where the Work is in preparation, at all times for the purpose of inspection. The Design Builder shall maintain proper facilities and provide safe access for such inspection at all times.

3.1.2 The County shall have the right to reject materials and workmanship that are defective, or to require their correction. Rejected workmanship shall be satisfactorily corrected and rejected materials shall be removed from the Site without charge to the County.

3.1.3 The County may make an examination of work already completed by requiring the Design Builder to remove or tear out such work at any time before final acceptance of the Work. Upon request, the Design Builder shall provide all facilities, labor and materials necessary to remove the portion of the Work designated by the County Representative. If such work is found to be defective in any respect due to the fault of the Design Builder or its subcontractors, the Design Builder shall be responsible for all expenses of such examination and satisfactory reconstruction. If such work is found to meet the requirements of the Contract Documents, the additional cost of labor and materials involved in the examination shall be allowed to the Design Builder.

3.2 QUALITY CONTROL REPORTS

3.2.1 Frequency: Reports are required for each week that Work is performed, 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 shall be identified by Specification number and title and terminology consistent with the Contract Schedule. Design Builder Quality Control Reports shall be prepared, signed and dated by the Quality Control Manager and shall contain the following information:

3.2.1.1 Identify the part or parts of the Work that is the subject of the report.

3.2.1.2 Indicate, as applicable, that for this portion of the 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.

- 3.2.1.3 Indicate, as applicable, that for this portion of the 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 Documents, and the required testing has been performed. Include a list of who performed the tests.
- 3.2.1.4 Results of off-site quality control work, if applicable, including actions taken.
- 3.2.1.5 List any rework items identified but not corrected by close of business.
- 3.2.1.6 List the rework items corrected from the rework items list along with the corrective action taken.
- 3.2.1.7 Include a "Comments" section in the report that contains pertinent information including directions received, quality control problem areas, deviations from the Quality Control Plan, construction deficiencies encountered, Quality Control meetings held, acknowledgement that as-built drawings have been updated, corrective direction given by the Quality Control Manager, and corrective action taken by the Design Builder.
- 3.2.1.8 Contractor Quality Control Report certification.

3.3 TEST AND INSPECTION LOG

- 3.3.1 Prepare a sequentially numbered record of tests and inspections organized by Regulatory Agency project. Include the following:
 - 3.3.1.1 Request for Inspection
 - 3.3.1.2 Date test or inspection was conducted.
 - 3.3.1.3 Description of the Work tested or inspected.
 - 3.3.1.4 Applicable Construction Drawing and Specification numbers
 - 3.3.1.5 Date test or inspection results were transmitted to County Representative.
 - 3.3.1.6 Identification of testing agency or special inspector conducting test or inspection.
- 3.3.2 Maintain log at Site. Post changes and modifications as they occur. Provide access to test and inspection log for County Representative's reference during normal working hours.

3.4 REPAIR AND PROTECTION

- 3.4.1 General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes. Comply with the Contract Document requirements for Section 017329 (Cutting and Patching).
- 3.4.2 Protect construction exposed by or for quality control service activities.

- 3.4.3 Repair and protection are Design Builder's responsibility, regardless of the assignment of responsibility for quality control services.

3.5 GEOTECHNICAL ENGINEERING

- 3.5.1 All geotechnical engineering services are paid for by the Design Builder. The geotechnical engineer or his representative will provide the following tests and inspections:
 - 3.5.1.1 Continuous inspection of fill placement.
 - 3.5.1.2 Evaluation of onsite and imported earth materials before placement.
 - 3.5.1.3 Field test fill and earth backfill as placed and compacted.
 - 3.5.1.4 Inspect excavations and subgrade before concrete is placed.
 - 3.5.1.5 Provide continuous inspection of pile boring.
 - 3.5.1.6 Provide periodic inspection of open excavations, embankments, and other cuts or vertical surfaces of earth.
 - 3.5.1.7 The Geotechnical Engineer will submit reports of tests and inspections. These reports will indicate compliance or noncompliance with the Contract Documents, results of compaction tests and that soil conditions encountered do or do not confirm anticipated conditions and support their design recommendations.
- 3.5.2 Design Builder shall remove unsatisfactory material, re-compact, adjust moisture, place new material, or in the case of excavations, provide proper protective measures, perform other operations necessary, as determined by the geotechnical engineer and directed by the County Representative, whose decisions and directions will be considered final.
- 3.5.3 Soils Test and Inspection Procedure
 - 3.5.3.1 Allow sufficient time for testing and evaluation of results before material is needed. The Geotechnical Engineer will be the sole and final judge of suitability of all materials.
 - 3.5.3.2 Laboratory compaction tests to be used will be in accordance with ASTM D 1557.
 - 3.5.3.3 Field density tests will be made in accordance with ASTM D 1556.
 - 3.5.3.4 The number of tests will be determined by the Geotechnical Engineer and County Representative. Materials in question may not be used, pending test results.
 - 3.5.3.5 The Geotechnical Engineer will visually or otherwise examine excavations and embankments.

3.6 CONCRETE TESTS AND INSPECTIONS

3.6.1 Tests

- 3.6.1.1 Notify Inspector, County Representative, and testing agency of brand and type of cement and sources of aggregates in time for review, sampling and testing. Test cement in accordance with Title 24, 1928 B.1
- 3.6.1.2 Aggregate: The County's testing agency will test at least one sample for every two hundred (200) cubic yards of aggregate. Aggregates from a known source of supply that have shown by actual service to produce concrete of the required quality will be tested only for gradation and deleterious substances.
- 3.6.1.3 Obtain at least one set of samples for strength tests of each separate design mix of concrete placed each day. Frequency of sampling shall be not less than once per day, nor less than once for each fifty (50) cubic yards of concrete, nor less than once per 2,000 square feet of surface area for slabs or walls. Obtain one additional set of samples for testing at the start of concrete for each class of concrete, and whenever the mix or aggregate is changed.
- 3.6.1.4 One set of samples consists of four cylinders.
- 3.6.1.5 Cylinders will be taken so as to represent as nearly as possible the batch of concrete from which they are taken. Sampling procedures shall conform to ASTM C 172.
- 3.6.1.6 Test cylinders shall be made and cured in compliance with ASTM C 31, except as modified hereinafter. Tests will comply with ACI 301 for strength, slump, and air entrainment tests.
- 3.6.1.7 Test cylinders from respective batches, one at age of seven (7) Days, and two at age twenty-eight (28) Days. The fourth cylinder shall be held in reserve and tested only at the direction of the Inspector, SEOR, or County Representative. Cylinder testing procedures shall conform to ASTM C 39 for strength.
- 3.6.1.8 Slump tests shall be taken as required by Testing Laboratory to certify compliance with the Contract Documents. Slump shall be tested in accordance with ASTM C 143.
- 3.6.1.9 Minimum compressive strength of test cylinders, in pounds per square inch, shall not be less than the specified required design strength.
- 3.6.1.10 If minimum strengths of test cylinder fall below those specified, Inspector or County Representative may require test cores from hardened concrete to be taken and tested. Each core test, if taken shall consist of three cores. The cost of such cores and tests shall be borne by the Design Builder. Cores shall be taken in accordance with ASTM C 42, from locations selected by the Inspector or County Representative. The Design Builder shall repair core holes with a non-shrinking natural aggregate grout. Concrete testing by coring shall be considered acceptable if the average strength of the three

cores is equal to at least .85 of the minimum specified twenty-eight (28) day strength and if no single core strength is less than five hundred (500) psi below the twenty-eight (28) day strength.

3.6.2 Concrete Inspections

An authorized inspector from the testing agency shall be present at all times during placing of structural cast-in-place concrete. The inspector shall inspect and accept the accuracy of all reinforcing steel before concrete is placed. Concrete construction activities shall not proceed until inspections are complete and the inspected construction is approved.

3.6.3 Concrete Plant Inspection

3.6.3.1 Structural concrete manufacturer(s) shall deliver a certificate in accordance with ASTM C 94, Section 15.1, and all items of Section 15.2 with the addition of type and brand of cement and admixtures, source and identification of aggregates to the Inspector with each mixer truck. Certificates shall be from a public weighmaster. The inspector shall not accept concrete that is not accompanied and identified by a certificate from a batch plant inspector, and that does not correspond with the mix design submitted by the Design Builder and approved by the testing agency/laboratory.

3.6.3.2 Concrete shall be mixed at certified automatic concrete batch plants and shall have quality control as follows:

3.6.3.2.1 Laboratory designed mixes using adequate cement factors.

3.6.3.2.2 The testing agency shall perform continuous batch plant inspection.

3.6.3.2.3 Compliance with California Building Code (CBC) Standard 19-3.

3.6.3.2.4 Periodic inspection of quality of materials used may be made by testing laboratory acceptable to Inspector or County Representative.

3.7 HIGH-STRENGTH GROUT

3.7.1 This Article applies to structural grout used below base plates and similar applications.

3.7.2 The placement of grout materials will be continuously inspected by the County's testing agency.

3.7.3 Grout compressive strength testing: The County will obtain a set of three samples from each batch. Samples will be tested at one (1) or three (3) days and seven (7) days following mixing. Compressive strengths shall exceed the manufacturer's published minimum strengths or eighty percent (80%) of their published typical compressive strengths.

3.8 EXPANSION ANCHOR BOLTS (TITLE 24, 1925 B.3.5)

3.8.1 Expansion type concrete anchor bolts shall be Hilti Kwik Bolt II or as indicated on the approved Construction Documents. Other brands of similar anchors will be acceptable with demonstration of equivalency. Submit manufacturer's specifications and ICBO reports. All anchors shall be installed with special inspection in accordance with the requirements of the Building Code.

3.8.2 Fifty percent of the anchors or alternate bolts in any group arrangement shall be proof tested in tension or torque, as specified on the drawings.

3.8.3 Testing Requirements:

3.8.3.1 Anchor diameter refers to the thread size.

3.8.3.2 Apply proof test loads to anchors without removing the nut, if possible. If not possible, remove nut and install a threaded coupler to the same tightness as the original nut using a torque wrench and apply load.

3.8.3.3 Reaction loads from test fixtures may be applied close to the anchor being tested, provided the anchor is not restrained from withdrawing by the fixture(s).

3.8.3.4 Test equipment is to be calibrated by an approved testing laboratory in accordance with standard recognized procedures.

3.8.3.5 The following criteria are applicable for the approval of installed anchors:

3.8.3.5.1 Hydraulic Ram Method: The anchor should have no observable movement at the applicable test load. For wedge and sleeve type anchors, a practical way to determine observable movement is that the washer under the nut becomes loose.

3.8.3.5.2 Torque Wrench Method: The applicable test torque must be reached within the following limits:

3.8.3.5.2.1 One half (1/2) turn of the nut.

3.8.3.5.2.2 One quarter (1/4) turn of the nut for the 3/8" sleeve anchor only.

3.8.3.5.3 Testing should occur a minimum of twenty-four (24) hours after installation of the subject anchors.

3.9 ADHESIVE ANCHORS

3.9.1 Installation Testing: Fifty percent of the anchors shall be pull-tested.

3.9.2 Proof Test Load: Pull test to twice the ICBO evaluation report design tension values or as indicated on the drawings.

- 3.9.3 Inspection: Installation of adhesive anchors will be continuously inspected in accordance with the requirements of the California Building Code, Section 1701, and the appropriate ICBO evaluation report.

3.10 EPOXY AND CEMENTITIOUS GROUTED DOWELS

- 3.10.1 Initial Testing: Install three anchors for each anchor size and installation position planned in allocation acceptable to the Inspector or County Representative. These anchors shall not be incorporated into the finished construction. The testing agency will pull-test these anchors at one hundred twenty-five percent (125%) of the values specified on the drawings.
- 3.10.2 Testing: The testing agency will pull-test fifty percent (50%) of the dowels in accordance with the schedule shown on the drawings. If any failures occur, the testing agency will pull-test one hundred percent (100%) of dowels in the vicinity or placed with the same batch of grout until at least twenty (20) tests demonstrate compliance. The Design Builder shall bear the cost of replacing failed dowels and re-inspection.
- 3.10.3 Inspection: Installation of epoxy grouted dowels will be continuously inspected in accordance with the California Building Code, Section 1701, and the appropriate ICBO evaluation report.

3.11 REINFORCING STEEL

3.11.1 Tests

- 3.11.1.1 Tests shall be performed before the delivery of steel to the Site. Steel that does not meet specifications shall not be shipped to the Project.
- 3.11.1.2 Testing procedure shall conform to ASTM A615.
- 3.11.1.3 Sample at the place of distribution, before shipment. Make one tensile strength test and one bending test from samples out of 10 tons, or fraction thereof, each size and kind of reinforcing steel, where taken from bundles as delivered from the mill and properly identified as to heat number. Mill analysis shall accompany report. Where identification number cannot be ascertained, or where random samples are taken, make one series of tests from each two and a half (2-1/2) tons, or fraction thereof, of each size and kind of reinforcing steel. Samples shall include not fewer than two pieces, each eighteen (18) inches long, of each size and kind of reinforcing steel.
- 3.11.1.4 Welds: Reinforcing bar welds shall be inspected. Tests of reinforcing bar welds shall be in accordance with ASTM E 709 and AWS D1.4. Chemical testing of reinforcing bars for welding shall conform to Title 24, 2603 B.5.2.
- 3.11.2 Inspector will inspect all reinforcement for concrete construction for size, dimensions, locations and proper placement. Special Inspector required for welding as required by Title 24, 1928 B.12. Inspector shall be present during welding of all reinforced steel.

3.12 MASONRY

3.12.1 Job Inspector

- 3.12.1.1 All masonry work will be continuously inspected during laying and grouting by an inspector specially trained in such inspections. The inspector shall make test samples and perform such tests as are required.
- 3.12.1.2 The inspector shall check the materials, details of construction and construction procedure. The inspector shall furnish a verified report that of his own personal knowledge the work covered by the report has been performed and materials used and installed are in every particular in accordance with, and in conformity to, the duly approved drawings and specifications.

3.12.2 Stone Veneer

All veneer shall be continuously inspected as required by the CCR, Title 24, Part 2, Volume I, Section 1403 A.6 and the enforcement agency (Regulatory Agency).

3.13 STRUCTURAL STEEL INCLUDING MISCELLANEOUS STEEL

- 3.13.1 Mill certificates or affidavits and manufacturers' certifications shall be supplied to the inspector for verification of steel materials. Testing agency shall be notified at least three working days in advance of fabrication and supplied with the reports so that the inspector can make a shop inspection of the steel.
- 3.13.2 Inspection requests shall be based on Title 24, Part 2, California Building Code, Volume 2, Seismic Provisions for Structural Steel Buildings of the American Institute of Steel Construction, 2002.
- 3.13.3 Identify and mark steel in accordance with Section 2202B. Structural steel properly identified need not be tested.
- 3.13.4 Tests of Steel Materials: If structural steel cannot be identified by heat or melt numbers, or if its source is questionable, not less than one tension test and one bend test will be made for each five tons or fractional part thereof. The cost of such testing will be borne by the Design Builder.
- 3.13.5 Testing and Inspection of Structural Steel:
 - 3.13.5.1 Testing agency will visit the fabricator's plant to verify that materials used check with the mill tests, affidavits of test reports, and that fabrication and welding procedures meet specifications.
 - 3.13.5.2 Testing agency shall visually check fabricated steel delivered to the Project against the working and reviewed shop drawings for compliance, and make physical tests and measurements as required to meet the Specifications.
 - 3.13.5.3 Inspection of welding shall be in accordance with the requirements of section 2212 B.5.

- 3.13.5.4 Erection Inspection: Testing agency will visually inspect bolted and field welded connections, perform such additional tests and inspections of the field work as are required by the Regulatory Agency or County Representative and prepare test reports for the approval.
- 3.13.6 Ultrasonic Testing: All complete penetration multi-pass groove welds will be ultrasonically tested:
 - 3.13.6.1 The County's testing agency will perform ultrasonic testing immediately after welding is complete. A second ultrasonic testing will be performed near the end of field welding for at least twenty-five percent (25%) of the field welded groove welds.
 - 3.13.6.2 All defective welds shall be repaired and re-tested with ultrasonic equipment.
 - 3.13.6.3 When ultrasonic indications arising from the weld root can be interpreted as either a weld defect or the backing strip itself, the backing strip shall be removed at the Design Builder's expense and, if no root defect is visible, the weld shall be retested. If no defect is indicated on this re-test, and no significant amount of the base and weld metal have been removed, no further repair or welding is necessary. If a defect is indicated, it shall be repaired at the Design Builder's expense.
 - 3.13.6.4 The ultrasonic instrumentation shall be calibrated by the technician to evaluate the quality of the welds in accordance with AWS D1.1.
 - 3.13.6.5 Should defects appear in welds tested, repairs shall be similarly inspected at the Design Builder's expense and at the direction of the Inspector, SEOR, or County Representative until satisfactory performance is assured.
 - 3.13.6.6 Other methods of inspection, for example, x-ray, gamma ray, magnetic particle, or dye penetrant, may be used on welds if deemed necessary by the Inspector, SEOR, or County Representative.
- 3.13.7 The testing agency will review welding procedure specifications and related documentation to verify compliance with AWS and the Contract Documents.
- 3.14 HIGH-STRENGTH BOLTS, NUTS AND WASHERS
 - 3.14.1 Material Tests: High-strength bolts, nuts and washers will be sampled and tested in accordance with the requirements of the specification for High-Strength Bolts for Structural Steel Joints, including Suitable Nuts and Plain Hardened Washers, ASTM A325, or for Quenched and Tempered Alloy Steel Bolts for Structural Steel Joints, ASTM 490, latest editions, details of construction, and installation procedure.
 - 3.14.2 Inspection of High-Strength Bolt Installation: Inspection of high-strength bolt installations shall be made in accordance with Title 24, Section 2213B by an inspector specially approved for that purpose by Regulatory Agency. The inspector will check the materials, equipment, details of construction, and installation procedure. The inspector shall furnish the Design Builder, County Representative, and Regulatory Agency with a report that the Work has been completed in every respect in compliance with the approved Drawings and Specifications.

3.15 METAL DECKING

3.15.1 Tests and Inspections:

3.15.1.1 Inspection by a qualified welding inspector of all deck welding will be made in accordance with CBC Chapter 17.

3.15.1.2 Materials Testing:

3.15.1.2.1 Identified Steel: Materials testing is waived for steel identified in accordance with CBC Section 2203.

3.15.1.2.2 Unidentified Steel: Steel will be sampled and testing to confirm compliance with the strength and chemical requirements of the appropriate ASTM standard. Frequency of sampling will be as determined by the Inspector or County Representative. The Design Builder shall supply samples and test pieces and provide facilities for inspection without extra charge.

3.15.2 Inspection shall be in accordance with the CBC Standard 27-6. Inspection of steel welding shall be made to ensure that seam welds and puddle welds are made in accordance with the Drawings and Specifications. Inspection shall ensure that proper electrodes, current, travel, and speed are used, and that no cracks, serious undercutting, overlap, surface holes or slag inclusions occur. The provisions of inspection by the Inspector, testing agency, or County Representative shall not relieve the Design builder from performing the work in accordance with the Contract Documents.

3.16 LOAD BEARING METAL STUD, LIGHT GAGE FRAMING WELDING TESTS AND INSPECTIONS

3.16.1 All shop and field welding of cold formed metal framing members, including cold formed metal framing welded to structural steel, will be continuously inspected by the County's special inspector.

3.16.2 Framing erection will be periodically inspected by the County's inspector.

3.16.3 Acceptable or rejected weld quality, including concavity and convexity will be determined by the County's special inspector. Repair or replace welds and welded components, as directed by the Inspector, special inspector, or County Representative, if any welds are deemed unacceptable by the County's special inspector.

3.16.4 Sheet to structural steel and structural steel to sheet welding will be continuously inspected by the County's testing agency and shall comply with both AWS D1.1-98 and AWS D1.3-98. Structural steel is material whose thickness exceeds 0.18".

3.17 WELDED STUD AND REBAR CONNECTORS

3.17.1 Inspection: Perform pre-production testing, stud installation, and production testing under continuous inspection of the Testing Laboratory Welding Inspector. In addition to standard reports, inspector's report shall detail the location of all defective studs with repair or replacement action taken, damage resulting from stud installation, and all defects and unusual occurrences.

3.17.2 Exception: Inspection and testing is waived for studs connecting non-structural and non-stressed finish materials.

3.17.3 Pre-Production Testing: Perform the following tests with each welding equipment power source at the start of each production period (the time period from start-up to any shutdown of any stud welding equipment) at the start of any new welding procedure, and after any change in the welding procedure.

3.17.3.1 Pre-Production Tests – Stud Shear Connectors: After cooling, test the first two studs on a member by hammer bending to a forty-five (45) degree angle. If a failure occurs in the weld zone of either stud, correct the procedure, and weld and bend test two more studs on the member. If either of the second two studs fails, continue all additional welding on separate materials until two consecutive studs are tested and found to be satisfactory. Then weld two studs to the same member, bend test, and find satisfactory before any more studs are welded to the member.

3.17.3.2 Pre-Production Tests – Studs other than Shear Connectors: Weld two studs to separate material in the same general position (such as flat, vertical, sloping, or overhead) and of similar steel material and thickness as members to receive studs. After cooling, hammer bend the studs to a thirty (30) degree angle. If failure occurs in any stud shank, ascertain and correct the cause before making any further welds. If a failure occurs in the weld zone of either stud, correct the procedure and successfully weld and test two successive studs before any studs are welded to members.

3.17.4 Production Inspection and Testing

3.17.4.1 Inspection of Stud Shear Connectors: After cooling, test at least one stud on each member by hammer bending to a fifteen (15) degree angle, or test each stud by striking twice with a six (6) pound hammer to verify that quality welds have been obtained. If failure occurs either in weld zone or stud shank, follow method of correction as required herein for pre-production testing until successful installations are produced, and replace all defective studs. Test all studs:

3.17.4.1.1 Not showing full three hundred sixty (360) degree fillet weld

3.17.4.1.2 That have been repaired by welding

3.17.4.1.3 That are replacement studs

3.17.4.1.4 In which reduction in length is less than correct by hammer bending to a fifteen (15) degree angle; for studs showing less than a three hundred sixty (360) degree weld fillet, bend the stud in the direction opposite to the missing weld fillet. Remove and replace studs that crack either in the weld zone, base metal, or shank under inspection and testing, or under subsequent straightening.

3.17.4.2 Inspection of Studs other than Shear Connectors: Test at least one stud in every 100 studs by hammer bending to a fifteen (15) degree angle or, if threaded, torque test with a calibrated torque wrench to an approved value for stud diameter and thread in an approved device. If the stud fails, correct

the welding procedure as required herein for pre-production testing and bend or torque test two more in-place studs. If either of the two second studs fails, all studs represented by the tests shall be bend or torque, or shall be rejected and replaced. The extent of additional inspection and testing for critical structural connections shall be as designated by Regulatory Agency.

- 3.17.5 Straightening: Leave in a bent condition those stud shear connectors and shear transfer devices that are bent less than sixteen (16) degree, and are free of failure provided no portion of the studs is within 1" of an exposed concrete surface. Perform stud bending and straightening without heating and before completion of each day's stud welding operations. Obtain inspection and approval of straightened studs before covering.
- 3.17.6 Load Testing: The testing agency shall load test studs to the extent and by the methods directed.

END OF SECTION

SECTION 015000

TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

1.1.1 Section Includes:

- 1.1.1.1 Temporary Electricity
- 1.1.1.2 Temporary Communications.
- 1.1.1.3 Temporary Water
- 1.1.1.4 Fences
- 1.1.1.5 Protection of Public and Private Property
- 1.1.1.6 Temporary Sanitary Facilities
- 1.1.1.7 Temporary Barriers and Enclosures
- 1.1.1.8 Water Control
- 1.1.1.9 Pollution Control
- 1.1.1.10 Construction Aids
- 1.1.1.11 Erosion Control
- 1.1.1.12 Noise Control
- 1.1.1.13 Traffic Control
- 1.1.1.14 Removal of Temporary Facilities and Controls
- 1.1.1.15 Interim Wayfinding

1.2 TEMPORARY ELECTRICITY

- 1.2.1 Design Builder shall provide, maintain, and pay for electrical power at the Site for construction purposes and for Design Builder's trailers. Power may be obtained via self-provided power generators as needed as an alternate to tapping into the County's system. Design Builder must meter all connections to County's system to determine usage rates.
- 1.2.2 For smaller loads, such as test equipment, work area lighting, and small hand tools, Design Builder can use available County electrical circuits following County approval in writing as specified in Section 011400 (Work Restrictions).

1.3 TEMPORARY WATER

- 1.3.1 Provide, maintain, and pay for suitable quality water service (potable water) required for construction operations.
- 1.3.2 All water required for and in connection with the Work, including without limitation for dust control, shall be furnished by and at the expense of Design Builder. Design Builder may be allowed to utilize water from the County, with County's approval. However, County does not guarantee availability of this water. Design Builder will pay County prevailing rates per acre foot of water used. Design Builder shall furnish necessary pipe, hose, nozzles, meter, and tools and perform all necessary labor. Unnecessary waste of water will not be permitted. Special hydrant wrenches shall be used for opening and closing fire hydrants; in no case shall pipe wrenches be used for this purpose.

1.4 FENCES

- 1.4.1 On completion of the Work across any tract of land, Design Builder shall restore all existing fences to their original condition and to their original locations.

1.5 PROTECTION OF PUBLIC AND PRIVATE PROPERTY

- 1.5.1 Design Builder shall protect, shore, brace, support, and maintain all underground pipes, conduits, drains, and other underground construction uncovered or otherwise affected by its construction operations. All pavement, surfacing, driveways, curbs, walks, buildings, utility poles, guy wires, fences, and other surface structures affected by construction operations, together with all sod and shrubs in yards, parkways, and medians, shall be restored to their original condition, whether within or outside the easement. All replacements shall be made with new materials.
- 1.5.2 Design Builder shall be responsible for all damage to streets, roads, highways, shoulders, ditches, embankments, culverts, bridges, and other public or private property, regardless of location or character, which may be caused by transporting equipment, materials, or workers to or from the Work, Site or any part thereof, whether by Design Builder or Subcontractors. Design Builder shall make satisfactory and acceptable arrangements with the County, or the agency or authority having jurisdiction over the damaged property, concerning its repair or replacement or payment of costs incurred in connection with the damage.
- 1.5.3 All fire hydrants and water control valves shall be kept free from obstruction and available for use at all times.

1.6 TEMPORARY SANITARY FACILITIES

- 1.6.1 Provide and maintain required temporary buildings with sanitary toilets for use of all workers. At a minimum, sanitary facilities shall be located at trailer site, staging area, and adjacent to work area.
- 1.6.2 Sanitary facilities shall be of reasonable capacity, properly maintained throughout the construction period, and obscured from public view to the greatest practical extent. Sanitary facilities shall include an integral hand sanitizer dispenser, or a separate hand wash station shall be provided. If toilets of the chemically treated type are used, at least one toilet will be furnished for each twelve (12) persons.
- 1.6.3 Design Builder shall enforce the use of such sanitary facilities by all personnel at the Site.
- 1.6.4 Comply with all minimum requirements of the Health Department or other public agency having jurisdiction; maintain in a sanitary condition at all times.

1.7 TEMPORARY BARRIERS AND ENCLOSURES

- 1.7.1 Provide barriers to prevent unauthorized entry to construction areas, to allow for County's use of Site, and to protect existing facilities and adjacent properties from damage from construction operations. Barriers may be chain link fencing with fabric.
- 1.7.2 Provide barricades required by governing authorities for public access to existing buildings.

- 1.7.3 Protect vehicular traffic, stored materials, Site, and structures from damage.
- 1.7.4 Provide Final Site Logistics Plan including any off-site lay down and parking areas, worker drop-off locations, construction fencing, location of construction gates, fire access gates, and locations of existing fire hydrants for approval by local Fire Department, Health Services Office and County Representative.

1.8 WATER CONTROL

- 1.8.1 Grade Site to drain.
- 1.8.2 Maintain excavations free of water.
- 1.8.3 Protect Site from puddling or running water.
- 1.8.4 Provide water barriers as required to protect Site from soil erosion.
- 1.8.5 Provide for drainage of storm water and such water as may be applied or discharged on the Site in performance of the Work. Drainage facilities shall be adequate to prevent damage to the Work, the Site, utility infrastructure, and adjacent property.
- 1.8.6 Clean, enlarge and/or supplement existing drainage channels and conduit as necessary to carry all increased runoff attributable to Design Builder's operations. Construct dikes as necessary to divert increased runoff from entering adjacent property (except in natural channels), to protect County's facilities and the Work, and to direct water to drainage channels or conduits. Provide ponding as necessary to prevent downstream flooding.

1.9 POLLUTION CONTROL

- 1.9.1 Design Builder must provide a Storm Water Pollution Prevention Plan (SWPPP) where required due to the extent of site work.
- 1.9.2 Design Builder shall prevent the pollution of drains and watercourses by sanitary wastes, sediment, debris, and other substances resulting from construction activities. No sanitary wastes shall be permitted to enter any drain or watercourse other than sanitary sewers. No sediment, debris, chemicals, or other substances shall be permitted to enter sanitary sewers without authorization of the receiving sanitary sewer service, and all possible Best Management Practices (BMPs) shall be taken to prevent such materials from entering any drain to watercourse.
- 1.9.3 Design Builder shall implement BMPs during construction activities as specified in the California *Storm Water Best Management Practices Handbook* (Stormwater Quality Task Force) and/or the *Manual of Standards for Erosion and Sediment Control Measures* (ABAG). Erosion and sedimentation control practices shall include installation of silt fences, straw wattle, soil stabilization, revegetation, and runoff control to limit increases in sediment in stormwater runoff, including but not limited to, detention basins, straw bales, silt fences, check dams, geofabrics, drainage swales, and sand bag dikes.
- 1.9.4 In the event that dewatering of excavations is required, Design Builder shall obtain the necessary permits for discharge of the dewatering effluent from the local jurisdiction. Design Builder shall be responsible for assuring that water quality of such discharge meets the appropriate permit requirements prior to any discharge. Design Builder shall be responsible for any discharge permit fees.

1.10 CONSTRUCTION AIDS

- 1.10.1 Design Builder and/or its Subcontractors shall furnish, install, maintain, and operate all construction aids required by it and its Subcontractors in the performance of the Work, except as otherwise provided herein. Such construction aids shall include elevators and hoists, cranes, temporary enclosures, swing staging, scaffolding and temporary stairs. In the event of conflict, Design Builder furnishing the equipment shall determine priorities in the best interest of the Project.
- 1.10.2 When sandblasting, spray painting, spraying of insulation, or other activities inconveniencing or dangerous to property or the health of employees or the public are in progress, the area of activity shall be enclosed adequately to contain the dust, over-spray, fumes, noxious odors, or other hazard. In the event there are no permanent enclosures of the area, or such enclosures are incomplete or inadequate, Design Builder shall provide suitable temporary enclosures.
- 1.10.3 Temporary shoring and bracing of construction shall be provided wherever necessary and shall be adequate for all loads to which the structure may be subject during construction including seismic, wind, materials, equipment and operation of same. Leave temporary shoring and bracing in place as long as may be required for safety. Contractor shall submit temporary shoring and bracing designs, including calculations, to structural engineer of record for review.

1.11 EROSION CONTROL

- 1.11.1 Design Builder shall prevent soil erosion on the Site and adjacent property resulting from its construction activities consistent with an approved Storm Water Pollution Prevention Plan ("SWPPP"). Effective measures shall be initiated prior to the commencement of clearing, grading, excavation, or other operations that will disturb the natural or existing protection.
- 1.11.2 Work shall be scheduled to expose areas subject to erosion for the shortest possible time, and natural vegetation shall be preserved to the greatest extent practicable. Temporary storage and construction buildings shall be located, and construction traffic routed, to minimize erosion. Temporary fast-growing vegetation or other suitable ground cover shall be provided as necessary to control runoff.

1.12 NOISE CONTROL

- 1.12.1 When required by OSHA Standards or otherwise recommended by best practices or equipment operation manuals, construction workers shall be provided with ear protection to operate equipment.
- 1.12.2 Design Builder shall take reasonable measures to avoid unnecessary noise. Such measures shall be appropriate for the normal ambient sound levels in the area during working hours. All construction machinery and vehicles shall be equipped with practical sound-muffling devices and operated in a manner to cause the least noise consistent with efficient performance of the Work. During construction activities on or adjacent to occupied buildings, and when appropriate, Design Builder shall erect screens or barriers effective in reducing noise in the building and shall conduct its operations to avoid unnecessary noise which might interfere with the activities of building occupants.
- 1.12.3 Ensure that all construction equipment and vehicles used for the Work are:

1.12.3.1 Maintained in good mechanical condition

1.12.3.2 Equipped with properly installed engine mufflers

1.13 TRAFFIC CONTROL

1.13.1 All traffic associated with the construction, including without limitation delivery and mail trucks, shall enter Design Builder's access gate and road. Design Builder shall provide signs directing construction and delivery traffic to this gate.

1.13.2 Design Builder shall take all necessary steps to minimize inconvenience to the general public throughout all work under this Contract. No driveways or private roads shall be blocked without notifying the property owner, and access must be restored during all non-working hours. Safe access must be maintained for pedestrian traffic throughout any public work area at all times.

1.13.3 At least one lane of traffic in each direction on all roads used at the Project must be kept open at all times unless prior approval is provided by the County and any affected agency. No roads shall be blocked or made inaccessible for any period, due to Design Builder's work, without prior written approval of the County and the affected agencies in the form of an encroachment permit. Design Builder shall not block or obstruct fire lanes at any time.

1.13.4 Traffic control shall be in accordance with the California Department of Transportation Traffic Manual. Design Builder shall submit its traffic control plans to the appropriate agency for approval prior to work in public streets. Traffic control shall include signs, warning lights, reflectors, barriers, and other necessary safety devices and measures, including sufficient flaggers to direct vehicular traffic through the construction areas. No material or equipment shall be stored/parked where it will interfere with the free and safe passage of public traffic, and at the end of each day's work, and at other times when construction operations are suspended for any reason, Design Builder shall remove all equipment and other obstructions from the public right-of-way.

1.13.5 Upon securing appropriate agency approval of the traffic control plans, Design Builder shall submit its Traffic Management Plan (TMP) including the agency-approved traffic control plans, to the County for review and acceptance. The TMP shall be fully aligned with the agency-approved traffic control plans. Design Builder shall not proceed with any work requiring or involving vehicular traffic from its own personnel, subcontractor personnel, or vendor personnel, without first having secured an accepted TMP from the County. The TMP shall address peak demand data, fully coordinated with mitigation measures, onsite parking, onsite staging, offsite parking, offsite staging, deliveries and off-haul, and emergency response access to the premises.

1.14 REMOVAL OF TEMPORARY FACILITIES AND CONTROLS

1.14.1 Remove temporary utilities, equipment, facilities, structures, and materials prior to final inspection.

1.14.2 Remove underground installations.

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

- 1.14.4 Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

1.15 INTERIM WAYFINDING

- 1.15.1 During construction or demolition, some recognizable features will be obscured, removed or replaced. Arrival points, wayfinding routes and department locations that are familiar to the public, visitors, vendors, and staff members will change. Interim and temporary graphics shall be designed and implemented to mitigate identity and wayfinding issues that will arise during demolition and construction.
- 1.15.2 In order to respond to the dynamic nature of the construction process, interim wayfinding shall utilize modular, movable, reusable and changeable signage elements that allow rapid deployment and removal. Cost effective materials selection and efficient use of materials shall be considered in the design process.

PART 2 - PRODUCTS - Not used.

PART 3 - EXECUTION - Not used.

END OF SECTION

SECTION 015200

CONSTRUCTION FACILITIES FOR CONTRACTOR AND COUNTY USE

PART 1 - GENERAL

1.1 SUMMARY

- 1.1.1 General: The Design Builder shall provide fully functional and serviced Field Office Space ready for Design Builder use at the Project site.
 - 1.1.1.1 The Field Office Space and contents shall be clean, safe, fully furnished, functional, complete, finished, and in like new condition ready for use and operation.
 - 1.1.1.2 The Field Office Space shall be installed and ready for occupancy and use twenty (20) days prior to the start of any construction activities at the site. Facilities shall be maintained by Design Builder throughout the duration of Project work at the site.
 - 1.1.1.3 The Field Office Space shall meet all the requirements of this Section.
 - 1.1.1.4 Property: The Office Space, furniture and equipment supplied by the Design Builder shall remain the property of the Design Builder.
- 1.1.2 At the Los Medanos Recovery Center Project site, the Design Builder shall provide the County's Field Office Space and contents, for the County's use during the Design and Construction of the Project.
 - 1.1.2.1 Where so provided, County Field Office Space shall meet the same requirements as for the Design Builder Field Office Space specified in this Section with regard to safety, finishes, condition, functionality, amenities, furnishings, and fixtures.
 - 1.1.2.2 Property: The Office Space, furniture and equipment supplied by the Design Builder shall remain the property of the Design Builder.
 - 1.1.2.3 Modifications: The County reserves the right to modify the Office Space and contents as may be deemed necessary by the County. Modifications to the standard Office/trailer space layout will be the responsibility of the Design Builder. Design Builder shall provide a plan of the proposed Office/trailer layout to the County representative for review and approval prior to delivery.

1.2 SUBMITTALS

- 1.2.1 The Design Builder shall submit to the County for its review prior to procurement or installation by Design Builder:
 - 1.2.1.1 Office Space Data: Manufacturer's descriptive data, technical descriptions, regulatory compliance, industry standards, installation, removal, and maintenance instructions.
 - 1.2.1.2 Equipment Data: Manufacturer data for each type of equipment, if directed by the County.

- 1.2.1.3 Furniture and Furnishings Data: Manufacturer data for each type of equipment, if directed by the County.

1.3 REGULATORY REQUIREMENTS

In addition to any other regulatory compliance required by the Contract Documents, if Design Builder provides Office Space in part or in whole by means of trailers, any such space shall display California Commercial Coach Insignia indicating that the entire complies with the California law including, but not necessarily limited to, the Construction and Fire Safety requirements of the California Code of Regulations.

PART 2 - PRODUCTS

2.1 OFFICE SPACE

- 2.1.1 General: Provide County Field Office Space of type, function, operation, capacity, size, complete with controls, safety devices, and accessories, for proper and durable installation. Partitions, walls, ceiling, and other interior and exterior surfaces shall be appropriately finished, including, but not limited to, trim, painting, wall base, floor covering, and suspended or similar ceiling; provide systems, components, units, nuts, bolts, screws, anchoring devices, fastening devices, washers, accessories, adhesives, sealants, and other items of type, grade, and class required for the particular use, not identified but required for a complete, weather-tight, appropriately operating, and finished installation.
- 2.1.2 Program: Space shall be maintained by Design Builder in good, proper, safe, clean, sanitary, and properly finished condition during the Contract.
- 2.1.2.1 Field Office space shall be located at the project building site. Exact location to be approved by the County.
- 2.1.2.2 County Field Office shall include, at a minimum, the following:
- 2.1.2.2.1 Two private offices, conference room for 18-20 people, workspace, storage area, kitchenette, and one unisex restroom.
 - 2.1.2.2.2 Each office and conference room shall include window, tack boards and whiteboards. Conference room shall include a 70" computer display monitor.
 - 2.1.2.2.3 Stairs, Platform (if applicable): Provide properly finished stairs, platforms, and ramps as necessary for ADA accessibility compliance.
 - 2.1.2.2.4 Doors: Provide two, 3-foot-wide exterior doors with keypad locksets; finished ramp, steps, and entry platform at each exterior door.
 - 2.1.2.2.5 HVAC system.
 - 2.1.2.2.6 Lighting: 65 foot-candles illumination minimum at any point, at 30 inches above finished floor throughout from LED light source.
 - 2.1.2.2.7 Electrical Outlets: Provide 1 duplex outlet evenly spaced every 12 linear horizontal feet of wall face, and electrical service ready for use. Include dedicated outlet for office copier.

- 2.1.2.2.8 Telephones and Telephone Outlets: Provide 6 telephone lines wired, connected to telephone utility service, and ready for use, and 6 telephone instruments, each with 2-line capability, speed dial, voice mail, and hands-free feature; locate each outlet as directed by the County.
- 2.1.2.2.9 Data and Internet: Provide high-speed internet line serving 8 outlets, wired, connected to internet service provider, and ready for use; locate each outlet as directed by the County. Provide Wi-Fi service with password protected internet access.

2.2 OFFICE SPACE ITEMS

2.2.1 General: Provide the Office Space with the following:

- 2.2.1.1 Desks: Quantity 6, 36 inches by 72 inches, 29" high, laminated plastic top, 1 or 2 locking file drawers, single pedestal; provide 2 keys.
- 2.2.1.2 Tables: Quantity 12, 36 inches by 60 inches, 29 inches high, laminated plastic top tables; one at each office, workspace and 6 for conference table.
- 2.2.1.3 Chairs: Quantity 24, ergonomic rolling task chairs. Fully adjustable with swivel, seat cushion and arms, one at each desk and workspace and 20 at the conference table.

2.2.2 Furniture and Equipment: Provide in the space located to effect efficient and logical use.

- 2.2.2.1 Bookshelf: Quantity 4, 12 inches deep, by 72 inches high, 42 inches wide.
- 2.2.2.2 Storage Cabinet: Quantity 1, 24 inches deep, by 72 inches high, 42 inches wide.
- 2.2.2.3 Small waste and recycling Baskets: Quantity 7, one at each desk and two for conference room, one in toilet room.
- 2.2.2.4 Large waste and Recycling Baskets: Quantity 1 large of each.

2.2.3 Maintenance: The Design Builder shall purchase service agreements for each unit of equipment for the duration of the project plus two (2) months, and shall maintain all equipment in proper working condition. Service agreements shall include provision or replacement of filters and other items required to effect proper unit use.

- 2.2.3.1 Unlimited Service Call.
- 2.2.3.2 Same Day Response.
- 2.2.3.3 All parts, labor, preventative maintenance and mileage.
- 2.2.3.4 System training and setup.
- 2.2.3.5 Sanitary Holding tanks (if applicable): 1, each shall include hook-up and removal; shall be pumped 1 time a week or as necessary to prevent overflow.

2.3 UTILITY AND SERVICES

- 2.3.1 Electrical Service: Provide all proper connections and continuously pay for service for the duration of the Work.
- 2.3.2 Data/Internet/Wi-Fi Service: Design Builder shall provide highspeed data, internet access, and Wi-Fi service for DB, County and Consultant use.
- 2.3.3 Water Service: Provide all proper connections and continuously pay for service for the duration of the Work.

2.4 FINISHES

- 2.4.1 General: Manufacturer standard finish system over surfaces properly cleaned, pretreated, and prepared to obtain proper bond; all visible surfaces shall be coated.
- 2.4.2 Finish: Color as selected by the County from manufacturer standard palette.

PART 3 - EXECUTION

3.1 INSTALLATION

- 3.1.1 General: Prepare area and affected items to receive the Work. Set Work accurately in location, alignment, and elevation; rigidly, securely, and firmly anchor to appropriate structure; install plumb, straight, square, level, true, without racking, rigidly anchored to solid blocking or substrate; provide appropriate type and quantity of reinforcements, fasteners, adhesives, self-adhesive and other tapes; lubricants, coatings and accessories, as required for a complete, structurally rigid, stable, sound, and finished installation, in accordance with manufacturer's published instructions. Moving parts shall be installed without binding, looseness, noise, and the like.
- 3.1.2 Installation: If a trailer, install in accordance with 25 CCR 3.2.3. Jack up Space and level both ways; mount on proper concrete piers with all load off wheels; provide required tie down and accessories per Section 4368 of referenced 25 CCR 3.2.3.
- 3.1.3 Rejected Work: Work, materials, unit, items and systems, not accepted by the County shall be deemed rejected; and shall be removed and replaced with proper and new at no cost to the County.
- 3.1.4 Standard: Comply with manufacturer's published instructions.
- 3.1.5 Location: To be determined.
- 3.1.6 Fire Resistance: Construct and install in accordance with UL requirements.
- 3.1.7 Maintenance: The Design Builder shall maintain Space and adjacent areas in a safe, clean and hygienic condition throughout the duration of the Work, and as directed by the County. Repair or replace furniture or other items, as directed by the County. Remove unsafe, damaged, or broken furniture, or similar items, and replace with safe and proper items. The Design Builder shall pay cost of all services, repair, and maintenance, or replacement of each item.

- 3.1.8 Janitorial Service: At frequency of two (2) times each week, minimum (or as directed by County), provide professional janitorial service, including, but not by limitation, trash, recyclables, waste paper baskets, fill paper dispensers; clean, and dust all furniture, files, and the like; and sweep and mop resilient and similar flooring; vacuum carpeting and similar flooring.
- 3.1.9 Removal: Properly remove the Office Space and contents from the Facility upon completion of the Contract, or as directed by the County in writing. Patch and repair affected areas; replace damaged items with new items. Carefully and properly inventory, clean, pack, store, and protect County property; submit County property to the County at a date, time and location as directed by the County.

END OF SECTION

SECTION 015526

TRAFFIC CONTROL

PART 1 - GENERAL

1.1. RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General Conditions and other Division 1 Specification Sections, apply to this Section.

1.2. SECTION INCLUDES

- 1.2.1. Construction parking control.
- 1.2.2. Flagmen.
- 1.2.3. Flares and lights.
- 1.2.4. Haul routes.
- 1.2.5. Traffic signs and signals.
- 1.2.6. Removal.

1.3. GENERAL

- 1.3.1. Comply with CEQA, Notice of Exemption requirements for this Project including, but not limited to, use of Traffic Best Management Practices.

1.4. SIGNS, SIGNALS, AND DEVICES

- 1.4.1. Traffic Control Signals: As approved by local jurisdictions.
- 1.4.2. Traffic Cones and Drums, Flares and Lights: As approved by local jurisdictions.
- 1.4.3. Flagman Equipment: As approved by local jurisdictions.

1.5. CONSTRUCTION PARKING CONTROL

- 1.5.1. Control vehicular parking to prevent interference with public and Health Services staff traffic and parking, access by emergency vehicles, and Owner's operations.
- 1.5.2. Monitor parking of delivery, visitor, and construction personnel's vehicles. Maintain vehicular access to and through parking areas.
- 1.5.3. Prevent parking on or adjacent to access roads or in non-designated areas.

1.6. FLAGMEN

Provide trained and equipped flagmen to regulate traffic when construction operations or traffic encroach on public traffic lanes.

1.7. FLARES AND LIGHTS

Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.

1.8. HAUL ROUTES

1.8.1. Consult with authority having jurisdiction in establishing public thoroughfares to be used for haul routes and site access.

1.8.2. Confine construction traffic to designated haul routes.

1.8.3. Provide traffic control at critical areas of haul routes to regulate traffic, to minimize interference with public traffic.

1.9. TRAFFIC SIGNS AND SIGNALS

1.9.1. At approaches to site and on site, install at crossroads, detours, parking areas and elsewhere as needed to direct construction and affected public traffic as approved by Health Services Office.

1.9.2. Install and operate traffic control signals to direct and maintain orderly flow of traffic in areas under Trade Contractor's control, and areas affected by General Contractor's operations.

1.9.3. Relocate as Work progresses, to maintain effective traffic control.

1.10. REMOVAL

1.10.1. Remove equipment and devices when no longer required.

1.10.2. Repair damage caused by installation.

1.10.3. Remove post settings to a depth of 2-feet (600 mm).

PART 2 - PRODUCTS – NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION

SECTION 016000

PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- 1.1.1 This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and product substitutions.
- 1.1.2 Related Sections include the following:
 - 1.1.2.1 Section 014200 (References and Definitions) for applicable industry standards for products specified.
 - 1.1.2.2 Section 017700 (Closeout Procedures) for submitting warranties for Contract closeout.
 - 1.1.2.3 Section 013000 (Submittal Procedures)

1.2 DEFINITIONS

- 1.2.1 Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1.2.1.1 Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
 - 1.2.1.2 New Products: Items that have not previously been incorporated into another project, facility, or location, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.
- 1.2.2 Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Design Builder.
 - 1.2.2.1 The following are not considered substitutions:
 - 1.2.2.1.1 Revisions to Contract Documents requested by the County Representative.
 - 1.2.2.1.2 Specified options of products and construction methods included in Contract Documents.
 - 1.2.2.1.3 The Design Builder's determination of and compliance with governing regulations and orders issued by governing authorities.

- 1.2.2.2 Design Builder will be held responsible for: (a) all costs and claims arising from any cost or schedule impact resulting from the County's approval of a requested substitution and (b) all costs and claims arising from any cost or schedule impact resulting from any substitution not approved by the County.

1.3 SUBMITTALS

- 1.3.1 Product List: Submit a list, in tabular form, showing specified products. Include generic names of products required. Include manufacturer's name and proprietary product names for each product.

- 1.3.1.1 Coordinate product list with Design Builder's Project Master Schedule and the Submittals Schedule.

- 1.3.1.2 Form: Tabulate information for each product under the following column headings:

- 1.3.1.2.1 Specification Section number and title.
 - 1.3.1.2.2 Generic name used in the Contract Documents.
 - 1.3.1.2.3 Proprietary name, model number, and similar designations.
 - 1.3.1.2.4 Manufacturer's name and address.
 - 1.3.1.2.5 Supplier's name and address.
 - 1.3.1.2.6 Installer's name and address.
 - 1.3.1.2.7 Projected delivery date or time span of delivery period.
 - 1.3.1.2.8 Identification number on Project Master Schedule network.
 - 1.3.1.2.9 Identification of items that require early submittal approval for scheduled delivery date. (Long lead items)

- 1.3.1.3 Product List: Within sixty (60) Days after date of Notice to Proceed, submit electronic copy and three (3) hard copies of product list. Include a written explanation for omissions of data and for variations from Contract requirements.

- 1.3.1.4 County's Action: County will respond in writing to Design Builder within fourteen (14) Days of receipt of each product list. County's response will include a list of unacceptable product selections and a brief explanation of reasons for this action. County's response, or lack of response, does not constitute a waiver of requirement to comply with the Contract Documents.

- 1.3.2 Substitution Requests: Submit electronic copy and three (3) copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

- 1.3.2.1 Substitution Request Form: Use form provided by County included at the end of this Section 016000.

- 1.3.2.2 Documentation: Show compliance with requirements for substitutions and the following, as applicable:

- 1.3.2.2.1 Statement indicating why specified material or product cannot be provided.
 - 1.3.2.2.2 Coordination information, including a list of changes or modifications needed on other parts of the Work and to construction performed by County and separate contractors, which will be necessary to accommodate proposed substitution.
 - 1.3.2.2.3 Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 - 1.3.2.2.4 Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - 1.3.2.2.5 Samples, where applicable or requested.
 - 1.3.2.2.6 List of similar installations for completed projects with project names and addresses and names and addresses of owners.
 - 1.3.2.2.7 Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - 1.3.2.2.8 Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to County Representative.
 - 1.3.2.2.9 Detailed comparison of Design Builder's Project Master Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
 - 1.3.2.2.10 Cost information, including a proposal of change, if any, in the Contract Sum.
 - 1.3.2.2.11 Design Builder's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
 - 1.3.2.2.12 Design Builder's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
- 1.3.2.3 County's Action: If necessary, County will request additional information or documentation for evaluation within seven (7) Days of receipt of a request for substitution. County will notify Design Builder of acceptance or rejection of proposed substitution within twenty-one (21) Days of receipt of request, or

seven (7) Days of receipt of additional information or documentation, whichever is later.

1.3.2.3.1 Form of Acceptance: Substitution Request form indicating acceptance from the County Representative.

1.3.2.3.2 Use product specified if County cannot make a decision on use of a proposed substitution within time allocated.

1.3.2.3.3 If any proposed substitution is deemed by the County Representative to be unacceptable, the specified material or equipment shall be provided.

1.3.2.3.4 The decision of the County Representative shall be final.

1.4 QUALITY ASSURANCE

1.4.1 Source Limitations: To the fullest extent possible, provide products of the same kind, from a single source.

1.4.2 Compatibility of Options: If Design Builder is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.

1.4.3 Underwriter's Laboratories, Inc. ("UL") Label: Where laboratory standards have been established and label service is available, materials and equipment for shall bear the appropriate UL, Warnock-Hersey, or Factory Mutual label.

1.4.4 Manufacturers' Trademarks and Names: County Representative reserves the right to review and request the removal or redesign of manufacturers' trademarks and names on items of material and equipment that will be exposed to view in the completed Work. Such removal or redesign shall be completed with no adjustment of the Contract Sum.

1.4.5 If a proposed substitution requires that portions of the Work be redesigned or removed to accommodate the substituted item, submit design and engineering calculations prepared by a California licensed design professional.

1.4.6 Samples may be required for substitutions. Tests required by County Representative for the determination of quality and utility shall be made by Design Builder's Testing Laboratory and at the expense of Design Builder, with acceptance of the test procedure first given by County Representative.

1.4.7 In reviewing the supporting data submitted for substitutions, County Representative will use, for purposes of comparison, all the characteristics of the specified material or equipment as they appear in the manufacturer's published data, even though all the characteristics may not have been particularly mentioned in the Specifications. If more than two submissions of supporting data are required, the cost of reviewing the additional supporting data shall be borne by Design Builder; and County will deduct the costs from the Contract Sum.

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

1.5.1 General: Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.

1.5.2 Delivery and Handling:

- 1.5.2.1 Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
- 1.5.2.2 Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
- 1.5.2.3 Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
- 1.5.2.4 Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
- 1.5.2.5 Reject delivery of damaged or defective items. Promptly remove damaged or defective products from the Project site and replace with new at no change in Contract Sum.

1.5.3 Storage:

- 1.5.3.1 Store products to allow for inspection and measurement of quantity or counting of units.
- 1.5.3.2 Store materials in a manner that will not endanger Project structure.
- 1.5.3.3 Store products that are subject to damage by the elements under cover in a weather tight enclosure above ground, with ventilation adequate to prevent condensation.
- 1.5.3.4 Store cementitious products and materials on elevated platforms.
- 1.5.3.5 Store sand, rock, or aggregate materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.
- 1.5.3.6 Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
- 1.5.3.7 Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
- 1.5.3.8 Protect stored products from damage.
- 1.5.3.9 Periodically inspect stored products to assure that products are maintained under specified conditions and are free from damage and deterioration.

- 1.5.3.10 The use of stairways and mechanical or electrical rooms for storage of materials is prohibited.

1.5.4 Imported Materials and Products:

- 1.5.4.1 Imported materials and products require special handling in shipping crates. Document and examine materials at the following points:

- 1.5.4.1.1 At the origination point prior to crating.

- 1.5.4.1.2 At the port of embarkation (for damage to crates).

- 1.5.4.1.3 At the port of entry (for damage to crates).

- 1.5.4.1.4 Immediately following delivery to the Site.

- 1.5.4.2 If crates show signs of damage, open them and inspect materials and products.

- 1.5.4.3 Reject damaged or defective products or materials and replace promptly.

- 1.5.4.4 Provide detailed Bill of Goods at each point listed above, indicating quantity and condition of each item. At port locations, Bill of Goods may be accepted unless damage is observed.

1.6 PRODUCT WARRANTIES

- 1.6.1 Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Design Builder of obligations under requirements of the Contract Documents.

- 1.6.1.1 Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to County.

- 1.6.1.2 Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for County.

- 1.6.2 Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.

- 1.6.2.1 Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.

- 1.6.2.2 Specified Form: When specified forms are included with the Specifications, prepare a written document using appropriate form properly executed.

- 1.6.3 Submittal Time: Comply with requirements in Section 017700 (Closeout Procedures).

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

2.1.1 General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.

2.1.1.1 Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.

2.1.1.2 Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.

2.1.1.3 County reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.

2.1.1.4 Where products are accompanied by the term “as selected,” County will make selection.

2.1.1.5 Where products are accompanied by the term “match sample,” sample to be matched is County’s.

2.1.1.6 Descriptive, performance, and reference standard requirements in the Specifications establish “salient characteristics” of products.

2.1.1.7 Or Equal: Where products are specified by manufacturer’s name and accompanied by the term “or equal,” comply with provisions in Article 2.2, Product Substitutions, to obtain approval for use of an unnamed product.

2.1.2 Product Selection Procedures:

2.1.2.1 Product: Where Specifications name a single product and manufacturer, and indicate “no known equal,” provide the named product that complies with requirements.

2.1.2.2 Manufacturer/Source: Where Specifications name a single manufacturer or source, and indicates “no known equal,” provide a product by the named manufacturer or source that complies with requirements.

2.1.2.3 Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.

2.1.2.4 Manufacturers: Where Specifications include a list of manufacturers’ names, provide a product by one of the manufacturers listed that complies with requirements.

2.1.2.5 Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches County’s sample. County’s decision on whether a proposed product matches will be final.

2.1.2.5.1 When approval of a color, pattern or texture sample match by the County is required, provide the best match that complies with the specification and also provide the two nearest in the selection range to either direction from the same manufacturer/supplier. Application examples are:

2.1.2.5.1.1 *Color* – shall have two color hues or shades darker and two color hues or shades lighter. Total of five selections available.

2.1.2.5.1.2 *Pattern* – shall have two patterns that are less dense (or smaller) and two patterns that are more dense (or larger). Total of five selections available.

2.1.2.5.1.3 *Texture* – shall have two textures that are less rough (or smaller) and two patterns that are more rough (or larger). Total of five selections available.

2.1.2.5.2 If no product available within specified category matches and complies with other specified requirements, comply with provisions in Article 2.2 (Product Substitutions) below for proposal of product.

2.1.2.6 Visual Selection Specification: Where Specifications include the phrase “as selected from manufacturer’s colors, patterns, textures” or a similar phrase, select a product that complies with other specified requirements.

2.1.2.6.1 Standard Range: Where Specifications include the phrase “standard range of colors, patterns, textures” or similar phrase, County will select color, pattern, density, or texture from manufacturer’s product line that does not include premium items.

2.1.2.6.2 Full Range: Where Specifications include the phrase “full range of colors, patterns, textures” or similar phrase, County will select color, pattern, density, or texture from manufacturer’s product line that includes both standard and premium items.

2.2 PRODUCT SUBSTITUTIONS

2.2.1 Timing: County will consider requests for substitution if received within thirty (30) Days after the Notice to Proceed. Requests received after that time may be considered or rejected at discretion of County.

2.2.2 Regulatory Agency Approval of Product Substitutions: After regulatory agency approval of the Construction Drawings, no substitutions that would require additional regulatory agency approval¹ shall be allowed except as may be deemed necessary by the County Representative because:

2.2.2.1 Previously specified or approved manufactured products are no longer manufactured.

¹As required under Section 7-153 of the California Building Standards Administrative Code (C.C.R., Title 24, Part 1).

- 2.2.2.2 The substitution is required due to a County-initiated Change Order.
- 2.2.2.3 The substitution is in the best interests of the County.
- 2.2.3 Conditions: County will consider Design Builder's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, County will return requests without action, except to record noncompliance with these requirements:
 - 2.2.3.1 Requested substitution offers County a substantial advantage in cost, time, durability, maintainability, energy conservation, environmental impact, or other benefits.
 - 2.2.3.2 Requested substitution is consistent with the Contract Documents and will produce required results.
 - 2.2.3.3 Substitution request is fully documented and properly submitted.
 - 2.2.3.4 If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
 - 2.2.3.5 One or more of the following conditions must be satisfied:
 - 2.2.3.5.1 The specified product or method of construction cannot be provided within the Contract Time. The request for substitution will not be considered if the product or method cannot be provided due to the Design Builder's failure to pursue the Work promptly or coordinate activities properly.
 - 2.2.3.5.2 The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
 - 2.2.3.5.3 The specified product or method of construction cannot be provided in a manner that is compatible with other materials, and where the Design Builder certifies that the substitution will overcome the incompatibility.
 - 2.2.3.5.4 The specified product or method of construction cannot be coordinated with other materials, and where the Design Builder certifies that the proposed substitution can be coordinated.
 - 2.2.3.5.5 The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Design Builder certifies that the proposed substitution can provide the required warranty.
 - 2.2.3.5.6 The specified product or material has been discontinued or is no longer available.
 - 2.2.3.5.7 The proposed substitution exceeds minimum requirements of the Contract Documents.

2.2.3.6 The County's acceptance of any substitution shall not relieve the Design Builder of the responsibility to comply with the requirements of the Contract Documents.

2.2.3.7 The Design Builder shall be responsible for all costs of any changes resulting from substitutions that affect other parts of the Work or the work of separate Contractors.

PART 3 - EXECUTION – NOT USED

END OF SECTION

**SUBSTITUTION NO.**

Page 1 of 3

SUBSTITUTION REVIEW FORM

Date of Request
from Design
Builder: _____

Date County
Response due to
Design Builder: _____

Subject: _____

PRODUCT INFORMATION		
DESCRIPTION	SPECIFIED PRODUCT	REQUESTED SUBSTITUTION
Spec Section No.		
Title		
Generic Name used in Contract Documents		
Proprietary Name		
Model No. and Similar Designation		
Manufacturer's Name and Address		
Supplier's Name and Address		
Installer's Name and Address		
Projected Delivery Date		
Schedule ID Number		
Items require early submittal approval for scheduled delivery date		

CONDITION:

County will consider Design Builder's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, County will return requests without action, except to record noncompliance with these requirements:

- ☐ Requested substitution offers County a substantial advantage in cost, time, energy conservation, or other benefits.
- ☐ Requested substitution is consistent with the Contract Documents and will produce required results.
- ☐ Substitution request is fully documented and properly submitted.
- ☐ If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

**One or more of the following conditions must be satisfied:**

- ☐ The specified product or method of construction cannot be provided within the Contract Time. The request for substitution will not be considered if the product or method cannot be provided due to the Design Builder's failure to pursue the Work promptly or coordinate activities properly.
- ☐ The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
- ☐ The specified product or method of construction cannot be provided in a manner that is compatible with other materials, and where the Design Builder certifies that the substitution will overcome the incompatibility.
- ☐ The specified product or method of construction cannot be coordinated with other materials, and where the Design Builder certifies that the proposed substitution can be coordinated.
- ☐ The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Design Builder certifies that the proposed substitution can provide the required warranty.
- ☐ The specified product or material has been discontinued or is no longer available.
- ☐ The proposed substitution exceeds minimum requirements of the Contract Documents.

REASON FOR SUBSTITUTION:**COORDINATION INFORMATION:****PRODUCT COMPARISON:**

**SUBSTITUTION NO.**

Page 3 of 3

SIMILAR INSTALLATIONS:**LEED:****ATTACHMENTS:**

- ☐ Product Data, including drawings and descriptions of products and fabrication and installation procedures.
- ☐ Samples, where applicable or requested.
- ☐ Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
- ☐ Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to County's Representative.
- ☐ Detailed comparison of Design Builder's Contract Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
- ☐ Cost information, including a proposal of change, if any, in the Contract Sum.

Response By_____
Vanir Signature_____
Date_____
County Signature_____
Date

The above response will be issued to Design Builder by the due date indicated above, unless otherwise stated.

SECTION 017123

FIELD ENGINEERING

PART 1 - GENERAL

1.1 SUMMARY

1.1.1 This section describes field engineering services to be done by Design Builder and by County, and procedures to accomplish these services.

1.1.2 Related Documents.

Document 003130 (Geotechnical Data and Existing Conditions)

1.1.3 Related Sections.

1.1.3.1 Section 011110 (Summary of Work).

1.1.3.2 Section 011114 (Summary of Work - Design Services and Deliverables).

1.1.3.3 Section 013119 (Project Meetings).

1.2 RESPONSIBILITIES

1.2.1 Design Builder shall provide field engineering services; establish grades, lines, and levels for Work by use of recognized engineering survey practices.

1.2.2 Design Builder shall employ California licensed civil engineer or land surveyor for horizontal and vertical control.

1.2.3 Design Builder shall locate and maintain reference points for horizontal and vertical control and shall provide starting points for the Work.

1.3 PROCEDURES

Design Builder shall request assistance from County two (2) Business Days prior to date any assistance is required.

PART 2 - PRODUCTS - Not used.

PART 3 - EXECUTION - Not used.

END OF SECTION

SECTION 017300

EXECUTION REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- 1.1.1 This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:

- 1.1.1.1 Construction layout.
- 1.1.1.2 Field engineering and surveying.
- 1.1.1.3 General installation of products.
- 1.1.1.4 Coordination of County-installed products.
- 1.1.1.5 Progress cleaning.
- 1.1.1.6 Starting and adjusting.
- 1.1.1.7 Protection of installed construction.
- 1.1.1.8 Correction of the Work.

- 1.1.2 Related Sections include the following:

- 1.1.2.1 Document 003130 (Geotechnical Data and Existing Conditions).
- 1.1.2.2 Section 011110 (Summary of Work).
- 1.1.2.3 Section 011400 (Work Restrictions) regarding measures for security, noise, dust, and infection control.
- 1.1.2.4 Section 013100 (Project Management and Coordination) for procedures for coordinating field engineering with other construction activities.
- 1.1.2.5 Section 013119 (Project Meetings).
- 1.1.2.6 Section 013000 (Submittal Procedures) for submitting surveys.
- 1.1.2.7 Section 017123 (Field Engineering).
- 1.1.2.8 Section 017329 (Cutting and Patching) for procedural requirements for cutting and patching necessary for the installation or performance of other components of the Work.
- 1.1.2.9 Section 017700 (Closeout Procedures) for submitting final property survey with Project Record Documents, recording of County-accepted deviations from indicated lines and levels, and final cleaning.

1.2 SUBMITTALS

- 1.2.1 Qualification Data: For land surveyor or professional engineer.
- 1.2.2 Certificates: Submit certificate signed by land surveyor or professional engineer certifying that location and elevation of improvements comply with requirements.
- 1.2.3 Contingency Plan: Submit six copies within sixty (60) Days of Notice to Proceed for emergency plan(s) should an existing utility be damaged.

1.3 QUALITY ASSURANCE

- 1.3.1 Land Surveyor Qualifications: A professional land surveyor who is legally qualified to practice in California and who is experienced in providing land-surveying services of the kind indicated.
- 1.3.2 Installer Qualifications: Installers shall have a minimum of five (5) years successful experience installing items similar to those required for Project, except for individuals in training under the direct supervision of an experienced installer.
- 1.3.3 If cleaning and protection is not performed to the satisfaction of the County Representative, the County reserves the right to have cleaning performed by others at the Design Builder's expense.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

3.1 EXAMINATION

- 3.1.1 Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and locations of underground utilities and other construction affecting the Work.
 - 3.1.1.1 Before construction, verify the locations and invert elevations at points of connection of gas, sanitary sewer, storm sewer, fire water, and water-service piping; and underground electrical and communication/data services.
 - 3.1.1.2 Furnish location data for work related to Project that must be performed by public utilities serving Project site.
 - 3.1.1.3 Locate all known existing utilities and shut-off devices before proceeding with construction operations that may cause damage to such installations. Existing utilities shall be kept in service where possible and damage to them shall be repaired with no adjustment of Contract Sum.
 - 3.1.1.4 If any other structures or utilities are encountered, request County Representative to provide direction on how to proceed with the Work.
 - 3.1.1.5 If any structure or utility is damaged, take appropriate action to ensure the safety of persons and property.
 - 3.1.1.6 Submit a contingency plan for safety and emergency repair of all utilities to County Representative for approval prior to commencing Work.
- 3.1.2 Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.

- 3.1.2.1 Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
 - 3.1.2.1.1 Description of the Work.
 - 3.1.2.1.2 List of detrimental conditions, including substrates.
 - 3.1.2.1.3 List of unacceptable installation tolerances.
 - 3.1.2.1.4 Recommended corrections.
- 3.1.2.2 Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- 3.1.2.3 Examine rough-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
- 3.1.2.4 Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
- 3.1.2.5 Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 MANUFACTURERS' INSTRUCTIONS

- 3.2.1 Manufacturer's Recommendations: When work is specified to comply with manufacturers' recommendations or instructions, distribute copies to persons involved, and maintain one set in field office. Conform to requirements specified in Section 013000 (Submittal Procedures) for submittal of recommendations or instructions to County; submit to County only where specified or where specifically requested.
- 3.2.2 Perform work in accordance with details of recommendations and instructions and specified requirements.
 - 3.2.2.1 Should a conflict exist between Specifications and recommendations or instructions consult with County.
- 3.2.3 Where manufacturer's information notes special recommendations in addition to installation instructions, comply with both recommendations and instructions.

3.3 PREPARATION

- 3.3.1 Existing Utility Information: Furnish public utilities with information that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with County Representative.
- 3.3.2 Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction

progress to avoid delaying the Work. Allow for cutting and patching to avoid delaying Work.

- 3.3.3 Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- 3.3.4 Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a Request for Information to County Representative. Include a detailed description of problem or issue encountered, together with recommendations for changing the Contract Documents. Submit requests via a "Request for Information."

3.4 CONSTRUCTION LAYOUT

- 3.4.1 Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify County Representative promptly.
- 3.4.2 General: Engage a land surveyor or professional engineer to lay out the Work using accepted surveying practices.
 - 3.4.2.1 Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
 - 3.4.2.2 Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
 - 3.4.2.3 Inform installers of lines and levels to which they must comply.
 - 3.4.2.4 Check the location, level, and plumb of every major element as the Work progresses.
 - 3.4.2.5 Notify County Representative when deviations from required lines and levels exceed allowable tolerances.
 - 3.4.2.6 Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction, industry standard, or as directed by the County.
- 3.4.3 Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and invert elevations.
- 3.4.4 Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.
- 3.4.5 Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by County Representative.

3.5 FIELD ENGINEERING

- 3.5.1 Identification: Design Builder shall pothole and provide surveys that identify reference points for horizontal and vertical control which shall provide basis for establishing the starting points for the project Work.
- 3.5.2 Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
 - 3.5.2.1 Do not change or relocate existing benchmarks or control points without prior written approval of County Representative. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to County Representative before proceeding.
 - 3.5.2.2 Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.
- 3.5.3 Benchmarks: Establish and maintain a minimum of two permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.
 - 3.5.3.1 Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
 - 3.5.3.2 Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
 - 3.5.3.3 Remove temporary reference points when no longer needed. Restore marked construction to its original condition.
- 3.5.4 Final Property Survey: Prepare a final property survey showing significant features (real property) for Project. Include on the survey a certification, signed by land surveyor or professional engineer, that principal metes, bounds, lines, and levels of Project are accurately positioned as shown on the survey.
 - 3.5.4.1 Show boundary lines, monuments, streets, site improvements and utilities, existing improvements and significant vegetation, adjoining properties, acreage, grade contours, and the distance and bearing from a site corner to a legal point.
 - 3.5.4.2 At Completion, have the final property survey recorded by or with authorities having jurisdiction as the official "property survey."

3.6 INSTALLATION

- 3.6.1 Pre-Installation Meetings: Installers and suppliers are to attend pre-installation meetings scheduled and run by Design Builder.
- 3.6.2 General: Locate the Work and components of the Work accurately, in correct alignment and elevation.

- 3.6.2.1 Make vertical work plumb and make horizontal work level.
- 3.6.2.2 Install components to maximize space available for maintenance and ease of removal for replacement.
- 3.6.2.3 Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated.
- 3.6.2.4 Doors and access panels shall be kept clear.
- 3.6.2.5 Before beginning any installation, make provisions to avoid interference.
- 3.6.2.6 Relocate installed work that does not provide adequate accessibility.
- 3.6.2.7 Maintain minimum headroom clearance of nine (9) feet in spaces without a suspended ceiling.
- 3.6.2.8 Do not obstruct spaces and installations that are required to be clear by California Building Code requirements.
- 3.6.3 Precedence of Installation Requirements:
 - 3.6.3.1 Descriptive specification.
 - 3.6.3.2 Product listing, classification or certification.
 - 3.6.3.3 Manufacturer's installation instructions.
 - 3.6.3.4 Trade association or referenced standards.
 - 3.6.3.5 Most common trade practices.
- 3.6.4 Comply with manufacturer's written instructions and recommendations for installing products in applications indicated unless more explicit or stringent requirements are contained in Contract Documents.
- 3.6.5 Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Completion.
- 3.6.6 Allow for building movement including thermal expansion and contraction.
- 3.6.7 Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- 3.6.8 Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
 - 3.6.8.1 Maximum noise level for trenchers, graders, and trucks shall not exceed ninety (90) dBA at fifty (50) feet as measured under the noisiest operating conditions. For other equipment, noise levels shall not exceed eighty-five (85) dBA at fifty (50) feet.

- 3.6.8.2 Jackhammers shall be equipped with exhaust mufflers and steel muffing sleeves. Air compressors should be of a quiet type such as a “whisperized” compressor.
- 3.6.8.3 Machines and equipment shall not be left idling.
- 3.6.8.4 Where commercially feasible, electric power shall be used in lieu of internal combustion engine power wherever possible.
- 3.6.8.5 Schedule noisy operations so as to minimize their duration at any given location.
- 3.6.8.6 Equipment shall be properly maintained to reduce noise from excessive vibration, faulty mufflers, or other sources.
- 3.6.8.7 Provide noise barriers to comply with above criteria.
- 3.6.8.8 Refer to Section 011400 (Work Restrictions), for additional noise control requirements.
- 3.6.9 Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check shop drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- 3.6.10 Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.
 - 3.6.10.1 Where mounting heights are not indicated, install individual components at standard mounting heights recognized within the industry for the particular application and as required by applicable Code requirements for accessibility. Refer questionable mounting height decisions to the County Representative for final decision.
 - 3.6.10.2 Allow for building movement, including thermal expansion and contraction.
 - 3.6.10.3 Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, blocking, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
 - 3.6.10.4 Comply with the California Building Code requirements for earthquake Seismic Zone 4.
- 3.6.11 Make joints of uniform width. Where joint locations in exposed work are not indicated, produce sketch to arrange joints for the best visual effect and submit to the County Representative for review. Fit exposed connections together to form hairline joints.
- 3.6.12 Use products, cleaners, and installation materials that are not considered hazardous.
- 3.6.13 Isolate each part of the completed construction from incompatible material to prevent deterioration.

3.7 COUNTY-INSTALLED PRODUCTS

- 3.7.1 Site Access: Provide access to Project Site for County's construction and installation forces.
- 3.7.2 Coordination: Coordinate construction and operations of the Work with work performed by County's forces.
 - 3.7.2.1 Contract Schedule: Inform County of Design Builder's preferred contract Schedule for County's portion of the Work. Adjust Contract Schedule based on a mutually agreeable timetable. Notify County if changes to schedule are required due to differences in actual construction progress.
 - 3.7.2.2 Pre-Installation Conferences: Include County's forces at pre-installation conferences covering portions of the Work that are to receive County's work. Attend pre-installation conferences conducted by County's forces if portions of the Work depend on County's construction.

3.8 PROGRESS CLEANING

- 3.8.1 Clean Project site and work areas at frequent intervals, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
 - 3.8.1.1 Comply with requirements in CFC Article 87 for removal of combustible waste materials and debris.
 - 3.8.1.2 Do not hold materials more than seven (7) days during normal weather or three (3) Days if the temperature is expected to rise above eighty degrees Fahrenheit (80°F).
 - 3.8.1.3 Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- 3.8.2 Maintain Project site free of waste materials and debris.
- 3.8.3 Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 3.8.3.1 Remove liquid spills promptly.
 - 3.8.3.2 Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate. Refer to Section 011400 (Work Restrictions) regarding dust control requirements.
- 3.8.4 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.
- 3.8.5 Remove debris from concealed spaces before enclosing the space.

- 3.8.6 Clean exposed surfaces in finished areas and protect as necessary to ensure protection from damage and deterioration at time of Completion.
- 3.8.7 Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- 3.8.8 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.
- 3.8.9 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.
- 3.8.10 Manage and Supervise construction operations and take appropriate measures 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. Where applicable, such exposures include, but are not limited to, the following:
 - 3.8.10.1 Excessive static or dynamic loading.
 - 3.8.10.2 Excessive internal or external pressures.
 - 3.8.10.3 Excessively high or low temperatures.
 - 3.8.10.4 Thermal shock.
 - 3.8.10.5 Excessively high or low humidity.
 - 3.8.10.6 Air contamination or pollution.
 - 3.8.10.7 Water or ice.
 - 3.8.10.8 Solvents.
 - 3.8.10.9 Chemicals.
 - 3.8.10.10 Light.
 - 3.8.10.11 Puncture.
 - 3.8.10.12 Abrasion.
 - 3.8.10.13 Heavy traffic.
 - 3.8.10.14 Soiling, staining and corrosion.
 - 3.8.10.15 Bacteria.
 - 3.8.10.16 Rodent and insect infestation.
 - 3.8.10.17 Combustion.
 - 3.8.10.18 Electrical current.
 - 3.8.10.19 High speed operation.
 - 3.8.10.20 Improper lubrication.
 - 3.8.10.21 Unusual wear or other misuse.
 - 3.8.10.22 Contact between incompatible materials.
 - 3.8.10.23 Destructive testing.

- 3.8.10.24 Misalignment.
- 3.8.10.25 Excessive weathering.
- 3.8.10.26 Unprotected storage.
- 3.8.10.27 Improper shipping or handling.
- 3.8.10.28 Theft.
- 3.8.10.29 Vandalism.

3.8.11 Design Builder shall regularly evaluate environmental and site conditions and take appropriate measures in advance of reasonably anticipated situations to prevent deleterious exposure to items listed above.

3.9 STARTING AND ADJUSTING

3.9.1 Following are minimum starting and adjusting requirements. Design Builder is to perform starting and adjusting per manufacturer's recommendations. If more stringent requirements are described in the Contract Documents, the more stringent shall apply

- 3.9.1.1 Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- 3.9.1.2 Adjust operating components for proper operation without binding. Adjust equipment for proper operation.
- 3.9.1.3 Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- 3.9.1.4 If a factory-authorized service representative is required to inspect field-assembled components and equipment installation, comply with qualification requirements in Section 014500 (Quality Control and Assurance).

3.10 PROTECTION OF INSTALLED CONSTRUCTION

3.10.1 Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Completion.

- 3.10.1.1 Cover products subject to deterioration with impervious cover; provide ventilation to avoid condensation and trapping water.
- 3.10.1.2 Take care to use protective covering and blocking materials that do not soil, stain, or damage materials being protected.
- 3.10.1.3 After installation, provide coverings to protect products from damage from traffic and construction operations, remove when no longer needed.

3.10.2 Comply with manufacturer's written instructions for temperature and relative humidity.

3.10.3 Protect interior materials from water damage; immediately remove wet materials from site to prevent growth of mold and mildew on site.

- 3.10.4 Coordinate temporary enclosures with required inspections and tests, to minimize the necessity of uncovering completed construction for that purpose.

3.11 CORRECTION OF THE WORK

- 3.11.1 Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Section 017329 (Cutting and Patching). Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- 3.11.2 Restore permanent facilities used during construction to their specified condition.
- 3.11.3 Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- 3.11.4 Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
- 3.11.5 Remove and replace chipped, scratched, and broken glass or reflective surfaces.

END OF SECTION

SECTION 017329

CUTTING AND PATCHING

PART 1 - GENERAL

1.1 SUMMARY

1.1.1 This Section includes procedural requirements for cutting and patching. Design-Builder shall be responsible for cutting, fitting and patching required to complete Work and to:

1.1.1.1 Make its parts fit together properly.

1.1.1.2 Uncover work to provide for installation of ill-timed work.

1.1.1.3 Remove and replace defective work.

1.1.1.4 Remove and replace work not conforming to Contract Documents.

1.1.1.5 Patch and repair visible finish surfaces or fire rated assemblies affected by installation of products or construction.

1.1.1.6 Remove samples of installed work as required for testing.

1.1.1.7 Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit.

1.1.2 Related Sections include the following:

1.1.2.1 Sections 011110 (Summary of Work) and 011400 (Work Restrictions) regarding the interruption of utility services.

1.1.2.2 Section 017322 (Selective Demolition) for demolition of selected portions of the building.

1.1.2.3 Bridging Documents for specific requirements and limitations applicable to cutting and patching individual parts of the Work.

1.1.2.3.1 Cutting and patching incidental to Work specified in the Section.

1.1.2.3.2 Coordination with Work specified in other Sections for openings required to accommodate Work specified in those other Sections.

1.1.2.4 Bridging Documents for specific requirements and limitations applicable to (penetration firestopping for patching fire-rated construction.

1.2 DEFINITIONS

1.2.1 Cutting: Removal of in-place construction necessary to permit installation or performance of other Work.

- 1.2.2 Patching: Fitting and repair work required to restore surfaces to original condition after installation of other Work.

1.3 SUBMITTALS

- 1.3.1 Cutting and Patching Proposal: Submit a proposal describing procedures at least fourteen (14) Days before the time cutting and patching will be performed, requesting approval to proceed. Include the following information:

- 1.3.1.1 Extent: Describe cutting and patching, show how they will be performed, and indicate why they cannot be avoided. Include Shop Drawings as necessary to identify locations and communicate descriptions.
- 1.3.1.2 Changes to In-Place Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building's appearance and other significant visual elements. Describe extent and method of refinishing to be included.
- 1.3.1.3 Products: List products to be used and firms or entities that will perform the Work.
- 1.3.1.4 Dates: Indicate when cutting and patching will be performed.
- 1.3.1.5 Exterior Envelope or Moisture Barriers: Where the integrity of weather-exposed or moisture-resistant elements is involved, describe the temporary measures that are to be implemented to maintain a weather tight installation during the execution of the Work. Also, describe the permanent construction to be cut and how it shall be properly patched. Provide supporting documentation by manufacturer of products and/or trade association involved.
- 1.3.1.6 Utility Services and Mechanical/Electrical Systems: List services/systems that cutting and patching procedures will disturb or affect. List services/systems that will be relocated and those that will be temporarily out of service. Indicate how long services/systems will be disrupted. Comply with the requirements of Sections 011110 (Summary of Work) and 011400 (Work Restrictions).
- 1.3.1.7 Structural Elements: Where cutting and patching affect the integrity of, or involve adding reinforcement to structural elements, submit details and engineering calculations prepared and signed by a California Registered Structural Engineer for existing buildings, or by the Structural Engineer of Record for the new buildings showing integration of reinforcement with original structure.
- 1.3.1.8 County's Approval: Obtain approval of cutting and patching proposal before cutting and patching. Approval does not waive right to later require removal and replacement of unsatisfactory work.

1.4 QUALITY ASSURANCE

- 1.4.1 Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.

1.4.2 Operational Elements: Do not cut and patch operating elements and related components in a manner that results in a reduction of their capacity to perform as intended, increased maintenance, or decreased operational life or safety.

1.4.3 Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would reduce, in County Representative's opinion, the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.

1.5 WARRANTY

Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing or new warranties.

PART 2 - PRODUCTS

2.1 MATERIALS

2.1.1 General: Comply with requirements specified in other Sections.

2.1.2 Primary Products: As required for original installation and to match surrounding construction.

2.1.2.1 Where Specifications and standards have not been provided, provide materials and fabrication consistent with quality of Project and intended for commercial construction.

2.1.2.2 Provide new materials for cutting and patching unless otherwise indicated.

2.1.3 In-Place Materials: Use materials identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.

2.1.3.1 If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

3.1.1 Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.

3.1.1.1 Inspect existing conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching.

3.1.1.2 After uncovering existing Work, inspect conditions affecting proper accomplishment of Work.

3.1.1.3 Report unsatisfactory or questionable conditions to County in writing; do not proceed with work until County has provided further instructions. Proceed

with installation only after unsafe or unsatisfactory conditions have been corrected.

- 3.1.1.4 Identify hazardous substances or conditions exposed during the Work to County for decision or remedy.
- 3.1.1.5 Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with in-place finishes or primers.
- 3.1.1.6 Beginning of cutting or patching shall be interpreted to mean that existing conditions were found by Design Builder to be acceptable.

3.2 PREPARATION

- 3.2.1 Temporary Support: Provide temporary support of Work to be cut. If structural elements are to be involved, comply with paragraph 1.3.1.7 above. Provide devices and methods to protect other portions of Project from damage. Provide services of California licensed engineer for designing temporary support where required by applicable authorities for temporary supports and for shoring; submit engineering calculations directly to applicable authorities and County upon request.
- 3.2.2 Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- 3.2.3 Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- 3.2.4 Existing Utility Services and Mechanical/Electrical Systems: Where existing services/ systems are required to be removed, relocated, or abandoned, bypass such services/ systems before cutting to prevent interruption to occupied areas.

3.3 PERFORMANCE

- 3.3.1 General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- 3.3.2 Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
 - 3.3.2.1 In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Pneumatic tools will not be allowed without prior approval. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Do not overcut corners. Temporarily cover openings when not in use.
 - 3.3.2.2 Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.

- 3.3.2.3 Concrete or Masonry: Core drill holes through concrete and masonry. Cut using a cutting machine, such as an abrasive saw or a diamond-core drill. Cut masonry and concrete materials using masonry saw.
- 3.3.2.4 Excavating and Backfilling: Comply with requirements in applicable Specification Sections where required by cutting and patching operations. Execute excavating and backfilling by methods that will prevent settlement and damage to other work.
- 3.3.2.5 Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
- 3.3.2.6 Proceed with patching after construction operations requiring cutting are complete.
- 3.3.3 Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.
 - 3.3.3.1 Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
 - 3.3.3.2 Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 - 3.3.3.2.1 For continuous surfaces, refinish to nearest intersection or natural break.
 - 3.3.3.2.2 For an assembly, refinish entire unit.
 - 3.3.3.2.3 Clean piping, conduit, and similar features before applying paint or other finishing materials.
 - 3.3.3.2.4 Restore damaged pipe covering to its original condition.
 - 3.3.3.3 Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance. Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
 - 3.3.3.4 Ceilings: Patch, repair, or re-hang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.

3.3.3.5 Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.

3.3.4 Restoration:

3.3.4.1 Restore work that has been cut or removed; install new products to provide completed Work in accordance with requirements of Contract Documents.

3.3.4.2 Fit work neat and tight allowing for expansion and contraction. Butt new finished construction to existing exposed surfaces, structure, pipes, ducts, conduit, and other penetrations through surfaces to allow for movement.

3.3.4.3 Penetrations at Fire-Rated Construction: At penetrations of fire-rated walls, partitions, ceiling, or floor construction, completely seal voids or membrane with material in accordance with applicable Specifications Sections, to full thickness of the penetrated element.

3.3.5 Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.

END OF SECTION

SECTION 017332

SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

1.1.1 This Section includes the following:

1.1.1.1 Demolition and removal of selected portions of buildings or structures.

1.1.1.2 Demolition and removal of soil and selected site elements.

1.1.1.3 Salvage of existing items to be reused or recycled.

1.1.2 Related Sections include the following:

1.1.2.1 Section 011110 (Summary of Work) for use of premises, and phasing, and County's occupancy requirements.

1.1.2.2 Section 011400 (Work Restrictions) for restrictions on use of the premises due to County or tenant occupancies in adjacent structures or spaces.

1.1.2.3 Section 015000 (Temporary Facilities and Controls) for temporary construction and environmental-protection measures for selective demolition operations.

1.1.2.4 Section 017329 (Cutting and Patching) for cutting and patching procedures.

1.1.2.5 Section 018113 (Sustainable Design Requirements).

1.1.2.6 Section 017419 (Construction Waste Management and Disposal).

1.1.2.7 Section 017420 (Recycling and Waste Diversion).

1.2 DEFINITIONS

1.2.1 Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.

1.2.2 Remove and Salvage: Detach items from existing construction and deliver them to County ready for reuse.

1.2.3 Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.

1.2.4 Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

1.3 MATERIALS OWNERSHIP

1.3.1 Historic items, relics, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, antiques, and other items of interest or value to County that may be encountered during selective demolition remain County's

property. Carefully remove and salvage each item or object in a manner to prevent damage and deliver promptly to County. Coordinate with County Representative, who will establish special procedures for removal and salvage.

- 1.3.2 Demolished material not claimed by the County shall be considered to be property of the Design Builder and shall be completely removed from the job site. Materials and equipment to be salvaged shall not be placed on view to prospective purchasers or sold on site.

1.4 SUBMITTALS

- 1.4.1 Schedule of Selective Demolition Activities: Indicate the following:

- 1.4.1.1 Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure County's buildings and adjacent tenants' operations are uninterrupted.
- 1.4.1.2 Interruption of utility services. Indicate how long utility services will be interrupted. Comply with the requirements of Sections 011110 (Summary of Work) and 011400 (Work Restrictions).
- 1.4.1.3 Coordination for shutoff, capping, and continuation of utility services.
- 1.4.1.4 Locations of proposed site access, dust- and noise-control temporary partitions and means of egress, including for other tenants affected by selective demolition operations.
- 1.4.1.5 Coordination of any of County's continuing occupancy of portions of existing building and site and partial occupancy of completed Work.
- 1.4.1.6 Means of protection for items to remain and items in path of waste removal from building or site.

- 1.4.2 Design Builder shall secure and pay for required hauling permits and pay dumping fees and charges. Submit permits for transport and disposal of debris.

- 1.4.3 Submit demolition procedures and operational sequence for review and acceptance by County.

- 1.4.3.1 Demolition Plan: Prior to the commencement of the work of this Section, and in accordance with the provisions of the Division 1 General Specifications, submit a plan for the organization of the demolition, including salvage, demolition, removal, and disposal procedures for acceptance by County. Indicate plans for the protection of portions of the existing structure to remain. Include locations of temporary barriers.

- 1.4.3.2 Shop Drawings: Indicate demolition and removal sequence and location of salvageable items; location and construction of temporary work.

- 1.4.4 Inventory: After selective demolition is complete, submit a list of items that have been removed and salvaged.

- 1.4.5 Pre-Demolition Photographs and Video: Show existing conditions of adjoining construction and site improvements, including finish surfaces that might be misconstrued as damage caused by selective demolition operations. Submit to County Representative before Work begins.

- 1.4.6 Project Record Documents: Design Builder shall accurately record actual locations of capped utilities, subsurface construction, and obstructions.
- 1.4.7 Landfill Records: Indicate receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous wastes.
- 1.4.8 Statement of Refrigerant Recovery: A statement signed by technician responsible for recovering refrigerant, that "All refrigerant that was present was recovered and the recovery was performed under EPA regulations." Include name and address of technician, and list the refrigerant(s) recovered.

1.5 QUALITY ASSURANCE

- 1.5.1 Refrigerant Recovery Technician Qualifications: Certified by an EPA-approved certification program.
- 1.5.2 Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- 1.5.3 Standards: Comply with ANSI A10.6 and CFC Article 87.

1.6 PRE-DEMOLITION CONFERENCE

- 1.6.1 Pre-demolition Conference: Conduct conference at Project site. In company with the Architect and County Representative, visit the site and verify the extent and location of demolition required. Review methods and procedures related to selective demolition including, but not limited to, the following:
 - 1.6.1.1 Inspect and discuss condition of construction to be selectively demolished.
 - 1.6.1.2 Carefully identify limits of demolition.
 - 1.6.1.3 Review structural load limitations of existing structure.
 - 1.6.1.4 Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
 - 1.6.1.5 Review areas where existing construction is to remain and requires protection.
 - 1.6.1.6 Mark interface surfaces as required to enable workmen also to clearly identify items to be removed and items to be left in place intact.
 - 1.6.1.7 Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.

1.7 PROJECT CONDITIONS

- 1.7.1 Depending on schedule and sequencing, County may occupy portions of building(s) immediately adjacent to selective demolition area. Conduct selective demolition so disruption to County's operations will be minimized.
 - 1.7.1.1 Comply with requirements specified in Section 011110 (Summary of Work).

- 1.7.1.2 Conditions existing at time of bidding will be maintained by County as far as practical.
- 1.7.2 Notify County Representative of discrepancies between existing conditions and Drawings before proceeding with selective demolition. Information shown on the Drawings is to show existing site and building conditions with information developed from the original construction documents, field surveys and County's records, and to generally show the amount and type of demolition required to prepare existing areas for new work. Design Builder shall make a detailed survey of existing conditions pertaining to the work prior to commencing demolition.
- 1.7.3 Hazardous Materials: It is expected that hazardous materials will not be encountered in the Work.
- 1.7.4 Storage or sale of removed items or materials on-site is not permitted.
- 1.7.5 Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations. Maintain fire-protection facilities in service during selective demolition operations.
- 1.8 WARRANTY
 - Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS

- 2.1 TEMPORARY PROTECTION: Temporary, protective plastic sheeting shall have the following minimum characteristics:
 - 2.1.1 Self-adhesive applications shall provide a clean release for easy removal without adhesive transfer.
 - 2.1.2 Provide anti-slip, anti-trip at walking surfaces.
 - 2.1.3 Protection shall be impact and scratch resistant to the underlying surface.
 - 2.1.4 Provide waterproof polyethylene top layer at areas exposed to moisture.

PART 3 - EXECUTION

- 3.1 EXAMINATION
 - 3.1.1 Verify that utilities have been disconnected and capped.
 - 3.1.2 Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
 - 3.1.3 Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.
 - 3.1.4 If unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to the County Representative.
 - 3.1.5 Record existing conditions by use of pre-construction photographs and video.

3.1.6 Engage a professional engineer to survey the condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure to remain or adjacent structures during selective demolition operations.

3.1.7 Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

3.2.1 Existing Services/Systems: Maintain services/systems indicated to remain and protect them against damage during selective demolition operations. Comply with requirements for existing services/systems interruptions specified in Sections 011110 (Summary of Work) and 011400 (Work Restrictions).

3.2.2 Service/System Requirements: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished or connection point for new service.

3.2.2.1 County Representative will arrange to shut off County services/systems when requested by Design Builder.

3.2.2.2 Arrange to shut off service utilities with utility companies.

3.2.2.3 Do not schedule shutdowns until materials, manpower, and equipment are available to complete the Work with a minimum of delay.

3.2.2.4 The County Representative may require system and utility shutdowns, power outages, and interruption of services to be performed on weekends or off-hours with no increase in Contract Sum. Shutdowns, power outages, and interruptions of services must be requested in writing to the County Representative in accordance with Section 011400 (Work Restrictions). These shutdowns, power outages, and interruption of services must be approved in advance by the County Representative prior to scheduling.

3.2.2.5 If services/systems are required to be removed, relocated, or abandoned before proceeding with selective demolition, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.

3.2.2.6 Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing. Where an entire wall is to be removed, existing services/systems shall be removed with removal of the wall.

3.3 PREPARATION

3.3.1 Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities. Comply with requirements for access and protection specified in Section 015000 (Temporary Facilities and Controls).

3.3.2 Temporary Facilities: Provide temporary barricades, enclosures, chutes, and other protection required to prevent injury to people and damage to adjacent buildings and facilities that remain. Do not interfere with use of adjacent building spaces; maintain free and safe passage to and from.

- 3.3.2.1 Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
- 3.3.2.2 Temporary safeguards shall conform to the requirements of the Fire Marshal where fire and life systems, rated assemblies or exit ways are involved.
- 3.3.2.3 Provide appropriate temporary signage including signage for exit or building egress. Provide warning signs, lanterns, and lighting for vehicular and personnel protection.
- 3.3.2.4 Prevent dust, odors and noise from becoming a nuisance to occupants, neighbors, the public, and to other work being performed on or near the site.
- 3.3.2.5 Provide temporary weather protection during interval between selective demolition of existing construction on exterior surfaces and new construction to prevent water leakage and damage to structure and interior areas.
- 3.3.2.6 Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations. Where temporary partitions are utilized to allow disassembly of fire-rated assemblies, the temporary partitions and any openings in them shall be constructed to maintain the fire rating of the adjacent rated partition.
- 3.3.2.7 Cover and protect furniture, furnishings, and equipment that have not been removed.
- 3.3.2.8 Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Section 015000 (Temporary Facilities and Controls).
- 3.3.3 Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
 - 3.3.3.1 Strengthen or add new supports when required during progress of selective demolition. Provide services of a California Licensed Engineer for designing temporary support where required by applicable authorities for temporary supports and for shoring; submit engineering calculations directly to applicable authorities upon request.
 - 3.3.3.2 Prevent movement of adjacent construction, provide and place bracing and be responsible for safety and support of adjacent construction.
 - 3.3.3.3 Assume liability for movement of adjacent construction, for damage, and for injury.
 - 3.3.3.4 Cease operations and notify County Representative immediately if safety of structure appears to be endangered; take precautions to properly support structure. Do not resume operations until safety is restored.

3.4 GENERAL REQUIREMENTS

- 3.4.1 Demolish and remove existing construction only to the extent required by new construction. Perform demolition work in accordance with the submitted plan as accepted. Use methods required to complete the Work within limitations of governing regulations and as follows:

- 3.4.1.1 Shut off, cap, and otherwise protect existing utility lines in accordance with the requirements of the County, public agencies or utilities having jurisdiction.
 - 3.4.1.1.1 Do not remove utilities discovered during demolition but not indicated without first determining purpose for utility, coordinate with County Representative.
 - 3.4.1.1.2 Do not disrupt services to adjacent building areas not in Project.
 - 3.4.1.1.3 Place markers to indicate location of disconnected services; identify service lines and capping locations on Project Record Documents.
- 3.4.1.2 Completely remove items scheduled to be demolished and removed, leaving surfaces clean, solid, and ready to receive new materials specified elsewhere.
- 3.4.1.3 The use of explosives is not permitted.
- 3.4.1.4 Proceed with selective demolition systematically, from higher to lower level.
- 3.4.1.5 Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
- 3.4.1.6 Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
- 3.4.1.7 Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Establish and maintain fire watch and portable fire-suppression devices during flame-cutting operations.
- 3.4.1.8 Maintain adequate ventilation when using cutting torches.
- 3.4.1.9 Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site at Design Builder's expense. Immediately remove from site wet materials and materials with water stains, mold, and mildew.
- 3.4.1.10 Removal of any structural framing members is not allowed without design professional review and the County Representative's approval.
- 3.4.1.11 Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- 3.4.1.12 Dispose of demolished items and materials promptly off-site at Design Builder's expense.
- 3.4.1.13 Spoil material that is excavated in excess of what is required for backfill, or excavated material that is unsuitable for backfill and rubbish, shall be removed from the Site and disposed of promptly off-site at Design Builder's expense.

- 3.4.1.14 Ensure fire alarm system remains operable at all times. If fire alarm system becomes inoperable, immediately establish and maintain a continuous fire watch until such time as the system is restored to full operation.

3.4.2 Removed and Salvaged Items:

- 3.4.2.1 Carefully remove, store and protect materials indicated for reinstallation or retention by County. Where stored materials are damaged, repair to original condition or replace with new undamaged materials.
- 3.4.2.2 Clean salvaged items.
- 3.4.2.3 Pack or crate items after cleaning. Identify contents of containers.
- 3.4.2.4 Store items in a secure area until delivery to County.
- 3.4.2.5 Transport items to County's storage area on-site as designated by County Representative.
- 3.4.2.6 Protect items from damage during transport and storage.

3.4.3 Removed and Reinstalled Items:

- 3.4.3.1 Clean and repair items to functional condition adequate for intended reuse. Repair and paint equipment to match new equipment.
- 3.4.3.2 Pack or crate items after cleaning and repairing. Identify contents of containers.
- 3.4.3.3 Protect items from damage during transport and storage.
- 3.4.3.4 Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make items functional for use indicated.

- 3.4.4 Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by the County Representative, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

3.5 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- 3.5.1 Concrete: Demolish in sections. Cut concrete to its full depth at junctures with construction to remain and at regular intervals using a power-driven saw, then remove concrete between saw cuts.
- 3.5.2 Masonry: Demolish in small sections. Cut masonry at junctures with construction to remain using a power-driven saw, then remove masonry between saw cuts.
- 3.5.3 Concrete Slabs-on-Grade: Saw-cut perimeter of area to be demolished, then break up and remove.

3.6 DISPOSAL OF DEMOLISHED MATERIALS

3.6.1 General: Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain the County's property, remove demolished materials from Project site and recycle or legally dispose of them in an EPA-approved landfill at Design Builder's expense.

3.6.1.1 Do not allow demolished materials to accumulate on-site.

3.6.1.2 Remove and transport debris in a manner that will prevent spillage on adjacent streets, surfaces, and areas.

3.6.1.3 Remove debris from elevated portions of building by chute, hoist or other device that will convey debris to grade level in a controlled manner.

3.6.2 Burning: Do not burn demolished materials.

3.6.3 Disposal: Transport demolished materials off County's property and legally dispose of them at Design Builder's expense.

3.7 CLEANING

3.7.1 Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION

SECTION 017419

CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.1 SUMMARY

- 1.1.1 This section specifies the requirements for the diversion of demolition (non-hazardous) and construction debris from landfill and submittal of the Waste Management Plan.
- 1.1.2 Performance Requirement: Divert a **minimum of 65%** of construction and demolition (non-hazardous) debris from landfill accordance with California Green Building Standards Code (CALGreen).

1.2 SUBMITTALS

- 1.2.1 Submit specified Waste Management Plan using WasteTracking.com powered by Green Halo Systems using the following URL: [Contra Costa County C&D Waste Tracking](#). Submittal is required **within 7 calendar days after receipt of Notice to Proceed**.

PART 2 - PRODUCTS

2.1 MATERIALS, EQUIPMENT AND FACILITIES

- 2.1.1 Furnish all materials, tools, equipment, devices, appurtenances, facilities, and services required for performing waste management of debris covered under this Section's scope of work.

PART 3 - EXECUTION

3.1 EXAMINATION AND PREPARATION

- 3.1.1 Set up and maintain a project account with WasteTracking.com powered by Green Halo Systems using the website, [Contra Costa County C&D Waste Tracking](#) to be used exclusively for this project to develop a waste management plan, upload all reuse, recycling and waste disposal data throughout the construction process, and submit the final online report demonstrating project compliance.
- 3.1.2 Perform as required in the approved Waste Management Plan.

3.2 DISPOSAL OF DEBRIS

- 3.2.1 Dispose of waste, trash and debris in a safe, acceptable manner, in accordance with applicable laws and ordinances and as prescribed by authorities having jurisdiction.
Burying of trash and debris on the site is strictly prohibited.
- 3.2.2 Remove demolished materials from site as work progresses. Remove debris from the site so that its presence will not delay the progress of the work.

- 3.2.3 Debris shall be the property of the Design Builder and shall be removed and disposed of in a legal manner off the County's property in accordance with the approved Waste Management Plan described herein. Location of recycling facility or dump and length of haul shall be the Design Builder's responsibility.

END OF SECTION

Waste Management Report

Page 1 of 2

Many of the materials generated from your project can be recycled. You are required to list materials that will be reused, recycled or disposed from your project.

The performance requirement is to reuse or recycle at least 65% of project waste. Diversion of 75% of the project waste is a desired goal.

Use **tons** to quantify total estimated waste and percentages for materials. Ask your hauler, recycler or site cleanup vendor to assist you with this plan. Receipts of all recycling and disposal must be submitted monthly with each Waste Management Update.

Project Name: _____

Location: _____

Type of Project: ☐ New Construction ☐ Demolition ☐ Renovation

Square Footage: _____

Type of Construction (wood frame, concrete, steel, etc.): _____

Total Project Value: \$ _____

Company Name: _____ Contact: _____

Address: _____ Phone: _____

Recycler #1: _____ Contact: _____

Address: _____ Phone: _____

Recycler #2: _____ Contact: _____

Address: _____ Phone: _____

Recycler #3: _____ Contact: _____

Address: _____ Phone: _____

Did you have difficulties finding recycling vendors? ☐ Yes ☐ No

If the estimated amount reused/recycled is less than 65%, please explain why:

If the actual amount reused/recycled is less than 65%, please explain why:

Waste Management Report

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Total Estimated Waste to be generated by Project: _____ tons					
Complete and return within 7 calendar days after receipt of Notice of Award of Bid, or prior to beginning demolition or construction, whichever occurs sooner.			Submit completed Waste Management Report monthly.		
Material Type	Estimated Reused / Recycled	Estimated Disposed / Landfilled	Actual Reused / Recycled	Actual Disposed / Landfilled	Vendor or Facility Used (Destination)
Reused & Salvaged Materials					
Asphalt & Concrete					
Bricks/Masonry/Tiles					
Building Materials (doors, windows, fixtures, etc.)					
Cardboard & other paper products					
Carpet/Carpet Padding/Foam					
Ceiling Tiles (acoustic)					
Drywall (new, unpainted)					
Electrical Components (light fixtures, cables, etc.)					
Film Plastic & Styrofoam Blocks					
Landscape Debris (Plant & Tree Trimmings)					
Mechanical Debris (ducts, controls, plumbing fixtures, etc.)					
Scrap Metal					
Unpainted Wood & Pallets					
Other (painted wood & drywall, roofing, etc.)					
Mixed C&D*					
Trash/Garbage					
TOTAL					

*Mixed C&D is defined as a mixture of three or more materials (e.g. wood, drywall, roofing, insulation, etc) from construction or demolition sites that will be taken to a “qualified” facility for recycling (See C&D

Rebates Program Insert). Recycling rates for mixed C&D debris loads vary among the facilities listed on the attached sheet. For the purposes of calculating your Waste Management Table, assume that 70% by weight of the “*mixed C&D debris*” are reused/recycled and 30% are disposed/landfilled.

Prepared by: _____

Date: _____

Signature: _____

SECTION 017420

RECYCLING AND WASTE DIVERSION

PART 1 - GENERAL

1.1 SUMMARY

- 1.1.1 This section specifies the requirements for recycling, composting, and waste diversion capacity and equipment in the functioning building. It is the County's intent to design, construct, commission, and operate the project following integrated, sustainable design principles, using green building technologies and materials. The benefits are a healthy, resource-efficient, and productive work environment, along with meeting the requirements and interests of the federal government, our surrounding community, and future generations.
- 1.1.2 Performance Goal: The building recycling and trash system will support the diversion of seventy-five percent (75%) of all waste generated.

1.2 DEFINITIONS

- 1.2.1 "Recyclables" include paper fiber, toner cartridges, glass and plastic bottles, aluminum and tin cans, film plastics, textiles, metal, and wood.
- 1.2.2 "Organic Waste" is inedible organic materials generated during the preparation of food, unconsumed prepared food either in bulk or from plate scrapings, and paper fiber food packaging.
- 1.2.3 "Trash" is waste that is not recyclable, compostable, or reusable.
- 1.2.4 "Waste" is any material that is no longer needed including recyclables, organic waste, and trash.
- 1.2.5 "Diversion" means the redirection of material for any purpose other than disposal in a landfill or transfer facility.
- 1.2.6 "Compostable" means organic material that can be composted and will decay to produce a soil amendment.

1.3 SUBMITTALS

- 1.3.1 The Design Builder shall submit floor plans indicating the placement and size of recycling bins and waste containers for all functional spaces, including offices, program spaces, eating areas, Servery's, public areas, staff areas, supply areas, and loading docks, for approval by the County.
- 1.3.2 The Design Builder shall submit a written description and/or diagrams of the path of waste through the building from the points of generation to the compactor and/or dumpster for approval by the County.

1.4 SEPARATION OF WASTE

- 1.4.1 Waste will be source-separated into three bins: recyclables, organic waste, and trash. All recyclables can be combined into the same bin.
- 1.4.2 Organic waste will be separated from trash only at large sites of generation such as cafeterias, kitchens, eating areas, etc.
- 1.4.3 All waste and recycling containers, including trash cans, bins, and dumpsters, must be adjacent and sized appropriately.

PART 2 - PRODUCTS

- 2.1 Provide all necessary design, space, and coordination necessary to allow County to implement its recycling, composting, and waste diversion program at the facility.

PART 3 - EXECUTION - Not used.

END OF SECTION

SECTION 017700

CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

1.1.1 This section describes contract closeout procedures including:

- 1.1.1.1 Removal of temporary construction facilities
- 1.1.1.2 Substantial completion
- 1.1.1.3 Final completion
- 1.1.1.4 Final cleaning
- 1.1.1.5 Project record documents
- 1.1.1.6 Material, equipment and finish data
- 1.1.1.7 Project guarantee
- 1.1.1.8 Warranties
- 1.1.1.9 Turn-in
- 1.1.1.10 Release of claims
- 1.1.1.11 Guaranty and Maintenance Bonds

1.2 PRE-CLOSEOUT COORDINATION MEETING

Design Builder shall convene, administer, and minute a meeting with County to review the requirements stated herein as well as in the following Sections:

- 017823 Operations and Maintenance Data
- 017839 Project Record Documents
- 017900 Demonstration and Training

Minutes of the discussion shall be maintained by Design Builder and shall document any deviations, modifications, or variances from the contract requirements that are agreed to by the County in the Pre-Closeout Coordination Meeting. Minutes shall be distributed by Design Builder to County for review and acceptance. Bi-weekly follow-up meetings shall be convened to track progress in achieving the requirements as stated herein and in the above Sections.

1.3 REMOVAL OF TEMPORARY CONSTRUCTION FACILITIES

- 1.3.1 Remove temporary materials, equipment, services, and construction prior to Substantial Completion inspection. Temporary construction facilities to be removed upon Final Completion when approved by County.

1.3.2 Clean and repair damage caused by installation or use of temporary facilities.

1.3.3 Restore permanent facilities used during construction to original condition.

1.4 SUBSTANTIAL COMPLETION

1.4.1 The term “Substantial Completion” is defined in the General conditions. When Design Builder considers Work or designated portion thereof as substantially complete, submit to the County Representative written notification, with a list of items to be completed or corrected.

1.4.2 Within reasonable time, County will inspect to determine status of completion.

1.4.3 Should County determine that Work is not substantially complete, **within fourteen (14) days** County will notify Design Builder in writing and will submit a list of all defects and omissions.

1.4.4 Design Builder shall remedy deficiencies and send a second written notice of substantial completion. County will re-inspect the Work. If deficiencies previously noted are not corrected on re-inspection, then Design Builder shall pay the cost of the re-inspection.

1.4.5 When County concludes that Work is substantially complete, County will respond to Design Builder’s notice acknowledging the Milestone and will include a list of any additional remaining items to be provided, completed or corrected not already on Design Builders list of remaining items.

1.4.6 Following are requirements for a determination of Substantial Completion:

1.4.6.1 Design Builder must complete all Work necessary for the County to operate the facility for the purposes for which it is intended, including but not limited to the following:

1.4.6.1.1 Manufactured units, equipment and all building systems that require startup must have been started up and run for a fifteen (15) day period.

1.4.6.1.2 All electrical and low voltage systems must be complete.

1.4.6.1.3 Final Test and Balance Report Complete and accepted by the Mechanical Engineer of Record and County

1.4.6.1.4 All requirements of Section 017823 (Operations and Maintenance Data) complete and accepted by County.

1.4.6.1.5 All Training required in Section 017900 (Demonstration and Training) must be complete.

1.4.6.2 Occupancy: The Work has progressed to the point where the regulatory agency will allow it to be occupied and used for its intended purposes. Prior to the County accepting Occupancy, the following must be complete:

1.4.6.2.1 All Work necessary to occupy, utilize, and operate the building for its intended purpose.

1.4.6.2.2 All corrections or punch list items that would require an occupied space to be vacated to complete those corrections or punch list items

1.4.6.2.3 Except for minor exceptions made at the County's discretion which shall be added to the punch list, all Commissioning, including but not limited to:

- (a) Final Sequence of Operations submitted and approved by Mechanical Engineer of Record and County.
- (b) All functional and performance testing of all building systems complete and all outstanding issues resolved.
- (c) Building Management System programming complete and system fully functional.

1.5 FINAL COMPLETION

1.5.1 Final Completion is defined in the General Conditions. When Design Builder considers Work is finally complete, it shall submit written certification that:

1.5.1.1 Design Builder has inspected Work for compliance with the Contract Documents, and all requirements for Final Completion/Acceptance have been met.

1.5.1.2 The Work, except for Design Builder maintenance after Final Completion/Acceptance, has been completed in accordance with the Contract Documents and deficiencies listed as part of Substantial Completion have been corrected. Equipment and systems have been tested in the presence of County Representative and/or designated consultants and are operative.

1.5.1.3 The Work is complete and ready for final inspection.

1.5.2 In addition to submittals required by conditions of the Contract Documents, Design Builder shall provide submittals required by governing authorities and submit final statement of accounting giving total adjusted Contract Sum, previous payments, and sum remaining due.

1.5.3 When County finds the Work is acceptable and final submittal is complete, County will issue final change order reflecting approved adjustments to Contract Sum not previously made by Change Order.

1.5.3.1 Should County determine that the Work is incomplete or defective:

1.5.3.1.1 County promptly will so notify Design Builder, in writing, and will submit a list of the incomplete or defective items.

1.5.3.1.2 Design Builder shall promptly remedy the deficiencies and notify County when the Work is ready for re-inspection.

- 1.5.3.1.3 When County determines that the Work is acceptable under the Contract Documents, County will request Design Builder to prepare any closeout submittals/deliverables that are still due.

1.6 FINAL CLEANING

- 1.6.1 Employ professional cleaners for final cleaning. Clean each surface or unit to condition expected in a professional, routine cleaning and maintenance program. Comply with manufacturers' written instructions.
- 1.6.2 Complete the following cleaning operations before requesting inspection for Substantial Completion for entire Project or for any phase of Project:
 - 1.6.2.1 Cleaning chemicals must be coordinated with facility maintenance staff and any green cleaning procedures and appropriate for use in an occupied facility.
 - 1.6.2.2 Clean Project site, yard, and grounds in areas disturbed by construction activities including landscape development areas, of rubbish, construction building materials, waste material, litter, and other foreign substances.
 - 1.6.2.3 Sweep paved areas broom clean. Remove paint, petrochemical spills, stains, and other foreign deposits.
 - 1.6.2.4 Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - 1.6.2.5 Remove tools, construction equipment, machinery, and surplus material from Project site.
 - 1.6.2.6 Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - 1.6.2.7 Horizontal surfaces: All horizontal surfaces must be dusted and/or washed until free of dust and grime.
 - 1.6.2.8 Furnishings and equipment:
 - 1.6.2.8.1 Remove all gum, adhesives, and sticky substances from all surfaces. Wash all furniture and equipment with a neutral cleaner. Use specialized cleaner appropriate for wood and/or excessively dirty surfaces.
 - 1.6.2.8.2 Walls: Wash all wall surfaces with detergent and water.
 - 1.6.2.8.3 All restroom fixtures and accessories to be washed with a disinfectant cleaner.
 - 1.6.2.8.4 Doors: Remove all tape, adhesive, and foreign matter and wash all doors, frames and hardware.

- 1.6.2.9 Floors:
 - 1.6.2.9.1 Clean and finish flooring using appropriate procedures and finishes/sealers per manufacturers' recommendations. Newly installed resilient floors or linoleum must have seams welded, all surface mastic removed, and shall be allowed to set for time recommended by manufacturer prior to final finish application.
 - 1.6.2.9.2 Concrete Floors – Scrub using water and detergent.
 - 1.6.2.9.3 Ceramic Floors – Clean and apply sealer per manufacturer's recommendations
- 1.6.2.10 Restrooms: Thoroughly clean and disinfect all surfaces and fixtures.
- 1.6.2.11 Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
- 1.6.2.12 Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
- 1.6.2.13 Sweep concrete floors broom clean in unoccupied spaces.
- 1.6.2.14 Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
- 1.6.2.15 Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
- 1.6.2.16 Remove labels that are not permanent.
- 1.6.2.17 Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
- 1.6.2.18 Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
- 1.6.2.19 Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint, tape, and mortar droppings, and other foreign substances.
- 1.6.2.20 Replace parts subject to unusual operating conditions.
- 1.6.2.21 Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
- 1.6.2.22 Clean ducts, blowers, and coils if units were operated without filters during construction.

- 1.6.2.23 Clean all new and existing light fixtures, lamps, globes, and reflectors to function at full efficiency.
- 1.6.2.24 Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
- 1.6.2.25 Do not perform final cleaning while Design Builder's punch list activities are in progress. Do not perform final cleaning while County's staff, suppliers, or installers are completing occupancy-related activities prior to Design Builder's request for Final Completion/Acceptance inspection.
- 1.6.2.26 Ensure that Project is clean and "turn-key" ready for occupancy.

1.7 MATERIAL, EQUIPMENT AND FINISH DATA

Submit electronic copy and two sets of data for primary materials, equipment and finishes as required under each specification section prior to final inspection, bound in 8-1/2 inches by 11 inches three-ring binders with durable plastic covers to County for its records.

1.8 MISCELLANEOUS PROJECT RECORD SUBMITTALS

- 1.8.1 Refer to other Specification Sections for digital media and miscellaneous record keeping requirements and submittals in connection with various construction activities. Immediately prior to Substantial Completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for use and reference. Submit electronic copy and hard copy to County for its records. All versions to be tabbed or bookmarked for easy reference.
- 1.8.2 Refer to other Specification Sections for miscellaneous Operation & Maintenance (O&M) data requirements. Prior to furnishing hard copies of O&M manuals, provide electronically as a submittal, which shall be reviewed by County and once accepted for content and format, shall be submitted along with hard copy in the quantities stated herein and in individual Specification Sections. All versions to be tabbed or bookmarked for easy reference.
- 1.8.3 Digital media shall be submitted in a format and on a device acceptable to the County. All photographs, videos, or other image files should be at the resolution specified or at a minimum quality to be sufficient to provide clear representation of the subject matter. All digital files shall be organized and indexed to provide easy navigation to each section within the document.

1.9 PROJECT GUARANTEE

- 1.9.1 Requirements for Design Builder's guarantee of completed Work are included in the General Conditions. Design Builder shall guarantee Work done under Contract against failures, leaks, breaks, or other unsatisfactory conditions due to defective design, equipment, materials, or workmanship, and shall perform repair work or replacement required, at Design Builder's sole expense, for period of two (2) years from date of Final Acceptance.
- 1.9.2 Neither recordation of final acceptance nor final certificate for payment nor provision of the Contract nor partial or entire use or occupancy of premises by County shall constitute

acceptance of Work not done in accordance with Contract Documents nor relieve Design Builder of liability in respect to express warranties or responsibility for faulty materials or workmanship.

- 1.9.3 County may make repairs to defective Work as set forth in the General Conditions if, within five (5) Business Days after mailing of written notice of defective work to Design Builder or authorized agent, Design Builder shall neglect to make or undertake repair with due diligence; provided, however, that in case of leak or emergency where, in opinion of County, delay would cause hazard to health or serious loss or damage, repairs may be made without notice being sent to Design Builder, and Design Builder shall pay the cost thereof.
- 1.9.4 If, after installation, operation or use of materials or equipment furnished under the Contract Documents proves to be unsatisfactory to County, County shall have right to operate and use materials or equipment until it can, without damage to County, be taken out of service for correction or replacement. Period of use of defective materials or equipment pending correction or replacement shall in no way decrease guarantee period required for acceptable corrected or replaced items of materials or equipment.
- 1.9.5 Nothing in this Section shall be construed to limit, relieve or release Design Builder's, Subcontractors' and equipment suppliers' liability to County for damages sustained as result of latent defects in equipment caused by negligence of suppliers' agents, employees or Subcontractors. Warranty contained in the Contract Documents shall not amount to, nor shall it be deemed to be, waiver by County of any rights or remedies (or time limits in which to enforce such rights or remedies) it may have for defective workmanship or defective materials under laws of this State pertaining to acts of negligence.

1.10 WARRANTIES

- 1.10.1 Execute Design Builder's submittals and assemble warranty documents, and operations and maintenance manuals, executed or supplied by Subcontractors, suppliers, and manufacturers.
 - 1.10.1.1 Provide electronically as a submittal, which shall be reviewed by County and once accepted for content and format, shall be submitted along with hard copy in the quantities stated herein and in individual Specification Sections.
 - 1.10.1.2 Provide table of contents and assemble in 8-1/2 inches by 11 inches three-ring binder with durable plastic cover, appropriately separated and organized.
 - 1.10.1.3 Assemble in Specification Section order.
 - 1.10.1.4 Provide two copies of completed warranty binders.
- 1.10.2 Submit material prior to final application for payment.
 - 1.10.2.1 For equipment put into use with County's permission during construction, submit within twenty (20) Business Days after first operation.
 - 1.10.2.2 For items of Work delayed materially beyond Date of Substantial Completion, provide updated submittal within ten (10) Business Days after acceptance, and list date of acceptance as start of warranty period.

- 1.10.3 Warranties are intended to protect County against failure of work and against deficient, defective and faulty materials and workmanship, regardless of sources.
- 1.10.4 Warranties are not intended to cover failures that result from the following:
 - 1.10.4.1 Unusual or abnormal phenomena of the elements
 - 1.10.4.2 Vandalism after substantial completion
 - 1.10.4.3 Insurrection or acts of aggression including war
- 1.10.5 Related Damages and Losses: Remove and replace Work which is damaged as result of defective Work, or which must be removed and replaced to provide access for correction of warranted Work.
- 1.10.6 Warranty Reinstatement: After correction of warranted Work, where the correction requires replacement of a major component of equipment or more than ten percent (10%) of work area, reinstate warranty for corrected Work to date of original warranty expiration or to a date not less than three hundred sixty-five (365) Days after corrected Work was done, whichever is later for the effected equipment or area.
- 1.10.7 Replacement Cost: Replace or restore failing warranted items without regard to anticipated useful service lives.
- 1.10.8 Warranty Forms: Submit drafts to County for approval prior to execution. Forms shall not detract from or confuse requirements or interpretations of the Contract Documents.
 - 1.10.8.1 Warranty shall be countersigned by manufacturers.
 - 1.10.8.2 Where specified, warranty shall be countersigned by Subcontractors and installers.
- 1.10.9 Rejection of Warranties: County reserves right to reject unsolicited and coincidental product warranties which detract from or confuse requirements or interpretations of Contract Documents.
- 1.10.10 Term of Warranties: For materials, equipment, systems and workmanship, warranty period shall be two (2) years minimum from date of Substantial Completion, as defined in the General Conditions, except where:
 - 1.10.10.1 Detailed specifications for certain materials, equipment or systems require longer warranty periods.
 - 1.10.10.2 Materials, equipment or systems are put into beneficial use of County prior to Final Completion as agreed to in writing by County.
- 1.10.11 Warranty of Title: No material, supplies, or equipment for Work under the Contract Documents 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. Design Builder warrants good title to all material, supplies, and equipment installed or incorporated in Work and agrees upon completion of all work to deliver premises, together with improvements and appurtenances constructed or placed thereon by Design Builder, to County free from any claim, liens, security

interest, or charges, and further agrees that neither Design Builder nor any person, firm, or corporation furnishing any materials or labor for any Work covered by the Contract Documents shall have right to lien upon premises or improvement or appurtenances thereon. Nothing contained in this paragraph, however, shall defeat or impair right of persons furnishing materials or labor under bond given by Design Builder for their protection or any rights under law permitting persons to look to funds due Design Builder in hands of County.

1.11 TURN-IN

The Contract Documents will not be closed out and final payment will not be made until all personnel identification media, vehicle permits, and keys issued to Design Builder during prosecution of Work are turned in to County.

1.12 RELEASE OF CLAIMS

The Contract Documents will not be closed out and final payment will not be made until a Release of Claims is completed and executed by Design Builder and County.

1.13 FIRE INSPECTION COORDINATION

Design Builder shall coordinate fire inspection and secure sufficient notice to County to permit convenient scheduling, if necessary.

PART 2 - PRODUCTS - Not used.

PART 3 - EXECUTION - Not used.

END OF SECTION

SECTION 017823

OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 SUMMARY

1.1.1 This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:

1.1.1.1 Operation and Maintenance documentation directory.

1.1.1.2 Finishes maintenance manuals for the care and maintenance of products, materials, and finishes.

1.1.1.3 Operation and maintenance manuals for systems, subsystems, and equipment.

1.1.2 Related Sections include the following:

1.1.2.1 Section 013000 (Submittal Procedures) for submitting copies of submittals for operation and maintenance manuals.

1.1.2.2 Section 017700 (Closeout Procedures) for submittal of Project Record Documents and material, equipment, and finish data.

1.1.2.3 Section 017839 (Project Record Documents) for preparing Record Drawings for operation and maintenance manuals.

1.1.2.4 Technical Specifications for specific operation and maintenance manual requirements for the Work in those Sections.

1.2 DEFINITIONS

1.2.1 System: An organized collection of parts, equipment, or subsystems united by regular interaction.

1.2.2 Subsystem: A portion of a system with characteristics similar to a system.

1.3 SUBMITTALS

1.3.1 Each Component of the Project shall be considered a separate submittal for the purposes of this section.

1.3.2 Initial Submittal: Submit draft copies of the O&M Directory and each manual in digital PDF format at least thirty (30) Days before requesting inspection for Substantial Completion. County will review and provide comment whether general scope and content of each manual is acceptable.

1.3.3 Final Submittal: Submit at least thirty (30) Days before Final Completion.

1.3.3.1 Hard Copy Format: Submit two (2) hard copies of the O&M Manual Binder which contains Operation and Maintenance Directory and all manuals that have addressed comments from the initial submittal.

1.3.3.2 Electronic Format: Submit one (1) electronic copy of O&M Binder in text-searchable PDF format. Files/folders should be organized to match Hard Copy with file folders for each manual. Large files submitted for systems or complex equipment shall be bookmarked to allow for efficient navigation through the file.

1.4 COORDINATION

Where operation and maintenance documentation include information on installations by more than one factory-authorized service representative, assemble and coordinate information furnished by all representatives in prepared manuals.

PART 2 - PRODUCTS

2.1 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

2.1.1 Organization: Include a section in the directory for each of the following:

2.1.1.1 List of systems and subsystems.

2.1.1.2 List of equipment.

2.1.1.3 Tables of contents.

2.1.2 List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.

2.1.3 List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.

2.1.4 Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.

2.1.5 Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, *Preparation of Operating and Maintenance Documentation for Building Systems*.

2.2 MANUALS, GENERAL

2.2.1 Organization: Unless otherwise indicated, 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. Each manual shall contain the following materials, in the order listed:

2.2.1.1 Title page.

2.2.1.2 Table of contents.

- 2.2.1.3 Manual contents, including all approved product data, shop drawings, installation instructions for equipment and all consumable components such as filters, operation instructions, manufacturer's recommended maintenance instructions, and other data required in individual Specification Sections.

2.2.2 Binder Labels:

- 2.2.2.1 Spine shall include the following information, in the order listed:

- (a) Project name and any additional identifying information requested by County.
- (b) Specification Section(s) (number and title of each Section).
- (c) "Operation & Maintenance Data" beneath the Specification Section(s).

- 2.2.2.2 Front cover shall include the following information, in the order listed:

- (a) Project name and any additional identifying information requested by County.
- (b) Specification Section(s) (number and title of each Section).
- (c) "Operation & Maintenance Data" beneath the Specification Section(s).
- (d) Date of submittal

2.2.3 Title Page: Enclose title page in transparent plastic sleeve. Include the following information:

- 2.2.3.1 Subject matter included in manual, including Specification Section(s) (number and title of each Section).
- 2.2.3.2 Name and address of Project.
- 2.2.3.3 Date of submittal.
- 2.2.3.4 Name, address, and telephone number of Design Builder.
- 2.2.3.5 Name and address of responsible Design Professional.
- 2.2.3.6 Cross-reference to related systems in other operation and maintenance manuals.
- 2.2.3.7 Volume number (e.g. Volume 1 of 3)

2.2.4 Table of Contents: 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 Project Manual.

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.

2.2.5 Manual Contents: 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.

- 2.2.5.1 Binders: Heavy-duty, 3-ring, “D” ring, vinyl-covered, loose-leaf 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.
 - 2.2.5.1.1 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.
 - 2.2.5.1.2 Identify each binder on front and spine, with printed title “OPERATION AND MAINTENANCE MANUAL,” Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets (e.g. Volume 1 of 3).
- 2.2.5.2 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 Project Manual.
- 2.2.5.3 Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software on digital media for computerized electronic equipment.
- 2.2.5.4 Supplementary Text: Prepared on 8-1/2-by-11-inch white bond paper.
- 2.2.5.5 Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
 - 2.2.5.5.1 If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
 - 2.2.5.5.2 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.
 - 2.2.5.5.3 Use of photographs instead of drawings to demonstrate unusual installations is acceptable.

2.3 PRODUCT FINISHES MAINTENANCE MANUAL

- 2.3.1 Content: 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.
- 2.3.2 Source Information: List each product included in manual, identified by product name and arranged to match Project Manual (Specifications) 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 Project Manual.

2.3.3 Product Information: Include the following, as applicable:

- 2.3.3.1 Product name and model number.
- 2.3.3.2 Manufacturer's name.
- 2.3.3.3 Color, pattern, and texture.
- 2.3.3.4 Material and chemical composition.
- 2.3.3.5 Reordering information for specially manufactured products.

2.3.4 Maintenance Procedures: Include manufacturer's written recommendations and the following:

- 2.3.4.1 Inspection procedures.
- 2.3.4.2 Types of cleaning agents to be used and methods of cleaning.
- 2.3.4.3 List of cleaning agents and methods of cleaning detrimental to product.
- 2.3.4.4 Schedule for routine cleaning and maintenance.
- 2.3.4.5 Repair instructions.

2.3.5 Repair Materials and Sources: Include lists of materials and local sources of materials and related services.

2.3.6 Warranties and Bonds:

- 2.3.6.1 Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
- 2.3.6.2 Include procedures to follow and required notifications for warranty claims.

2.4 SYSTEMS AND EQUIPMENT OPERATION AND MAINTENANCE MANUAL

2.4.1 Content: For each system, subsystem, and piece of equipment not part of a system, include operation data, 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. In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:

- 2.4.1.1 System, subsystem, and equipment descriptions.
- 2.4.1.2 Performance and design criteria.
- 2.4.1.3 Operating standards.
- 2.4.1.4 Operating procedures.
- 2.4.1.5 Operating logs.
- 2.4.1.6 Wiring diagrams.

- 2.4.1.7 Control diagrams.
- 2.4.1.8 Piped system diagrams.
- 2.4.1.9 Precautions against improper use.
- 2.4.1.10 License requirements including inspection and renewal dates.
- 2.4.2 Descriptions: Include the following:
 - 2.4.2.1 Product name and model number.
 - 2.4.2.2 Manufacturer's name.
 - 2.4.2.3 Equipment identification with serial number of each component.
 - 2.4.2.4 Equipment function.
 - 2.4.2.5 Operating characteristics.
 - 2.4.2.6 Limiting conditions.
 - 2.4.2.7 Performance curves.
 - 2.4.2.8 Engineering data and tests.
 - 2.4.2.9 Complete nomenclature and number of replacement parts.
- 2.4.3 Operating Procedures: Include the following, as applicable:
 - 2.4.3.1 Startup procedures.
 - 2.4.3.2 Equipment or system break-in procedures.
 - 2.4.3.3 Routine and normal operating instructions.
 - 2.4.3.4 Regulation and control procedures.
 - 2.4.3.5 Instructions on stopping.
 - 2.4.3.6 Normal shutdown instructions.
 - 2.4.3.7 Seasonal and weekend operating instructions.
 - 2.4.3.8 Required sequences for electric or electronic systems.
 - 2.4.3.9 Special operating instructions and procedures.
- 2.4.4 Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.
- 2.4.5 Piped Systems: Diagram piping as installed and identify color-coding where required for identification.
- 2.4.6 Source Information: 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 Project Manual.
- 2.4.7 Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
 - 2.4.7.1 Standard printed maintenance instructions and bulletins.

- 2.4.7.2 Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
- 2.4.7.3 Identification and nomenclature of parts and components.
- 2.4.7.4 List of items recommended to be stocked as spare parts.
- 2.4.8 Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
 - 2.4.8.1 Test and inspection instructions.
 - 2.4.8.2 Troubleshooting guide.
 - 2.4.8.3 Precautions against improper maintenance.
 - 2.4.8.4 Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - 2.4.8.5 Aligning, adjusting, and checking instructions.
- 2.4.9 Maintenance and Service Schedules: 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.
 - 2.4.9.1 Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
 - 2.4.9.2 Maintenance and Service Record: Include manufacturers' forms for recording maintenance.
- 2.4.10 Spare Parts List and Source Information: 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.
- 2.4.11 Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.
- 2.4.12 Warranties and Bonds:
 - 2.4.12.1 Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 2.4.12.2 Include procedures to follow and required notifications for warranty claims.
- 2.5 SYSTEMS AND EQUIPMENT OPERATION AND MAINTENANCE MANUAL
 - 2.5.1 Content: Organize manual into a separate section for each system, subsystem, and equipment. Include source information, maintenance service, maintenance dates, and maintenance agent, as described below.

- 2.5.2 Source Information: List each system, subsystem, and equipment, corresponding to the Operations and Maintenance Manual described in Section 2.4 above. For each item list name, address, and telephone number of installer or supplier.
- 2.5.3 Maintenance Service: List detailed scope of maintenance services that will be conducted for each system, subsystem, and equipment.
- 2.5.4 Maintenance Agent: List the maintenance service agent that will be contacting the County to coordinate the maintenance service
- 2.5.5 Maintenance Dates: List dates of each maintenance service.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

- 3.1.1 Operation and Maintenance Documentation Directory: Prepare a separate document that provides an organized reference to operation and maintenance manuals.
- 3.1.2 Product Finishes Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- 3.1.3 Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
 - 3.1.3.1 Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
 - 3.1.3.2 Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by County's operating personnel.
- 3.1.4 2-year Maintenance Manual: Assemble a complete set of all manufacturer's recommended maintenance that will be performed by the Design Builder and it's subcontractors or vendors during the 2-year maintenance period described in Section 006530 Project Guaranty.
- 3.1.5 Manufacturers' Data:
 - 3.1.5.1 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.
 - 3.1.5.2 If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
 - 3.1.5.3 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.

3.1.6 Drawings:

- 3.1.6.1 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 Record Drawings to ensure correct illustration of completed installation.
- 3.1.6.2 Comply with requirements of Record Shop Drawings in Division 1, Section 017839 - "Project Record Documents."

END OF SECTION

SECTION 017823

OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 SUMMARY

1.1.1 This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:

1.1.1.1 Operation and Maintenance documentation directory.

1.1.1.2 Finishes maintenance manuals for the care and maintenance of products, materials, and finishes.

1.1.1.3 Operation and maintenance manuals for systems, subsystems, and equipment.

1.1.2 Related Sections include the following:

1.1.2.1 Section 013000 (Submittal Procedures) for submitting copies of submittals for operation and maintenance manuals.

1.1.2.2 Section 017700 (Closeout Procedures) for submittal of Project Record Documents and material, equipment, and finish data.

1.1.2.3 Section 017839 (Project Record Documents) for preparing Record Drawings for operation and maintenance manuals.

1.1.2.4 Technical Specifications for specific operation and maintenance manual requirements for the Work in those Sections.

1.2 DEFINITIONS

1.2.1 System: An organized collection of parts, equipment, or subsystems united by regular interaction.

1.2.2 Subsystem: A portion of a system with characteristics similar to a system.

1.3 SUBMITTALS

1.3.1 Each Component of the Project shall be considered a separate submittal for the purposes of this section.

1.3.2 Initial Submittal: Submit draft copies of the O&M Directory and each manual in digital PDF format at least thirty (30) Days before requesting inspection for Substantial Completion. County will review and provide comment whether general scope and content of each manual is acceptable.

1.3.3 Final Submittal: Submit at least thirty (30) Days before Final Completion.

1.3.3.1 Hard Copy Format: Submit two (2) hard copies of the O&M Manual Binder which contains Operation and Maintenance Directory and all manuals that have addressed comments from the initial submittal.

1.3.3.2 Electronic Format: Submit one (1) electronic copy of O&M Binder in text-searchable PDF format. Files/folders should be organized to match Hard Copy with file folders for each manual. Large files submitted for systems or complex equipment shall be bookmarked to allow for efficient navigation through the file.

1.4 COORDINATION

Where operation and maintenance documentation include information on installations by more than one factory-authorized service representative, assemble and coordinate information furnished by all representatives in prepared manuals.

PART 2 - PRODUCTS

2.1 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

2.1.1 Organization: Include a section in the directory for each of the following:

2.1.1.1 List of systems and subsystems.

2.1.1.2 List of equipment.

2.1.1.3 Tables of contents.

2.1.2 List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.

2.1.3 List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.

2.1.4 Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.

2.1.5 Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, *Preparation of Operating and Maintenance Documentation for Building Systems*.

2.2 MANUALS, GENERAL

2.2.1 Organization: Unless otherwise indicated, 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. Each manual shall contain the following materials, in the order listed:

2.2.1.1 Title page.

2.2.1.2 Table of contents.

- 2.2.1.3 Manual contents, including all approved product data, shop drawings, installation instructions for equipment and all consumable components such as filters, operation instructions, manufacturer's recommended maintenance instructions, and other data required in individual Specification Sections.

2.2.2 Binder Labels:

- 2.2.2.1 Spine shall include the following information, in the order listed:

- (a) Project name and any additional identifying information requested by County.
- (b) Specification Section(s) (number and title of each Section).
- (c) "Operation & Maintenance Data" beneath the Specification Section(s).

- 2.2.2.2 Front cover shall include the following information, in the order listed:

- (a) Project name and any additional identifying information requested by County.
- (b) Specification Section(s) (number and title of each Section).
- (c) "Operation & Maintenance Data" beneath the Specification Section(s).
- (d) Date of submittal

2.2.3 Title Page: Enclose title page in transparent plastic sleeve. Include the following information:

- 2.2.3.1 Subject matter included in manual, including Specification Section(s) (number and title of each Section).
- 2.2.3.2 Name and address of Project.
- 2.2.3.3 Date of submittal.
- 2.2.3.4 Name, address, and telephone number of Design Builder.
- 2.2.3.5 Name and address of responsible Design Professional.
- 2.2.3.6 Cross-reference to related systems in other operation and maintenance manuals.
- 2.2.3.7 Volume number (e.g. Volume 1 of 3)

2.2.4 Table of Contents: 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 Project Manual.

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.

2.2.5 Manual Contents: 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.

- 2.2.5.1 Binders: Heavy-duty, 3-ring, “D” ring, vinyl-covered, loose-leaf 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.
 - 2.2.5.1.1 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.
 - 2.2.5.1.2 Identify each binder on front and spine, with printed title “OPERATION AND MAINTENANCE MANUAL,” Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets (e.g. Volume 1 of 3).
- 2.2.5.2 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 Project Manual.
- 2.2.5.3 Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software on digital media for computerized electronic equipment.
- 2.2.5.4 Supplementary Text: Prepared on 8-1/2-by-11-inch white bond paper.
- 2.2.5.5 Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
 - 2.2.5.5.1 If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
 - 2.2.5.5.2 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.
 - 2.2.5.5.3 Use of photographs instead of drawings to demonstrate unusual installations is acceptable.

2.3 PRODUCT FINISHES MAINTENANCE MANUAL

- 2.3.1 Content: 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.
- 2.3.2 Source Information: List each product included in manual, identified by product name and arranged to match Project Manual (Specifications) 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 Project Manual.

2.3.3 Product Information: Include the following, as applicable:

- 2.3.3.1 Product name and model number.
- 2.3.3.2 Manufacturer's name.
- 2.3.3.3 Color, pattern, and texture.
- 2.3.3.4 Material and chemical composition.
- 2.3.3.5 Reordering information for specially manufactured products.

2.3.4 Maintenance Procedures: Include manufacturer's written recommendations and the following:

- 2.3.4.1 Inspection procedures.
- 2.3.4.2 Types of cleaning agents to be used and methods of cleaning.
- 2.3.4.3 List of cleaning agents and methods of cleaning detrimental to product.
- 2.3.4.4 Schedule for routine cleaning and maintenance.
- 2.3.4.5 Repair instructions.

2.3.5 Repair Materials and Sources: Include lists of materials and local sources of materials and related services.

2.3.6 Warranties and Bonds:

- 2.3.6.1 Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
- 2.3.6.2 Include procedures to follow and required notifications for warranty claims.

2.4 SYSTEMS AND EQUIPMENT OPERATION AND MAINTENANCE MANUAL

2.4.1 Content: For each system, subsystem, and piece of equipment not part of a system, include operation data, 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. In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:

- 2.4.1.1 System, subsystem, and equipment descriptions.
- 2.4.1.2 Performance and design criteria.
- 2.4.1.3 Operating standards.
- 2.4.1.4 Operating procedures.
- 2.4.1.5 Operating logs.
- 2.4.1.6 Wiring diagrams.

- 2.4.1.7 Control diagrams.
- 2.4.1.8 Piped system diagrams.
- 2.4.1.9 Precautions against improper use.
- 2.4.1.10 License requirements including inspection and renewal dates.
- 2.4.2 Descriptions: Include the following:
 - 2.4.2.1 Product name and model number.
 - 2.4.2.2 Manufacturer's name.
 - 2.4.2.3 Equipment identification with serial number of each component.
 - 2.4.2.4 Equipment function.
 - 2.4.2.5 Operating characteristics.
 - 2.4.2.6 Limiting conditions.
 - 2.4.2.7 Performance curves.
 - 2.4.2.8 Engineering data and tests.
 - 2.4.2.9 Complete nomenclature and number of replacement parts.
- 2.4.3 Operating Procedures: Include the following, as applicable:
 - 2.4.3.1 Startup procedures.
 - 2.4.3.2 Equipment or system break-in procedures.
 - 2.4.3.3 Routine and normal operating instructions.
 - 2.4.3.4 Regulation and control procedures.
 - 2.4.3.5 Instructions on stopping.
 - 2.4.3.6 Normal shutdown instructions.
 - 2.4.3.7 Seasonal and weekend operating instructions.
 - 2.4.3.8 Required sequences for electric or electronic systems.
 - 2.4.3.9 Special operating instructions and procedures.
- 2.4.4 Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.
- 2.4.5 Piped Systems: Diagram piping as installed and identify color-coding where required for identification.
- 2.4.6 Source Information: 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 Project Manual.
- 2.4.7 Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
 - 2.4.7.1 Standard printed maintenance instructions and bulletins.

- 2.4.7.2 Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
- 2.4.7.3 Identification and nomenclature of parts and components.
- 2.4.7.4 List of items recommended to be stocked as spare parts.
- 2.4.8 Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
 - 2.4.8.1 Test and inspection instructions.
 - 2.4.8.2 Troubleshooting guide.
 - 2.4.8.3 Precautions against improper maintenance.
 - 2.4.8.4 Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - 2.4.8.5 Aligning, adjusting, and checking instructions.
- 2.4.9 Maintenance and Service Schedules: 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.
 - 2.4.9.1 Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
 - 2.4.9.2 Maintenance and Service Record: Include manufacturers' forms for recording maintenance.
- 2.4.10 Spare Parts List and Source Information: 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.
- 2.4.11 Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.
- 2.4.12 Warranties and Bonds:
 - 2.4.12.1 Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 2.4.12.2 Include procedures to follow and required notifications for warranty claims.
- 2.5 SYSTEMS AND EQUIPMENT OPERATION AND MAINTENANCE MANUAL
 - 2.5.1 Content: Organize manual into a separate section for each system, subsystem, and equipment. Include source information, maintenance service, maintenance dates, and maintenance agent, as described below.

- 2.5.2 Source Information: List each system, subsystem, and equipment, corresponding to the Operations and Maintenance Manual described in Section 2.4 above. For each item list name, address, and telephone number of installer or supplier.
- 2.5.3 Maintenance Service: List detailed scope of maintenance services that will be conducted for each system, subsystem, and equipment.
- 2.5.4 Maintenance Agent: List the maintenance service agent that will be contacting the County to coordinate the maintenance service
- 2.5.5 Maintenance Dates: List dates of each maintenance service.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

- 3.1.1 Operation and Maintenance Documentation Directory: Prepare a separate document that provides an organized reference to operation and maintenance manuals.
- 3.1.2 Product Finishes Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- 3.1.3 Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
 - 3.1.3.1 Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
 - 3.1.3.2 Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by County's operating personnel.
- 3.1.4 2-year Maintenance Manual: Assemble a complete set of all manufacturer's recommended maintenance that will be performed by the Design Builder and it's subcontractors or vendors during the 2-year maintenance period described in Section 006530 Project Guaranty.
- 3.1.5 Manufacturers' Data:
 - 3.1.5.1 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.
 - 3.1.5.2 If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
 - 3.1.5.3 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.

3.1.6 Drawings:

- 3.1.6.1 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 Record Drawings to ensure correct illustration of completed installation.
- 3.1.6.2 Comply with requirements of Record Shop Drawings in Division 1, Section 017839 - "Project Record Documents."

END OF SECTION

SECTION 017839

PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

- 1.1.1 This Section includes general, administrative and procedural requirements for project record documents. Design Builder shall have complete responsibility for preparation of marked-up As-Builts and final Record Documents, including the following:

1.1.1.1 Record CAD drawings and BIM files

1.1.1.2 Record specifications

1.1.1.3 Miscellaneous record submittals

- 1.1.2 Related Sections include the following:

1.1.2.1 Section 017700 (Closeout Procedures) for general closeout procedures.

1.1.2.2 Section 017823 (Operations and Maintenance Data) for operation and maintenance manual requirements.

1.1.2.3 Divisions 2 through 16 Sections for specific requirements for project record documents in those Sections.

1.2 PRE-SUBMITTAL MEETING

Prior to submitting any project record documents described herein, Design Builder shall convene a pre-submittal meeting to review all required project record documents to establish County and Design Builder understanding of the requirements, County preferences for content, format, and number of sets, and any requirements that the County agrees may be waived or modified. Minutes of the pre-submittal meeting shall be recorded by Design Builder and distributed to County and County Representative for review and confirmation.

1.3 SUBMITTALS

- 1.3.1 Record CAD Drawings and BIM files: Comply with the following:

1.3.1.1 Number of Digital and Hard Copies: Submit digital and hard copies of As-Builts and Record Drawings as follows:

1.3.1.1.1 *Initial Submittal:* Submit one set of digital and one set of bond plots from corrected record electronic drawings and one set of marked-up (in **red**) As-Built prints. Design Builder's Architect of Record will initial and date each plot and mark (in **red**) whether general scope of changes, additional information recorded, and quality of drafting is acceptable. County Representative will return plots with any comments (in **red**) to be incorporated into record drawings.

- 1.3.1.1.2 *Final Submittal:* Submit one digital and one complete **full color** sets of Record Drawings, and one complete **full color** sets of As-Built Drawings. Plot and print each drawing, whether or not changes and additional information were applicable to the sheet.
- 1.3.1.1.3 Drawings shall be organized into volumes by discipline and bound with bolts into sets no more than 1" thick with translucent mylar covers front and back. Include a title sheet describing the contents of each set and listing the contents of all volumes/sets.
- 1.3.1.2 Electronic Media: Along with the initial and final hard copies listed above, submit CAD files, BIM files, and PDF files of all drawings.
 - 1.3.1.2.1 CAD and BIM files shall be Revit, Version 2025 or later operating in Microsoft Windows operating system.
 - 1.3.1.2.2 PDF files shall be of manageable file size and organized by discipline with bookmarks for ease of navigation to each drawing.
- 1.3.2 Record Specifications: Prior to submitting hard copies, submit one (1) electronic file copy, conformed to include addenda and contract modifications. Electronic media shall be Microsoft Word, Version 2010 or later operating in Microsoft Windows operating system. Provide as a submittal, which County shall review, and after County acceptance of content and format, Design-Builder shall submit one (1) hard copy set and final electronic files in both MS Word document and PDF format. Hard copies shall be organized into volumes with plastic front and back covers and bound with bolts into sets no more than 2" thick.

PART 2 - PRODUCTS

2.1 AS-BUILT AND RECORD DRAWINGS

- 2.1.1 As-Built Prints: Maintain one set of red-line prints of the permitted Construction Drawings, Deferred Approval Drawings, and relevant Shop Drawings on site. Label each document or volume (on first sheet or page) "PROJECT AS-BUILT". Keep As-Built documents current. Note: A reference by number to a Change Order, RFI, RFQ, Field Order or other such document is not acceptable as sufficient record information on any as-built document. Do not permanently conceal any Work until required information has been recorded.
 - 2.1.1.1 Preparation: Mark As-Built drawings to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is installer, Subcontractor, or similar entity, to prepare the marked-up As-Built.
 - 2.1.1.1.1 Give particular attention to information on concealed elements that would be difficult to identify or measure and record later. Record sufficient information such that Work concealed in the building may be located with ease and accuracy. County Representative will determine what constitutes sufficient information.

- 2.1.1.1.2 Accurately record information in an understandable drawing technique.
- 2.1.1.1.3 Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
- 2.1.1.1.4 Update project as-built drawings daily and allow for County inspection per paragraph 3.1.1 below.
- 2.1.1.2 Content: Types of items requiring marking include, but are not limited to, the following:
 - 2.1.1.2.1 Dimensional changes to the Drawings
 - 2.1.1.2.2 Revisions to details shown on the Drawings
 - 2.1.1.2.3 Depths of various elements of foundation in relation to main floor level or survey datum.
 - 2.1.1.2.4 Horizontal and vertical location of underground duct banks, utilities, and appurtenances referenced to permanent surface improvements.
 - 2.1.1.2.5 Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
 - 2.1.1.2.6 Establish locations of underground work, points of connection with existing utilities, changes in direction, valves, manholes, catch basins, capped stub-outs, invert elevations, and similar items.
 - 2.1.1.2.7 Provide actual numbering of each electrical circuit.
 - 2.1.1.2.8 Field changes of dimension and detail.
 - 2.1.1.2.9 Revisions to routing of piping and conduits
 - 2.1.1.2.10 Revisions to electrical circuitry
 - 2.1.1.2.11 Actual equipment locations
 - 2.1.1.2.12 Duct size and routing
 - 2.1.1.2.13 Changes made by Change Order
 - 2.1.1.2.14 Details not on original Contract Plans
- 2.1.1.3 Mark the Construction Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Construction Drawings.

- 2.1.1.4 Mark important additional information that was either shown schematically or omitted from original Drawings.
- 2.1.1.5 Note Alternate numbers, Change Order numbers, and similar identification, where applicable.
- 2.1.2 Electronic As-Built Drawings: Immediately before inspection for Substantial Completion, review marked-up as-built prints with County Representative and submit for architect's and other design professionals review and approval. Produce PDF files of the approved prints for submittal to the County.
- 2.1.3 Electronic Record Drawings: Prepare a full set of corrected electronic Record Drawings of the Construction Drawings, as follows:
 - 2.1.3.1 Format: Provide "live" files in Revit, Version 2025 or later, operating in Microsoft Windows operating system. Provide read only version of each drawing in full size PDF format.
 - 2.1.3.2 Incorporate changes and additional information previously marked on As-Built prints. Modify, delete, redraw, and add details and notations where applicable.
- 2.1.4 Electronic Record Shop Drawings: Prepare shop drawings instead of revising the Design Professional drawings as record drawings when shop drawings have been produced for the project.
 - 2.1.4.1 Revise Design Professional drawings to refer to shop drawing sheet for record drawing information for that particular product, material or equipment shown on the shop drawing.
 - 2.1.4.2 Shop drawings as record drawings shall detail and show requirements to record the actual physical installation and its relation to other construction. Integrate shop drawings into record drawing sets; comply with procedures for formatting, organizing, copying, binding, and submitting.
- 2.1.5 Format:
 - 2.1.5.1 Prints: Organize record prints and record shop drawings into manageable sets. Bind each set with durable mylar cover sheets. Include identification on cover sheets.
 - 2.1.5.2 Electronic Drawings: Organize Revit project files into separate electronic files that correspond to the system models used to develop the Project. Further organize these files into folders that correspond to the major phases of the Project. Each folder will contain a Microsoft Word document explaining the organizational logic of the Revit files and the system used to produce the paper drawing sheets.
 - 2.1.5.3 Identification:
 - 2.1.5.3.1 County's Project name.
 - 2.1.5.3.2 Date.

2.1.5.3.3 Designation “PROJECT RECORD DRAWINGS.”

2.1.5.3.4 Name of Design Professionals.

2.1.5.3.5 Name of Design Builder.

2.1.5.3.6 Professional license, seal and signature.

2.2 AS-BUILT AND RECORD SPECIFICATIONS

2.2.1 Preparation: Red-line mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.

2.2.1.1 Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.

2.2.1.2 Note related Change Orders and record drawings where applicable.

2.2.1.3 Indicate actual products used in record specifications, including manufacturer, model number and options.

2.2.1.4 Line out any items not utilized on the project.

2.2.1.5 Update project record documents daily and allow for County inspection per paragraph 3.1.1 below.

2.2.2 Submittal: Immediately before inspection for Substantial Completion, review marked-up As-Built Specifications with County Representative. Provide as a numbered submittal, and following County acceptance of content and format prepare a full set of corrected Specifications of the Construction Specifications, as follows:

2.2.2.1 Format: Provide “live” Record Specification files in Microsoft Word, Version 2016 or later, operating in Microsoft Windows operating system. Provide searchable read only version of each specification in PDF format.

2.2.2.2 Incorporate changes and additional information previously marked on As-Built specs. Delete, rewrite, and add details and notations where applicable.

2.3 MISCELLANEOUS RECORD SUBMITTALS

2.3.1 Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference. Miscellaneous records include, but are not limited to, the following:

2.3.1.1 Field records on excavations and foundations.

2.3.1.2 Field records on underground construction and similar work.

2.3.1.3 Surveys showing locations and elevations of underground lines.

- 2.3.1.4 Authorized measurements using unit prices or allowances.
- 2.3.1.5 Certifications received in lieu of labels on bulk products.
- 2.3.1.6 Testing and qualification of trade persons.
- 2.3.1.7 Documented qualification of installation firms.
- 2.3.1.8 Load and performance testing.
- 2.3.1.9 Inspections and certifications by governing authorities.
- 2.3.1.10 Fire-resistance and flame-spread test results.
- 2.3.1.11 Final inspection and correction procedures.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- 3.1.1 Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and modifications to project As-Built documents as they occur. County Representative shall review documents in concert with the monthly Application for Payment. **Approval of Application for Payment may be withheld if As-Built Documents are not up to date.**
- 3.1.2 Maintenance of As-Built Documents and Samples: Store as-built documents and samples in the field office apart from the Contract Documents used for construction. Do not use project as-built documents for construction purposes. Maintain as-built documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project as-built documents for County Representative's reference during normal working hours.
- 3.1.3 The County reserves the right to review monthly updates of project as-built documents to confirm Design Builder's conformance with the requirements stated herein. Approval of monthly progress payments to Design Builder shall take into account any exceptions noted by County in its review of project as-built documents.

END OF SECTION

SECTION 017900

DEMONSTRATION AND TRAINING

PART 1 - GENERAL

1.1 SUMMARY

1.1.1 This Section includes administrative and procedural requirements for instructing County's personnel, including the following:

1.1.1.1 Demonstration of operation of systems, subsystems, and equipment.

1.1.1.2 Training in operation and maintenance of systems, subsystems, and equipment.

1.1.1.3 Demonstration and training videotapes.

1.1.2 Related Sections include the following:

1.1.2.1 Section 013100 (Project Management and Coordination) for requirements for pre-instruction conferences.

1.1.2.2 Divisions 2 through 16 Sections for specific requirements for demonstration and training for products in those Sections.

1.2 SUBMITTALS

1.2.1 Each Component shall be considered a separate submittal for the purposes of this section.

1.2.2 Instruction Program: Submit electronically for County review and approval, a Basic System Training Schedule form with the outline of instructional program for demonstration and training, including a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include learning objective and outline for each training module.

1.2.2.1 Once Training Schedule is approved by County, submit three (3) bound hard copies.

1.2.2.2 At completion of training, submit two complete training manual(s) including electronic and hard copies of any presentations or materials used at the training session for County's use. Include sign-in sheet showing all attendees at each training session.

1.2.2.3 Electronic Format: Submit copies in electronic format of each manual on USB drive.

1.2.3 Qualification Data: For each instructor.

1.2.4 Training Video: For each training session, submit electronic video in format directed by the County that captures the full content of the training and is suitable for training of additional personnel.

1.2.5 Attendance Record: For each training session, submit list of participants and length of instruction time.

1.3 QUALITY ASSURANCE

1.3.1 Instructor Qualifications: A factory-authorized service representative experienced in operation and maintenance procedures and training.

1.3.2 Pre-Instruction Conference: Conduct conference at Project site to comply with Section 013119 (Project Meetings). Review methods and procedures related to demonstration and training including, but not limited to, the following:

1.3.2.1 Inspect and discuss locations and other facilities required for instruction.

1.3.2.2 Review and finalize instruction schedule and verify availability of County staff, educational materials, instructors' personnel, and facilities needed to avoid delays.

1.3.2.3 Review required content of instruction.

1.3.2.4 For instruction that must occur outside, review weather and forecasted weather conditions and procedures to follow if conditions are unfavorable.

1.4 COORDINATION

1.4.1 Coordinate instruction schedule with County's operations. Adjust schedule as required to minimize disrupting County's operations.

1.4.2 Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.

1.4.3 Coordinate content of training modules with content of approved operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by County's Representative.

PART 2 - PRODUCTS

2.1 INSTRUCTION PROGRAM

2.1.1 Program Structure: Develop an instruction program that includes individual training sessions for each system and equipment not part of a system, as required by individual Specification Sections. Systems and equipment listed below are minimum examples that might apply to the project. Revise to suit Project:

2.1.1.1 Motorized doors, such as overhead coiling doors, overhead coiling grilles and automatic entrance doors.

2.1.1.2 Equipment, such as projection screens, access control, security screening.

- 2.1.1.3 HVAC systems, such as air-handling equipment, air distribution systems, and terminal equipment and devices.
 - 2.1.1.4 HVAC instrumentation and controls.
 - 2.1.1.5 Electrical service and distribution, such as transformers, switchboards, panel boards and motor controls.
 - 2.1.1.6 Lighting equipment and controls.
 - 2.1.1.7 Communication systems, such as intercommunication, surveillance, clocks and programming, voice and data, radio, antenna, signage, and audio/video equipment
 - 2.1.1.8 Plumbing equipment, fixtures, valves, pumps, and irrigation.
- 2.1.2 Training Sessions: Develop a learning objective and teaching outline for each session. Include a description of specific skills and knowledge that participant is expected to master. For each session, include instruction for the following:
- 2.1.2.1 Basis of System Design, Operational Requirements, and Criteria: Include the following:
 - 2.1.2.1.1 System, subsystem, and equipment descriptions.
 - 2.1.2.1.2 Performance and design criteria if Design Builder is delegated design responsibility.
 - 2.1.2.1.3 Operating standards.
 - 2.1.2.1.4 Regulatory requirements.
 - 2.1.2.1.5 Equipment function.
 - 2.1.2.1.6 Operating characteristics.
 - 2.1.2.1.7 Limiting conditions.
 - 2.1.2.1.8 Performance curves.
 - 2.1.2.2 Documentation: Review the following items in detail:
 - 2.1.2.2.1 Operations manuals.
 - 2.1.2.2.2 Maintenance manuals.
 - 2.1.2.2.3 Project Record Documents.
 - 2.1.2.2.4 Identification systems.
 - 2.1.2.2.5 Warranties and bonds.
 - 2.1.2.2.6 Maintenance service agreements and similar continuing commitments.
 - 2.1.2.3 Emergencies: Include the following, as applicable:
 - 2.1.2.3.1 Instructions on meaning of warnings, trouble indications, and error messages.
 - 2.1.2.3.2 Instructions on stopping.

- 2.1.2.3.3 Shutdown instructions for each type of emergency.
- 2.1.2.3.4 Operating instructions for conditions outside of normal operating limits.
- 2.1.2.3.5 Sequences for electric or electronic systems.
- 2.1.2.3.6 Special operating instructions and procedures.
- 2.1.2.4 Operations: Include the following, as applicable:
 - 2.1.2.4.1 Startup procedures.
 - 2.1.2.4.2 Equipment or system break-in procedures.
 - 2.1.2.4.3 Routine and normal operating instructions.
 - 2.1.2.4.4 Regulation and control procedures.
 - 2.1.2.4.5 Control sequences.
 - 2.1.2.4.6 Safety procedures.
 - 2.1.2.4.7 Instructions on stopping.
 - 2.1.2.4.8 Normal shutdown instructions.
 - 2.1.2.4.9 Operating procedures for emergencies.
 - 2.1.2.4.10 Operating procedures for system, subsystem, or equipment failure.
 - 2.1.2.4.11 Seasonal and weekend operating instructions.
 - 2.1.2.4.12 Required sequences for electric or electronic systems.
 - 2.1.2.4.13 Special operating instructions and procedures.
- 2.1.2.5 Adjustments: Include the following:
 - 2.1.2.5.1 Alignments.
 - 2.1.2.5.2 Checking adjustments.
 - 2.1.2.5.3 Noise and vibration adjustments.
 - 2.1.2.5.4 Economy and efficiency adjustments.
- 2.1.2.6 Troubleshooting: Include the following:
 - 2.1.2.6.1 Diagnostic instructions.
 - 2.1.2.6.2 Test and inspection procedures.
- 2.1.2.7 Maintenance: Include the following:
 - 2.1.2.7.1 Inspection procedures.
 - 2.1.2.7.2 Types of cleaning agents to be used and methods of cleaning.
 - 2.1.2.7.3 List of cleaning agents and methods of cleaning detrimental to product.
 - 2.1.2.7.4 Procedures for routine cleaning
 - 2.1.2.7.5 Procedures for preventive maintenance.

2.1.2.7.6 Procedures for routine maintenance.

2.1.2.7.7 Instruction on use of special tools.

2.1.2.8 Repairs: Include the following:

2.1.2.8.1 Diagnosis instructions.

2.1.2.8.2 Repair instructions.

2.1.2.8.3 Disassembly; component removal, repair, replacement and reassembly instructions.

2.1.2.8.4 Instructions for identifying parts and components.

2.1.2.8.5 Review of spare parts needed for operation and maintenance.

PART 3 - EXECUTION

3.1 PREPARATION

3.1.1 Assemble educational materials necessary for instruction, including documentation and training module. Assemble training sessions into a combined training manual.

3.1.2 Set up instructional equipment at instruction location.

3.2 INSTRUCTION

3.2.1 Engage qualified instructors to instruct County's personnel to adjust, operate, and maintain systems, subsystems, and associated equipment not part of the system.

3.2.2 Video each instruction program and edit as necessary to provide effective educational material for subsequent staff training.

3.2.3 Scheduling: Provide instruction at mutually agreed on times.

3.2.3.1 Schedule training with County's Representative with at least fourteen (14) Days' advance notice.

3.2.3.2 Fill out and expand, if necessary, the schedule form attached at the end of this section to reflect equipment and systems on the project.

3.2.4 Cleanup: Collect used and leftover educational materials and remove from Project site. Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

BASIC SYSTEMS TRAINING SCHEDULE

NOTE: Each system must be cross referenced to the Contract Documents and each component identified.

Spec. Section Number	System/Equipment Description	Plan/Schedule Identifier	Operations & Maintenance Manual Required?	Training Required?

BASIC SYSTEMS TRAINING SCHEDULE

NOTE: Each system must be cross referenced to the Contract Documents and each component identified.

Spec. Section Number	System/Equipment Description	Plan/Schedule Identifier	Operations & Maintenance Manual Required?	Training Required?

END OF SECTION

SECTION 018112

ENERGY PERFORMANCE MODELING AND VERIFICATION REQUIREMENTS

PART 1 GENERAL

1.1 SUMMARY

1.1.1 Section Includes:

- 1.1.1.1 Introduction.
- 1.1.1.2 General modeling guidelines.
- 1.1.1.3 Modeling rules and restrictions.
- 1.1.1.4 Modeling of energy efficiency measures.
- 1.1.1.5 Sample model.

1.1.2 Related Documents

- 1.1.2.1 The Contract Documents apply to the Work of this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other documents.

1.2 INTRODUCTION

- 1.2.1 This section describes the submission requirements and modeling procedures related to the minimum building energy performance. The County has determined that the goal for the Project (***Los Medanos Recovery Center Project***) shall be to use a minimum of twenty percent (20%) less energy than the current California Code of Regulations Title 24 Building Energy Standard. For the purposes of this section “project” shall refer to the ***Los Medanos Recovery Center Project***.

1.3 GENERAL MODELING GUIDELINES

1.3.1 California Code of Regulations Title 24 Standards

- 1.3.1.1 The Title 24 Standard allows both a prescriptive and performance approach in demonstrating compliance. For the purpose of this project, only a performance approach may be used to compare the building against the Title 24 Standard. The performance approach compares a computer model of the proposed building with a computer model representing a “Standard” design - based on key features of the proposed building - which is minimally compliant with Title 24. The Standard Design Building is a building that is automatically simulated by Commission-approved compliance software to establish the Energy Budget that is the maximum energy consumption allowed by a Proposed Building Design to comply with the Energy Code. The Standard Design Building is simulated using the same location and having the same characteristics of the Proposed Design Building, but assuming minimal compliance with the Mandatory and Prescriptive requirements applicable to the proposed building, as specified by the Alternative Calculation Methods Approval
- 1.3.1.2 The Contractor will be required to demonstrate a high degree of understanding of the Title 24 Standard and building energy performance

modeling and will apply that knowledge in modeling the proposed design. The Contractor will model the design using the rules and guidelines approved by the California Energy Commission (CEC) for compliance with the performance approach, employing the approved computer program described below.

1.3.2 Use of Energy Modeling Program

- 1.3.2.1 Modeling software must be industry standard (CEC approved) and provide reports in format requested by County.
- 1.3.2.2 It is the responsibility of the Design Builder to obtain a licensed copy of modeling software and to maintain the program and version through the duration of modeling activities during the development of the design and construction documents. The cost for obtaining a user's license, as well as the effort to competently operate and maintain the program, shall be solely at the Design Builder's expense.
- 1.3.2.3 The Design Builder shall be expected to use the modeling software in a manner consistent with both the Title 24 Building Energy Standards, the CEC's Alternative Calculation Method Approval Manual (ACM, October 2004) and user instructions and information updates offered by the program vendor. Superseding these are the specific modeling rules and restrictions specific to this project that are defined later in this document.
- 1.3.2.4 The Design Builder is strongly encouraged to engage a specialist sufficiently experienced in modeling large complex buildings, including efficient mechanical and lighting systems and strategies, using the software for energy performance exceeding Title 24 compliance requirements.

1.3.3 Submission Requirements

- 1.3.3.1 The Design Builder will be required to model the project initially during the Design phase and will be required to update the model for energy performance verification during the final Construction Document and construction phases. Initial model and updates shall be submitted for timely review and approval by the County's agent.
- 1.3.3.2 During the proposal stage, the Design Builder is encouraged to seriously consider the capital cost implications of design decisions with respect to the minimum energy performance goal and is strongly encouraged to prepare models that test the proposed design and design alternates against the goal.
- 1.3.3.3 The Design Builder will be required to document project energy use during the Construction Document and construction phases by modeling building performance using the approved computer program. Along with the required model, the Design Builder will submit all backup calculations, equipment cut sheets, design data, and other pertinent information documenting key inputs in the model, in a manner consistent with the approval process as determined by the County. This information will be assembled in a three-ring binder, organized by section and with a table of contents. The binder shall contain a USB drive with the most current model in the modeling software format.

- 1.3.3.4 The following schedule of deliverables will be part of the requirements of the contract. At a minimum, five (5) iterations of the energy models will be submitted.

1.3.3.4.1 Design Verification Phase

- 1.3.3.4.1.1 Preliminary Design Phase Model: fifteen percent (15%) Submissions, upon completion of preliminary mechanical plus detailed lighting equipment layouts. Additionally, a Microsoft Excel spreadsheet that details the proposed installed ambient and task lighting power density on a room-by-room basis must be submitted that accurately reflects the drawings and specifications. Include a csv file with the hourly kWh or kW total building electrical load data.

1.3.3.4.2 Construction Document Phase

- 1.3.3.4.2.1 Preliminary Construction Document Phase Model: fifty percent (50%) Submissions. Additionally, an Excel spreadsheet that details the proposed installed ambient and task lighting power density on a room-by-room basis must be submitted that accurately reflects the drawings and specifications. Include a csv file with the hourly kWh or kW total building electrical load data.
- 1.3.3.4.2.2 Final Construction Document Phase Model: one-hundred percent (100%) Submission. Additionally, an Excel spreadsheet that details the proposed installed ambient and task lighting power density on a room-by-room basis must be submitted that accurately reflects the drawings and specifications. Include a csv file with the hourly kWh or kW total building electrical load data.

1.3.3.4.3 Construction Phase

- 1.3.3.4.3.1 Verification Models (max. 1): 10 days following request by County agent.
- 1.3.3.4.3.2 Final Record Model: at Substantial Completion. The record model as may be used for the basis of LEED™ 5.0 Energy and Atmosphere Credit 1: Optimize Energy Performance plus any material changes that have occurred during construction. The Final Record Model shall indisputably demonstrate modeled building energy performance that is equal to or superior to the requirement stated in the Introduction to this section.

1.3.4 County Review of Required Model Submissions

- 1.3.4.1 The County or County's agent will review the model submitted by the Design Builder at each phase. Written review comments, along with any request for clarifications or additional information, will be prepared by the County within 14 days from the receipt of the Design Builder's submissions. The Design Builder will have 10 days to adequately respond to requests for additional information.
- 1.3.4.2 Once the review and response period has been completed, the County will issue a brief report, accepting or rejecting the model, with specific reason(s) for non-compliance. If the County rejects the models, the Contractor will have the opportunity to provide additional data and/or to submit a revised model within 10 days of notification by the County upon appeal.

1.3.5 Non-Compliance Resolution

- 1.3.5.1 In the event that the County and Design Builder fail to reach a consensus regarding the interim model submissions, a Non-Compliance report will be forwarded by the County to the California Energy Commission (CEC), who will be responsible for resolving outstanding modeling issues. The CEC, as author of the Title 24 Energy Standards and the performance compliance method, shall make recommendations to the County or County's agent regarding final interpretation of Title 24 performance method compliance modeling issues.

1.4 MODELING OF ENERGY EFFICIENCY BUILDING FEATURES

- 1.4.1 Construction Assemblies: Construction assemblies, particularly with respect to proposed insulation materials, shall accurately reflect the proposed assembly, provided that all other requirements of the contract documents are met.
- 1.4.2 Glazing: Proposed glazing shall accurately reflect the proposed assembly, provided that all other requirements of the contract documents are met. Overall window assembly U-Factor and Solar Heat Gain Coefficient (SHGC) shall be input per proposed design. (Note that manufacturer's published U-Factors and SHGCs may require adjustments for frame effects as these are often listed as center of glass values.)
- 1.4.3 Interior Shading: Fixed interior shading elements shall accurately reflect the proposed assembly, provided that all other requirements of the contract documents are met.
- 1.4.4 Exterior Shading: Exterior shading, including overhangs, fins and other self-shading elements are defined in the contract documents and may not be altered.
- 1.4.5 Lighting Power Density (LPD): The Area Category approach to modeling of interior lighting; i.e., "Installed LPD", may be used along with lighting fixtures applied on a room-by-room basis to reflect the proposed detailed lighting design. Alternatively, lighting may be modeled using "Override with Modeled LPD; i.e., representing the installed power for all of the fixtures in the zone combined. In either case, the LPD should reflect lamp and ballast wattage per manufacturer's specifications.
 - 1.4.5.1 Lighting may alternatively be input as one LPD value representing the entire building. In that case, the LPD value should exactly match the summary of

lighting power on a room-by-room basis submitted in an Excel spreadsheet and as shown on lighting plans.

- 1.4.6 Lighting Control Credits: Lighting control credits for occupancy sensors and dimming systems may be used per the proposed design but only for the ambient lighting component. Daylighting control credits may be used in perimeter daylight zones only.
- 1.4.7 HVAC Air Systems: Modeling of air systems must be consistent with the overall integrated design of fans, motors, controls, ductwork, and terminal units, as appropriate for the design solution. Modeled inputs of system and individual equipment efficiencies used in the models must be adequately documented by technical submittals and shall represent the installed equipment as shown on the construction documents and schedules. Modeled supply and return air minimum volumes, volume controls, along with outside air ventilation, shall represent the installed equipment as shown on the construction documents and schedules and must be consistent with the other requirements of the contract documents.
- 1.4.8 HVAC Water/Fluid Systems for Heating/Cooling: Modeling of water/fluid systems must be consistent with the overall integrated design of pumps, motors, controls, pipe-work, and coils, as appropriate for the design solution. Modeled inputs of system and individual equipment efficiencies used in the models must be adequately documented by technical submittals and shall represent the installed equipment as shown on the construction documents and schedules. Modeled fluid flows, system minimum capacities, temperatures and ranges must be consistent with the other requirements of the contract documents.

PART 2 - PRODUCTS - Not used.

PART 3 - EXECUTION - Not used.

END OF SECTION

SECTION 018113

SUSTAINABLE DESIGN REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

1.1.1 Section Includes:

- 1.1.1.1 U.S. Green Building Council LEED Green Building Rating System Version 5.0.
- 1.1.1.2 Design Builder's Responsibilities.
- 1.1.1.3 Sustainable Design Rating Requirements.
- 1.1.1.4 County's Responsibilities.
- 1.1.1.5 County Objectives and Principles.

1.2 REFERENCES and RESOURCES

- 1.2.1 All web-page references, current as of the release of the Performance Criteria Manual, are provided as a courtesy.
- 1.2.2 U. S. Green Building Council (USGBC), at: <https://www.usgbc.org/resources/leed-v5-reference-guide-building-design-and-construction-november-2025-edition>, LEED Green Building Rating System, Version 5.0.
- 1.2.3 U.S. Department of Energy Office of Energy Efficiency and Renewable Energy Website: <https://energy.gov/eere/better-buildings>
- 1.2.4 Whole Building Design Guide, federal sustainable design and development principles, which are consistent with the LEED™ rating system: <http://wbdg.org>.
- 1.2.5 New Building Institute, *New Construction Guide*, 2015.
- 1.2.6 Los Alamos National Laboratory (LANL), *Sustainable Design Guide*
- 1.2.7 Advanced Energy Design Guide for Small to Medium Office Buildings <https://www.ashrae.org/standards-research--technology/advanced-energy-design-guides/50-percent-aedg-free-download>
- 1.2.8 Federal Energy Management Program, for energy efficient products: <https://energy.gov/eere/femp/energy-efficient-products-and-energy-saving-technologies> or telephone 202-586-3267
- 1.2.9 Comprehensive Procurement Guidelines, for products designated by the U.S. Environmental Protection Agency for purchase with recovered materials: <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>
- 1.2.10 Building for Environmental and Economic Sustainability (BEES), tool to weigh the environmental and economic performance of building products and materials: <https://www.nist.gov/services-resources/software/bees>

- 1.2.11 Contra Costa County Clean Water Program Municipal Regional Stormwater Permit C.3 Requirements:
<https://www.cccleanwater.org/development-infrastructure/developments>

1.3 U. S. GREEN BUILDING COUNCIL LEED RATING SYSTEM

Sustainable Design Certification: The U.S. Green Building Council (USGBC) certifies projects for sustainable design, based upon certain specific requirements and criteria. This program is called Leadership in Energy and Environmental Design (LEED™). The County typically requires that new projects achieve a LEED™ Silver rating based on the LEED BD+C™ Rating System for New Construction and Major Renovation, Version 5.0, or any newer versions approved by the USGBC and the County. ***The County's goal for Los Medanos Recovery Center project is for the Design Build Entity to pursue a qualifying score for a LEED™ Silver rating pursuing formal registration or certification of the project. See Proposal regarding obtaining actual LEED Silver Certification.***

1.4 DESIGN BUILDER'S RESPONSIBILITIES

- 1.4.1 Building Rating: Pursue a qualifying score for a LEED-BD+C™ Silver certification from USGBC for the project. ***(DBE shall not be required to formally register or certify the project with USGBC unless Proposal Enhancement C is selected.)***
- 1.4.2 LEED™ Accredited Professional: Design Builder shall retain the services of a LEED™ Accredited Professional for the duration of the project as an integral part of Design Builder's project team and coordinator of the LEED process. This person shall:
- 1.4.2.1 Have successfully passed USGBC's accredited professional exam and have managed the LEED accreditation process for a project of similar size and value.
 - 1.4.2.2 Schedule and administer project LEED discussions in accordance with section 013119 (Project Meetings).
 - 1.4.2.3 Provide management, coordination, and record keeping as required to demonstrate the achieved LEED scoring for the project.
 - 1.4.2.4 Successfully respond to any project meeting comments and requests for information to document the DBE's efforts to achieve a qualifying score for a LEED BD+C Silver rating for the project.
- 1.4.3 Job Site Recycling: Comply with the waste management program and performance requirements as specified and directed by County ordinance relating to construction and demolition debris management. Minimum performance requirements include: At least sixty-five percent (65%) of the total debris generated by the project shall be diverted from landfill via reuse or recycling.
- 1.4.4 Storm Water: Comply with storm water management regulations and performance requirements as specified and as directed by Department of Public Works and Contra Costa County Public Clean Water Program.

1.5 SUSTAINABLE DESIGN – LEED BD+C BUILDING RATING REQUIREMENTS

- 1.5.1 Ineligible Credits: As part of the scoring for sustainability related to a **LEED** BD+C Silver rated design, the Design Builder MAY NOT utilize Energy & Atmosphere Credit 7, Green Power and Carbon Offsets, nor rely on renewable energy produced by existing County infrastructure not associated with the Project.
- 1.5.2 Other LEED BD+C Credits: The Design Builder must consider and review options for additional other credits as selected by the Design Builder, in order to document Design Builders efforts to obtain a sufficient number of total credits for a qualifying score to achieve a LEED BD+C [™] Silver certification from USGBC.
- 1.5.3 Submittal to County: As part of the 50% and 100% Construction Document submittal, Design Builder shall document Design Builder's efforts to Achieve Green Building Criteria/ LEED BD+C Silver including, updated LEED [™] Project Checklists identifying which credits could be achieved based upon the current design. Design Builder shall keep County apprised of the anticipated number of LEED points within each credit category and compliance with all prerequisites for the Work by submitting a copy of the LEED Project Checklist showing the number of points in each LEED subcategory.

1.6 COUNTY OBJECTIVES AND PRINCIPLES

- 1.6.1 Intent: It is the County's intent to design, construct, commission, and operate the project following integrated, sustainable design principles, using green building technologies and materials. The benefits are a healthy, resource-efficient, and productive work environment, along with meeting the requirements and interests of the federal government, our surrounding community, and future generations.
 - 1.6.1.1 The County has developed its building design and construction standards, specifications, and Design Builder procurement methods and contracts to reflect sustainable design and operations practices. The purpose of this specification is to require the Design Builder to evaluate the principles of sustainable design in the Work for the **Los Medanos Recovery Center Project** and design the project to be capable of reaching a LEED Silver rating obligating the Design Builder to actually register, submit, and achieve a LEED BD+C Silver certification. Design Builder must document all decisions associated with all sustainable design and LEED efforts for the project.
- 1.6.2 Energy Efficient Products: The Design Builder shall purchase energy efficient products and equipment, including those labeled "EnergyStar" by the U.S. Environmental Protection Agency and/or those designated by the U.S. Department of Energy's Federal Energy Management Program (FEMP). This requirement applies to the Work, including the Design Builder's direct purchases.

PART 2 - PRODUCTS - Not used.

PART 3 - EXECUTION - Not used.

END OF SECTION

SECTION 018122

BIM PERFORMANCE REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- 1.1.1 This section describes requirements for Building Information Modeling (BIM) of the Project, including:

- 1.1.1.1 File Formats, level of detail, and model integrations
- 1.1.1.2 Systems to be modeled
- 1.1.1.3 Model updating, usage, and final As-Built deliverable

1.1.2 Related Sections

- 1.1.2.1 Section 011114 (Summary of Work – Design Services and Deliverables)
- 1.1.2.2 Section 013000 (Submittal Procedures)
- 1.1.2.3 Section 013100 (Project Management and Coordination)
- 1.1.2.4 Section 017700 (Closeout Procedures)

- 1.1.3 The Design Builder shall utilize a Building Information Modeling (BIM) system to submit design and construction document work in the form of a Virtual Construction Model (VC Model) of the project buildings in a parametric 3D format in order to maximize design and construction coordination of the facility through interference checking (clash detection) and code compliance studies within that electronic format.

- 1.1.3.1 Submit the VC Model to the County's Project Manager for review during the Request for Proposal and Construction Document Phase. Submittals are outlined in Section 011114 (Summary of Work – Design Services and Submittals).
- 1.1.3.2 Use the VC Model and associated model aggregation platform to facilitate the construction methods and means.
- 1.1.3.3 Update the VC Model and associated model aggregation platform progressively throughout the design and construction period to incorporate all sub-contractor information and approved changes.
- 1.1.3.4 Provide a final "as-built" VC Model to the County's Project Manager for the County's non-restricted right to use in operating and managing the facility.
- 1.1.3.5 Engage in regular BIM management meetings with the County and Design Build team participants to discuss and evolve the scope of work described through this section. Discussion topics will include element modeling responsibilities, interdisciplinary model integration and schedule up updates, model maintenance and clean up, clash detection and resolution, interstitial/ceiling space coordination of all disciplines, integration of 2 dimensional data not produced in a BIM platform, software interoperability, 2.5d modeling scope, best practices and technical feasibility in the context of rapidly evolving BIM technology.

1.2 USE OF THE VIRTUAL CONSTRUCTION MODEL

- 1.2.1 Upon execution of the “Electronic Data Transfer Agreement” attached at the end of this section, any or all of the Criteria Architect’s BIM models will be made available for use by the Design Builder in developing the VC Model, however such usage shall be for convenience only and shall not carry contractual implication. The Criteria Architect’s BIM model will be provided in an “as-is” condition and the Contractor may use the model at their discretion, and shall assume all responsibility for its use, and will be required to develop a BIM model to the levels defined in this Section and agreed to in the final BIM Execution Plan, regardless of the condition or quality of Criteria Architect BIM model completeness and at no additional cost to the Owner.
- 1.2.2 Intent of the VC Model and Aggregate Platform: The VC Model and aggregate platform shall be developed for design evaluation, coordination, communication and collaboration purposes during design and construction. At the completion of the Work, the VC model shall be turned over to the County. The County shall have exclusive rights to the model for their use in operating and managing the facility.
- 1.2.3 Basis of Information for Modeling: The Criteria Manual, Criteria Documents, and Additional Reports and Surveys shall be the basis of information for the VC Model described herein.

1.3 DEFINITIONS

- 1.3.1 BIM: Building Information Modeling, a process of constructing electronic models of facility’s buildings and site.
- 1.3.2 BIM Manager: The individual responsible for managing the Design-Build Entity’s (DBE) modeling and coordination process, including managing the Design-Build Entity’s BIM Staff and all other aspects of the DBE’s BIM requirements.
- 1.3.3 Level of Development (LOD): The term used to describe the fullness and definitiveness of the Model. The LOD definition is based on the AIA E 202 – 2008 document and expanded in document.
- 1.3.4 Model Aggregation Platform: The VC system models shall be aggregated into a single building information model via Autodesk® Navisworks software.
- 1.3.5 Native Model: A Model created in a specific 3D parametric modeling software platform. For example, a model made in Revit.
- 1.3.6 Object: The term used to describe the 3D virtual representation of each of the separate sub-parts of Model such as doors, walls, equipment etc. If an Object is, in itself, comprised of several sub-elements, the sub-elements shall be grouped into one virtual representation of that Object.
- 1.3.7 Room: The term used to describe any space within the enclosing walls of the building. The space may be rectangular or more complex.
- 1.3.8 Virtual Construction (VC) Model: The Design Builder’s Virtual Construction Model using 3-D Building Information Modeling (BIM) technologies to convey the design and construction elements of the project’s buildings and site. The VC Model will consist of a

minimum of seven system models e.g. Civil, Architectural, Structural, Mechanical, Electrical, Fire Protection and Equipment.

1.4 MINIMUM REQUIREMENTS

- 1.4.1 General: The VC Model shall be developed to include parametric components of major building and site elements as defined by Part 2 of this section.
- 1.4.2 Accuracy of the Models: The VC Model and each of its system models shall be developed to within a tolerance of 1/4" plus or minus. Model dimension strings shall not be set to round to coarser than 1/16" accuracy to ensure accurate modeling.
- 1.4.3 Parametric Data: The VC Model may vary in level of detail for individual elements, but at a minimum shall include sufficient parametric data to support use and analysis of:
- 1.4.3.1 Functional and visual representation of all spaces.
 - 1.4.3.2 Constructability review of Design Builders documents.
 - 1.4.3.3 Clash detection and correction of all major systems.
 - 1.4.3.4 Construction methods and means.
 - 1.4.3.5 Construction scheduling.
 - 1.4.3.6 As-built documentation and modeling.

1.4.4 GEO-SPATIAL DATUM CONTROL

- 1.4.4.1 The federated Model and all its Native Models shall be developed based on the California Coordinate System of 1983 (CCS83) horizontal datum control system, for Zones 1 through 6 as applicable to the Project location, and the NAVD 88 vertical datum control system.
- 1.4.4.2 The three-dimensional coordination of the Native Models to the VC Model shall be established using the above datum.
- 1.4.5 File Format: Revit or any file format (BIM application(s) or software(s)) approved by the County's Project Manager may be used for development of the VC Model providing that it is a true parametric, data-based application.

BIM application(s) and software(s) for reviewing the Federated Model shall use the current version of Autodesk® Navisworks software.

The preferred Native Model software is listed in the following matrix. The selection of software other than the preferred listed shall be reviewed and approved by the Owner and its BIM consultants. Any software submitted for use must support the BIM Requirements listed in this document and the resulting functions of the BIM Execution Plan (BEP).

Suggested Native Model Software Matrix		
Discipline	Native Model Software	Comments
Architectural	Revit® Architecture	
Fixtures, and Equipment	Revit Architecture	Applies to stationary items only
HVAC	Revit MEP® AutoCAD MEP ® CAD-Duct ®	

Plumbing	Revit MEP AutoCAD MEP CAD-Pipe	
Electrical	Revit MEP AutoCAD MEP	
Security Electronics	Revit MEP AutoCAD MEP	

- 1.4.6 The Design Builder shall maintain a matrix similar to that above that summarizes BIM software tools, including version of software being used on the project by all participants.
- 1.4.7 **Level of Detail:** The VC Model shall be developed and detailed sufficiently to meet the requirements of the Request for Proposal and the Contract Documents. The two levels of detail are Generic-model(ed) and Project-model(ed), as defined below. All elements listed under Part 2 Products shall be Project-model(ed). All other elements may be Generic-model(ed). The level of detail described by Part 2: Products shall be subject to further discussion, clarification, and evolution through BIM management meetings. The Design Builder will maintain a building component matrix that documents the BIM scope and clarifies responsibilities and level of detail. This matrix shall be subject to County approval.
- 1.4.7.1 “Generic-model(ed)”: the model and its elements may be based upon the standard objects available from the modeling software without project-specific customization. In addition, generic components may be used early in the BIM development process as “placeholders” for “project modeled” components.
- 1.4.7.2 “Project-model(ed)”: the model and/or a specific element must be customized to reflect project-specific configuration.
- 1.4.7.3 “2.5D Elements”: Model management may require use of 2.5D components. This type of component includes parametric, plan and elevation information but does not include 3D data. The scope of use for 2.5D elements shall be determined through discussions held at BIM management meetings.

PART 2 - PRODUCTS

2.1 SYSTEM MODELS

- 2.1.1 **Civil Systems:** The Civil Systems model shall serve as the basis for project shared coordinates through which the position of building elements on the site will be coordinated. The civil model shall be coordinated directly with the architectural model to ensure coordinated footprints, extents of work, FFE, etc. Except as noted, provide project-model(ed) elements of:
- 2.1.1.1 Topography: 1) existing natural and/or graded contours, and 2) new grades and finish contours.
- 2.1.1.2 Planting: 1) existing major landscaped areas, 2) existing trees to remain, 3) new landscaped areas, 4) new trees, and 5) irrigation lines over 2” diameter. Planting may be generic-model(ed).

- 2.1.1.3 Surface Improvements: 1) pavements, 2) curbs and gutters, 3) retaining walls, and 4) exterior non-building structures such as pools, shade structures etc.
- 2.1.1.4 Existing Structures: 1) all buildings within the project area intended to remain, 2) buildings intended to be demolished. All existing structures that are to remain untouched may be generic-model(ed) exterior surface only; interior elements are not required if the structure is to remain as-is. If the structure is to be demolished in full or partially demolished, enough information must be provided to provide accuracy of demolition scope. If structure is to be renovated or modified, sufficient detail must be provided to clearly and fully indicate scope and level of work to be performed.
- 2.1.1.5 Storm Water and Sanitary Sewers: 1) existing lines (over 3" diameter), boxes and structures within project area, 2) all new lines, boxes and structures, and 3) existing public lines, boxes and structures beyond the project area but serving as points of connection for the project. Storm Water and Sanitary Sewers outside the buildings may be generic-model(ed).
- 2.1.1.6 Utilities: 1) existing domestic and fire water main and branch lines (2" and larger diameter) within project area, 2) all new domestic and fire water lines, 3) existing electrical overhead and underground lines within project area, all new electrical lines outside buildings, 4) existing telephone and data lines within project area, 5) all new telephone and data lines outside buildings, 6) existing gas lines within project area, and 7) all new gas lines outside buildings. Utilities outside buildings may be generic-model(ed).
- 2.1.1.7 Other requirements:
 - 2.1.1.7.1 Quantities: data to reflect accurate quantities of the above elements.
- 2.1.2 Architectural Systems: The Architectural Systems Model shall be the primary model to which others are linked. Except as noted, provide project-model(ed) elements of:
 - 2.1.2.1 Spaces: 1) net square footage of all occupied spaces, 2) gross constructed floor area, per floor and total structure, 3) room names and numbers, and 4) floor, base, wall, and ceiling finishes.
 - 2.1.2.2 Exterior Walls and Curtain Walls: 1) type and composition, 2) height, length, and width, and 3) thermal, acoustic, fire, smoke, and security ratings.
 - 2.1.2.3 Partitions: 1) type and composition, 2) height, length, and width, 3) thermal, acoustic, fire, smoke, and security ratings., and ceiling or structure extension and top of wall attachment.
 - 2.1.2.4 Floors: 1) type and material, 2) thickness, and 3) finishes with basis of design manufacturer's name and product numbers. Link floor structure to the Structural Systems Model.
 - 2.1.2.5 Ceilings: 1) type and composition, 2) height, length, and width, 3) thermal, acoustic, fire, smoke and security ratings, and ceiling or structure extension and to of wall attachment.

- 2.1.2.6 Roof Coverings and Openings: 1) type and material, 2) configuration, 3) drainage system, 4) thermal, acoustic, fire, smoke, and security ratings, and 5) penetrations for modeled building components.
- 2.1.2.7 Exterior Doors, Windows, and Louvers: 1) type and material, 2) height, width, and thickness, 3) thermal, acoustic, fire, smoke, and security rating, 4) location, 5) hardware elements or group; and 6) detailing, sealing, and flashing to ensure water tight envelope.
- 2.1.2.8 Interior Doors, Windows, and Louvers: 1) type and material, 2) height, width, and thickness, 3) thermal, acoustic, fire, smoke, and security rating, 4) location, and 5) hardware elements or group.
- 2.1.2.9 Stairs and Ramps: 1) stairs and railings, 2) ramps and railings, and 3) handrails and guardrails.
- 2.1.2.10 Elevators and Escalators: 1) elevator cabs and doors, 2) elevator hoist-way doors and trim, 3) elevator machinery and equipment, 4) escalator belts and railings, and 5) escalator machinery and equipment.
- 2.1.2.11 Casework and Counters: 1) type and material, 2) height, width, and depth, 3) location, 4) configuration including doors, drawers and openings, etc., 5) integration of appliances, equipment, plumbing fixtures, wall attached elements, and any other elements to be integrated into casework or counter, and 6) hardware.
- 2.1.2.12 Plumbing Fixtures: 1) location. Link fixtures and trim to the Mechanical Systems Model.
- 2.1.2.13 Miscellaneous Fittings: 1) toilet partitions, 2) toilet room accessories, 3) grab bars, 4) personal storage lockers, 5) display cases, and 6) other surface applied quasi-permanent items such as mirrors etc.
- 2.1.2.14 Other requirements:
 - 2.1.2.14.1 Quantities: data to reflect accurate quantities of the above elements.
- 2.1.3 Structural Systems: The Structural Systems Model shall be a sub-system model linked to the architectural system model. Except as noted provide project-model(ed) elements of:
 - 2.1.3.1 Foundations and footings: 1) type and configuration, and 2) depth, length, and width.
 - 2.1.3.2 Slab(s) on-grade: 1) type and configuration, 2) under-slab base and waterproofing, 3) recesses, curbs, pads, closure pours, 4) major penetrations, and 5) cast in place equipment such as floor boxes, rails, tracks, etc.
 - 2.1.3.3 Basement Walls: 1) type and composition, 2) height, length, and width, and 3) thermal, acoustic, fire, smoke, and security ratings.

- 2.1.3.4 Elevated Floors: 1) columns and beams, 2) primary and secondary framing members, 3) bracing, 4) connections, and 5) framed, composite, and/or slab decks.
- 2.1.3.5 Roofs: 1) columns and beams, 2) primary and secondary framing members, 3) bracing, 4) connections, and 5) framed, composite, and/or slab decks.
- 2.1.3.6 Joints: 1) expansion and/or contraction, and 2) seismic.
- 2.1.3.7 Stairs and Ramps: 1) openings and framing, and 2) railing supports.
- 2.1.3.8 Shafts and Pits: 1) openings and framing, and 2) railing supports.
- 2.1.3.9 Other requirements:
 - 2.1.3.9.1 Quantities: include data to reflect accurate quantities of the above elements.
 - 2.1.3.9.2 Fireproofing: Fireproofing is not to be included in the BIM but clash detection studies shall include definition of tolerances for conflict detection.
 - 2.1.3.9.3 Color Code: color code structural steel from other elements.
- 2.1.4 **Mechanical:** The Mechanical Systems Model shall be a sub-system model linked to the architectural system model. Except as noted provide project-model(ed) elements of:
 - 2.1.4.1 Heating, Ventilating, and Air Conditioning: 1) all heating, ventilating, air-conditioning, exhaust fans, and specialty equipment, 2) air supply, return, ventilation and exhaust ducts, including space-consuming elbows and transitions, 3) fire dampers with ratings, 4) mechanical piping, and 5) registers, diffusers, grilles and hydronic baseboards. Coordinate and link fixtures and trim to the Architectural Systems Model.
 - 2.1.4.2 Plumbing: 1) all domestic plumbing piping and fixtures, 2) floor and area drains, and 3) related equipment.
 - 2.1.4.2.1 Piping larger than 1 .5" diameter shall be modeled.
 - 2.1.4.3 Roof Drainage: 1) all piping and fixtures, and 2) related equipment.
 - 2.1.4.3.1 Piping larger than 1 .5" diameter shall be modeled.
 - 2.1.4.4 Other requirements:
 - 2.1.4.4.1 Quantities: data to reflect accurate quantities of the above elements.
 - 2.1.4.4.2 Equipment Clearances: Clearances for major equipment and all M/E/P Equipment and Architecturally Significant Equipment including but not limited to Medical Equipment, Food Service Equipment, Laundry Equipment, Fitness or Gym Equipment, Performance or Theater Equipment, Lab Equipment, etc., as

model objects for conflict detection and maintenance access requirements.

2.1.4.4.3 Color Code: separate color code for each type element.

2.1.5 Electrical: The Electrical Systems Model shall be a sub-system model linked to the architectural system model. Except as noted provide project-model(ed) elements of:

2.1.5.1 Interior Electrical Power and Lighting: 1) all interior electrical components, 2) lighting, receptacles, special and general-purpose power receptacles, 3) lighting fixtures, 4) panel-boards and control systems, and 5) conduit and cable trays.

2.1.5.1.1 Individual conduit larger than 1 .5" diameter shall be modeled.

2.1.5.1.2 Groups or clusters runs of conduit of all sizes shall be modeled.

2.1.5.2 Exterior Building Electrical Power and Lighting: 1) all exterior electrical components, 2) lighting, receptacles, special and general-purpose power receptacles, 3) lighting fixtures, 4) panel-boards and control systems, and transformers, and 5) utility connection and equipment.

2.1.5.2.1 Individual conduit larger than 1 .5" diameter shall be modeled.

2.1.5.2.2 Grouped or clustered runs of conduit of all sizes shall be modeled.

2.1.5.3 Telephone, Data, Television, and Other Low Voltage: 1) all interior low voltage components, 2) outlets, receptacles, special and controls, 3) fixtures, 4) panel-boards, equipment racks, and control systems, and 5) conduit and cable trays.

2.1.5.3.1 Individual conduit larger than 1 .5" diameter shall be modeled.

2.1.5.3.2 Groups or clusters runs of conduit of all sizes shall be modeled.

2.1.5.4 Other requirements:

2.1.5.4.1 Quantities: data to reflect accurate quantities of the above elements.

2.1.5.4.2 Equipment Clearances: Clearances for major as model objects for conflict detection and maintenance access requirements.

2.1.5.4.3 Color Code: separate color code for each type element.

2.1.6 Fire Suppression: The Fire Suppression Systems Model shall be a sub-system model linked to the architectural system model. Except as noted provide Project-model(ed) elements of:

2.1.6.1 Fire Suppression System: 1 main lines

2.1.6.2 Fire Alarms: 1) alarm and notification devices, and 2) detection systems.

2.1.6.3 Other requirements:

- 2.1.6.3.1 Quantities: data to reflect accurate quantities of the above elements.
- 2.1.6.3.2 Equipment Clearances: Clearances for major equipment as model objects for conflict detection and maintenance access requirements.
- 2.1.6.3.3 Color Code: separate color code for each type element.

2.1.7 Equipment: The Equipment Model may be a sub-system model. Subject to owner approval and project scope and scale, all parts and pieces listed hereafter may be included in their relative discipline models such as architecture, mechanical and plumbing, and electrical if deemed appropriate to do so. Equipment includes furniture, fixtures, and equipment and systems, security equipment and systems, conveyance equipment and systems, manufacturing equipment and systems, etc. and provide for the following:

- 2.1.7.1.1 Equipment
- 2.1.7.1.2 Related mechanical, plumbing, and electrical requirements.
- 2.1.7.1.3 Quantities: data to reflect accurate quantities of the above elements.
- 2.1.7.1.4 Equipment Clearances: equipment clearances as model objects for conflict detection and maintenance access requirements.

2.2 MODEL SOFTWARE REQUIREMENTS

2.2.1 The Design Builder's selected BIM application(s) and software(s) for the VC Model shall:

- 2.2.1.1 Have maximum interoperability between systems models and shall be fully compatible with the current version of Autodesk® Navisworks software.
- 2.2.1.2 Be provided in a format that is compatible with a free software download for viewing the Design Builder's models with the ability to save and track user annotations and notes.
- 2.2.1.3 Contain reports/logs of:
 - 2.2.1.3.1 Discrepancies and/or clarifications in the Construction Documents identified during the modeling process.
 - 2.2.1.3.2 Conflicts between location and alignment of model elements with resolutions developed by the Design Builder.
 - 2.2.1.3.3 Quantities of modeled building element.
- 2.2.1.4 For any additional electronic model information that is not supported by the Revit or the primary software solution approved by Program manager, the Design Builder shall utilize AutoDesk® Navisworks software (Manage, Review, Simulate and Freedom) to create and utilize .nwd files.

- 2.2.1.5 Provide reports/logs in a format that links with scheduling software utilities

PART 3 - EXECUTION

3.1 DEVELOPMENT AND SUBMITTAL OF THE MODELS

- 3.1.1 Submit a BIM Execution Plan within (14) days of the notice to proceed in accordance with the requirements of this section

The BIM Execution Plan shall, at a minimum, detail the following: project goals and BIM uses, organizational roles and responsibilities (including a detailed breakdown of BIM Manager and staff duties), BIM software and versions to be used by all participants, model development strategy, collaboration workflows, clash detection and resolution protocols, model exchange formats, quality control procedures, and data management plan.

- 3.1.1.1 The Design Builder shall provide qualified BIM Manager and staff to manage the BIM process and develop the required BIM Execution Plans (BEP). The Design Builder BIM Manager shall be responsible for overseeing development of all submittals generated from BIM data, and managing the coordination process including:

- 3.1.1.1.1 Managing the information of the Design Builder and subcontractor's responsible for creating models, managing and/or performing routine model maintenance and clean up, analyzing "clashes" and resolving coordination issues.

- 3.1.1.1.2 "Gap" modeling of all design elements and building systems, that may occur between systems discipline models, as necessary for design clarity and coordination of the work.

- 3.1.2 The Design Builder shall provide hardware to support BIM modeling, presentations and coordination work sessions including projectors and large interactive viewing screens or large flat panel monitor for reviewing and/or modifying BIM models.

- 3.1.3 The Design Builder shall develop the VC Model and its systems models in compliance with the Contract Documents and the following:

- 3.1.3.1 Develop and submit all of the systems models concurrently. Note: if any of the systems models qualify as deferred approvals, they may be submitted separately.

- 3.1.3.2 Submit models with generic-model(ed) information as required to satisfy the requirements of the Request for Proposal as outlined in Section 002100 (Request for Proposals).

- 3.1.3.3 Submit a minimum Level of Development (LOD) 300 VC Model to the Owner's representative for review and approval during the Construction Documents Phase outlined in Section 011114 (Summary of Work – Design Services and Submittals), for review and coordination.

- 3.1.3.4 Submit partially complete models as needed at any time when the Design Builder requests changes and/or clarifications.

- 3.1.3.5 Submit fully completed VC Model and its systems models, prior to construction.
- 3.1.3.6 Submit updated systems models complying with final approved shop drawing submittals.
- 3.1.3.7 Submit the “as-built” VC Model and its systems models as part of the close-out process.

3.2 UPDATING THE MODELS DURING CONSTRUCTION

- 3.2.1 The VC Model shall be updated/revised to keep it current with construction activity as follows:

- 3.2.1.1 Update the VC Model progressively throughout the construction period to incorporate all construction actions so that the VC Model shall be current and accurate to as-built conditions incorporating changes in the field including but not limited to: ASIs, RFIs, Change Order, as-built conditions, and reflective of unforeseen conditions.

- 3.2.1.1.1 Approved Change Orders
 - 3.2.1.1.2 Field Modifications

- 3.2.1.2 Updating: Issue the updated VC Model and its systems models as part of each incremental milestone deliverable submittal including but not limited to: schematic design (30% completion), design development (60% completion) all permit package submittals, and contract documentation (90% and 100% completion). The design builder shall ensure an archival copy of the model is made at each milestone deliverable at the minimum, and more frequently as appropriate.

- 3.2.1.3 Revising: Issue the revised VC Model and/or its systems models immediately after each incremental permit package has been approved.

- 3.2.2 Submit the updates and revisions to the County's Project Manager.

3.3 DELIVERY OF FINAL AS-BUILT MODELS

- 3.3.1 The final updated and revised VC Model and all its systems models shall be submitted to the County's Project Manager as part of the close-out submittals.

- 3.3.2 The VC Model and all its systems models will be:

- 3.3.2.1 Editable for future expansion or remodel projects.
- 3.3.2.2 The final as-built VC Model shall include key asset data embedded within model elements such as manufacturer information, model numbers, installation dates, warranty information, and maintenance requirements, to support the County's facility operations and management system. The specific data requirements shall be detailed in the BIM Execution Plan.

END OF SECTION

SECTION 019113

GENERAL COMMISSIONING REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. Owner's Project Requirements (OPR) and Basis of Design Document (BOD) are included by reference for information only.

1.2 SUMMARY

A. Section Includes:

- 1. General requirements for coordinating and scheduling commissioning activities.
- 2. Commissioning meetings.
- 3. Commissioning reports.
- 4. Use of commissioning process test equipment, instrumentation, and tools.
- 5. Construction checklists, including, but not limited to, installation checks, startup, performance tests, and performance test demonstration.
- 6. Commissioning tests and commissioning test demonstration.
- 7. Adjusting, verifying, and documenting identified systems and assemblies.

As applied to the commissioning requirements for mechanical (including building automation system), electrical, plumbing (MEPCx), renewable energy, and irrigation controls.

- B. Commissioning is a systematic process of verifying that the building systems perform interactively according to the construction documents and the Owner's operational needs. The commissioning process shall encompass and coordinate the system documentation, equipment startup, control system calibration, testing and balancing, performance testing, and training. Commissioning during the construction and post-occupancy phases is intended to achieve the following specific objectives according to the contract documents:

- 1. Verify that the applicable equipment and systems are installed in accordance with the contract documents and according to the manufacturer's recommendations.
- 2. Verify and document proper integrated performance of equipment and systems.
- 3. Verify that Operations & Maintenance documentation is complete.
- 4. Verify that all components requiring servicing can be accessed, serviced and removed without disturbing nearby components including ducts, piping, cabling or wiring.
- 5. Verify that the Owner's operating personnel are adequately trained to enable them to operate, monitor, adjust, maintain, and repair building systems in an effective and energy-efficient manner.
- 6. Document the successful achievement of the commissioning objectives listed above.

- C. Various sections of the project specifications require equipment startup, testing, and adjusting services. Requirements for startup, testing, and adjusting services specified in the technical sections of these specifications are intended to be provided in coordination with the commissioning services and are not intended to duplicate services. The Contractor shall coordinate the work required by individual specification sections with the commissioning services requirements specified herein.
- D. The commissioning process does not take away from or reduce the responsibility of the Contractor to provide a finished and fully functioning product.
- E. Related Requirements:
 - 1. SECTION 01 11 10: SUMMARY OF WORK
 - 2. SECTION 01 30 00: SUBMITTAL PROCEDURES
 - 3. SECTION 01 31 00: PROJECT MANAGEMENT AND COORDINATION
 - 4. SECTION 01 81 13: SUSTAINABLE DESIGN REQUIREMENTS - LEED®
 - 5. SECTION 01 45 00: QUALITY REQUIREMENTS
 - 6. SECTION 01 77 00: CLOSEOUT PROCEDURES
 - 7. SECTION 01 78 23: OPERATION AND MAINTENANCE DATA
 - 8. SECTION 01 78 39: PROJECT RECORD DOCUMENTS
 - 9. SECTION 01 79 00: DEMONSTRATION AND TRAINING
 - 10. DIVISION 22: PLUMBING – COMMISSIONING REQUIREMENTS APPLY TO THE SYSTEM(S) SHOWN IN SECTION 3.7 COMMISSIONED SYSTEMS, OF THIS DOCUMENT.
 - 11. DIVISION 23: HEATING VENTILATING AND AIR CONDITIONING – COMMISSIONING REQUIREMENTS APPLY TO THE SYSTEM(S) SHOWN IN SECTION 3.7 COMMISSIONED SYSTEMS, OF THIS DOCUMENT.
 - 12. DIVISION 25: CONTROLS FOR HVAC – COMMISSIONING REQUIREMENTS APPLY TO THE SYSTEM(S) SHOWN IN SECTION 3.7 COMMISSIONED SYSTEMS, OF THIS DOCUMENT.
 - 13. DIVISION 26: ELECTRICAL – COMMISSIONING REQUIREMENTS APPLY TO THE SYSTEM(S) SHOWN IN SECTION 3.7 COMMISSIONED SYSTEMS, OF THIS DOCUMENT.
 - 14. SECTION 32 84 00: LANDSCAPE IRRIGATION
- F. References
 - 1. ASHRAE Standard 202-2024 Commissioning Process Requirements for New Buildings and New Systems.
 - 2. ASHRAE Guideline 0-2019 The Commissioning Process.
 - 3. ASHRAE Guideline 1.1-2007, HVAC&R Technical Requirements for the Commissioning Process.
 - 4. ASHRAE Guideline 1.4-2019, Preparing Systems Manuals for Facilities.
 - 5. 2022 California Green Building Standards Code, Title 24, Part 11 (CALGreen).
 - 6. LEED™, New Construction Reference Guide.

1.3 DEFINITIONS

- A. Acceptance Criteria: Threshold of acceptable work quality or performance specified for a commissioning activity, including, but not limited to, construction checklists, performance tests, performance test demonstrations, commissioning tests, and commissioning test demonstrations.
- B. Acceptance Phase: Phase of construction after startup and initial checkout when functional performance tests, O&M documentation review and training occurs.
- C. Approval: Acceptance that a piece of equipment or system has been properly installed and is functioning in the tested modes according to the Contract Documents.
- D. Architect/Engineer (A/E): The prime consultant (architect) and sub-consultants who comprise the design team. As it pertains to commissioning, the A/E is the design professional responsible for the design of the portion of the project being commissioned.
- E. Basis of Design (BoD) document: 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 includes both narrative descriptions and lists of individual items that support the design process.
- F. Building Automation System (BAS): The central building control system and energy management system. Also referred to as a Controls System.
- G. Building Management System (BMS): In general practice, this is just a different name for the BAS.
- H. Commissioning (Cx): - A quality-focused process for enhancing the delivery of a project. The process focuses upon verifying and documenting that the facility and all of its systems and assemblies are planned, designed, installed, tested, operated and maintained to meet the Owner's Project Requirements.
- I. Commissioning Activity Schedule: A commissioning schedule designed to provide team members with a descriptive overview of commissioning activities as they relate to parallel construction activities regardless of changes to the construction schedule. (See Exhibit B this specification and Cx Plan)
- J. Commissioning Authority (CxA): An entity identified by the Owner who leads, plans, schedules, and coordinates the commissioning team to implement the Commissioning Process. The CxA reports directly to the Owner without assuming oversight responsibilities.
- K. Commissioning Coordinator (CxC): A person or entity employed by the Contractor to manage, schedule and coordinate the commissioning process.
- L. Commissioning Plan (Cx Plan): A document that outlines the organization, schedule, allocation of resources, and documentation requirements of the Commissioning Process.
- M. Construction Manager (CM): Owner's on-site representative in day-to-day activities, including supervision and management of construction activities.
- N. Commissioning Team: The commissioning team is composed of key members from the Owner, the design team, the construction team, and critical equipment installers.
- O. Contract Documents: They include a wide range of documents that will vary from project to project and with the Owner's needs and regulations, laws, and countries, construction management process, subcontractor agreements or requirements, requirements and

procedures for submittals, changes, and other construction requirements, timeline for completion, and other Construction Documents.

- P. Contractor (C) or General Contractor (GC): The person or entity under contract with the Owner pursuant to the Construction Contract to serve as the General Contractor for the construction work.
- Q. Control System: A component of environmental, HVAC, security and fire systems for reporting, monitoring and issuing of commands.
- R. Data Logging: Monitoring flows, currents, status, pressures, etc. of equipment using stand-alone data loggers separate from the control system.
- S. DDC: Acronym for Direct Digital Controls. This is the most typical controls platform for BAS' / BMS'.
- T. Deferred Functional Tests: Functional Tests that are performed later, after substantial completion, equipment, seasonal requirements, design, or other site conditions that disallow tests from being performed.
- U. Deficiency or Commissioning Issue: A condition identified by the Commissioning Agent or other member of the Commissioning Team that adversely affects the commissionability, operability, maintainability, or functionality of a system, equipment, or component. A condition that is in conflict with the Contract Documents and/or performance requirements of the installed systems and components.
- V. Factory Testing: Testing of equipment on-site or at the factory, by factory personnel with District's representative present.
- W. Facilities Manager (FM): The Owner representative responsible for the operation and maintenance of the physical facilities and grounds.
- X. Functional Performance Test (FPT): Test of the dynamic function and operation of equipment and systems using, simulations, manual (direct observation) and/or monitoring methods. Systems are tested under various modes. The systems are run through all the control system's sequences of operation and components are verified to be responding as intended per the specified sequence of operations. FPTs are performed after pre-functional checklists and startup is complete and are performed by the contractor and witnessed by the CxA.
- Y. Installation Verification: Observations or inspections that confirm the system or component has been installed in accordance with the contract documents and to industry accepted best practices.
- Z. Integrated System Testing: Integrated Systems Testing procedures entail testing of multiple integrated system's performance to verify proper functional interface between systems. Typical Integrated Systems Testing includes verifying that building systems respond properly to loss of utility, transfer to emergency power sources, re-transfer from emergency power source to normal utility source; interface between HVAC controls and Fire Alarm systems for equipment shutdown, interface between Fire Alarm system and elevator control systems for elevator recall and shutdown; interface between Fire Alarm System and Security Access Control Systems to control access to spaces during fire alarm conditions; and other similar tests as determined for each specific project.

- AA. Master Issues Log: A formal and ongoing record of problems or concerns, and their resolution, that have been raised by members of the commissioning team during the course of the commissioning process. Maintained by the CxA.
- BB. Monitoring: The recording of equipment operation parameters (flow, current, status, pressure, etc.) using data loggers or the trending capabilities of control systems.
- CC. Owner's Project Requirements (OPR): A collection of documents that details the functional requirements of Project and expectations of how it will be used and operated. This document includes Project and design goals, measurable performance criteria, budgets, schedules, success criteria, and supporting information.
- DD. Owner: Project Owner or designated representative.
- EE. Owner-Contracted Tests: Tests paid for by the Owner outside the Contract and for which the CxA does not oversee. These tests will not be repeated during functional tests if properly documented.
- FF. Overwritten Value: Writing over a sensor value in the control system to see the response of a system (e.g., changing the outside air temperature value from 50°F to 75°F to verify economizer operation). See also "Simulated Signal" in 3.3-E-1-C.
- GG. Phased Commissioning: Commissioning that is completed in phases (by floors, for example) due to the size of the structure or other scheduling issues, in order minimize the total construction time.
- HH. Pre-functional Checklists (PFC): Checklists prepared by the CxA, in conjunction with the Subs, and provided to the contractor to document the complete installation of equipment or systems. These checklists are essentially elementary component tests to verify proper installation of equipment and are primarily static inspections and procedures to prepare the equipment or system for initial operation (e.g., belt tension, oil levels OK, labels affixed, gages in place, sensors calibrated, amp readings, etc.) Pre-functional checklists are completed by the contractors prior to or along with the manufacturer's start-up procedure and checklist.
- II. Pre-Functional Test (PFT): An inspection or test that is done before functional testing. PFT's include installation verification and system and component start up tests.
- JJ. Quality Assurance: The application of planned, and systematic methods to verify that quality control procedures are being effectively implemented. This is a set of processes and procedures that ensure a construction project meets quality and performance standards, regulations, and client expectations.
- KK. Quality Control: The process to establish consistency and conformance in project / program work that includes the continuous review, certification, inspection, and testing of project / program components including persons, systems, materials, documents, techniques, and workmanship to determine whether such components conform to the plans, specifications, applicable standards, and project / program requirements.
- LL. Sampling: Functionally testing only a fraction of the total number of identical or near identical pieces of equipment.
- MM. Seasonal Performance Tests: Functional Tests that are deferred until the system(s) will experience conditions closer to their design conditions.

- NN. Site Observation Visit: On-site inspections and observations made by the Commissioning Agent for the purpose of verifying component, equipment, and system installation, to observe contractor testing, equipment start-up procedures, or other purposes.
- OO. Start-up: The initial starting or activating of dynamic equipment or the initial energization and programming of control systems.
- PP. Systems Manual: A system-focused composite document that includes summary information required for the owners / operators to maintain and operate the system(s).
- QQ. Systems, Subsystems, and Equipment: Where these terms are used together or separately, they shall mean "as-built" systems, subsystems, and equipment.
- RR. Test, Adjust, Balance (TAB): A systematic process or service applied to heating, ventilating, and air-conditioning (HVAC) systems and other environmental systems to achieve and document air and hydronic flow rates. The standards and procedures for providing these services are referred to as "Testing, Adjusting, and Balancing" and are described in the Procedural Standards for the Testing, Adjusting and Balancing of Environmental Systems, published by NEBB or AABC.
- SS. Test Procedures: Written details developed by the CxA, and included in the FPTs, that details the expectations for tests conducted on components, equipment, assemblies, systems, and interfaces among systems.
- TT. Thermal Scans: Thermographic pictures taken with an Infrared Thermographic Camera. Thermographic pictures show the relative temperatures of objects and surfaces and are used to identify leaks, thermal bridging, thermal intrusion, electrical overload conditions, moisture containment, and insulation failure.
- UU. Trends / Trending: Recordings of control point value history or monitoring value history over time. Trends are automatically recorded by the building automation system or other electronic data gathering equipment. Trend data gathered over a period of time is often used to analyze and verify proper performance of equipment, systems, or sequence of operations.
- VV. Training Plan: A written document that details the expectations, schedule and deliverables of commissioning process activities related to training of project operating and maintenance personnel, users and occupants.
- WW. Trending: The monitoring by a building management system or other electronic data gathering equipment and analyzing of the data gathered over a period of time to verify proper equipment or systems sequence of operations.
- XX. Warranty Phase Commissioning: Warranty Phase Commissioning efforts are executed approximately 10 months. after a project has been completed and accepted by the Owner is This Commissioning phase may include verification of system performance, measurement and verification tasks and assistance in identifying warranty issues and enforcing warranty provisions of the construction contract. See the Warranty section of this document for additional information.
- YY. Warranty Visit: A commissioning meeting and site review where all outstanding warranty issues and deferred testing is reviewed and discussed.

1.4 COMPENSATION

- A. If the Commissioning Authority is required to perform additional services or incur additional expenses due to actions of the Contractor as listed below the Contractor agrees to compensate the Owner for such additional services and expenses.
 - 1. Failure to provide timely notice of commissioning activities schedule changes.
 - 2. Failure to meet acceptance criteria for test demonstrations.
 - 3. Additional work required by the CxA to coordinate and correct commissioning issues.
 - 4. Additional work required to coordinate and repeat tests when equipment and systems fail initial acceptance criteria testing.
 - 5. See 3.11 Exhibit A: Commissioning Readiness Letter (CxRL).
- B. Contractor shall compensate Owner for such additional services and expenses at the rate of \$250.00 per labor hour, plus travel and per diem allowances for meals and lodging according to current U.S. General Services Administration (GSA) Per Diem Rates for the project area for the applicable fiscal year and month(s).

1.5 COMMISSIONING TEAM INTERACTION & PROCESS

- A. A project team will be created to coordinate the commissioning effort. This team will coordinate and communicate with the rest of the project team, attend meetings, and solve problems. This team includes representatives from the contractor, subcontractors, and owner.
- B. The prime contractor shall in addition to their representative also appoint a representative from each subcontractor involved in commissioned systems including mechanical, electrical, controls, test adjust balance, plumbing, and low voltage systems.
- C. With these fundamental practices in mind, the commissioning process described herein has been developed to recognize that, in the execution of the Commissioning Process, the Commissioning Agent must develop effective methods to communicate with every member of the construction team involved in delivering commissioned systems while simultaneously respecting the exclusive contract authority of the Construction Project Manager (CM). Thus, the procedures outlined in this specification must be executed within the following limitations:
 - 1. No communications (verbal or written) from the Commissioning Agent shall be deemed to constitute direction that modifies the terms of any contract between the Owner and the Contractor.
 - 2. Commissioning Issues identified by the Commissioning Agent will be delivered to the Construction Manager and copied to the designated Commissioning Representatives for the Contractor and subcontractors on the Commissioning Team for information only in order to expedite the communication process. These issues must be understood as the professional opinion of the Commissioning Agent and as suggestions for resolution.
 - 3. In the event that any Commissioning Issues and suggested resolutions are deemed by the Construction Manager to require either an official interpretation of the construction documents or require a modification of the contract documents, the Construction Manager will issue an official directive to this effect.
 - 4. All parties to the Commissioning Process shall be individually responsible for alerting the Construction Manager of any issues that they deem to constitute a potential contract change prior to acting on these issues.

5. Authority for resolution or modification of design and construction issues rests solely with the Construction Manager, with appropriate technical guidance from the Architect/Engineer and/or Commissioning Agent.

1.6 OWNER'S RESPONSIBILITIES

- A. Participate in resolution of issues that may occur as a result of the commissioning process.
- B. Assign operation and maintenance personnel and schedule them to participate in commissioning team activities including, but not limited to, the following:
 1. Coordination meetings.
 2. Training in operation and maintenance of systems, subsystems, and equipment.
 3. Testing meetings.
 4. Demonstration of operation of systems, subsystems, and equipment.
 5. Provide feedback to CxA for the project warranty phase testing and review, as well as access to the site and controls system during the warranty test.

1.7 COMMISSIONING COORDINATION RESPONSIBILITIES

- A. Contractor's and Subcontractor's Responsibilities
 1. Provide utility services required for the commissioning process.
 2. Contractor is responsible for construction means, methods, job safety, or management function related to commissioning on the job site.
 3. Contractor shall assign representatives with expertise and authority to act on behalf of the Contractor and schedule them to participate in and perform commissioning team activities including, but not limited to, the following:
 - a. Participate in construction-phase commissioning meetings including controls coordination meeting to review and resolve any issues with the sequence of operations.
 - b. Participate in maintenance orientation and inspection.
 - c. Participate in operation and maintenance training sessions.
 - d. Certify that Work is complete and systems are operational according to the Contract Documents, including calibration of instrumentation and controls.
 - e. Perform quality control of all work and certify it is complete prior to request for inspection.
 - f. Evaluate performance deficiencies identified in test reports and, in collaboration with entity responsible for system and equipment installation, recommend corrective action.
 4. Contractor shall integrate all commissioning activities into Contractor's master construction schedule.
 5. Contractor shall provide a means to effectively commission the BMS system including the following at minimum:
 - a. Schedule the controls contractor that was an integral part of programming the building BMS to run the tests

- b. Provide a table with chairs
 - c. Provide a 17" 1080p monitor with 10' cables for connection to the controls contractor's laptop.
6. Subcontractors shall assign representatives with expertise and authority to act on behalf of subcontractors and schedule them to participate in and perform commissioning team activities including, but not limited to, the following:
- a. Participate in construction-phase coordination meetings.
 - b. Participate in maintenance orientation and inspection.
 - c. Complete pre-functional checklists for all equipment. Submit completed forms with start-up reports immediately after start up.
 - d. Schedule and perform duct air leakage testing as specified in the technical specification sections. Make testing available for CxA to witness, and provide testing reports to CxA.
 - e. Provide flushing plans, disinfection reports and water treatment reports to the CxA for review.
 - f. Participate in pre-TAB meeting and jobsite inspections to verify TAB readiness.
 - g. Provide draft completed TAB report to CxA for review. CxA will identify up to 20% of TAB report for TAB contractor to demonstrate compliance to the completed TAB report.
 - h. Participate in procedures meeting for testing.
 - i. Perform point-to-point, calibration and checkout of the building automation system and provide completed report to the CxA for review.
 - j. Participate in final review at acceptance meeting.
 - k. Provide schedule for operation and maintenance data submittals, equipment startup, and testing to CxA for incorporation into the commissioning plan. Update schedule on a weekly basis throughout the construction period.
 - l. Provide information to the CxA for developing construction-phase commissioning plan.
 - m. Participate in training sessions for operation and maintenance personnel.
 - n. Verify that all systems function correctly by testing each mode of operation, alarm and system function.
 - o. Gather and submit operation and maintenance data for systems, subsystems, and equipment to the CxA, as specified.
 - p. Perform quality control of all work and certify it is complete prior to request for inspection.
 - q. Complete and sign Commissioning Readiness Letter (CxRL) and provide to CxA (See EXHIBIT A of this specification section).

- r. Provide technicians who are familiar with the construction and operation of installed systems and who shall develop specific test procedures and participate in testing of installed systems, subsystems, and equipment.
 - s. Perform seasonal testing, at the direction of the CxA, to prove functional performance of the HVAC and controls in the opposite season.
 - t. Perform 10-month warranty testing, which will be witnessed and directed by the CxA. This testing will be to review the operation of all the systems onsite prior to the expiration of warranty. Typically, previous issues are reviewed for completion as well as a sampling of functional performance testing, and or other system review to assess the functionality and operation.
- B. Architect and Design Engineer Responsibilities
 - 1. Responsible for developing the construction contract documents and clarifying the design intent during the construction phase of the project.
 - 2. Performs construction observation.
 - 3. Contracted directly to OWNER.
- C. CxA's Responsibilities
 - 1. Organize and lead the commissioning team.
 - 2. Prepare a Commissioning Plan. Collaborate with design team, owner, contractor and subcontractors to develop test and inspection procedures. Identify commissioning team member responsibilities, by name, firm, and trade specialty, for performance of each commissioning task.
 - 3. Work with the Contractor to schedule commissioning activities. The Contractor shall integrate all commissioning activities into the master construction schedule. All parties will address scheduling issues in a timely manner in order to expedite the commissioning process.
 - 4. Review and comment on submittals for compliance with the approved project documents and identify any potential conflicts.
 - 5. Conduct commissioning team meetings for the purpose of coordination, communication, and conflict resolution; discuss progress of the commissioning processes. The CxA shall prepare and distribute minutes to commissioning team members and attendees within five (5) workdays of the commissioning meeting.
 - 6. At the beginning of the construction phase, conduct an initial construction-phase coordination meeting for the purpose of reviewing the commissioning activities and establishing tentative schedules for permanent power; operation and maintenance data submittals; operation and maintenance training sessions; TAB Work; and Project completion.
 - 7. Periodically observe and inspect construction and report progress and deficiencies. In addition to compliance with the Contract Documents, inspect systems and equipment installation for adequate accessibility for maintenance and component replacement or repair.
 - 8. Prepare Project-specific pre-functional checklists and functional test procedures checklists.
 - 9. Compile test data, inspection reports, and certificates and include them in the systems manual and commissioning report.

10. Review and comment on operation and maintenance documentation for compliance with the Contract Documents. Operation and maintenance documentation requirements are specified in Division 01 Section "Operation and Maintenance Data."
11. Review Contractor's operation and maintenance training program. Operation and maintenance training is specified in Division 01 Section "Demonstration and Training."
12. Prepare commissioning status reports.
13. Perform and direct warranty functional testing and site review at a point in time 10 months after the start of warranty.
14. Assemble the final commissioning documentation, including the Commissioning Report including applicable Project Record Documents.

1.8 COMMISSIONING DOCUMENTATION

- A. Commissioning Plan: A document, prepared by CxA, that outlines the process, schedule, allocation of resources, and documentation requirements of the commissioning effort, and shall include, but is not limited to the following:
 1. Description of the organization, layout, and content of commissioning documentation to be provided along with identification of responsible parties.
 2. Identification of systems and equipment to be commissioned.
 3. Description of the level of commissioning for each system
 4. Description of schedules for testing procedures along with identification of parties involved in performing and verifying tests.
 5. Identification of items that must be completed before the next operation can proceed.
 6. Description of responsibilities of commissioning team members.
 7. Description of observations to be made.
 8. Description of requirements for operation and maintenance training, including required training materials.
 9. Provide a schedule for commissioning activities with specific dates coordinated with overall construction schedule.
 10. Define the process for completing pre-functional and startup checklists for systems, subsystems, and list of specific equipment requiring these checklists.
 11. Include Step-by-Step procedures for Functional Testing of systems, subsystems, and equipment with descriptions for methods of verifying relevant data, recording the results obtained, and listing parties involved in performing and verifying tests.
- B. Pre-Functional Checklists: CxA shall develop pre-functional checklists for all equipment to be commissioned. Pre-Functional Checklists shall be completed and signed by the Contractor, verifying that systems, subsystems, equipment, and associated controls are ready for testing. The Commissioning Agent may spot check Pre-Functional Checklists to verify accuracy and readiness for testing. Inaccurate or incomplete Pre-Functional Checklists shall be returned to the Contractor for correction and resubmission.
- C. Site Visit Reports: CxA shall record test data, observations, and measurements on site visit forms. Updated Issues Log, photographs and other means appropriate for the application shall be included with Report.

- D. Start-Up Reports: Contractor/Manufacturer created forms that document that factory start-up procedures have been followed for all equipment and systems to be commissioned. Provided by sub-contractors.
- E. Functional Performance Testing: CxA shall develop functional performance test procedures for all equipment and systems to be commissioned. Site Visit Reports: CxA shall record test data, observations, and measurements on site visit forms. Photographs and other means appropriate for the application shall be included with data.
- F. Test and Inspection Reports: CxA shall compile test and inspection reports and test and inspection certificates and include them in Systems Manual and commissioning report.
- G. Commissioning Schedule: CxA shall review and provide input to the master project and construction schedules for commissioning activities.
- H. Issues Log: CxA shall prepare and maintain an issues log that describes installation, and performance issues that are at variance with the Contract Documents. CxA will identify and track issues as they are encountered, documenting the status of unresolved and resolved issues.

1. Creating an Issues Log Entry:

- a. Identify the issue with unique numeric or alphanumeric identifier by which the issue may be tracked.
- b. Assign a descriptive title of the issue.
- c. Identify issue date.
- d. Identify test number of test being performed at the time of the observation, if applicable, for cross-reference.
- e. Identify system, subsystem, and equipment to which the issue applies.
- f. Identify location of system, subsystem, and equipment.
- g. Include information that may be helpful in diagnosing or evaluating the issue.
- h. Note recommended corrective action.
- i. Identify commissioning team member responsible for corrective action.
- j. Identify expected date of correction.
- k. Identify person documenting the issue.

2. Documenting Issue Resolution:

- a. Log date correction is completed, or the issue is resolved.
- b. Describe corrective action or resolution taken. Include description of diagnostic steps taken to determine root cause of the issue, if any.
- c. Identify changes to the Contract Documents that may require action, if any.
- d. State that correction was completed, and system, subsystem, and equipment are ready for retest, if applicable.
- e. Identify person(s) who corrected or resolved the issue.
- f. Identify person(s) documenting the issue resolution.

- I. Commissioning Report: CxA shall document results of the commissioning process including performance of systems, subsystems, equipment and issues. The commissioning report shall indicate whether systems, subsystems, and equipment have been completed and are performing according to the OPR, BoD and Contract Documents. The commissioning report shall include, but is not limited to, the following:
 1. Discussion of performance of commissioned systems including any variance from OPR, BOD and the Contract Documents; record of conditions; and, if appropriate, recommendations for resolution. This report shall be used to evaluate systems, subsystems, and equipment and shall serve as a future reference document during OWNER occupancy and operation. It may also include a recommendation for accepting or rejecting systems, subsystems, and equipment.
 2. Commissioning Plan.
 3. Testing plans and reports.
 4. Issues log.
 5. Completed test checklists.
 6. Listing of off-season test(s) not performed and a schedule for their completion.

1.9 CXA SUBMITTALS

- A. Commissioning Plan: CxA shall submit a draft commissioning plan. Deliver one copy to Contractor and one to OWNER. Present submittal in sufficient detail to evaluate data collection and arrangement process. One copy, with review comments, will be returned to the CxA for preparation of the final commissioning plan.
- B. Pre-functional Checklists: CxA shall submit sample checklists and forms to Contractor and subcontractors for review, comment and approval. Contractor completed prefunctional checklists are required to be submitted for review and approved prior to proceeding with functional performance testing.
- C. Functional Test Plan: CxA shall submit draft Functional Test Plan and checklists for comment. The final Functional Test Plan will be submitted and used for functional testing.
- D. Site visit reports: CxA shall submit site visit reports as they are created.
- E. Final Commissioning Report: CxA shall submit the draft commissioning report. One copy, with review comments, will be returned to the CxA for preparation of final submittal. The final report submittal must address previous review comments.
- F. The CxA will provide appropriate contractors with a specific request for the type of submittal documentation the CxA requires facilitating the commissioning work. These requests will be integrated into the normal submittal process and protocol of the construction team. At minimum the request will include the manufacturer and model number, the manufacturer printed installation and detailed start-up procedures, sequences of operation, O&M data, performance data, any performance test procedures, control drawings and details. In addition, the factory checkout sheets or field technicians' reports shall be submitted for review

1.10 COORDINATION

- A. Scheduling: The Contractor shall work with the Commissioning Agent to incorporate the commissioning activities into the construction schedule. The Commissioning Agent will

provide sufficient information (including, but not limited to, tasks, durations and predecessors) on commissioning activities to allow the Contractor to schedule commissioning activities. All parties shall address scheduling issues and make necessary notifications in a timely manner in order to expedite the project and the commissioning process. The Contractor shall update the Master Construction schedule as directed by the Owner.

- B. Coordinating Meetings: CxA shall conduct coordination meetings of the commissioning team as needed to review progress on the commissioning plan, to discuss scheduling conflicts, and to discuss upcoming commissioning process activities.
- C. Pretesting Meetings: CxA shall conduct pretest meetings with the commissioning team to review startup reports, coordinate controls sequence of operations, review pretest inspection results, review testing and balancing procedures, review testing personnel and instrumentation requirements, and manufacturers' authorized service representative services for each system, subsystem, equipment, and component to be tested.
- D. Testing Coordination: CxA shall coordinate with the OWNER and Contractor to plan the sequence of testing activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- E. The Subcontractors shall provide sufficient notice to the CxA (2 weeks minimum) regarding their completion schedule for the pre-functional checklists and startup of all equipment and systems. The contractor will use the Commissioning Readiness Letter (CxRL) in EXHIBIT A to notify the CxA that the systems are ready.
- F. General
 - 1. Functional testing is conducted after pre-functional testing and startup has been satisfactorily completed.
 - 2. The BAS is sufficiently tested and approved by the CxA before it is used for TAB or to verify performance of other components or systems.
 - 3. The air and water balancing is complete and approved before functional testing of air-related or water-related equipment or systems.
 - 4. Testing proceeds from components to subsystems to systems.
 - 5. When the proper performance of all interacting, individual systems has been achieved, the interface or coordinated responses between systems is checked.

PART 2 - PRODUCTS

2.1 TEST EQUIPMENT AND DOCUMENTATION, INSTRUMENTATION AND TOOLS

- A. Test equipment and instrumentation required to perform the commissioning shall remain the property of Contractor unless otherwise indicated.
- B. Test equipment and instrumentation required to perform commissioning shall comply with the following criteria:
 - 1. Be manufactured for the purpose of testing and measuring tests for which they are being used and have an accuracy to test and measure system performance within the tolerances required to determine acceptable performance.

2. Calibrated and certified.
 - a. Calibration performed and documented by a qualified calibration agency according to national standards applicable to the tools and instrumentation being calibrated. Calibration shall be current according to national standards or within test equipment and instrumentation manufacturer's recommended intervals, whichever is more frequent, but not less than within Six [6] months of initial use on Project. Calibration tags permanently affixed.
 - b. Repair and recalibrate test equipment and instrumentation if dismantled, dropped, or damaged since last calibrated.
3. Maintain test equipment and instrumentation.
4. Use test equipment and instrumentation only for testing or monitoring Work for which they are designed.

PART 3 - EXECUTION

3.1 SUBMITTALS

- A. The CxA shall provide the Design Builder with a specific request for the type of submittal documentation required to facilitate the commissioning work. These requests shall be integrated into the submittal process and protocol of the project.
- B. The submittal shall be reviewed and approved by the Design Builder's design team prior to being submittal to the CxA.
- C. At minimum, the submittal request shall include:
 1. Equipment manufacturer and model number.
 2. Selection and operating data (Example: Flows, pressures, temperatures, fan curves, etc.).
 3. The manufacturer's printed installation and detailed start-up procedures.
 4. Full sequences of operation and control drawings.
 5. O&M data, performance data, performance test procedures, details, and results of owner-contracted tests.
 6. Installation and checkout materials that are shipped inside the equipment and the manufacturer field checkout sheet forms to be used by the factory or field technicians.
- D. The CxA shall review and approve submittals related to the commissioned equipment for conformance to the Owner Project Requirements, Design documents and as it relates to the commissioning process, the functional performance of the equipment, completeness and adequacy for developing test procedures.
- E. The CxA's review is intended to aid in the development of functional testing procedures and to verify compliance with equipment specifications. The Commissioning authority shall notify the Owner and the Design-Builder of items missing or areas that are not in conformance with contract documents or Owner Project Requirements and which require resubmission.

- F. The CxA may request additional design narrative from the A/E and Controls Contractor, depending on the completeness of the basis of design documentation and sequences provided with the design document Specifications.
- G. These submittals to the CxA do not constitute compliance for O&M manual documentation. The O&M manuals are the responsibility of the Design-Builder, though the CxA will review and them.

3.2 PRE-FUNCTIONAL CHECKLISTS AND FACTORY START UP REPORTS

- A. The following procedures apply to all equipment to be commissioned.
- B. Pre-functional Checklists are developed by the CxA and completed by the appropriate installing contractors for all major equipment and systems being commissioned before functional testing can begin. The checklist captures equipment nameplate and characteristics data, confirming the as-built status of the equipment or system. These checklists also ensure that the systems are complete and operational, so that the functional performance testing can be scheduled. The Contractor and vendors shall execute factory startup and provide the CxA with a copy of the signed and dated completed start-up checklists which will be submitted with the Pre-Functional checklists.
- C. Startup and Initial Checkout Plan: The Contractor shall develop detailed startup plans for all equipment. The primary role of the Contractor in this process is to ensure that there is written documentation that each of the manufacturer recommended procedures have been followed and completed. Parties responsible for startup shall be identified in the Startup Plan and in the checklist forms.
 - 1. The full startup plan shall at a minimum consist of the following items:
 - a. The Pre-Functional Checklists.
 - b. The manufacturer's standard written startup procedures copied from the installation manuals with check boxes by each procedure and a signature block added by hand at the end.
 - c. The manufacturer's normally used field checkout sheets.
- D. The Commissioning Agent will review/approve the full start-up plan.
- E. Execution of Pre-functional Checklists and Startup.
 - 1. Pre-Functional checklists will be provided to the project site by the CxA.
 - 2. The contractor shall maintain a master copy of signed checklists.
 - 3. The installing contractors shall update the checklists as work is completed. Only individuals that have direct knowledge and witnessed that a line-item task on the pre-functional checklist was actually performed shall initial or check that item off.
 - 4. The CxA will periodically review the checklists for completeness and report on progress at the Cx meetings.
- F. BAS Startup Testing, Adjusting, and Calibration
 - 1. Work and/or systems installed under this Division shall be fully functioning prior to Demonstration and Acceptance Phase. Contractor shall start, test, adjust, and calibrate all work and/or systems under this Contract, as described below:

- a. Inspect the installation of all devices. Review the manufacturer's installation instructions and validate that the device is installed in accordance.
- b. Verify proper electrical voltages and amperages, and verify that all circuits are free from faults.
- c. Verify integrity/safety of all electrical connections.
- d. Coordinate with TAB subcontractor to fine tune control settings that are determined from balancing and testing procedures. Record the following control settings as obtained from TAB contractor, and note any TAB deficiencies in the BAS, Pre-functional checklists and initiate an associated Action Item:
 - 1) Optimum duct static pressure setpoints for VAV air handling units.
 - 2) Minimum outside air damper settings for air handling units.
 - 3) Optimum differential pressure setpoints for variable speed pumping systems.
 - 4) Calibration parameters for flow control devices such as VAV boxes and flow measuring stations.
 - 5) BAS contractor shall provide access to the front end Building Automation System as a minimum to the TAB and CxA to facilitate calibration. Connection for any given device shall local to it (i.e.: at the VAV box or at the thermostat). Shall be made at front end and shall allow querying and editing of parameters required for proper calibration and start up.
- e. Test, calibrate, and set all digital and analog sensing, and actuating devices. Calibrate each instrumentation device by making a comparison between the BAS display and the reading at the device, using an instrument traceable to the National Bureau of Standards, which shall be at least twice as accurate as the device to be calibrated (e.g., if field device is +/-0.5% accurate, test equipment shall be +/-0.25% accurate over same range). Record the measured value and displayed value for each device in the BAS Pre-functional Report.
- f. Check each digital control point by making a comparison between the control command at the controller and the status of the controlled device. Check each digital input point by making a comparison of the state of the sensing device and the operator interface display. Record the results for each device in the BAS Pre-functional checklists.
- g. Verify proper sequences by using the approved checklists to record results and submit with BAS Pre-functional checklists. Verify proper sequence and operation of all specified functions. There is inherent duplication between the functional performance testing of the testing contractor, and the thorough checking testing of the sequences by the BAS. Generally, the sequence checkouts indicated as the responsibility of the testing contractor under functional testing, must first be tested by the BAS under pre-functional testing.

- h. Verify all safety devices trip at appropriate conditions. Adjust setpoints accordingly.
 - i. Verify that all alarm thresholds for all analog devices are entered. Request direction from Owner as to alarm threshold parameters.
 - j. Tune all control loops to obtain the fastest stable response without hunting, offset or overshoot. Record tuning parameters and response test results for each control loop in the BAS Pre-functional Report. Except from a startup, maximum allowable variance from set point for controlled variables under normal load fluctuations shall be as follows. Within 2 minutes of any upset (for which the system has the capability to respond to) in the control loop, tolerances shall be maintained (exceptions noted):
 - 1) Duct air temperature: $\pm 1^{\circ}\text{F}$.
 - 2) Space Temperature: $\pm 2^{\circ}\text{F}$
 - 3) Hot water temperature: $\pm 2^{\circ}\text{F}$.
 - 4) Duct pressure: $\pm 0.25''$ w.g.
 - 5) Water pressure: ± 1 psid
 - 6) Air flow control: $\pm 5\%$ of setpoint velocity. For min OA flow loops being reset from CO₂, response to upset max time is one hour
 - 7) Space Pressurization (on active control systems): $\pm 0.02''$ w.g. with no door or window movements
- G. For interface and DDC control panels:
- 1. Ensure devices are properly installed with adequate clearance for maintenance and clearly labeled in accordance with the record drawings
 - 2. Ensure terminations are safe, secure and labeled in accordance with the record drawings
 - 3. Check power supplies for proper voltage ranges and loading.
 - 4. Ensure wiring and tubing are run in a neat and workman-like manner, either bound or enclosed in trough.
 - 5. Check for adequate signal strength on communication networks.
 - 6. Check for stand-alone performance of controllers by disconnecting the controller from the LAN. Verify the event is enunciated at operator interfaces. Verify that the controlling LAN reconfigures as specified in the event of a LAN disconnection.
 - 7. Ensure that controller memory and control network through-put are adequate to support the extensive trending requirements. Reconfigure the system to provide a reliable and robust system as necessary.
 - 8. Ensure all outputs and devices fail to their proper positions/states.
 - 9. Ensure buffered and/ or volatile information is held through power outage.
 - 10. With all system and communications operating normally, sample and record update/enunciation times for critical alarms fed from the panel to the operator interface.
 - 11. Check for adequate grounding of all DDC panels and devices.

H. Meters

1. All meters (Electric, Gas, Water) calibration will be verified in the field after installation.
2. All Meters will be verified by the contractor to be reporting correctly; including – correct units, intervals, and trending back to the DDC controls system operator workstation graphics.

I. For Operator Interfaces:

1. Verify all elements on the graphics are functional and properly bound to physical devices and/or virtual points and that hot links or page jumps are functional and logical.
2. Output all specified system reports for review and approval.
3. Verify the alarm printing and logging is functional and per requirements
4. Verify trend archiving to disk and provide a sample to the CxA for review.
5. Verify paging/dial out alarm enunciation is functional.
6. Verify functionality of remote operator interfaces and that a robust connection can be established consistently.
7. Verify that required third party software applications required with the bid are installed and functional.
8. Verify proper interface with fire alarm system.

J. Submit Start-Up Test Report. Report shall be completed, submitted and approved prior to functional testing.

K. Deficiencies, Non-Conformance and Approval in Checklists and Startup.

1. The Contractor shall clearly list any outstanding items of the initial start-up and pre-functional procedures that were not completed successfully, at the bottom of the procedures form or on an attached sheet. The procedures form and any outstanding deficiencies are provided to the CxA within two days of test completion.
2. The CxA reviews the report and reports to the OWNER. The CxA shall work with the Contractor and vendors to correct and retest deficiencies or uncompleted items.

3.3 FUNCTIONAL PERFORMANCE TESTING

A. Common Elements for All Systems

1. Have the required submitted documentation convenient to testing area. Validate that all required documentation has been submitted and is per the contract requirements (very cursory review). CxA shall review the content of the documentation and validate that it is per contract documents.
2. CxA shall review the startup documentation at the start of functional performance testing. Review the startup tests and checklist documentation. CxA shall validate that startup is acceptably executed and complete. CxA shall ensure that any items indicated as outstanding in the checklists is entered as an Action Item and enter one if it is not. The checklists and start up tests/measurements shall be spot checked at the beginning of FPT to ensure accuracy. CxA shall complete a test that indicates he has reviewed the prefunctional checklists and finds them acceptable and note any outstanding items.

3. CxA shall check for and as applicable direct Contractor to demonstrate that access is sufficient to perform required maintenance.
 4. CxA shall validate that all prerequisite work is complete and confirm via a test record that the CxA feels it is.
 5. Specifically check labeling and ensure conformance to contract requirements.
 6. Check proof indication, alarming on failure and restart/acknowledgement as applicable.
 7. CxA shall observe operating conditions encountered at the start of FPT. CxA shall examine for normal functionality and record parameters as a test.
 8. All dynamic systems powered by electricity shall be tested to simulate a power outage to ensure proper sequencing. Those on emergency power or uninterruptible power shall be tested on all sources.
 9. CxA shall inspect the installation and compare it to contract requirements. Record the inspection as a test.
 10. Capacities and adjusted and balanced conditions as applicable will generally be checked.
 11. Verify all sequence modes and sequences of operation. CxA must initiate all modes and may not refer to or rely on a pre-functional test done by the BAS. Some examples of generic modes that apply to most systems include:
 - a. Off Mode
 - b. Failed Mode: Proof, safeties, power outage etc. See below for stress testing.
 - c. Start Sequence in various modes
 - d. Stop sequences in various modes
 12. All adjusted, balanced, controlled systems shall be assessed to determine the optimal setting for the system as applicable. The optimal settings should be determined to establish reliable, efficient, safe and stable operation. CxA is responsible for placing systems in optimal condition for occupancy and not simply relying on initial design estimated settings. For adjustable setpoints, the team will document the conditions at the end of FPTs. The contractors will use RFIs / ACDs to confirm any deviations from the design.
 13. Dynamic Graphics: The graphic for all components, systems, and areas sampled and required to be represented by a graphic shall be checked for adequacy and accuracy. Furthermore, when setpoints are required to be adjustable, verify that they can be adjusted directly from the graphic screen.
 14. All interfaces between two systems or equipment of different manufacturers must be checked for accuracy and functionality.
 15. "Stress Testing": CxA shall analyze systems to identify possible conditions where functionality may be compromised. CxA shall design non-destructive tests that will demonstrate either the automated response to the conditions or so that team can identify the best method for responding or fixing the condition. All tests and findings shall be documented.
- B. Objectives and Scope. The objective of functional performance testing is to demonstrate that each system is operating according to the Contract Documents. Each system will be tested to verify that the system response is as designed. HVAC systems will be checked for conformance to the design sequences of operation and stable control, lighting control

will be checked in each type of lighting area, security system cameras will be verified functional and able to see the correct areas. Proper system responses to such conditions as power failure, out of limit condition, equipment failure, etc. shall also be tested.

- C. Early duct air leakage tests shall be performed as specified to ensure green and building code compliance. Make testing available for CxA to witness and provide testing reports to CxA. Point-to-point testing will be performed by controls contractor on all applicable systems, with results given to CxA prior to functional performance testing.
- D. Development of Test Procedures: The test procedures are written by the CxA based upon the final operational sequences from available project documentation. The CxA shall develop specific test procedures and forms to verify and document proper operation of each system. Prior to execution, the CxA shall provide a copy of the test procedures to the Contractor who shall review the tests for feasibility, safety, equipment and warranty protection. The test procedure checklists developed by the CxA shall include the following information:
 - 1. System and equipment or component name(s).
 - 2. Equipment location and ID number.
 - 3. Date.
 - 4. Project name.
 - 5. Participating parties.
 - 6. Reference to the specification section describing the test requirements, if applicable.
 - 7. A copy of the specific sequence of operations.
 - 8. Prerequisites for the test.
 - 9. Special cautions, alarm limits, etc.
 - 10. Specific step-by-step procedures to execute the test.
 - 11. Acceptance criteria of proper performance with a Yes / No/NA check box.
 - 12. A section for comments.
- E. Test Methods.
 - 1. Systems Functional Performance Testing shall be achieved by manual testing (i.e., persons manipulate the equipment and observe performance) and/or by monitoring the performance and analyzing the results using the control system's trend log capabilities or by standalone data loggers. The Contractor and Commissioning Agent shall determine which method is most appropriate for tests that do not have a method specified.
 - a. Simulated Conditions: Simulating conditions (not by an overwritten value) shall be allowed, although timing the testing to experience actual conditions is encouraged wherever practical.
 - b. Overwritten Values: Overwriting sensor values to simulate a condition, such as overwriting the outside air temperature reading in a control system to be something other than it really is, shall be allowed, but shall be used with caution and avoided when possible. Such testing methods often can only test a part of a system, as the interactions and responses of other systems will be

erroneous or not applicable. Simulating a condition is preferable. e.g., for the above case, by heating the outside air sensor with a hair blower rather than overwriting the value or by altering the appropriate setpoint to see the desired response. Before simulating conditions or overwriting values, sensors, transducers and devices shall have been calibrated.

- c. Simulated Signals: Using a signal generator which creates a simulated signal to test and calibrate transducers and DDC constants is generally recommended over using the sensor to act as the signal generator via simulated conditions or overwritten values.
 - d. Altering Setpoints: Rather than overwriting sensor values, and when simulating conditions is difficult, altering setpoints to test a sequence is acceptable. . For example, to see the Air Conditioning compressor lockout initiate at an outside air temperature below 54 F (12 C), when the outside air temperature is above 54 F (12 C), temporarily change the lockout setpoint to be 4 F (2 C) above the current outside air temperature.
 - e. Indirect Indicators: Relying on indirect indicators for responses or performance shall be allowed only after visually and directly verifying and documenting, over the range of the tested parameters, that the indirect readings through the control system represent actual conditions and responses. Much of this verification shall be completed during systems startup and initial checkout
- 2. Functional testing is performed by the contractors with the method and degree of testing as defined in this specification for each system. Each function and test shall be performed under conditions that simulate actual conditions as close as is practically possible. The Contractor executing the test shall 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. At completion of the test, the Contractor shall return all affected building equipment and systems to their pre-test condition.
 - 3. Multiple identical pieces of equipment may be functionally tested using a sampling strategy. The sampling strategy will be defined in these specifications with the commissioned systems list.
- F. Coordination and Scheduling: See the *COORDINATION* section for coordination and scheduling details.
 - G. Problem Solving: The CxA will recommend solutions to problems found; however, the burden of responsibility to solve, correct and retest problems is with the Contractor and Owner's consultants.

3.4 OPERATION AND MAINTENANCE TRAINING REQUIREMENTS

- A. Before the operation and maintenance training, CxA shall review training preparation for compliance with project documents.
- B. Training is required per contract specifications. At a minimum, training is required for Mechanical systems, Lighting, and Controls systems.
- C. The CxA requires submission of training records including attendance lists to verify appropriate people received the training.

3.5 COSTS OF COMMISSIONING WORK

- A. The cost to the Contractor and Subcontractors to comply with the specified requirements and to support the work of the CxA shall be included in the Contractor's and Subcontractor's bid price.
- B. It is the Contractor's responsibility to QC and pre-test all building equipment and systems. The CxA shall confirm function of each system. If a device, piece of equipment, sequence, or system fails a test, corrections shall be made immediately and retested.
- C. If at any point in the Commissioning Functional Testing Process, should an issue or failure arise that requires significant time to correct or cannot be corrected immediately during the testing process, that results in a delay or prevents the CxA from completion of the functional testing, incurred costs shall be reimbursed by the Contractor. The associated costs of re-testing are defined in Exhibit A - Commissioning Readiness Letter (CxRL) .

3.6 COMMISSIONED SYSTEMS

System	Equipment	Level Note
HVAC System (Systems to be determined in design)	Chiller (Water Cooled / Air Cooled)	5
	Cooling Towers	5
	HHW Boilers	5
	Pumps	3
	Heat Recovery Units	3
	Heat Exchangers	3
	Energy Recovery Units	3
	Outside Air Ventilation Systems / Dedicated Outside Air System (DOAS)	5
	Air Handling Units	5
	Rooftop / Packaged AHU	3
	Kitchen Ventilation / Exhaust	3
	Transfer Fans	3
	Supply Fans	3
	Variable Refrigerant Flow Systems - FCUs & CUs	3
	Split Systems	3
	Fan Coil Units	3
	Air Cooled Condensing Units (Split and FCU)	3
	Unit Heaters	3
	Variable Frequency Drives	3
	Exhaust Fans	3
	VAV Air Terminal Units	3
	CAV Air Terminal Units	3
	Chilled Beams	3
	Test Adjust Balance Report Values	3
Building Management System (Systems to be determined in design)	Sequences of Operation, Monitored Points, and Alarms	5
	Metering/Monitoring Devices and Equipment	5
	Software Commissioning, GUI Presentation Commissioning, System Access Performance Criteria, Software Tools/Source Code Commissioning, Instrument Data Sheets, Middleware Commissioning, Internet Protocol Commissioning	5

System	Equipment	Level Note
Electrical System (Systems to be determined in design)	Lighting Systems & Controls (Interior & Exterior & Emergency Functions)	3
Plumbing System (Systems to be determined in design)	Domestic Water Heaters	3
	Thermostatic Mixing Valves	3
	Booster Pumps	3
	HW Circulation Pump	3
Irrigation	Irrigation Controls	3
Renewable Energy (Systems to be determined in design)	Photovoltaics	3

Testing Levels Defined:

Level 1 - The CxA will request and review equipment installation documentation, periodically observe and review the installation of building systems to verify that the operation meets the Owners Project Requirements.

Level 2 - The CxA will perform Level 1 activities and will witness Contractor performance testing of the system. Contractor shall test systems at the discretion of the CxA to prove operational requirements are met. The test sections shall be chosen at random by the CxA to ensure uniformity of system. Testing failures may result in Level 3 testing.

Level 3 - The CxA will perform Level 2 activities and will witness contractor performance testing of the system. Contractor shall test up to 20% of the system to prove operational requirements are met. The test sections shall be chosen at random by the CxA to ensure uniformity of the system. Failure of any test section shall require retesting of that section and an additional test section equivalent in scope. Coordination will be required to avoid impact to the construction schedule.

Level 4 - The CxA will perform Level 2 activities and will witness contractor performance testing of the system. Contractor shall test up to 50% of the system to prove operational requirements are met. The test sections shall be chosen at random by the CxA to ensure uniformity of the system. Failure of any test section shall require retesting of that section and an additional test section equivalent in scope. Coordination will be required to avoid impact to the construction schedule.

Level 5 - The CxA will perform Level 2 activities and will witness contractor performance testing of the system. Contractor shall test up to 100% of the system to prove operational requirements are met. Failure of any test section shall require retesting of that section. Coordination will be required to avoid impact to the construction schedule.

* Testing percentages may vary based on testing success rate.

3.7 METHODS OF TESTING

A. HVAC Systems

1. CxA may witness specified duct air leakage testing during rough-in. Contractor to forward all duct air leakage reports to CxA for review.
2. CxA will visit the site during rough-in of ductwork, piping and equipment to verify proper maintenance clearances and access are being maintained.
3. The CxA may witness contractor and/or factory start-up of equipment.
4. The TAB contractor shall re-measure up to 20% of the TAB report values for the CxA to observe and to verify balance values are within allowable design tolerances.
5. Stand-alone controls will be tested independent of item B below.
6. Contractor will demonstrate to the CxA that the operation of each system through all modes, alarms, and operating parameters meet the contract documents.
7. Contractor will demonstrate IAQ requirements and performance via site demonstrations and documentation to CxA.

B. Building Management System

1. After receipt of the controls contractor's calibration and point to point reports by the CxA, the controls contractor will re-measure some of the points for the CxA to verify that the calibration and communication is correct. The points to be verified will be selected by the CxA.
2. Controls contractor shall provide an as-built shop drawing to the CxA for use in executing FPT.
3. All of the user graphics interfaces and displayed operating points will be demonstrated for the CxA by the controls contractor.
4. Controls contractor shall manipulate the system to demonstrate that it performs all of the specified modes of operation.
5. Points selected by the CxA will be trended for 1-2 weeks by the controls contractor to verify control operation and response. System needs to be in auto without alarms.

C. Electrical Systems

1. During the installation the CxA will perform the following for the electrical systems:
 - a. Periodically observe the installation of equipment.
 - b. Review the completed Pre-functional Checklists (PFC).
 - c. Verify the PFC's by observing the completed work and comparing to the values listed in the PFC.
 - d. Review the factory authorized programming and checkout report of the lighting control panels and devices.
 - e. The contractor is to provide NETA (InterNational Electrical Testing Association) certified third party testing of the power distribution system and provide the CxA with a certified test report.

- f. CxA will review contractor provided as-builts for proper identification and labeling of all equipment, piping and devices.
 - 2. To test the performance of the lighting control system the CxA will perform the following tasks:
 - a. Witness the contractor testing each scene from each wall station.
 - b. Verify these scenes match the design intent from the contract documents.
 - c. Witness the contractor testing the integration to the other integrated systems such as audio visual and monitoring abilities from the BMS.
 - d. Verify this integration allows control and/or monitoring from the other systems.
 - 3. Upon completion of the emergency power system, factory start-up and contractor pretesting, the CxA will witness a contractor test to verify complete system power loss and verify proper power provision of critical systems. The test will not be scheduled until all other systems dependent on emergency power have been tested and approved.
 - D. Plumbing
 - 1. Domestic hot water will be tested by the CxA by measuring the hot water temperature at a percentage of the fixtures along with the time it takes to reach that temperature.
 - 2. Contractor shall demonstrate domestic hot water boilers, pumps and controls through all modes of operation and alarms.
 - 3. Contractor shall demonstrate to the CxA that the sanitary sewer and domestic booster pump operation through all modes and alarms meets approved sequence of operations.
 - 4. After contractor has adjusted all fixtures for proper flush and sink fixture metering, the CxA will test plumbing fixtures for proper operation.
 - 5. The contractor shall demonstrate the water management system to the CxA.
 - 6. The CxA will test the compressed air and vacuum systems for proper operation.
 - E. Irrigation
 - 1. The CxA will witness the contractor demonstration of the irrigation controller and coverage using the contractor's as-built drawings.
 - F. Fire/Life Safety
 - 1. The CxA will review the results of the contractor's test documents to verify that the system was tested and meets specification. Interaction with other systems such as HVAC will be specifically reviewed.

3.8 COST OF RE-TESTING AND COMMISSIONING READINESS LETTER (CxRL) –
SYSTEMS FUNCTIONAL TESTING READINESS CERTIFICATION AND NOTIFICATION

 - A. If CxA arrives onsite, on the scheduled date for functional testing (as indicated on the CxRL, see Exhibit A of this specification section) which cannot be completed due to systems readiness failure, systems technician no-show, or other circumstances not caused by CxA resulting in failed functional testing; it is understood that the CxA's client (listed on CxRL) will be invoiced for expenses incurred by CxA. The contractor also agrees to

reimburse said client for incurred expenses. CxA expenses will be invoiced as noted in the CxRL.

- B. It is the Contractor's responsibility to QC and pre-test all building equipment and systems. The CxA shall confirm function of each system. If a device, piece of equipment, sequence, or system fails a test, corrections shall be made immediately and retested. Corrections that cannot be corrected immediately or that delay completion of CxA testing shall be reimbursed by the Contractor.

3.9 Exhibit A: Commissioning Readiness Letter (CxRL) - Systems Functional Testing Readiness Certification and Notification

Contra Costa County / Los Medanos Recovery Center

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This letter shall serve as certification to 3QC that all applicable systems checked below have been fully tested to perform as specified in the Construction Documents, in accordance with 3QC's Functional Testing Checklists, and that all functional testing prerequisites as outlined in the Commissioning Specifications and Commissioning Plan have been completed and submitted to 3QC for review. 3QC is hereby officially notified to begin onsite functional testing of the following systems:

Systems Ready for Functional Testing by 3QC <i>(Completed by General Contractor or CM at Risk as systems become available and are ready for testing and meeting all criteria explained here within – Check only the systems that are ready at this time, use additional copies of this letter if needed as systems become ready.)</i>		
Check Applicable System	Systems	Date GC is Requesting for CxA on-site Functional Testing *
☐	TAB Verification	
☐	BMS, BAS, DDC or EMS	
☐	HVAC Systems	
☐	Plumbing Systems	
☐	Lighting Control Systems	
☐	Renewable Energy Systems	
☐	Irrigation	

*** = Systems Technician Required** – The contractor certifies that a systems technician familiar with and capable of operating each system to be commissioned will be available onsite throughout functional testing by 3QC. For BMS, BAS, DDC or EMS systems this must be the commissioning technician/programmer.

Failed Functional Testing – If the CxA arrives onsite, on the date(s) indicated above, for functional testing of identified system(s) and cannot be tested due to systems readiness failure, systems technician no-show, or other circumstances not caused by 3QC resulting in failed functional testing; it is understood that 3QC's client (listed below) will be invoiced for travel and expenses incurred by 3QC. The Contractor agrees to reimburse project Owner for incurred expenses as described in Specification Section 019113, 1.4 COMPENSATION, B.

Signature of 3QC's Client or Representative
Date

Print Name

Signature of General Contractor or CM at Risk
Date

Print Name

3.10 Exhibit B: Commissioning Activity Schedule

Commissioning Activity Schedule							
GC Baseline Schedule Activity ID #	Commissioning (Cx) Construction Phase Activity		Building System		Parallel Construction Site Activity	Duration of Cx Activity	CxA Required Site Visit
			MEPCx				
	1	Cx Kick-off Meeting	●		Contractor mobilized onsite	1 day	
	2	CxA provides a digital jobsite Cx Plan Binder with Pre-Functional Checklists to CM or Contractor	●		CM or GC to receive Cx Plan & PFC binder from CxA 1 month prior to MEP equipment startup	-	
	3	CxA identifies submittals required for Cx	●		Contractor provides a submittal list for CxA review	-	
	4	CxA reviews submittals	●		A/E reviews submittals	-	
	5	CxA begins to receive O & M Manuals	●		Subcontractors sends O & M Manuals to Contractor	TBD	
	6	CxA performs site verification of mechanical equipment, and makes updates to Cx Equipment List & Cx Master Issues Log	●		Mechanical equipment set	1 day	●
	7	CxA starts development of Cx Functional Test Checklists	●		Submittal reviews complete. <i>Note: Approved control submittal, with Sequences of Operation, is required to start MEP Cx Functional Test Checklists</i>	14 days	
	8	CxA notified that permanent power is installed	●		Permanent power installed	-	
	9	CxA receives copies of the field Duct Leakage Testing Reports	●		Duct leakage testing completed	-	
	10	CxA conducts onsite functional testing procedures coordination meeting with CM, GC, MEP, communications, and security subcontractors	●		1 Month prior to Cx Functional Testing	1 day	●
	11	CxA issues Functional Test Plan & Checklists to CM, GC, MEP, communications, and security subcontractors	●		1 Month prior to Cx Functional Testing	-	
	12	CxA reviews start up reports and may witness startup of HVAC equipment.	●		GC sends completed startup reports	TBD	●

Commissioning Activity Schedule						
GC Baseline Schedule Activity ID #	Commissioning (Cx) Construction Phase Activity		Building System		Parallel Construction Site Activity	Duration of Cx Activity
			MEPCx			
	13	CxA receives jobsite Pre-Functional Checklist Binder w/ completed, signed, and dated checklists	●		Completed Pre-Functional Checklists 2 Weeks prior to Cx Functional Testing	-
	14	Building LEED flush-out schedule received by CxA (<i>if applicable</i>)	●		CM or GC coordinates LEED flush-out schedule prior to Cx functional testing activities	-
	15	CxA receives field TAB Report reviewed and approved by Engineer of Record	●		1 Week prior to Cx Functional Testing	-
	16	CxA notified that Controls System is complete, and receives controls point to point testing report.	●		Equipment and systems to be under command of the Building Management System (BMS) and controls graphics complete. Point to Point controls testing complete.	-
	17	CxA receives completed/signed Commissioning Readiness Letter (CxRL) indicating Commissioned Systems are ready for Cx Functional Testing	●		1 Week prior to Cx Functional Testing	-
	18	CxA starts Functional Performance Tests (FPTs) on TAB, BMS, HVAC, domestic hot water, lighting controls, Renewable, Irrigation Control Systems.	●		FPTs are scheduled after CxA receives the following functional testing prerequisites: a. Pre-functional checklist completed and signed b. EOR Approved TAB report c. Equipment and systems to be under command of the Building Management System (BMS) and controls graphics complete d. Signed CxRL that commissioned systems are completed and ready for Cx functional testing	5 total days of items 19 thru 25
	19	CxA verification of the TAB report air and water balance values	●		TAB, Controls, and Mechanical subcontractors meet CxA onsite to verify TAB report	½ day
	20	CxA FPTs of BMS	●		Controls subcontractor meets CxA onsite to perform Functional Testing of BMS	½ day

Commissioning Activity Schedule						
GC Baseline Schedule Activity ID #	Commissioning (Cx) Construction Phase Activity		Building System		Parallel Construction Site Activity	Duration of Cx Activity
			MEPCx			
					after BMS point-to-point and QC checkout is completed	
	21	CxA FPTs of HVAC	•		Controls and Mechanical subcontractors meet CxA onsite to perform functional testing of HVAC systems	2 days
	22	CxA FPTs of Domestic Water and Domestic Hot Water	•		Plumbing subcontractor meets CxA onsite to perform functional testing of domestic cold and hot water	½ day
	23	CxA FPTs of Lighting Controls	•		Lighting Control and Electrical subcontractors meet CxA onsite to perform functional testing of lighting controls	½ day
	24	CxA FPTs of Irrigation Controls	•		Irrigation subcontractor meets CxA onsite to perform functional testing of irrigation controls and systems	½ day
	25	CxA FPTs of Photovoltaic (PV) Solar Panels,)/ Renewables,	•		PV and Electrical subcontractors meet CxA onsite to perform functional testing of irrigation controls and systems	½ day
	26	CxA confirms that Cx issues are resolved.	•		CM receives responses addressing and closing out Cx issues	14 days
	27	Cx Report	•		Cx systems testing completed	21 days

SCHEDULE NOTES:

The following sequential priorities are required to be followed:

1. Equipment is not “temporarily” started (for heating or cooling), until pre-start checklist items and all manufacturer’s pre-start procedures are completed, dirt, dust and other environmental and building integrity issues have been addressed.
2. Functional performance testing does not begin until Pre-Functional, start-up and TAB is completed for a given system.
3. The controls systems and equipment under its control is not functionally tested until all points have been calibrated and Pre-Functional Checklists are completed.
4. Partial test days shall be combined such that CxA on site functional testing shall total entire work days.

End of Section 01 91 13