



COUNTY OF SANTA CLARA
Parks and Recreation Department

CONSTRUCTION DOCUMENTS

PROJECT MANUAL

Division 0
&
Division 1

JOB ORDER CONTRACTS:

MJOC-PRK-2024-01

Version 1.0

April 2024

Project Name: Job Order Contracting (JOC)

Project Number: **MJOC-PRK-2024-01**

Client Agency: Parks and Recreation Dept

Location: Various County Locations

Owner's Project Manager: Jason Ebling

END OF DOCUMENT 00001

NOTICE TO BIDDERS**ARTICLE 1 — JOB ORDER CONTRACTS – MJOC-PRK-2024-01.**

ARTICLE 2 — NOTICE IS HEREBY GIVEN that sealed Bids will be accepted by the Clerk of the Board of Supervisors of the County of Santa Clara, State of California, in the office of the Clerk of the Board of Supervisors, 10th Floor, East Wing of the County Government Center, 70 West Hedding Street, San Jose, CA, 95110 no later than 2:00 p.m., on **May 9, 2024**, for Minor Job Order Contract MJOC-PRK-2024-01.

ARTICLE 3 —**3.1 THE WORK**

3.2 The Work will be located at various County facilities within the geographical boundaries of Santa Clara County, in accordance with Bid Documents on file for the Work in the Office of the Clerk of the Board of Supervisors. Only one (1) contract will be awarded to the successful lowest bidder. Only one (1) bid per Contractor may be submitted. County reserves the right to award additional contracts under this bid.

3.2.1 The Work will consist of:

- .1 This Job Order Contract (JOC) is an indefinite quantity contract pursuant to which the Contractor will perform an ongoing variety of individual Projects, consisting of specific construction tasks, at different locations throughout the County. This Contract is for construction work and related services to be performed within a designated area of the County. However, if the need arises, the Owner reserves the right to require the Contractor to work at any location or facility under the jurisdiction of the Owner. The scope of this JOC Contract is for general construction, repair, remodel, site, utility, and other repetitive related work to be performed for the County of Santa Clara Parks and Recreation Department. The County has published a Construction Task Catalog® (CTC) containing a series of construction tasks with preset Unit Prices. The CTC was developed using experienced labor and high-quality materials. All Unit Prices are based on local labor, material and equipment prices including the current prevailing wages and are for the direct cost of construction. The Contractor will bid one set of Adjustment Factors to be applied to the Unit Prices. Each set of Adjustment Factors will include Adjustment Factors for performing work during Normal Working Hours and a second Adjustment Factor for performing work during Other Than Normal Working Hours. The price of an individual project will be determined by multiplying the preset Unit Prices and the appropriate quantities by the appropriate Adjustment Factor. These Adjustment Factors shall apply to every Pre-priced Task in the Construction Task Catalog®. This Contract will be awarded to the lowest, responsive, responsible bidder. The Other than Normal Working Hours Adjustment Factor must be equal to or greater than the Normal Working Hours Adjustment Factor.
- .2 The scope of Work for this Contract will be determined by the Detailed Scopes of Work issued in connection with individual Job Orders. The Contractor is required to complete each Detailed Scope of Work for the Job Order Price within the Job Order Completion Time. The scope of work, for each project will be explained to the Contractor at a Joint Scope Meeting. The County will provide a Request for Job Order Proposal and Detailed Scope of Work to the Contractor. The Contractor will be required to review the Detailed Scope of Work and develop a Job Order Proposal for the Project including a Job Order Price Proposal using appropriate tasks, quantities, and the applicable Adjustment Factor, as well as drawings, sketches, a list of subcontractors and suppliers, construction schedule, and other requested documentation. The Job Order Price shall equal the value of the approved Job Order Price Proposal. The value of the Job Order Price Proposal shall be calculated by summing the total of the calculation for each Pre-priced Task (Unit Price x quantity x Adjustment Factor) plus the value of all Non Pre-priced Tasks.
- .3 The County will review the Contractor's Proposal in detail and if found to be reasonable and

acceptable, a Job Order may be issued. The agreed upon price will be fixed price for the performance of the Detailed Scope of Work.

- 4 A Job Order will reference the Detailed Scope of Work and set forth the Job Order Completion Time, and the Job Order Price. The Job Order Price shall be a lump sum, fixed price for the completion of the Detailed Scope of Work. A separate Job Order will be issued for each Project. Extra work, credits, and deletions will be contained in a Supplemental Job Order.

3.3 MINIMUM AND MAXIMUM CONTRACT VALUES

The Minimum Contract Value is \$10,000.00 for MJOC-PRK-2024-01.

- 3.3.1 The Contractor has the opportunity to perform Job Orders totaling at least \$10,000 during the Contract term. The Maximum Contract Value is \$1,500,000.00 for MJOC-PRK-2024-01.
- 3.3.2 The Contractor will not be issued Job Orders which in total exceed the Maximum Contract Value. The County does not guarantee the Contractor will receive this volume of Work.

3.4 CONTRACT TIME

- 3.4.1 The contract term commences on the effective date of the Job Order Contract Notice to Proceed issued by the County.
- 3.4.2 The term of the Job Order Contract will be either for one year or when issued Job Orders totaling the Maximum Contract Value have been completed, whichever occurs first. All Job Orders must be issued but not necessarily completed within one calendar year of the commencement date of the Contract.
- 3.4.3 Each Job Order will specify a Job Order Completion Time as stated on the Job Order Notice to Proceed.
- 3.4.4 All Job Orders issued during the term of this Contract shall be valid and in effect notwithstanding that the Detailed Scope of Work may be performed, payments may be made, and the guarantee period may continue, after such period has expired. All terms and conditions of the Contract apply to each Job Order.

3.5 LIQUIDATED DAMAGES

- 3.5.1 Agreed Amount of Damages: It is understood and agreed by both parties to the Contract that in case all the Work specified or indicated in the Contract Documents is not completed within the specified limits of the Job Order Completion Time, or within such time limits as extended, damages will be sustained by the County in the event of and by reason of such delay. It is, and will be, impractical and extremely difficult to determine the actual damage which the County will sustain by reason of the delay. It is therefore agreed that the Contractor will pay, at a minimum, to the County the sum of money stipulated per day in the Job Order for each day's delay in completing the work beyond the time prescribed.
- 3.5.2 Application of Liquidated Damages and the value of liquidated damages will be determined by the County on a Job Order by Job Order basis. Each Request for Proposal will state whether Liquidated Damages will be applied to an individual Job Order. A typical range for Liquidated Damages is, but not limited to, \$50-\$3,000.
- 3.5.3 Owner may withhold Liquidated Damages from payments to the Contractor as such

damages accrue, or, at Owner's discretion, withhold Liquidated Damages from any payments due or that become due pursuant to the Contract, including Retention and final payment (pursuant to California Government Code §53069.85). A credit Supplemental Job Order shall be executed to assess liquidated damages.

3.6 BIDS MUST BE ADDRESSED TO: The Clerk of the Board of Supervisors of the County of Santa Clara, 70 West Hedding St. East Wing, 10th Floor, San Jose CA 95110 and bear the Project name and Project number as they appear on the cover of the Project Manual.

3.7 BIDDER'S SECURITY

3.7.1 Each Bid must be accompanied by cash, a certified or cashier's check, or a bond in the sum of not less than \$25,000 (twenty-five thousand dollars).

3.7.2 The check or bond must be made payable to "**The County of Santa Clara.**"

3.8 BID RESULTS

3.8.1 The Deputy Director will post the results of the Bid following the opening of the Bids and verification of bid amounts on the Clerk of the Board website no later than the following day.

3.9 ERRORS OR DISCREPANCIES IN THE BIDS

3.9.1 The Board of Supervisors reserves the right to reject any and all Bids and to waive any errors or discrepancies in the Bids.

ARTICLE 4 — OTHER NOTICES

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4.1 CONTRACTOR'S LICENSING REQUIREMENT

4.1.1 Pursuant to Document 00200.3, "Compliance with Contractor's License Law", the Contractor must possess a '**B**' Contractor's License.

4.1.2 The Contractor must possess the required classification of Contractor's License at the time the Bid is submitted (per Business and Professions Code §7028.15). If federal funds are involved in this Project, the Contractor must possess the required classification of Contractor's License at the time of the Contract Award (per Public Contract Code §20103.5).

4.2 FEDERAL AND GRANT REQUIREMENTS

4.2.1 A Job Order funded by federal or grant monies may mandate specific additional requirements such as, DBE participation, Buy America, Drug Free Work Place Policy, Federal Minimum Wage Rates, etc. Contractor must comply with any applicable mandated requirements.

4.3 PREVAILING WAGE REQUIREMENT

4.3.1 Pursuant to Document 00700.3.9.1, "Hours of Labor", all workers employed in the Work must be paid rates at least equal to the prevailing wage rates last adopted by the Board of Supervisors of the County of Santa Clara, which rates are filed in the Office of the Clerk of the Board of Supervisors, are incorporated herein by reference, and may be inspected upon request.

4.3.2 The rates are also available on the State of California Department of Industrial Relations website at California Department of Industrial Relations Home Page <http://www.dir.ca.gov/>.

4.3.3 Contractor must comply with all applicable requirements of Division 2, Part 7, Chapter 1 of the California Labor Code.

4.4 PROJECT LABOR AGREEMENT (PLA)

- 2.4.1 Any single Job Order that has a construction cost of two million dollars (\$2,000,000) or more shall be subject to the provisions of the current County of Santa Clara PLA policy.

4.5 BONDS AND INSURANCE

- 4.5.1 The successful Bidder must deliver signed Contract Bonds (payment bond and performance bond), and all required insurance documents to the Clerk of the Board of Supervisors for acceptance before Owner will issue a Notice to Proceed with the Contract.
- 4.5.2 No Contract exists until all Contract Bonds and insurance documents have been accepted by the Owner.

4.6 PRESERVATION OF CULTURAL RESOURCES

- 4.6.1 If Job Order Work site, as stated in the Detailed Scope of Work is deemed "Archaeologically Sensitive", the provisions in Document 00700.10.5, "Preservation of Cultural Resources", will apply.

4.7 COMPUTER, SOFTWARE, AND COMMUNICATION EQUIPMENT REQUIREMENTS

- 4.7.1 There are specific computer, software and communication equipment requirements in this Contract, Document 00800 "Supplemental Conditions" 2.1.1 & 2.2.17.

4.8 RETENTION FROM PAYMENTS DURING CONTRACT TIME

- 4.8.1 Pursuant to Document 00700.8.5, "Securities In Lieu Of Retention", Contractor may substitute securities for any money withheld from progress payments, using the attached Escrow Agreement form, Document 00550, "Escrow Agreement for Security Deposit In Lieu of Retention."

4.9 AVAILABILITY OF BID DOCUMENTS

- 4.9.1 Bid Documents will become available on **April 17, 2024**.
- 4.9.2 Bid Documents consist of the Construction Task Catalog® and Technical Specifications (only on CD Rom), electronic copy of the Master Project Manual available on the Periscope website.

4.10 MANDATORY PRE-BID CONFERENCE

- 4.10.1 A **MANDATORY** Pre-Bid Conference will be held on, **April 25, 2024 – 10:00 AM** at the County of Santa Clara Parks and Recreation Department, 5965 Silver Creek Valley Blvd, San Jose, CA 95138. Failure to attend and sign in will cause forfeiture of bidding rights.
- 4.10.2 Bidders should become thoroughly familiar with the terms and conditions of the Bid Documents and local conditions affecting the performance and costs of the Work before attending this conference.

4.11 BID OPENING

- 4.11.1 The opening of bids shall be made available to the public via virtual teleconference, a link to which will be posted via Addendum to the Invitation to Bid, no later than 72 hours before the time schedule for the opening of bids. The results will be posted on the Clerk of the Board website no later than the following day.

4.12 PROJECT MANAGER

- 4.12.1 The County's Project Manager for this Project is Jason Ebling at phone number 1-408-314-5168 or at Jason.ebling@prk.sccgov.org

4.13 OWNER'S AUTHORIZED REPRESENTATIVE

- 4.13.1 The Owner's Authorized Representative for this Bid, who has authority to Approve Addenda is,

the Director of Parks and Recreation.

4.14 OWNER'S CONSULTANT

The Owner selected The Gordian Group's (Gordian) Job Order Contracting (JOC) Solution for their JOC program. The Gordian JOC Solution™ includes Gordian's proprietary JOC Information Management System ("JOC IMS"), construction cost data, and Construction Task Catalog® which shall be used by the Contractor solely for the purpose of fulfilling its obligations under this Contract, including the preparation and submission of Job Order Proposals, Price Proposals, subcontractor lists, and other requirements specified by the Owner. The Contractor shall be required to execute Gordian's General Terms of Use and pay a 1% JOC System License Fee to obtain access to the Gordian JOC Solution™. The JOC System License Fee applies to all Job Orders issued to the Contractor under the terms of this Contract. The Contractor shall include the JOC System License Fee in the Adjustment Factors.

4.15 BID PERIOD CLARIFICATIONS AND ADDENDA

- 4.15.1 Contractor must submit all requests for clarification, or interpretation of the Bid Documents in writing at least seven (7) calendar days before the deadline for receipt of Bids.
- 4.15.2 The Owner's Authorized Representative may issue written Addenda as appropriate for clarification or other reasons during the bidding period.
- 4.15.3 Addenda will be updated on Periscope notice for the Project.
- 4.15.4 Owner is not responsible for any explanation or interpretation of the Bid Documents not communicated to Bidders in an Addendum.
- 4.15.5 Unless otherwise clarified in an Addendum, resolution of supposed discrepancies, conflicts, omissions, or errors in the Bid Documents are governed by Document 00700.1.6, "Conflicts in the Contract Documents."

4.16 FACILITIES SECURITY AND ACCESS POLICIES

- 4.16.1 Contractor will adhere to all applicable County secured facility, tool control, and escort policies.
- 4.16.2 Specific site policies will be supplied on a Job Order basis.

WORKMANSHIP

All Workers performing trade or craft work shall be Journeyman level or Apprentice level under direct Journeyman Supervision to the specific trade or craft that the Work requires.

BY ORDER OF THE BOARD OF SUPERVISORS OF THE COUNTY OF SANTA CLARA, STATE OF CALIFORNIA, on April 16, 2024.

CURTIS BOONE
Acting Clerk of the Board of Supervisors

END OF DOCUMENT 00100

INSTRUCTIONS TO BIDDERSIndex

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ARTICLE 1 — GENERAL

- 1.1 Bidder must examine these Instructions To Bidders carefully and respond to all requirements and conditions.
- 1.2 Bidders must be aware of the requirements of all codes referenced in the Bid Documents.

ARTICLE 2 — COMPETENCE OF BIDDERS

- 2.1 Bidders must meet all qualification requirements contained in the Bid Documents.
- 2.2 Bidder(s) may be required to furnish evidence satisfactory to Owner that the Bidder and its proposed Subcontractors have sufficient means and experience in the type of Work required to assure satisfactory completion of all the requirements of the Contract Documents.

ARTICLE 3 — COMPLIANCE WITH CONTRACTOR'S LICENSE LAWS

- 3.1 Bidder's attention is directed to the provisions of Chapter 9 of Division 3 (§7000 et seq.) of the California Business and Professions Code ("The Contractors' State License Law"), and §3300 of the California Public Contract Code. The Contractor must possess the required classification of Contractor's License at the time the Bid is submitted (per Business and Professions Code §7028.15).
- 3.2 If a Bidder does not possess the required Contractor's License at the time a Bid is submitted, in accordance with Business and Professions Code §7028.15, the Bid will be considered non responsive and will be rejected by the Owner. The Owner may require forfeiture of the Bidder's Bond.
- 3.3 Joint venture Bidders must possess a joint venture license. Each party to a joint venture must be properly licensed for the Work of this Project.

ARTICLE 4 — PRIOR DISQUALIFICATION

- 4.1 Bid may be rejected on the basis of a Bidder, any officer of such Bidder, or any employee of such Bidder who has a proprietary interest in such Bidder, having been disqualified, removed, or otherwise prevented from Bidding on, or completing a federal, state, or local project because of a violation of a law or a safety regulation.
- 4.2 The Owner will review the circumstances presented in the Bid Form Certification. The County will determine if acceptance of the Bid is in its best interest.

ARTICLE 5 — EXAMINATION OF BID DOCUMENTS

- 5.1 The Bidder must carefully examine the Bid Documents.
- 5.2 The submission of a Bid will be conclusive evidence that the Bidder has investigated and is fully aware of the conditions and difficulties that may be encountered including the availability of labor and materials to be provided, of the character and quality of Work to be performed, and of the requirements of all Bid Documents.
- 5.3 No information derived from the Contract Documents will relieve Contractor from any risk or from properly fulfilling all the terms of the Contract.
- 5.4 Failure by Bidder to educate itself with available information will not relieve Bidder from responsibility for estimating properly the difficulty or cost of successfully performing the Work.
- 5.5 Bidders are required to inform themselves fully of the conditions relating to the construction and labor under which the Work will be or is now performed, and, so far as possible, the successful Bidder must employ such means and methods in carrying out its Work as will not cause any interruption or interference with any other contractor.

ARTICLE 6 — DISCREPANCIES, CONFLICTS, OMISSIONS, OR ERRORS

- 6.1 If any person contemplating submitting a Bid is in doubt as to the intended meaning of any part of the Bid Documents, or finds discrepancies in, or omissions in the Bid Documents, that person must submit a written request for an interpretation or correction thereof at least seven (7) calendar Days before the

deadline for receipt of Bids.

- 6.2 Inquiries must be addressed to the Project Manager identified in the Notice to Bidders.
- 6.3 Any request received fewer than seven (7) calendar Days before the said deadline may not be answered. The person submitting the request will be responsible for its prompt delivery.
- 6.4 Any interpretation or correction of the Bid Documents will be made only by Addendum, and will be updated on Periscope for the Project.
- 6.5 Owner is not responsible for any explanation or interpretation of the Bid Documents not communicated to Bidders in an Addendum. If no Addenda are issued relating to supposed discrepancy, conflict, omissions, or errors in figuring the Work, the supposed discrepancies, conflicts, or omissions are governed by Document 00700.1.6, "Conflicts in the Contract Documents."

ARTICLE 7 — BIDDER'S SECURITY

- 7.1 Each Bid must be accompanied by cash, a certified or cashier's check, or an original Bidders Bond in an amount not less than ten percent (10%) of the Maximum Contract Value indicated in the Notice to Bidders.
- 7.2 A Bid will be considered non-responsive if not accompanied by proper Bidder's Security.
- 7.3 The original Bid Bond must be provided by an admitted Surety insurer, authorized to issue Surety bonds in the State of California, and it must execute the Bid Bond.
- 7.4 Bonds and checks must be made payable to "The County of Santa Clara".
- 7.5 All bonds must be provided on the forms included with the Bid Documents or the Bid will be considered non-responsive.

ARTICLE 8 — BID FORM

- 8.1 Prospective Bidders are furnished Bid Forms (Document 00410). The Bid Form contains a schedule of items requesting Adjustment Factors.
- 8.2 The Adjustment Factors multiplied by the Tasks in the Construction Task Catalog must include full compensation for Providing all labor, materials, services, tools, equipment and whatever else is required to perform all Work in accordance with the requirements of the Work.
- 8.3 All Unit Prices listed in the Construction Task Catalog® are priced at a net value of 1.0000. The Adjustment Factors shall be an increase or decrease to all the Unit Prices listed in the Construction Task Catalog®. For example, 1.1000 would be a 10% increase to the Unit Prices and 0.9500 would be a 5% decrease to the Unit Prices. Bidders who submit separate Adjustment Factors for separate Unit Prices will be considered non-responsive and their bid will be rejected.
- 8.4 All Bids must be submitted on the forms furnished by the Owner. A Bid not submitted on the forms furnished by the Owner will be considered non-responsive.
- 8.5 Completing the Bid Form:
 - .1 Bidder's name must be the same as listed on Bidder's California State Contractor's license.
 - .2 Bid price(s) must be in the manner required by the Bid Form.
 - .3 Bid Form must be signed by Bidder or duly authorized representative.
 - .a If Bidder is an individual, name must be stated.
 - .b If Bidder is a partnership, name of the partnership must be stated and one or more partners must sign the Bid Form.
 - .c If Bidder is a corporation, name of the corporation must be stated, the state of incorporation must be listed, the title of the person with authority to sign and bind the corporation, must be stated, and the corporate seal must be affixed.

.d Bidder's business and mailing address must be stated.

8.6 Required Listing of Proposed Subcontractors:

- .4 For each subcontractor to whom the bidder proposes to subcontract portions of the work in an amount in excess of one-half of 1 percent of the total Job Order, each Job Order Proposal shall have listed therein the name and address, and the dollar value of each, in accordance with Section 4104 of the Public Contract Code.
- .5 Bidders' attention is directed to the provisions of the Subletting and Subcontracting Fair Practices Act, beginning with Public Contract Code §4100, related to penalties for use of unauthorized Subcontractors or by making unauthorized substitutions.

ARTICLE 9 - CONTRACTING PRINCIPLES

9.1 Pursuant to the Resolution on Contracting Principles adopted by the Board of Supervisors on October 28, 1997, all Bidders are required to sign and submit with their Bid a completed "Contracting Principles Declaration of Contractor/Bidder" form, which has been included in the Bid forms.

9.2 The successful Bidder must, during the Contract Time.

- .1 Comply with all applicable federal, state, and local rules, regulations, and laws.
- .2 Maintain financial records adequate to verify that the County funds paid pursuant to the Contract were used for purposes consistent with the terms of the Contract.

It is the policy of the Board that all entities that contract with the County to provide services where the contract value is \$100,000 or more per budget unit per fiscal year and/ or as otherwise directed by the Board, must be fiscally responsible entities and must treat their employees fairly.

To ensure compliance with these contracting principles, all contractors must: (1) comply with all applicable federal, state and local rules, regulations and laws; (2) maintain financial records, and make those records available upon request; (3) provide to the County copies of any financial audits that have been completed during the term of the contract; (4) upon the County's request, provide the County reasonable access, through representatives of the Contractor, to facilities, financial and employee records that are related to the purpose of the contract, except where prohibited by federal or state laws, regulations or rules.

The factors the County considers in determining compliance with its contracting principles include, but are not limited to: wage levels, pay ranges, benefits for all positions and job classifications, medical insurance for employees, annual rate of staff turnover, number of hours of training for each position in subject areas directly related to the contract, number of legal complaints issued by an enforcement agency against the contractor for alleged violations of applicable federal, state, or local rules, regulations or laws and the number of citations, court findings or administrative findings for violations of applicable federal, state, or local rules, regulations or laws related to treatment of employees or the contractor's fiscal condition, and any collective bargaining agreements or personnel policies covering the contractor's employees.

ARTICLE 10 - SUBMISSION OF BID FORMS

10.1 Bid Forms must be **completed in ink**, completely filled out, the adjustment factor must be taken to the 4th decimal place (example: 1.XXXX), and submitted on the Bid Form furnished as part of the Bid Documents. Faxed Bids or modifications will not be considered by Owner.

10.2 It is the sole responsibility of the Bidder to ensure that its Bid is received at the proper time and at the proper location. Bids received after the time fixed for receiving them will not be considered.

10.3 Late Bids will be returned by the Owner to the Bidder unopened.

10.4 Each Bid must be addressed to The Clerk of the Board of Supervisors of the County of Santa Clara, 70 West Hedding St. East Wing, 10th Floor, San Jose CA 95110, and must be delivered to the Clerk of the Board of Supervisors no later than the date and time set for the opening of Bids in the published Notice to Bidders.

10.5 Each Bid must be in its own envelope. Each Bid must be enclosed in a sealed envelope bearing the title of the Project, the name of the Bidder and the date and time of the opening. Failure to do so may result in a premature opening of, or failure to open, such Bid. Bid Forms improperly marked may be disregarded.

ARTICLE 11 - WITHDRAWAL OF BID FORMS

11.1 Any Bid may be withdrawn at any time before the time fixed in the Notice to Bidders for the opening of Bids only by written request of the Bidder or a duly authorized representative.

11.2 Withdrawal of a Bid does not prejudice the right of the Bidder to file a new Bid at any time prior to the time fixed for receiving Bids in the Notice to Bidders.

11.3 Whether or not Bids are opened exactly at the time stated in the Notice to Bidders, a Bid will not be accepted after the time stated.

11.4 After the opening of Bids, Bids may only be withdrawn in accordance with the provisions of Public Contract Code §5100-5107.

ARTICLE 12 - PUBLIC OPENING OF BIDS

12.1 Bids will be opened and read publicly at the time and place indicated in the Notice to Bidders. Bidders or their authorized agents are invited to be present.

ARTICLE 13 - REJECTION OF IRREGULAR BIDS

13.1 The Owner may reject any Bid if there appears to be any alteration of the Bid Form, any addition or condition not called for, or any incompleteness, erasure, or irregularity of any kind.

13.2 Bids not completed in **ink** will be rejected.

13.3 If the Bid amount or other material information is changed by the Bidder, the **change must be initialed**.

ARTICLE 14 - COMPETITIVE BIDDING

14.1 More than one Bid from an individual, firm, partnership, corporation, or combination thereof, as a principal, under the same or different names will not be considered. Reasonable basis for believing that any individual, firm, partnership, corporation, or combination thereof is a principal in more than one Bid for the Work contemplated may cause the rejection of all Bids in which such individual, firm, partnership, corporation, or combination thereof is a principal.

14.2 If there is a reason for believing that collusion exists among the Bidders, any or all Bids may be rejected.

14.3 A person, firm, or corporation submitting a sub-bid to a Bidder, or who quoted prices on materials to a Bidder, is not thereby disqualified from submitting a sub-bid or quoting prices to other Bidders or from being a principal Bidder for the same Work.

14.4 Bids in which unit prices obviously are unbalanced may be rejected.

14.5 Bidders are put on notice that any collusive agreement fixing the prices to be Bid so as to control or affect Awarding of the Contract is in violation of competitive bidding requirements of the Public Contract Code and may render void any Contract let under such circumstances.

ARTICLE 15 - SUBSTITUTION OF ALTERNATIVE MATERIALS, ARTICLES, OR EQUIPMENT

15.1 Bids must be based upon use of items named in the Bid Documents.

15.2 In certain cases, specific items have been named because of operational or maintenance

considerations; approval of proposed equals should not be assumed.

15.3 Pursuant to Public Contract Code §3400, alternative material(s), article(s), or equipment that are of equal quality and of required characteristics for the purpose intended may be proposed, prior to the issuance of a Job Order, provided the Bidder complies with the following requirements:

15.4 The proposal will not be considered unless the submittal is accompanied by complete information and descriptive data necessary to determine equality of offered material(s), article(s), or equipment.

15.5 Samples must be submitted when requested by the Owner.

15.6 Burden of proof as to comparative quality, suitability, and performance of offered material(s), article(s), or equipment is the responsibility of the Bidder submitting the proposal.

15.7 Requests for approval must comply with the requirements of Section 01630, "Product Substitution Procedures."

15.8 Owner's Authorized Representative is the sole judge as to such matters. In the event Owner's Authorized Representative rejects the use of such Alternative(s) submitted, the Contractor must furnish one of the particular Named Products originally specified in the Documents.

ARTICLE 16 - RETURN OF BIDDER'S SECURITY

16.1 If Owner does not accept the Bid within the period of Days after the Bid opening stated in Document 00410 - Bid Form, Owner will return Bidder's Security to all Bidders.

16.2 If the Bidder to whom the Contract is Awarded executes and delivers to Owner all the required documents, Owner will return Bidder's Security to all Bidders in accordance with the Public Contract Code Section 20129.

ARTICLE 17 - RELIEF OF BIDDERS

17.1 Attention is directed to the provisions of California Public Contract Code §5100 through §5107 that set forth the criteria and procedures for relief of Bidders, and for authorizing Contract Award to another Bidder.

ARTICLE 18 - AWARD OF CONTRACT

18.1 The Contract(s), if awarded, will be to that responsible Bidder submitting the lowest responsive Bid, subject to Owner's right to reject any or all Bids and to waive any informality or irregularity in the Bids or in the bidding procedures.

18.2 No Contract is formed until all Contract Bonds and insurance documents have been accepted by the Owner and the Agreement is signed by the Owner.

ARTICLE 19 - CONTRACT BONDS

19.1 The successful Bidder (hereinafter "Contractor") must pay all Contract Bond premiums, costs thereof, and incidental thereto.

19.2 Each Contract Bond must be signed by both Contractor and the Sureties.

19.3 As a condition to Owner signing the Agreement, the successful Bidder must file with Owner on the approved forms, the two surety bonds in the amounts and for the purposes noted below, duly executed by a Surety company meeting the requirements of Article 20 herein.

19.4 The "**Payment Bond** for public works" must be in an amount of one hundred percent (100%) of the Maximum Contract Value and shall inure to the benefit of persons performing labor or furnishing materials in connection with the Work. This bond must be maintained in full force and effect until all Work is completed and Accepted by Owner, and until all claims for materials and labor have been paid.

19.5 The "**Performance Bond**" must be in an amount of one hundred percent (100%) of the Maximum Contract Value and must be so conditioned as to ensure the faithful performance by Contractor of all Work. It shall also include the replacing, or making acceptable, of any defective materials or faulty workmanship during the Guarantee period(s).

19.6 If any Surety or Sureties are deemed unsatisfactory at any time by Owner, Owner will notify Contractor, and Contractor must forthwith substitute a new Surety or Sureties satisfactory to Owner. No further payment will be deemed due or made until the replacement Sureties qualify and are accepted by Owner.

19.7 All changes to the Maximum Contract Value, Contract Time, or Contract Documents may be made without securing the consent of the Surety or Sureties on the Contract Bonds.

19.8 Sureties must be California admitted Sureties. (See Insurance and Bond Requirements set forth in Document 00700.11, "Indemnification and Insurance")

ARTICLE 20 - INSURANCE

20.1 Contractor will be required to furnish to Owner, concurrently with execution of the Agreement, insurance documents evidencing coverage as required by Document 00700.11, "Indemnification and Insurance."

20.2 If the Contractor provides incidental architectural or engineering design services, the County's insurance and indemnification requirements will be required.

ARTICLE 21 - EXECUTION OF CONTRACT AGREEMENT

21.1 The form of Agreement which the successful Bidder, as Contractor, must execute, and the form of Contract Bonds and insurance coverage that it must provide are included in the Bid Documents and must be carefully examined by each Bidder. All Contract Bonds, policies or certificates of insurance, and insurance policy endorsements must be delivered with or before the delivery of the signed Agreement form and must be acceptable to Owner.

21.2 The Bidder to whom the Contract is Awarded by Owner must, within seven (7) calendar Days after the Notice of Award, sign and deliver the following documents to the Owner's Project Manager: Jason Ebling, 5965 Silver Creek Valley Blvd., San Jose, CA 95138 c.

1. Two (2) originals of the signed Agreement form furnished by Owner in the Bid Documents. (Document 00500, "Agreement")
2. One (1) original and two (2) copies of the Performance Bond. (Document 00611, "Performance Bond Form")
3. One (1) original and two (2) copies of the Payment Bond for Public Works. (Document 00612, "Payment Bond Form")
4. Policies of insurance, insurance certificates and endorsements as required by the Bid Documents.
5. Workers Compensation Certificate

21.3 Should Contractor begin Work in advance of the start date for the Work, as stated in the Notice to Proceed, the Work will be considered as having been done at Contractor's risk as a volunteer.

ARTICLE 22 - FAILURE TO EXECUTE CONTRACT AGREEMENT

22.1 Failure of the successful Bidder to execute the Agreement in the form satisfactory to Owner is just cause for the annulment of the Award and the forfeiture of the Bidder's Security.

22.2 Failure of the successful Bidder to sign and return the Agreement within seven (7) calendar Days after notification of Award by the Owner constitutes failure to execute the Agreement.

22.3 Failure to return required Contract Bonds and insurance documents within seven (7) calendar Days after notification of Award by the Owner constitutes failure to execute the Agreement.

22.4 If the Bidder to whom the Contract is awarded does not file the documents required by the Bid Documents, files unsatisfactory documents, or refuses to enter into a Contract within the specified time, the Bidder is liable for any difference by which the cost of procuring the Work exceeds the amount of its Bid.

The Bidder's Security may be used to offset such difference.

ARTICLE 23 - NO ORAL AGREEMENTS

23.1 No conversation with any officer, employee, agent, or Consultant of Owner, either before, during, or after the execution of the Agreement, affects or modifies any terms or obligations contained in the Contract Documents, nor entitle Contractor to any adjustment in the Contract Time or Contract Sum whatsoever.

ARTICLE 24 - BID PROTEST

24.1 Any Bid protest relating to the form or content of the Bid Documents must be submitted in writing to the Owner's Project Manager identified in the Notice to Bidders at least three (3) business days before the original date or extension thereto set for the Bid opening. Any Bidder who fails to submit a protest before the Bid opening deadline will be deemed to have waived any protest to the form or content of the Bid Documents.

24.2 Any Bid protest unrelated to Article 24.1 must be submitted in writing to the Owner's Project Manager. The protest must be received before 5:00 p.m. of the third business day following Bid opening.

24.3 The protest document must contain a complete statement of the basis for the protest.

24.4 The protest must refer to the specific portion(s) of the Bid Documents that form the basis for the protest.

24.5 The protest must include the name, address, and telephone number of the person representing the protesting party.

END OF DOCUMENT 00200

BIDDING REQUIREMENTS**BID FORM**

(*Bid Form must be completed in ink & changes must be initialed.*)

Document 00410

Page 1 of 11

From: Name of Bidder

Name: _____

Mailing Address: _____

Phone:() _____ Fax:() _____ Email Address: _____

TO: The County of Santa Clara, herein called Owner:

Pursuant to and in compliance with your Notice to Bidders and the Contract Documents relating to the **MJOC-PRK-2024-01** the undersigned Bidder, having become thoroughly familiar with the terms and conditions of the Contract Documents and with local conditions affecting the performance and the costs of the Work, hereby proposes and agrees to fully perform authorized Work within the time(s) stated and in strict accordance with the Contract Documents and each Job Order, including providing any and all labor and materials, and performing all the work required to construct and to complete said Work in accordance with the requirements of the Contract Documents, for the following Adjustment Factors:

BID SCHEDULE:

Normal Working Hours: Work performed during Normal Working Hours in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog multiplied by the Adjustment Factor of:

Other than Normal Working Hours*: Work performed during Other Than Normal Working Hours in the quantities specified in individual Job Orders for the Unit Price sum specified in the Construction Task Catalog multiplied by the Adjustment Factor of:

* Bids will be rejected, as non-responsive if the 'Other than Normal Working Hours' Adjustment Factors are not equal to or greater than the 'Normal Working Hours' Adjustment Factors.

Award Criteria Figure Formula

Award Criteria Figure Formula percentages are for Bid purposes only. The County is not obligated to issue Job Orders in the stated percentages. Carry out all Lines to the 4th decimal place.

Line 1.	Normal Working Hours Adjustment Factor	1.
Line 2.	Multiply Line 1 by 85%	2.
Line 3.	Other than Normal Working Hours Adjustment Factor	3.
Line 4.	Multiply Line 3 by 15%	4.
Line 9.	Add Lines 2 and 4 (This is the Award Criteria Figure)	ACF =

BASIS FOR AWARD OF CONTRACT

1. The Contracts will be Awarded to the "Responsible Bidder" submitting the lowest responsive Bids (as may be corrected in accordance with paragraph 7 below) and per Article 18 - Award of Contract, in the Instructions to Bidders. "Responsible Bidder" (per Public Contract Code §1103) is a Bidder who has demonstrated the attribute of trustworthiness, as well as quality, fitness, capacity, and experience to satisfactorily perform the public works contract.
2. Owner reserves the right to reject this Bid.
3. This Bid must remain open and not be withdrawn for a period of ninety (90) calendar Days from the date prescribed for its opening.
4. If written notice of the acceptance of this Bid is mailed or delivered personally to the undersigned within ninety (90) calendar Days after the date set for the opening of this Bid, or at any time thereafter before withdrawn, the undersigned Bidder must execute and deliver the Agreement to Owner in accordance with this Bid as accepted, and must furnish and deliver to Owner the Performance Bond, Payment Bond for Public Works, and Proof of Insurance Coverage as required in the Bid Documents, all within seven (7) calendar Days after the date of Notice of Award furnished by the Clerk of the Board of Supervisors.
5. Contract Bonds and Insurance must be satisfactory to, and on forms acceptable to Owner.
6. Notice of acceptance of Bonds and Insurance or a request for additional information may be addressed to the Bidder at the address shown on Page 1 of Document 00410, "Bid Form."
7. Wherever in this Bid an amount is stated in both words and figures, in case of discrepancy between words and figures, the words shall prevail. If a discrepancy exists between the Adjustment Factors and the Award Criteria Figure (summation of weighted Adjustment Factors) the Adjustment Factors will prevail. The Owner will correct and revise the total Award Criteria Figure accordingly.
8. Bidder certifies that it has thoroughly read and understands the Bid Documents and Addenda. Bidder hereby incorporates by reference the Bid Documents and Addenda as though set out in full, and all provisions of the Notice to Bidders published by Owner pertaining to the Work described in this Bid.

Signature

Date

BIDDER'S SECURITY & ADDENDA

1. Accompanying this Bid proposal is _____ (insert words "cash," "cashier's check," "certified check," or "Bidder's Bond" as the case may be) in an amount equal to \$25,000 (Twenty-five thousand dollars),
2. Bidder acknowledges receipt of the following Addenda to the Bid Documents:

() NO Addenda received

() Addenda received as follows:

<u>Addendum Number</u>	<u>Date</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Failure to acknowledge on the Bid Form receipt of an Addendum is not in itself cause for withdrawal or rejection of Bid.

Signature _____

Date _____

BIDDER'S CERTIFICATIONS

1. THE NAMES OF ALL PERSONS INTERESTED IN THE FOREGOING BID AS PRINCIPALS ARE AS FOLLOWS: _____

NOTE: If Bidder or other interested person is a corporation, give legal name of corporation, the State where incorporated, and names of the president and secretary thereof; if a partnership, provide name of the firm, also names of all individual partners composing firm; if Bidder or other interested person is an individual, provide first and last names in full below:

2. LICENSED IN ACCORDANCE WITH CHAPTER 9, DIVISION 3, OF BUSINESS AND PROFESSIONS CODE PROVIDING FOR THE REGISTRATION OF CONTRACTORS:

Contractor's License: No.: _____ Class: _____ Expiration Date: _____

3. PUBLIC WORKS CONTRACTOR (PWC) REGISTRATIONS PURSUANT TO DIVISION 2, PART 7, CHAPTER 1 (COMMENCING WITH SECTION 1720 OF THE CALIFORNIA LABOR CODE.)

Public Works Contractor's Registration No.: _____ Expiration Date: _____

NOTE: Bidder(s) bidding jointly or as a combination of several business organizations are cautioned that such Bidder must be jointly licensed in the same form and style in which the Bid is executed. If making a Bid as a joint venture, each person submitting the Bid must provide the information required above with respect to his or her license.

NOTE: If Bidder is a corporation, the legal name of the corporation must be set forth below together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation; if Bidder is a partnership, the name of the firm must be set forth below together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; and if Bidder is an individual, the Bidder must sign below.

Business Address _____
Street

City State Zip Code

Business Telephone: () _____

Signature

Date

BIDDER'S CERTIFICATIONS (CONT'D)**3. DESIGNATION OF INSURANCE COMPANY(IES) & AGENT OR BROKER**

The following insurance company(ies) and agent or broker will provide policies of insurance or insurance certificates as required by the Contract Documents:

Insurance Company(ies) _____

Admitted in California: YES _____ NO _____

Agent

or

Broker: _____

Street

City

Zip

Phone:() _____

4. DESIGNATION OF BONDING COMPANY & AGENT OR BROKER

The following Surety company and agent or broker will provide Payment and Performance Bonds as required by the Contract Documents:

Surety Company Providing Bonds: _____

Admitted in California: YES _____ NO _____

Agent

or

Broker: _____

Street

City

Zip

Phone:() _____

BIDDER'S CERTIFICATIONS (CONT'D)**5. NONCOLLUSION AFFIDAVIT**

In accordance with Public Contract Code §7106. _____

(Bidder's full name)

being first duly sworn, deposes and says that he or she is _____

(Bidder's title)

of _____

(Company's name)

the party making the foregoing Bid that the Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the Bid 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 Bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham Bid, 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 the Bid price of the Bidder or any other Bidder, or to fix any overhead, profit, or cost element of the Bid price, or of that of any other Bidder, 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 Bid are true; and further, that the Bidder has not, directly or indirectly, submitted his or her bid 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, bid depository, or to any member or agent thereof to effectuate a collusive or sham Bid.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Signature

Date

6. STATEMENT OF BIDDER

Has the Bidder, or any officer of the Bidder or any employee of the Bidder who may have a proprietary interest in the Bid, ever been disqualified, removed, or otherwise prevented from bidding on or completing any federal, state, or local governmental project because of a violation of law or safety regulations:

YES _ NO _

If your answer is yes, explain the circumstances:

7. TRENCH AND EXCAVATION WORKER PROTECTION (TRENCH SAFETY)

Bidder hereby affirms that Bidder understands and will comply with the applicable provisions of the California Occupational Safety and Health Act of 1973, the California State Labor Code Sections 6705 and 6707. If trench/excavation work is required in a Job Order, the Contractor must identify the Trench Safety Construction Task Catalog tasks in the Job Order Proposal.

Signature

Date

BIDDER'S CERTIFICATIONS (CONT'D)**8. CONTRACTING PRINCIPLES DECLARATION OF CONTRACTOR/BIDDER**

The Contract that may be Awarded will be a Type I Service Contract pursuant to the Board of Supervisor's Resolution on Contracting Principles adopted on October 28, 1997.

Type I Category: "II. Definitions C.2. Construction or other work required by law to be contracted out."

Explanation: The work required by these Contract Documents is construction work and pursuant to Public Contract Code §20121 must be contracted out.

The Board resolution on Contracting Principals has two (2) specific requirements related to Type I Service contracts:

- 1) All Type 1 contracts must contain a contract provision specifying that the contractor shall comply with all applicable federal, state, and local rules, regulations, and laws. (See 00700.31, "Compliance With Laws and Regulations")
- 2) All Type 1 contracts must contain a contract provision specifying that the contractor shall maintain financial records that would be adequate to show that County funds were used for purposes consistent with the terms of the service contract. (See 00700.31, "Compliance With Laws and Regulations")

I am authorized to complete this form on behalf of:

Name of Contractor

I have reviewed and understand the requirements of Document 00700.31, "Compliance With Laws and Regulations."

Signature

Date

STOP NOTICE INFORMATION

PROJECT NAME: _____ NO.: _____

COUNTY PROJECT MANAGER _____

COUNTY DEPARTMENT: _____

CONTRACTOR'S NAME _____

CONTRACTOR'S ADDRESS _____

Reference: California Civil Code, Division 3, Part 4, Title 15, Chapter 4

The following is furnished for the information of contractors, Subcontractors and suppliers of labor, materials, equipment, and services under County Public Works contracts (Reference: California Civil Code, Division 3, Part 4, Title 15, Chapter 4), and is not intended as legal advice. Advice of legal counsel should be obtained to ensure compliance with legal requirements relating to public works stop notices.

WHERE TO FILE: All original stop notices and preliminary-20 day notices (if required by California Civil Code §3098 must be filed with the County of Santa Clara, FAF Department, 2310 N. First St. Suite 200, San Jose, CA 95131.

STOP NOTICE CONTENTS: See California Civil Code §3103. Written notice, signed and verified by the claimant and including information such as the kind of labor, equipment, materials, or services provided or agreed to be provided by the claimant; the name of the person/entity to or for whom the same was done or provided; the amount in value of that already done or provided and/or agreed to be done or provided. Blank Stop Notice forms are commercially available.

WHO MAY SERVE STOP NOTICE: See California Civil Code §3181. All persons furnishing labor, materials, equipment or services to the Project (except the original contractor) and persons furnishing provisions, provender or other supplies.

HOW THE STOP NOTICE IS SERVED: See California Code §3103. Served by personal service, registered mail, or certified mail.

TIME FOR SERVICE: See California Civil Code §3184. Stop notices must be served before the expiration of: 30 days after recording of a Notice of Completion (sometimes called a Notice of Acceptance) or Notice of Cessation, if such notice is recorded. If no Notice of Completion or Notice of Cessation is recorded, 90 days after actual completion or cessation.

NOTICE OF COMPLETION: See California Civil Code §3185. Provided that a stop notice claimant has paid to the Clerk of the Board of Supervisors the sum of \$2.00 at the time of filing a stop notice, the County shall provide that claimant with notice of the filing of a Notice of Completion, or after the cessation of labor has been deemed a completion of a public work, or after the acceptance of completion, whichever is later, by personal service, or registered or certified mail.

STOP NOTICE INFORMATION (Con't)

RELEASE OF STOP NOTICE: See California Civil Code §3196 and following. A stop notice can be released if the original contractor files a corporate surety bond with the Clerk of the Board of Supervisors, in the amount of one hundred twenty-five (125%) of the stop notice claim. Alternatively, the original contractor may file an affidavit pursuant to California Civil Code §3198, stating objections to the validity of the stop notice. A counter affidavit may be filed by the claimant pursuant to §3200 and a summary legal proceeding may be held pursuant to §3201 and following, to determine the validity of the stop notice. If no counter affidavit is filed, the stop notice funds shall be released. Alternatively, the Stop Notice claimant may file a Release in a form which substantially complies with California Civil Code §3262.

STOP NOTICE LAWSUIT: See California Civil Code §3210 through §3214. These sections provide that a stop notice is perfected only by the filing of a lawsuit. A lawsuit must be filed no sooner than 10 days after service of a stop notice and no later than 90 days after the expiration of the time for filing stop notices. Notice of suit must be given to the Clerk of the Board of Supervisors within 5 days after commencement. The Court has the discretionary right to dismiss the lawsuit if it is not brought to trial within 2 years.

I HEREBY ACKNOWLEDGE THAT I HAVE RECEIVED AND READ THE ABOVE STOP NOTICE INFORMATION AND IF I AM AWARDED THIS CONTRACT, I AGREE TO INCLUDE A COPY OF THIS PAGE IN ALL SUBCONTRACTS AND CONTRACTS FOR LABOR, MATERIALS, EQUIPMENT AND SERVICES THAT I ENTER INTO FOR THIS PROJECT:

SIGNATURE BLOCK (*Signature Block must be completed in ink & changes must be initialed.*)

Bidder's Signature: _____ Date: _____

Bidder's Name & Title (Print) _____

ATTENTION!!

**SIGNATURE(S) REQUIRED
ON ALL BID FORM SIGNATURE BLOCK AT TIME OF SUBMITTAL OF BID**

**ANY UNSIGNED BID FORM SIGNATURE BLOCK
MAY BE CAUSE FOR
REJECTION OF BID**

END DOCUMENT 00410

BIDDER'S BOND for MJOC-PRK-2024-01

WHEREAS, we, _____ as Principal,

and _____ as Surety,

are held and firmly bound unto the County of Santa Clara, a political subdivision of the State of California (hereinafter called "County") in the penal sum of \$25,000, of the Principal above named, submitted by said Principal to County for the Work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

The condition of this obligation is such that a Bid to County for certain construction specifically described as follows,

(Bidder shall copy here the description of the Work, including location, from the Notice to Bidders)

for which Bids are to be opened on _____, 20____, has been submitted by Principal to County:

NOW, THEREFORE, if the aforesaid Principal shall not withdraw said Bid within the period specified therein after the opening of the same or, if no period be specified, within sixty (60) days after said opening, and shall within the period specified therefore, or if no period be specified, within twenty (20) days after the prescribed forms are presented to Principal for signature, enter into a written Contract with County, in the prescribed form, in accordance with the Bid as accepted, and file the two Bonds with County, one to guarantee faithful Performance and the other to guarantee Payment for labor and materials, as required by law, or in the event of the withdrawal of said Bid within the period specified or the failure to enter into such Contract and give such Bonds within the time specified, if the Principal shall pay County the difference between the amount specified in said Bid and the amount for which County may procure the required Work and/or supplies, if the latter amount be in excess of the former, together with all costs incurred by County in again calling for bids, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

Surety for value received, hereby stipulates and agrees that no change, extension of time, alterations, or addition to the terms of the Contract on the call for Bids, or to the Work to be performed thereunder, or the specifications accompanying the same, shall in any way affect its obligation under this Bond, and it does, hereby, waive notice of any such change, extension of time, alteration, or addition to the terms of specifications. In the event suit is brought upon this Bond by the County of Santa Clara and judgment is recovered, Surety shall pay all costs incurred by the County of Santa Clara in such suit, including a reasonable attorney's fee to be fixed by the court in accordance with applicable statutory law.

BIDDER'S BOND (CONT'D)

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

PRINCIPAL:**SURETY:**_____
Signature_____
Signature_____
Name_____
Name_____
Title_____
Title_____
Address_____
Address**NOTE TO SURETY COMPANY:**

The following form of acknowledgement should be used. If any other form of acknowledgement is used, there must be submitted a certified copy of unrevoked resolution of authority for the attorney-in-fact.

SURETY COMPANY ATTORNEY-IN-FACT

STATE OF CALIFORNIA)
COUNTY OF SANTA CLARA) ss.
)

On _____, before me, the undersigned, a Notary Public in and for the State, personally appeared _____, known to me to be the duly authorized Attorney-in-Fact of the corporate Surety named in the within instrument, known to me to be authorized to execute that instrument on behalf of said corporation, known to me to be the person whose name is subscribed to such instrument as the Attorney-in-Fact of said corporation, and acknowledged to me that he (she) subscribed the name of said corporation thereto as Surety, and his (her) own name as Attorney-in-Fact and that said corporation executed the same.

WITNESS MY HAND AND OFFICIAL SEAL:

(SEAL)

Notary Public for the State of California.

Original, Acknowledgement by Attorney-in-Fact must be attached.
Original, Corporate seals of Principal and Surety must be attached.

END OF DOCUMENT 00430

AGREEMENT

This is an agreement ("Agreement") between the County of Santa Clara, ("Owner") and _____("Contractor").

Owner and Contractor agree as follows:

ARTICLE 1 – SCOPE OF WORK

Contractor must provide all of the materials and perform all of the Work authorized in Job Orders in accordance with the Contract Documents for Project **MJOC-PRK-2024-01**

ARTICLE 2 - CONTRACT SUM:

As full compensation for furnishing all materials and performing all the Work that may be authorized in Job Orders pursuant to this Agreement until its Acceptance by Owner; for all risks of every description connected with the Work; and for all expenses incurred by or in consequence of the suspension or discontinuance of Work thereof, in the manner and according to the Contract Documents, Owner will compensate the Contractor for the Detailed Scope of Work called for in each Job Order issued pursuant to this Contract for the Unit Prices set forth in the Construction Task Catalog® in accordance with the Contractor's Adjustment Factors stated on the Bid Schedule, which are as follows:

Normal Working Hours Adjustment Factor 7:00 am to 5:00 pm Monday to Friday, except Owner Holidays	
Other than Normal Working Hours Adjustment Factor 5:00 pm to 7:00 am, Monday through Friday, including all day Saturday, Sunday, and County Holidays	

The Minimum Contract Value is \$10,000. The Contractor has the opportunity to receive Job Orders totaling at least \$10,000. during the Contract term. The Maximum Contract Value is \$1,500,000. At no time may the sum of the outstanding Job Orders exceed the amount of the Payment Bond and Performance Bond. A Job Order is outstanding until the County has accepted the Project described in the Job Order by execution of a Notice of Completion. The Contractor will not be issued Job Orders which in total exceed the Maximum Contract Value.

The Owner does not guarantee the Contractor will receive this volume of Work. At the discretion of the Owner and if deemed to be in the public interest, the Maximum Contract Value of this Contract may be increased.

ARTICLE 3 - CONTRACT DOCUMENTS:

All rights and obligations of Owner and Contractor are fully set forth and described in the Contract Documents. The Contract Documents are incorporated herein by reference as though set forth in full.

Formation of a Contract between the parties requires accomplishment of the following: (1) execution of this Agreement by Contractor; (2) submission by Contractor and acceptance by Owner of the required Contract Bonds, Contractor's certification regarding Worker's Compensation, and insurance coverages and documents; (3) execution of this Agreement by Owner. No Contract is formed until these three elements have been accomplished to the satisfaction of the Owner.

ARTICLE 4 – WORKER’S COMPENSATION:

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

ARTICLE 5 – CONTRACT TIME:

Following acceptance of Contract Bonds, Contractor's certification regarding Worker's Compensation (Document 00621, "Contractor's Certification Regarding Worker's Compensation"), insurance coverages and documents, and execution of this Agreement by both parties, Owner's Authorized Representative will provide an executed copy of this Job Order Contract.

The term of this Job Order Contract commences on the effective date of the executed contract issued by the County of Santa Clara.

The term of this Job Order Contract is either for one year or when issued Job Orders totaling the Maximum Contract Value have been completed, whichever occurs first. All Job Orders must be issued, but not necessarily completed within one calendar year of the commencement date of the Contract.

A separate Job Order Notice to Proceed will be issued for each Job Order. Each Job Order will specify a time limit for completion as stated on the Job Order Notice to Proceed. The Work must be fully completed within the Contract Time(s) set forth in the Job Order.

AGREEMENT (CONT'D)**ARTICLE 7 - CONTRACTOR'S LICENSE:**

Contractors are required by law to be licensed and regulated by the Contractor's State License Board. Any questions concerning contractor licensing must be referred to the Registrar of the Contractor's State License Board at 1020 "N" Street, Sacramento, CA 95814.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date signed by the Board of Supervisors.

CONTRACTOR:

Signature: _____ Contractor's License No.: _____

Printed Name: _____ License Class: _____

Title: _____ License Expiration Date: _____

Address: _____

If this Agreement is signed outside of the State of California, a notarized acknowledgement is required.

COUNTY OF SANTA CLARA:

SUSAN ELLENBERG , President
Board of Supervisors

Attest:

CURTIS BOONE
Acting Clerk of the Board of Supervisors

END OF DOCUMENT 00500

**ESCROW AGREEMENT FOR
SECURITY DEPOSITS IN LIEU OF RETENTION**

This Escrow Agreement is made and entered into by and between:

THE COUNTY OF SANTA CLARA whose address is 70 W. Hedding St., San Jose, CA 95110
hereinafter called "**Owner**", and

_____ whose address is _____ hereinafter called
"**Contractor**", and

_____ whose address is _____ hereinafter called
"**Escrow Agent**".

For the consideration hereinafter set forth, Owner, Contractor, and Escrow Agent agree as follows:

1. Pursuant to §22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by Owner pursuant to the Construction contract entered into between the Owner and Contractor for _____ in the amount of \$ _____ dated _____ (hereinafter referred to as the "Contract"). Alternatively, on written request of the contractor, the Owner shall make payment of the retention earnings directly to the Escrow Agent. When the Contractor deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the Owner within 10 days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the Owner and Contractor. Securities shall be held in the name of _____ and shall be designated the Contractor as the beneficial Owner.
2. Owner shall make progress payments to Contractor for those funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that Escrow Agent holds securities in the form and amount specified above.
3. When the Owner makes payment of retentions earned directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of Contractor until the time that the escrow created under this contract is terminated. The Contractor 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 the Owner pays the Escrow Agent directly.
4. Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the Owner. The Owner, Contractor, and Escrow Agent shall determine these expenses and payment terms.
5. The interest earned on the securities or money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to Owner.
6. Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from Owner to Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor.
7. Owner shall have a right to draw upon the securities in the event of default by Contractor. Upon seven days written notice to Escrow Agent from Owner of the default, Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by Owner.
8. Upon receipt of written notification from Owner certifying that the Contract is final and complete, and that Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and

ESCROW AGREEMENT (CONT'D)

securities on deposit and payment of all fees and charges.

9. Escrow Agent shall rely on the written notifications from the Owner and the Contractor pursuant to Sections (5) through (8), inclusive, of this Escrow Agreement, and the Owner and the Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of securities and interest as set forth above.
10. The names of the persons who are authorized to give written notice or to receive written notice on behalf of Owner, Contractor, and Escrow Agent in connection with the foregoing, and exemplars of their respective signatures are as follows:

On behalf of Owner:

Signature

Name

Title

Address

On behalf of Contractor:

Signature

Name

Title

Address

On behalf of Escrow Agent:

Signature

Name

Title

Address

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

IN WITNESS WHEREOF, the parties have executed this Escrow Agreement by their proper officers on

OWNER:

Signature

Name

Title

Address

CONTRACTOR:

Signature

Name

Title

Address

END OF DOCUMENT 00550

PERFORMANCE BOND

WHEREAS, the Board of Supervisors of the County of Santa Clara, State of California, and _____ hereinafter designated as "Principal" have entered into an Agreement for the furnishing of all materials, labor, services, and equipment necessary, convenient and proper to:

MJOC-PRK-2024-01

pursuant to the said Agreement dated _____, 20__, and all of the documents attached thereto and incorporated by reference, becoming a part of said Agreement, are hereby referred to and made a part hereof; and,

WHEREAS, said Principal is required according to the terms of said Agreement and applicable California State law, to furnish a Bond for the faithful Performance of said Agreement.

NOW, THEREFORE, we, the Principal and _____ as Surety, are held and firmly bound unto the County of Santa Clara in the penal sum of: **One Million Five Hundred Thousand Dollars** (\$1,500,000.), 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 THIS OBLIGATION IS SUCH that if said Principal, its subcontractors, heirs, executors, administrators, successors or assigns shall in all things stand to and abide by, and well and truly keep and perform all of the covenants, conditions, and agreements in the said Agreement and any and all alterations thereof made as therein provided, on its or their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall defend, indemnify and save harmless the County of Santa Clara, its officers, agents, and employees, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

And the said Surety for value received, hereby stipulates and agrees that no change, extension of time, alteration, addition, or deletion to the terms of the said Agreement, the accompanying Contract Documents, or to the Work to be performed thereunder shall in any way affect its obligations on this Bond, and the Surety hereby waives notice of any such change, extension of time, alteration, addition, or deletion to the terms of the said Agreement or to the Contract Documents or to the Work.

In the event suit is brought upon this Bond by the County of Santa Clara and judgment is recovered, Surety shall pay all costs incurred by the County of Santa Clara in such suit, including a reasonable attorney's fee to be fixed by the court in accordance with applicable statutory law.

The Surety, by the execution of this Bond, represents and warrants that this Bond has also been duly executed by the Principal with proper authority, and the Surety hereby waives any defense which it might have by reason of any failure by the Principal to execute or properly execute this Bond.

PERFORMANCE BOND (CONT'D)

IN WITNESS WHEREOF two identical counterparts of this instrument, each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety above named on the _____ day of _____, 20____.

PRINCIPAL:**SURETY:**_____
Signature_____
Signature_____
Name_____
Name_____
Title_____
Title_____
Address_____
Address**NOTE TO SURETY COMPANY:**

The following form of acknowledgement should be used. If any other form of acknowledgement is used, there must be submitted a certified copy of unrevoked resolution of authority for the attorney-in-fact.

SURETY COMPANY ATTORNEY-IN-FACT

STATE OF CALIFORNIA)
COUNTY OF SANTA CLARA) ss.
)

On _____, before me, the undersigned, a Notary Public in and for the State, personally appeared _____, known to me to be the duly authorized Attorney-in-Fact of the corporate Surety named in the within instrument, known to me to be authorized to execute that instrument on behalf of said corporation, known to me to be the person whose name is subscribed to such instrument as the Attorney-in-Fact of said corporation, and acknowledged to me that he (she) subscribed the name of said corporation thereto as Surety, and his (her) own name as Attorney-in-Fact and that said corporation executed the same.

WITNESS MY HAND AND OFFICIAL SEAL:

(SEAL)

Notary Public for the State of California

Original Acknowledgement by Attorney-in-Fact must be attached.
Original Corporate seals of Principal and Surety must be attached.

END OF DOCUMENT 00611

PAYMENT BOND FOR PUBLIC WORKS

WHEREAS, the Board of Supervisors of the County of Santa Clara, State of California, and

hereinafter designated as "Principal" have entered into an Agreement for the furnishing of all materials, labor, services, and equipment necessary, convenient and proper to:

MJOC-PRK-2024-01

pursuant to the said Agreement dated _____, 20__, and all of the documents attached thereto and incorporated by reference, becoming a part of said Agreement, are hereby referred to and made a part hereof; and,

WHEREAS, said Principal is required by Chapter 5 (commencing at §3225) and Chapter 7 (commencing at §3247), Title 15, Part 4, Division 3 of the California Civil Code to furnish a Bond in connection with said Agreement.

NOW THEREFORE, we, the Principal and _____ as Surety, are held and firmly bound unto the County of Santa Clara in the penal sum of: **One Million Five Hundred Thousand Dollars** (\$1,500,000.), 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 and successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT if said Principal, its subcontractors, heirs, executors, administrators, successors or assigns shall fail to pay any of the persons named in §3181 of the California Civil Code, any amounts due under the Unemployment Insurance Code with respect to work or labor performed by any such claimant, any prevailing wages due and penalties incurred pursuant to Sections 1774, 1775, 1813 and 1815 of the California Labor Code, any amounts required to be deducted or withheld from the wages of employees of the Principal and its subcontractors for payment to the United States Government and/or to the State Franchise Tax Board with respect to such work and labor, the Surety will pay for the same, in an amount not exceeding the total sum herein above specified, and also, in case suit is brought upon this Bond, a reasonable attorney's fee to be fixed by the court. This Bond shall inure to the benefit of any of the persons named in Section 3181 of the California Civil Code, so as to give the right of action to such persons or their assigns in any suit brought upon this Bond.

It is further stipulated and agreed that the Surety on this Bond shall not be exonerated or released from the obligation of this Bond by any change, extension of time for performance, addition, deletion, alteration, or modification in, to, or any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described or pertaining to or relating to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission of the contract, agreement, or Bond, nor by any conditions precedent or subsequent in the Bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the Bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the Bond, and that this Bond be construed most strongly against the Surety and in favor of all persons for whose benefit such Bond is given, and under no circumstances shall the Surety be released from its obligations hereunder by reason of any breach of contract between the County of Santa Clara and said Principal or on the part of any obligee named in such Bond, but the sole conditions of recovery shall be that claimant is a person described in §3110 or §3112 of the California Civil Code and has not been paid the full amount of its claim, and that Surety does hereby waive notice of any such change, extension of time, addition, deletion, alteration, or modification herein mentioned.

PAYMENT BOND FOR PUBLIC WORKS (CONT'D)

The Surety, by the execution of this Bond, represents and warrants that this Bond has also been duly executed by the Principal with proper authority, and the Surety hereby waives any defense which it might have by reason of any failure by the Principal to execute or properly execute this Bond.

IN WITNESS WHEREOF two identical counterparts of this instrument each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety above named on the _____ day of _____, 20__.

PRINCIPAL:

Signature

Name

Title

Address

SURETY:

Signature

Name

Title

Address

NOTE TO SURETY COMPANY:

The following form of acknowledgement should be used. If any other form of acknowledgement is used, there must be submitted a certified copy of unrevoked resolution of authority for the attorney-in-fact.

SURETY COMPANY ATTORNEY-IN-FACT

STATE OF CALIFORNIA)
COUNTY OF SANTA CLARA) ss.
)

On _____, before me, the undersigned, a Notary Public in and for the State, personally appeared _____, known to me to be the duly authorized Attorney-in-Fact of the corporate Surety named in the within instrument, known to me to be authorized to execute that instrument on behalf of said corporation, known to me to be the person whose name is subscribed to such instrument as the Attorney-in-Fact of said corporation, and acknowledged to me that he (she) subscribed the name of said corporation thereto as Surety, and his (her) own name as Attorney-in-Fact and that said corporation executed the same.

WITNESS MY HAND AND OFFICIAL SEAL:

(SEAL)

Notary Public for the State of California

Acknowledgement by Attorney-in-Fact must be attached.
Corporate seals of Principal and Surety must be attached.

END OF DOCUMENT 00612

00612-2

Contractor's Certification Regarding Worker's Compensation

Contract with the County of Santa Clara for the construction of:

PROJECT TITLE: MJOC-PRK-2024-01

PROJECT NO.: _____

Labor Code §3700:

"Every employer, except the State, and all political subdivisions or institutions thereof, shall secure the payment of compensation in one or more of the following ways:

- (a) By being insured against liability to pay compensation by one or more insurers, duly authorized to write compensation insurance in this State.
- (b) *By securing from the Director of Industrial Relations a certificate on consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to employees."*

I am aware of the provisions of §3700 of the Labor Code that require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance. In accordance with the provisions of that code, I will comply with such provisions before commencing the performance of the Work of this Contract.

Dated: _____, 20__

(Contractor)

(Official Title)

(Labor Code §1861 requires that this Contractor certification must be signed and filed by the Contractor with the public agency prior to performing any Work.)

END OF DOCUMENT 00621

CONTRACTING REQUIREMENTS

CERTIFICATE OF INSURANCE

Document 00622
Page 1 of 2

Mail completed certification to: Santa Clara County Attn: Jason Ebling Department: County of Santa Clara Address: 5965 Silver Creek Valley Road San Jose , CA 95138 Contract No.: Description:				Department: 1. Complete address block to the left. 2. When completed certificate is returned, review and send the following to Finance / Controller. a. Signed and completed certificate b. Copy of insurance requirements and hold harmless clause from the contract. 3. If agreement is a Board approved contract, send a copy of the above (2a and b) to the Clerk of the Board.			
This certification is issued as a matter of information only and confers no right upon the policy holder, and does not amend, extend, or alter the coverage afforded by the policies. This to certify that the policies of insurance listed below have been issued to the insured named below for the policy period indicated, notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be insured or may pertain the insurance afforded by the policies described herein is subject to all terms, exclusions, and conditions of such policies.							
PRODUCER:				COMPANIES AFFORDING COVERAGE			
				Company A			
				Company B			
INSURED:				Company C			
				Company D			
Co. Ltr.	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS		
	GENERAL LIABILITY COMMERCIAL GENERAL LIABILITY CLAIMS MADE <input type="checkbox"/> OCCUR OWNER'S & CONT PROT				GENERAL AGGREGATE	\$	
					PROD-COMP/OP AGG	\$	
					PERS & ADV INJURY	\$	
					EACH OCCURRENCE	\$	
					FIRE DAMAGE	\$	
					(Any one fire)		
					MED EXPENSE	\$	
(Any one person)							
	AUTOMOBILE LIABILITY ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS				COMBINED SINGLE LIMIT	\$	
					BODILY INJURY	\$	
					(Per person)		
					BODILY INJURY	\$	
					(Per accident)		
					PROPERTY DAMAGE	\$	
	GARAGE LIABILITY ANY AUTO				AUTO ONLY. EACH ACC	\$	
					OTHER THAN AUTO ONLY:		
					EACH ACCIDENT	\$	
					AGGREGATE	\$	
	EXCESS LIABILITY UMBRELLA FORM OTHER THAN UMBRELLA FORM				EACH OCCURRENCE	\$	
					AGGREGATE	\$	
WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY THE PROPRIETOR / PARTNERS/ INCL. EXECUTIVE OFFICERS ARE: EXCL.					<u>STATUTORY LIMITS</u>		
					EACH ACCIDENT	\$	
					DISEASE-POLICY LIMIT	\$	
					DISEASE-EMPLOYEE	\$	
OTHER CERTIFICATE HOLDER The COUNTY OF SANTA C.ARA c/o EBIX BPO PO Box 257, Ref#84-Z361688 Portland, MI 48875-0257		DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / SPECIAL ITEMS					
		AUTHORIZED REPRESENTATIVE					

00622-1

SANTA CLARA COUNTY SPECIAL ENDORSEMENT

Unless specifically excluded, the following endorsements are issued to, and form a part of, the policy number(s) shown below, and are effective on the date indicated at 12:01a.m. Standard Time as stated in the policy.

a. Additional Insured Endorsement:

Insurance afforded by this policy shall also apply to the County of Santa Clara, and members of the Board of Supervisors of the County of Santa Clara, and the officers, agents, and employees of the County of Santa Clara, individually and collectively, as additional insureds. Such insurance shall also apply to any municipality in which the Work occurs and they shall be named on the policy as additional insured (if applicable).

b. Primary Insurance Endorsement:

Insurance afforded by the additional insured endorsement shall apply as primary insurance, and other insurance maintained by the County of Santa Clara, its officers, agents, and employees shall be excess only and not contributing with insurance provided under this policy.

c. Notice of Cancellation or Change of Coverage Endorsement:

Insurance afforded by this policy shall not be canceled or changed so as to no longer meet the specified County insurance requirements without 30 days' prior written notice of such cancellation or change being delivered to the County of Santa.

d. Contractual Liability Endorsement:

Insurance afforded by this policy shall apply to liability assumed by the insured under written contract with the County of Santa Clara.

e. X C & U (Explosion, Collapse and Underground) Endorsement:

Insurance afforded by this policy provides X, C and U Hazards coverage.

Name of Insured _____

Effective Date of Endorsement _____

Insuring Company _____

Policy Number _____

Insuring Company _____

Policy Number _____

Signature of Authorized Representative: _____ Date: _____

Send completed certificate to the JOC Program Manager, Jason Ebling , 5965 Silver Creek Valley Road, , San Jose , CA 95138

END OF DOCUMENT 00622

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1.1 ABBREVIATIONS: References in the General Conditions are sometimes referred to only by corresponding abbreviation. Not all abbreviations are listed and not all listed abbreviations are used. Unless otherwise specifically defined in the General Conditions, when the following abbreviations are used, the intent and meaning will be interpreted as follows:

- 1.1.1 **A/E** – Design Professional
- 1.1.2 **CM** – Construction Project Manager
- 1.1.3 **DFOW** - Definable Feature of Work
- 1.1.4 **PRK** – The Parks and Recreation Department of the County of Santa Clara
- 1.1.5 **LDs** – Liquidated Damages
- 1.1.6 **NTP** – Notice To Proceed
- 1.1.7 **OAR** – Owner's Authorized Representative
- 1.1.8 **PE** – Design Professional
- 1.1.9 **QC** – Quality Control
- 1.1.10 **RFI** – Request For Information
- 1.1.11 **SOV** – Schedule Of Values

1.2 DEFINITIONS: Wherever in the Bidding Requirements, Contracting Requirements (except Document 00850, "Indemnification and Insurance Requirements"), or General Requirements the following terms, or pronouns in place of them are used, the intent and meaning will be interpreted as follows:

- 1.2.1 **Acceptance** - The formal acceptance by the County of the Completion of the entire Work of the Job Order, which to Owner's knowledge has been performed in accordance with the requirements of the Contract Documents and all Approved modifications thereof.
- 1.2.2 **Addendum** - A written change to the Bid Documents issued before the time fixed for the opening of Bids.
- 1.2.3 **Additional Detailed Instructions** - Detailed written and/or graphic instructions issued by the Owner to the Contractor to explain the Work more fully. Such instructions become part of the requirements of the Contract Documents without changing the requirements of the Contract Documents.
- 1.2.4 **Agreement** - The written and signed document known as Document 00500, "Agreement." (Sometimes also referred to as Contract Agreement or Contract.)
- 1.2.5 **Alternative** - Refer to Approved Equal and Substitution
- 1.2.6 **Approved, Directed, Ordered, or Required** - Whenever these words or their derivatives are used, it is the intent, unless otherwise clearly stated, that written approval, acceptance, or direction by the Owner's Authorized Representative or Owner's Project Manager is required.
- 1.2.7 **Approved Equal** - Material, equipment, or method accepted by the Owner's Authorized Representative for use in the Work, as being acceptable as an equivalent in essential attributes to the material, equipment, or method specified in the Contract Documents.
- 1.2.8 **Architect of Record** – See Design Professional of Record
- 1.2.9 **Award Date** - Date of action taken by the Board of Supervisors accepting Contractor's Bid and authorizing its Chairperson to execute the Agreement. (Sometimes also referred to as Award.)
- 1.2.10 **Bid Alternate** – Additive and/or deductive Bid items identified as such on the Bid Form.

-
- 1.2.11 **Bid** - The offer of a Bidder to perform the Work pursuant to a completed prescribed Bid Form, properly executed and guaranteed, and timely submitted.
- 1.2.12 **Bidder** - Any individual, firm, partnership, corporation, or combination thereof, submitting a Bid for the Work contemplated, acting directly or through a duly authorized representative.
- 1.2.13 **Bid Documents** - The documents approved by the Board of Supervisors to advertise for construction of the Project, including but not limited to the Introductory Information, Bidding Requirements, Notice to Bidders (Document 00100), Bid Form (Document 00410), Agreement Form (Document 00500), Bidder's Bond Form (Document 00430), the Performance Bond Form (Document 00611), the Payment Bond Form for Public Works (Document 00612), and the Sample Escrow Agreement for Security Deposits in Lieu of Retention (Document 00550), plus the Project Manual, General Requirements, General Conditions, Construction Task Catalog, Task Specifications, Specification Division 1 (General Requirements), and any Addenda or written modification to any of the foregoing. The Bid Documents do not include documents listed, included, or referenced "For Information Only" including but not limited to geotechnical reports, asbestos surveys, and other pre-design reports.
- 1.2.14 **Bid Form** - The approved form upon which Owner requires a formal Bid be prepared and submitted for the Work.
- 1.2.15 **Bidder's Security** - The cash, cashier's check, certified check, or Bidder's bond accompanying the Bid submitted by the Bidder as a guaranty that the Bidder will enter into a Contract with Owner for the performance of the Work of the Contract is Awarded to the Bidder.
- 1.2.16 **Board of Supervisors** - The Board of Supervisors of the County of Santa Clara.
- 1.2.17 **Reserved**
- 1.2.18 **Reserved**
- 1.2.19 **Claim** - A separate unresolved Dispute by the Contractor for: (A) a Contract Time extension, (B) payment of money or damages arising from Work done by, or on behalf of, the Contractor pursuant to the contract for a public work and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (C) an amount the payment of which is disputed by the Owner.
- 1.2.20 **Complete Submittal** - A group of individual Submittals, each meeting the requirements of the Contract Documents, encompassing all the Work included in a Definable Feature of Work (DFOW), and submitted to the Owner as a single Submittal package.
- 1.2.21 **Completion** - Acceptance of the Work by Owner.
- 1.2.22 **Construction Project Manager (CM)** - A consultant firm or such other individual or entity as Owner may designate to Contractor in writing, retained by Owner to perform project management services.
- 1.2.23 **Consultants** - Architects, Engineers, Construction Project Managers, and other professionals engaged to provide the Owner with professional services for the Project.
- 1.2.24 **Contract** - The written Agreement on the Owner's form encompassing the performance of the Work and the furnishing of labor, materials, tools, and equipment in the construction of the Work. Synonymous with "Agreement", and "Contract Agreement".
- 1.2.25 **Contract Bonds** - The Performance Bond and the Payment Bond for Public Works.
- 1.2.26 **Contract Documents** - The Bid Documents, Request for Job Order Proposals, Job Orders, all Additional Detailed Instructions, Field Modifications, and Approved Supplemental Job Orders.
-

- 1.2.27 **Contractor** - The person or persons, firm, partnership, corporation, or combination thereof, private or municipal, or the legal representatives thereof, that entered into the Contract with Owner. (Sometimes also referred to as “Prime Contractor” or “Original Contractor”)
- 1.2.28 **Contractor’s Authorized Representative** – The Contractor’s authorized representative who has the authority to represent and act for Contractor.
- 1.2.29 **Contractor’s Labor Force** – A person or persons employed with and directly compensated by the Contractor as evidenced by certified payroll, worker’s compensation, insurance, and other indicia of employment.
- 1.2.30 **Reserved**
- 1.2.31 **Cost Breakdown** - A document submitted by the Contractor to the Owner reflecting the portions of the Job Order Price allotted for the various parts of the Work. (Sometimes also referred to as “Schedule of Values”)
- 1.2.32 **County** – The County of Santa Clara, a political subdivision of the State of California.
- 1.2.33 **Critical Path** –All references in the Contract Documents to the Critical Path mean the longest path of dependent activities within the current updated version of the Official Progress Schedule that determine when the Work of the Project will be complete.
- 1.2.34 **Date of Acceptance** - The date of Acceptance by the Board of Supervisors of Contract Completion.
- 1.2.35 **Day(s)** - Calendar days unless otherwise designated.
- 1.2.36 **Deficiency List** - A written list of deficiencies in the completed Work. Also sometimes referred to as “Punch List.”
- 1.2.37 **Definable Feature of Work (DFOW)** - A Work task that is separate and distinct from other Work tasks and has common control requirements and work crews.
- 1.2.38 **Design Professional** - The term “Design Professional” means a person licensed in California; as an architect pursuant to Chapter 3 (commencing with §5500) of Division 3 of the Business and Professions Code, registered as a professional engineer pursuant to Chapter 7 (commencing with §6700) of Division 3 of the Business and Professions Code, or licensed as a land surveyor pursuant to Chapter 15 (commencing with §8700) of Division 3 of the Business and Professions Code (Also sometimes referred to as “Architect/Engineer”, “A/E”, “Professional Engineer”, “PE”, “Design Consultant”, and/or “Consultant”.)
- 1.2.39 **Design Professional of Record** – The term “Design Professional of Record” means the Design Professional in responsible charge of the design services or portions of the design services in connection with the Project.
- 1.2.40 **Direct Labor** – Labor required to complete the Work and performed onsite as evidenced by certified payroll or other relevant documentation.
- 1.2.41 **Director** - The term “Director” means the Director of the County’s FAF Department.
- 1.2.42 **Dispute** - A written disagreement submitted by the Contractor seeking adjustment of Contract terms, payment of money, extension of Contract Time or other relief with respect to the terms of the Contract. A Dispute is not a Claim.
- 1.2.43 **Drawings** - The graphic and pictorial portions of the Contract Documents, illustrating the design, character, location, and dimensions of the Work to be performed, generally including but not limited to, elevations, sections, details, schedules, General Notes, specific notes, and diagrams. Synonymous with “Drawings”, “Contract Drawings”, and “Plans”.

- 1.2.44 **Emergency** – A sudden, unexpected occurrence that poses a clear and imminent danger, requiring immediate action to prevent or mitigate the loss or impairment of life, health, property, or essential public services.
- 1.2.45 **Fabricated** - Specifically assembled or made out of selected materials to meet Project specific design requirements.
- 1.2.46 **Field Modification** - A written instruction, clarification or additional information issued by the Owner's Project Manager to Contractor that does not change the Job Order Completion Time or Job Order Price but becomes part of the requirements of the Contract Documents.
- 1.2.47 **Final Inspection** – The inspection performed by the Owner and its Consultants after the Contractor has certified that the entire Work of the Project is complete.
- 1.2.48 **Force Account** - The method of performing Work by or on behalf of Contractor on a time, materials, and equipment basis.
- 1.2.49 **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.
- 1.2.50 **Governing Body** - The Board of Supervisors of the County of Santa Clara.
- 1.2.51 **Governmental Agencies** - Whenever, in the Contract Documents, reference is made to any governmental agency or officer, such reference will be deemed made to any agency or officer acting in accordance with law to the power, duties, jurisdiction, and authority of the agency or officer mentioned.
- 1.2.52 **Parks and Recreation Department (PRK)** – The Parks and Recreation Department of the County of Santa Clara.
- 1.2.53 **Guarantee** - A promise or assurance given by one party to a second party that a third party's obligations will be fulfilled (i.e., Contractor agrees to guaranty the Work performed by one of its Subcontractors to the Owner). (Also sometimes referred to as Warranty/Guarantee)
- 1.2.54 **Inspector** - The person assigned by Owner to inspect the Work. (Also sometimes referred to as Project Inspector or Owner's Inspector.)
- 1.2.55 **Install** - Synonymous with "Provide" for the purposes of this Contract.
- 1.2.56 **Job Order Document** - The County's signature document requiring the Contractor to complete the Detailed Scope of Work within the Job Order Completion Time for the Job Order Price and authorizing such Work and the approved cost. A project may consist of one or more Job Orders.
- 1.2.57 **Job Order Completion Time** - The time within which the Contractor must complete the Detailed Scope of Work.
- 1.2.58 **Job Order Contract Notice to Proceed** - The written notice issued by Owner's Authorized Representative to Contractor whereby the Contractor is notified of the official Job Order Contract start date, after which Work may be issued to the Contractor in the form of individual authorized Job Orders.
- 1.2.59 **Job Order Price** - The value of the approved Job Order Price Proposal and the amount the Contractor will be paid for completing a Job Order.
- 1.2.60 **Labor Hours** – The Direct Labor cost of a Job Order determined by adding (i) the labor cost component of all pre-priced unit tasks, and (ii) labor costs of non-pre-priced Work, including subcontracts.

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- 1.2.61 **Laboratory** - Any laboratory authorized or accepted by Owner to test materials and Work involved in the Contract.
- 1.2.62 **Liquidated Damages** - The amount prescribed in the Contract Documents to be paid to Owner or to be deducted from any payments due or to become due Contractor for each Day's delay in completing the whole or any specified portion of the Work, beyond the time(s) allowed in the Contract Documents Approved Work Schedule plus Approved time extensions.
- 1.2.63 **Reserved.**
- 1.2.64 **Reserved**
- 1.2.65 **Maximum Contract Value** - The maximum value of Job Orders that the Contractor may receive under this Contract.
- 1.2.66 **Minimum Contract Value** - The minimum value of Job Orders that the Contractor is guaranteed the opportunity to perform under this Contract.
- 1.2.67 **Named Products** - Products identified in the Contract Documents by Manufacturer's product name. Named Products may include Manufacturer's make or model number or other designation.
- 1.2.68 **Notice of Award** - The letter from the Clerk of the Board of Supervisors notifying Contractor that the Board of Supervisors accepted Contractor's Bid and authorized the President to execute the Agreement.
- 1.2.69 **Notice of Completion** - A document executed by the County and filed with the County Recorder, signifying that a Job Order has been Completed and Accepted.
- 1.2.70 **Notice to Bidders** - The Document inviting sealed Bids for the Work. (Document 00100, "Notice to Bidders")
- 1.2.71 **Official Progress Schedule** - The Contractor's Progress Schedule and all revisions and updates thereto, accepted by the Owner and attached to the Job Order.
- 1.2.72 **Or Equal** - Refer to Approved Equal
- 1.2.73 **Owner** - The County of Santa Clara
- 1.2.74 **Order** - Refer to Approved, Directed, Ordered, or Required
- 1.2.75 **Owner's Authorized Representative** - The person named in the Notice to Bidders whose authority includes but is not limited to the authority to approve Addenda, Change Orders, and Payment Requests.
- 1.2.76 **Plans** - See Drawings
- 1.2.77 **Preconstruction Submittals** - Submittals requiring Owner's acceptance before Contractor may proceed with the installation of Work or the procurement of the materials and/or equipment covered by the Submittal.
- 1.2.78 **Project** - The entire public improvement proposed by Owner to be constructed in whole or in part pursuant to the requirements a Job Order or Job Orders and the Contract Documents, including any phasing or other requirements.
- 1.2.79 **Product Data** - Illustrations, Manufacturer's literature, standard schedules, performance charts, instructions, brochures, diagrams, and other information submitted by the Contractor to illustrate materials or equipment for some portion of the Work. Product Data are not considered Contract Documents.
- 1.2.80 **Project Manager** - The person identified in the Notice to Bidders as the Project Manager or subsequently designated by Owner's Authorized Representative to manage the
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Contract and/or the Project. (Also sometimes referred to as Owner's Project Manager)

- 1.2.81 **Project Manual** - The written volume(s) assembled for the Work, including the Introductory Information, Bidding Requirements, Contracting Requirements, General Requirements, Construction Task Catalog, Technical Specifications, and other written or graphic material as may be listed in the Project Manual Table of Contents, including any Addenda and Approved revisions by Owner.
- 1.2.82 **Project Site** - Space available to Contractor for performance of the Work, either exclusively or in conjunction with others performing other work as part of the Project. May refer to one or more Project Sites.
- 1.2.83 **Provide** - Synonymous with "Install" for the purposes of this Contract: All labor, materials, equipment, supervision and whatever else is necessary to supply and incorporate a specified item into the Work in compliance with the requirements of the Contract Documents.
- 1.2.84 **Punch List** - A written list of deficiencies in the completed Work. (Also sometimes referred to as "Deficiency List.")
- 1.2.85 **Record Documents** - A set of the Contract Documents including Drawings and Project Manual updated on a continuous basis to indicate conditions encountered and the final configuration of a Project as it was constructed. Record Documents include any change or clarification to the Contract Documents and dimensional information showing the actual locations of Installed components of the Work. (Also known as "As-Builts" or "As-Built Documents")
- 1.2.86 **Request for Information (RFI)** - A written request by the Contractor for information or clarification regarding the requirements of the Contract Documents. Requests For Information must be numbered sequentially and presented in a format furnished or accepted by the Owner's Project Manager. The Owner's response to an RFI is considered an Additional Detailed Instruction and does not change the requirements of the Contract Documents, Job Order Completion Time, Contract Time, or Job Order Price.
- 1.2.87 **Retention** - A defined percentage of the Contract Sum held by the Owner pending Completion of the Work, or any portion of the Work.
- 1.2.88 **Samples** - Physical examples that illustrate materials, equipment or workmanship and establish standards by which the Work will be evaluated.
- 1.2.89 **Shop Drawings** - Drawings, diagrams, schedules, and other data specially issued for the Work by the Contractor or a Subcontractor, Sub-Subcontractor, and Suppliers to demonstrate and/or illustrate the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for some specific portion of the Work. Shop Drawings are not considered Contract Documents.
- 1.2.90 **Specifications** - The written directions, provisions and requirements pertaining to the materials to be provided and to the method and manner of performing the work, equipment, systems, and standards, including any Addenda and Approved revisions by Owner. (Also sometimes referred to as "Technical Specifications" or "Specs.")
- 1.2.91 **State** - The State of California.
- 1.2.92 **Subcontractor** - A contractor, within the meaning of the provisions of Chapter 9 (commencing with § 7000) of Division 3 of the Business and Professions Code, who contracts directly with the Contractor to perform any Work of the Project. The term Subcontractor is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or its authorized representative.
- 1.2.93 **Sub-subcontractor** - A contractor, within the meaning of the provisions of Chapter 9 (commencing with § 7000) of Division 3 of the Business and Professions Code, that has a direct or indirect contract with a Subcontractor to perform any Work of the Project. The

term Sub-subcontractor is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative thereof.

- 1.2.94 **Submittal** - Data or items required by the Contract Documents to be submitted by the Contractor to the Owner. Submittals demonstrate the method, materials, plan, or sequence the Contractor proposes to use to conform to the design concept expressed in the requirements of the Contract Documents. Submittals include but are not limited to Shop Drawings, Coordination Drawings, layouts, Progress Schedules, Substitution requests, Samples, mockups, catalogs, Product Data and literature, equipment data sheets, maintenance, and operating data. Unless otherwise stated in the Contract Documents, Submittals are not considered Contract Documents.
- 1.2.95 **Substitution** - A material and/or process offered by the Contractor in lieu of the specified material and/or process, and accepted by the Owner's Authorized Representative in writing as being equivalent (equal) to the specified material and/or process. (Also sometimes referred to as Product Substitution)
- 1.2.96 **Supplier** - A person or organization contracting with Contractor, a Subcontractor, or a Sub-subcontractor to supply materials and/or equipment for the Work.
- 1.2.97 **Surety** - A company that provides Contractor's bonds for bidding, performance and payment and is admitted as a surety insurer as defined in §995.120(a) of the California Code of Civil Procedure.
- 1.2.98 **Total Float Time** - The time difference between the earliest start date and the latest start date, or between the earliest finish date and the latest finish date, of Project activities. (Also sometimes referred to as "slack time" or "Total Float" or "Float")
- 1.2.99 **Warranty** - A Contractor's, Subcontractor's, Manufacturer's or material Supplier's promise or assurance, written or otherwise, that its Products and services provided meet industry (implied) or contractual (the requirements of the Contract Documents) standards of performance. (Also sometimes referred to as Warranty/Guarantee.)
- 1.2.100 **Work** - That which is constructed or done pursuant to the requirements of the Contract Documents to accomplish the Project including but not limited to the furnishing of all labor, materials, use of tools and equipment.

ADDITIONAL DEFINITIONS CAN BE FOUND IN THE SUPPLEMENTAL GENERAL CONDITIONS ARTICLE 1.

1.3 REPRESENTATIONS, CORRELATION, AND INTENT

- 1.3.1 By entering into the Agreement, Contractor represents it is familiar with the Project Site conditions including the availability of labor and materials in the local geographic area where the Work is to be performed and has correlated personal observations with requirements of the Contract Documents.
- 1.3.2 The Contract Documents are complementary, and what is required by any one is as binding as though required by all. The intent of the Contract Documents is to include all labor, materials, equipment, and all other items necessary for the proper execution and completion of the entire Work. Unless otherwise specifically noted, Contractor must Provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and all other facilities and services necessary for the proper execution and completion of the Work.
- 1.3.3 Work not explicitly depicted or mentioned in any portion of the Contract Documents is nevertheless required if it is consistent therewith and is reasonably inferable therefrom as being necessary to produce the intended results. Words and abbreviations having well known technical, trade or industry meanings are herein in accordance with such recognized meanings.

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- 1.3.4 The organization of the Project Manual into Articles, Parts, Sub-Parts, Divisions, Sections, and Paragraphs and the arrangement of Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers or in establishing the extent of Work to be performed by any Subcontractor or trade.
- 1.3.5 The Contract Documents prescribe the details for the construction and completion of the Work that Contractor undertakes to perform in accordance with the terms of the Contract.
- 1.3.6 Scale Drawings, full-sized Drawings and Project Manual are intended to be complementary and to agree.
- 1.3.7 Owner, whose decision is final, will clarify questions regarding the interpretation of the Contract Documents.
- 1.3.8 Any Work called for by the Drawings and not mentioned in the Project Manual, or vice versa, is to be Provided as though fully set forth by both.
- 1.3.9 Where not specifically stated otherwise, all Work and materials necessary for each unit or item of Work, including special construction for any specific brand or shape of materials called for, even though only briefly mentioned, or indicated, must be Provided and Installed fully and completely as part of the Work of this Contract.
- 1.3.10 In the event of any difference, discrepancy, inconsistency, error, omission, or other apparent conflict within the Contract Documents and/or with actual field conditions, Contractor must immediately notify Owner in writing, requesting clarification. If Contractor is aware the Work is affected and proceeds with the Work without instructions from Owner, Contractor must make good any resultant damage or defects.
- 1.3.11 Contractor must not assume that one element in the Contract Documents has preference over another, except as provided in Document 00700.1.6, "Conflicts in the Contract Documents." In the event that two or more Products or methods are specified for a particular application, Contractor must furnish the most suitable quality or method, as determined by Owner.
- 1.3.12 When standards of the Federal Government, trade societies, trade associations, or similar commercial standards are referred to in the Contract Documents by specific date of issue, these standards, including amendments or supplements, will be considered as part of the Contract Documents. When such references do not bear date of issue, the current published edition, including amendments or supplements, at the date of the first Notice to Bidders will be considered as part of the Contract Documents.
- 1.3.13 Contractor is responsible for the complete and proper execution of the Work as described in, and as reasonably implied by, the Contract Documents. Contractor is solely responsible for ensuring that all Subcontractors, Suppliers, Manufacturers, etc., working with any portion of the Contract Documents are fully aware that all the Contract Documents apply to their Work, although the other portions of the Contract Documents may not be fully reproduced or repeated therein.
- 1.3.14 Contractor must be skilled and experienced in the understanding and use of construction documents. Contractor must carefully review the Contract Documents for this Project and must carefully examine the Project Site of the Work before Bidding. Unless Contractor has otherwise informed Owner in writing before Bidding, Contractor warrants that it found all Contract Documents free of ambiguities and sufficient for Bidding and construction purposes, and that from its own observations, Contractor has satisfied itself as to the nature and locations of the Work, the character, quality and quantities of materials and labor required, the difficulties likely to be encountered, and all other items that may affect its performance.
- 1.3.15 Contractor, having assured itself of the adequacy of the Bid Documents and the accuracy of its Bid, agrees to execute the Work within the Job Order Completion Time(s) and Job Order Price established in the Contract Documents. Contractor further understands that construction will likely involve some clarifications and changes to the Bid Documents and
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modifications in Contractor's planned work procedures. These are expected conditions of construction, and Contractor has anticipated them and provided for them in its Bid.

- 1.3.16 The Drawings, Project Manual and other Contract Documents issued by Owner and copies furnished to the Contractor, are for use solely with respect to the Work of this Project. They are not to be used by the Contractor or any Subcontractor, Sub- Subcontractor or Supplier on other projects, nor for additions to this Project outside the scope of the Work without the specific written consent of Owner. The Contractor, Subcontractors, Sub-Subcontractors and Suppliers are granted permission to use and reproduce applicable portions of the Drawings, Project Manual and other Contract Documents issued by Owner appropriate to, and for use in, the execution of their work pursuant to the requirements of the Contract Documents.
- 1.3.17 Paragraphs titled "Section Includes" are not intended to "scope" the Section nor imply a trade responsibility but serve merely as a listing of significant items in the Section to allow the reader to quickly assess the Section content. Similarly, Paragraphs titled "Related Sections" or "Related Requirements" or "Related Documents" are not intended to coordinate the Contractor's work, but merely indicate where certain other significant items that may be related to the Work of the Section are specified.
- 1.3.18 Unless otherwise indicated, **highlighted**, **emboldened**, *italicized*, or underlined text is not intended to imply special significance but serves merely as an aid to the reader to distinguish or quickly reference selected text.
- 1.3.19 By submitting a Bid, Contractor represents to the Owner that Contractor has verified the availability of Named Products and the Named Products including sole source Products are currently available.

1.4 ORGANIZATION OF PROJECT MANUAL

- .a The Project Manual is organized in general compliance with the Construction Specifications Institute (CSI) MasterFormat.

1.5 CAPITALIZATION AND CAPTIONS

- 1.5.1 Terms capitalized in the Introductory Information, Bidding Requirements, Contracting Requirements, and Division 1 (General Requirements) include those that are:
- .1 Specifically defined; or
 - .2 Titles and captions of Documents or numbered Articles, Parts, Sub-Parts, Sections, or Paragraphs; or
 - .3 Titles of other documents.
- 1.5.2 The titles and captions of the Documents, Articles, Parts, Sub-Parts, Sections, or Paragraphs are for convenience only and will not be deemed relevant in resolving any question of interpretation or construction of any such Documents, Articles, Parts, Sub-Parts, Sections, or Paragraphs.

1.6 CONFLICTS IN THE CONTRACT DOCUMENTS

- 1.6.1 See Supplemental General Conditions
- 1.6.2 Resolution of conflicts in the Contract Documents
- .1 In case of conflict between the Job Order Drawings and Job Order Technical Specifications, the Drawings will govern in matters of quantity, the Project Manual in matters of quality. In the case of conflict within the Drawings, the following will govern:
 - .a Schedules, when identified as such, will govern over all other portions of the Drawings.
 - .b Specific notes will govern over General Notes, all other notes, and all other

portions of the Drawings, except schedules described in the preceding clause.

- .c Figured dimensions will have precedence over undimensioned items.
- .d Larger scale Drawings will govern over smaller scale Drawings (for example, $\frac{1}{4}" = 1'-0"$ governs over $\frac{1}{8}" = 1'-0"$).
- .e Detail Drawings govern over standard plates included in the Project Manual.

1.6.3 Omissions

- .1 If the Contract Documents are not complete as to any minor detail or required construction system or with regard to the manner of combining or Installing of parts, materials, or equipment, but there exists accepted trade standard for good and workmanlike construction, such detail will be deemed to have been included by the requirements of the Contract Documents in accordance with such standard.

1.7 REQUESTS FOR INFORMATION

- 1.7.1 Requests for Information (RFI): If the Contractor discovers conflicts, omissions, or errors in the Contract Documents, or has any questions concerning interpretation or needs clarification of Contract Documents, the Contractor must immediately submit to the Owner, in writing, an RFI that complies with the following requirements:
 - .1 All RFIs, whether by the Contractor, a Subcontractor or Supplier at any tier, must be submitted by the Contractor to the Owner.
 - .2 RFIs must be numbered sequentially and be presented in the format furnished by or acceptable to the Owner's Project Manager.
 - .3 The Contractor must clearly and concisely set forth the issue for which interpretation or clarification is sought, indicating details or other pertinent items involved, and state why a response is required.
 - .4 Each RFI must be limited to one issue requiring response from the Owner.
 - .5 In each RFI the Contractor must set forth its own interpretation or understanding of the requirements, along with reasons why it has reached such an understanding.
 - .6 RFIs must be submitted in a timely manner in order that they may be adequately researched and answered before the response affects any Critical Path Activity of the Work.
 - .7 All RFIs must be submitted by the Contractor to the Owner before 3:00p.m. RFIs received after 3:00p.m. will be date stamped as received the following workday.
 - .8 Responses to RFIs will be issued by the Owner's Project Manager within 14 Days unless the Owner notifies the Contractor in writing that a response will take longer. The 14 Day response time will begin when the RFI is received and date stamped as received by the Owner.
 - .9 RFI responses will not change any requirement of the Contract Documents.
 - .10 Should the Contractor contend that a response to a RFI causes a change to the requirements of the Contract Documents, the Contractor must, before proceeding, give written notice to the Owner indicating that the Contractor considers the response to the RFI to be a change to the requirements of the Contract Documents. Failure to give such written notice within seven (7) Days of receipt of the Owner's response to the RFI waives the Contractor's right to seek an adjustment in the Job Order Completion Time or Job Order Price according to Document 00700 - Article 6, "Changes in the Work", for costs or time incurred in connection with the Work described in the RFI.

1.8 ADDITIONAL DETAILED INSTRUCTIONS

- 1.8.1 Owner may furnish additional detailed written and/or graphic instructions to explain the Work more fully, and such instructions become a part of the requirements of the Contract Documents. Should Additional Detailed Instructions, in the opinion of the Contractor, constitute Work in excess of the requirements of the Contract Documents, the Contractor must submit written notice to the Owner within seven (7) Days following receipt of such instructions, and in any event prior to commencement of the Work thereon. If in the Owner's judgment the Additional Detailed Instructions constitute Work in excess of the requirements of the Contract Documents, the Additional Detailed Instructions will be revised or the extra Work will be added by Change Order.

END ARTICLE 1

ARTICLE 2 — ADMINISTRATION OF THE CONTRACT**2.1 AUTHORITY OF OWNER'S AUTHORIZED REPRESENTATIVE**

- 2.1.1 Owner's Authorized Representative will decide all questions regarding the interpretation and fulfillment of the Contract, the prosecution, progress, quality and acceptability of Work and materials; will implement and enforce decisions by issuing Orders, Directives, instructions, and notices, and will Approve all changes in Job Order Price and Job Order Completion Time.

2.2 INFORMATION AND/OR SERVICES FURNISHED BY OWNER

- 2.2.1 Information and/or services required of Owner will be furnished by Owner in accordance with the Contract Documents.
- 2.2.2 The Owner will furnish the Contractor with copies of the Project Manuals as specified in the Bid Documents.

2.3 ADMINISTRATION OF THE CONTRACT

- 2.3.1 The Owner will administer the Contract during construction and during the Warranty/Guarantee period.
- 2.3.2 Changes to the Contract may be accomplished after execution of the Contract and without invalidating the Contract, by Change Order.
- 2.3.3 Unless otherwise specified in the Contract Documents, the Owner will not control the construction means, methods, techniques, sequences, procedures, safety precautions and programs in connection with the Work.
- 2.3.4 The Owner is not responsible for the Contractor's failure to carry out the Work in accordance with the requirements of the Contract Documents.
- 2.3.5 The Owner is not responsible for acts, errors, or omissions of the Contractor, a Subcontractor, Sub-subcontractor or anyone directly or indirectly employed by any of them, or of any other persons performing portions of the Work.
- 2.3.6 Unless otherwise specified in the Contract Documents or when the Owner's Project Manager has specifically authorized direct communications with its Consultants, Contractor communications by and with the Owner's Consultants must be through the Owner's Project Manager.
- 2.3.7 Subcontractors, Sub-Subcontractors and Supplier communications with the Owner or its Consultants must be through the Contractor.
- 2.3.8 Unless otherwise specified in the Contract Documents or when the Owner's Project Manager has specifically authorized direct communications with other contractors working at the Project Site, Communications by and with separate contractors must be through the Owner's Project Manager.
- 2.3.9 If the Owner observes Work that appears non-compliant with the requirements of the Contract Documents, the Owner has the authority to reject the Work.
- 2.3.10 Whenever Owner considers it necessary or advisable for implementation of the intent of the Contract Documents, Owner may require additional inspection or testing of the Work, whether or not such Work is Fabricated, Installed, or completed.
- 2.3.11 The Owner will review Contractor's submitted Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information provided and the design concept expressed in the Contract Documents. Review of Submittals is not conducted for determining the accuracy and completeness of other details, such as dimensions and quantities, nor for substantiating instructions for installation or performance of equipment or systems, all of which are and remain the

responsibility of the Contractor.

- 2.3.12 Owner, Owner's Consultants, and Inspector as appropriate, will conduct periodic quality assurance inspections to determine the Contractor's compliance with their QC Program and with the requirements of the Contract Documents.
- 2.3.13 Unless otherwise stated in the Contract Documents, Contractor must sequentially number all Contractor correspondence to the Owner in a format acceptable to the Owner's Project Manager.

2.4 BREACHES, DEFAULTS AND TERMINATION FOR CAUSE

- 2.4.1 If Contractor fails to begin delivery of material and equipment, to commence Work or a designated portion of the Work within the time specified, to maintain the rate of delivery of material, to execute the Work or designated portion of the Work in the manner and at the specified location(s), or fails to maintain a work program which will ensure Owner's interest, or, if Contractor is not carrying out the intent of the Contract, Owner's written notice may be served upon Contractor and Surety on its faithful performance bond demanding satisfactory compliance with the requirements of the Contract Documents.
- 2.4.2 If the Owner deems that the Contractor has persistently or repeatedly refused or failed to supply an adequate workforce, or material of proper quality, or otherwise refuses or fails to submit a proposal in response to a Request for Job Order Proposal, prosecute the Work, or any separable part thereof, with such diligence as will ensure its completion within the Job Order Completion Time(s) specified in the Job Order or authorized extension thereof, or if Contractor should fail to make prompt payment to Subcontractors or Suppliers, or persistently disregards laws, ordinances, or Owner's written Directions, or fails to comply with self-performance requirements, or has failed in any other respect to prosecute the Work with the diligence and resources required by the Contract Documents, the Owner may, after providing at least 7 Days prior written notice to the Contractor identifying the defaults to be remedied, and the Contractor's continued failure to remedy the default(s):
- .1 provide any such labor and/or materials required to perform the Work or designated portion of the Work and deduct the cost from any money due or to become due to the Contractor; or
 - .2 if the Owner considers that the default(s) constitute sufficient basis for such action, provide the Contractor and the Contractor's Sureties with an additional 7 Days written notice, that if the defaults are not remedied, the Contractor's control of the Work or designated portion of the Work will be terminated.
- 2.4.3 Should Owner exercise its rights to terminate Contractor's control of the Work or designated portion of the Work as noted in this Document 00700.2.4, "Breaches, Defaults, and Termination for Cause", Owner may, without prejudice to any other rights or remedies of Owner and subject to any rights or obligations of the Surety:
- .1 terminate Contractor's control of the Work or designated portion of the Work;
 - .2 take possession of the Project Site or designated portion of the site and all or any of the Contractor's materials, equipment, tools, appliances, and construction equipment and machinery owned by the Contractor as may be on the site and necessary for the performance of the Work or designated portion of the Work;
 - .3 accept assignment of any and/or all Subcontractor, Supplier, and/or rental agreements; and/or
 - .4 complete the Work or designated portion of the Work by whatever reasonable method(s) Owner may deem expedient and appropriate.
- 2.4.4 If Owner terminates the Contractor's control of the Work or portion of the Work for reasons provided in this Document 00700.2.4, "Breaches, Defaults, and Termination for

Cause", the Contractor will not be entitled to receive any further payments until the entire Work or designated portion of the Work is completed and Accepted. Contractor and its Sureties are liable to Owner for any additional cost of completing the Work or designated portion of the Work, including compensation for additional managerial, administrative, and consulting services, plus the assessment of Liquidated Damages assessed pursuant to Document 00700.7.3, "Liquidated Damages."

- 2.4.5 If the costs incurred by Owner as the result of termination of Contractor's control of the Work or a portion of the Work pursuant to this Document Job Order Price Sum, the Contractor must pay the difference to Owner.
- 2.4.6 Upon Completion and Acceptance of the entire Work, Contractor is entitled to the return of all unused materials and its equipment, tools, and appliances, except that Contractor will have no Claim on account of usual and ordinary depreciation, loss, wear, and tear.
- 2.4.7 If Owner terminates Contractor's control of the Work for cause, and if it is later determined that the termination was wrongful, such default termination will automatically be converted to and be treated as a termination for convenience. In such event, Contractor will be entitled to receive only the amounts payable pursuant to Document 00700.2.5, "Termination for Owner's Convenience", and Contractor specifically waives any Claim for any other amounts or damages, including, but not limited to, any Claim for consequential damages or lost profits.

2.5 TERMINATION FOR OWNER'S CONVENIENCE

- 2.5.1 Owner reserves its right to terminate this Contract or any part thereof for Owner's sole convenience, upon written notice to Contractor. In the event of such termination, the Contractor must immediately suspend all Work hereunder and must immediately cause any and all of its Subcontractors, Sub-Subcontractors and Suppliers to cease work. The Contractor will not be paid for any work performed or costs incurred that reasonably could have been avoided.
- 2.5.2 The Contractor will be paid in accordance with the provisions of Document 00700.8, "Payments", except that the amount due the Contractor will be based upon the Owner's estimate of the Work completed, or acceptable materials provided but not used, to the date of suspension of the Work, less any amounts required to be withheld pursuant to Document 00700.8, "Payments", and less any prior payment(s) made to, or on the account of the Contractor.

2.6 CONTRACTOR'S RIGHT TO SUSPEND, STOP, OR TERMINATE THE WORK

- 2.6.1 Contractor may upon fifteen (15) Days' written notice to Owner, stop Work or terminate the Contract and recover from Owner payment for all Work executed to date of termination if:
 - .1 The Work is stopped pursuant to an order of any court or other public authority for a period of three (3) months, through no act or fault of Contractor or of anyone employed by Contractor; or,
 - .2 Owner, without justification or good cause, fails to pay Contractor within sixty (60) Days after a complete payment application has been received and Approved by Owner's Authorized Representative.
- 2.6.2 Work stoppage or termination by Contractor in accordance with this Document 00700.2.6, "Contractor's Right to Suspend, Stop, or Terminate Work", does not excuse or relieve Contractor from any of its obligations pertaining to Work in place or completed.
- 2.6.3 The provisions of this Document 00700.2.6, "Contractor's Right to Suspend, Stop, or Terminate Work", are in addition to all other rights and remedies available to Contractor by law.

- 2.6.4 Contractor does not have the right to suspend the Work without Owner's written approval and must resume Work promptly when notified by Owner.

2.7 SUSPENSION BY OWNER FOR CONVENIENCE

- 2.7.1 Owner may, without invalidating the Job Order, may order changes in the Work by altering, adding to, or deducting from the Work issuing a Supplemental Job Order, which may suspend, delay or interrupt all or any part of the Work for such periods of time as Owner may determine to be appropriate for Owner's convenience or any other reason.
- 2.7.2 Contractor must immediately comply with Owner's written Order to suspend, delay or interrupt Work or any part thereof.
- 2.7.3 If it should become necessary to suspend Work for an indefinite period:
- .1 Contractor must store all materials in such manner that they will not be or become an obstruction;
 - .2 Contractor must take every precaution to prevent damage or deterioration of the Work performed;
 - .3 Contractor must Provide suitable drainage and erect temporary structures where necessary to protect the Work;
 - .4 Contractor must take all prudent measures to mitigate costs associated with suspension of the Work.

2.8 ASSIGNMENT

- 2.8.1 The Contractor binds the Contractor, the Contractor's partners, successors, assigns and legal representatives to Owner in respect to covenants, agreements and obligations contained in the Contract Documents. Contractor must not assign the Contract as a whole or in part without written consent of the Owner. If Contractor makes such an assignment without Owner's written consent, Contractor will remain legally responsible for all Contractor's obligations in the Contract Documents.
- 2.8.2 No assignment by the Contractor will be valid unless it contains a provision that the funds to be paid to the assignee pursuant to the assignments are subject to prior claims for payment for services rendered or material supplied for performance of the Work called for pursuant to the Contract Documents in favor of all persons, firms, or corporations rendering such services or supplying such materials.
- 2.8.3 Owner will not consent to an assignment that would relieve the Contractor or the Contractor's Surety(s) of their responsibilities pursuant to the Contract.
- 2.8.4 Subcontracts, purchase orders, and rental agreements entered into by Contractor must contain provisions permitting assignment to Owner and providing for termination pursuant to the terms of this Agreement. To the extent that Owner elects to take legal assignment, the Contractor must execute and deliver all documents and take all such steps, including the legal assignment of such contracts and exercise other contractual rights of the Contractor, as Owner may require for the purpose of fully vesting in Owner the rights and benefits of the Contractor pursuant to such contracts.
- 2.8.5 The Contractor may assign moneys due or to become due pursuant to the Contract, through an amendment to the Contract. Any assignment of moneys earned by the Contractor is subject to all proper withholdings and Retention in favor of Owner provided for in the Contract Documents. All moneys withheld, whether assigned or not, are subject to being used by Owner to the extent permitted by law, for the Completion of the Work in the event that the Contractor is in default of the Contract.

2.9 NOTICE

2.9.1 Any notice from one party to the other must be dated and signed by the party giving such notice or by a duly authorized representative of such party. No notice is effective for any purpose unless served in the following manner:

- .1 If the notice is provided to Owner, it must be by personal delivery to Owner's Authorized Representative or by depositing the same in the United States mail, enclosed in a sealed envelope, addressed to the Owner's Authorized Representative at the address identified in the Notice to Bidders, first class postage prepaid.
- .2 If the notice is provided to Contractor, it must be by personal delivery thereof to Contractor, or to Contractor's Authorized Representative at the Project Site, or by depositing the same in the United States mail, enclosed in a sealed envelope, addressed to Contractor at its regular place of business or at such other address as may have been established for the conduct of the Work, first class postage prepaid.
- .3 If the notice is provided to the Surety or any other person, by personal delivery to such Surety or by depositing the same in the United States mail, enclosed in a sealed envelope, addressed to such Surety or person at the address of such Surety or person as stated in the Bond documents.
- .4 Deposit of notice in the United States mail will be deemed the date of receipt thereof.

2.10 AUDITS AND ACCESS TO RECORDS

- 2.10.1 The Contractor must maintain all books, records, documents, and other evidence directly pertinent to the performance of the Work in accordance with generally accepted accounting principles and practices consistently applied. The Contractor must also maintain all financial information and data used by the Contractor in the preparation or support of any cost submission, including the Contractor's Bid estimate, any Change Order, Dispute, Claim, Pay Application, or other request for equitable adjustment. Owner and its representatives will have access upon 24 hours advanced written notice, at all times during normal business hours, to all Contractor's books, summary reports, records, accounts, estimates, documents, detailed financial information, certified payroll records, and all other relevant information and documentation for the purposes of inspection, audit, and copying. The Contractor will, at no cost to Owner, provide proper facilities for such access, inspection and copying purposes.
- 2.10.2 Contractor agrees to include and make the requirements of Document 00700 - Sub-Part 2.10.1 applicable to all Subcontracts and Sub-subcontracts or purchase orders in excess of \$10,000, at any tier.
- 2.10.3 Audits conducted pursuant to Document 00700 - Sub-Part 2.10.1 will be in accordance with general accepted auditing standards and established procedures and guidelines of the reviewing or audit agency.
- 2.10.4 The Contractor agrees to provide all information and reports resulting from access to records to Owner and other affected parties.
- 2.10.5 Records must be maintained and made available during the performance of the Work and for 3 years after Final Payment, and until final settlement of all Disputes, Claims, or litigation, whichever occurs later. In addition, those records which relate to any portion of this Contract, to any Change Order, to any Dispute, to any litigation, to the settlement of any Claim arising out of such performance, or to the cost or items to which an audit exception has been taken, must be maintained, and made available until Final Payment or final resolution of such Dispute, litigation, Claim, or exception, whichever occurs later.
- 2.10.6 The right of access provisions of Document 00700 - Sub-Part 2.10.1 applies to all financial records pertaining to this Contract:
 - .1 to the extent the records pertain directly to Contract performance;

- .2 to the extent required for verification of the costs incurred where such costs are the basis for billings pursuant to this Contract including Change Orders;
 - .3 to the extent there is any indication of violation of the California False Claims statute or that fraud, gross abuse, or corrupt practices may be involved;
 - .4 if the Contract is terminated for default or convenience.
- 2.10.7 Access to records is not limited to the required retention periods. Owner's Authorized Representative or designee will have access to records at any reasonable time for as long as the records are maintained.

2.11 GOVERNING LAW

- 2.11.1 This Contract will be interpreted and enforced in accordance with the laws of the State of California. Pursuant to California Code of Civil Procedure §394, proper venue for legal action arising out of this Agreement is in the County of Santa Clara. Both parties hereto agree that personal and subject matter jurisdiction is proper in Santa Clara County, California.

END ARTICLE 2

ARTICLE 3 — CONTRACTOR'S RESPONSIBILITIES**3.1 GENERAL RESPONSIBILITIES**

- 3.1.1 Contractor must supervise and direct the Work, using its best skill and attention.
- 3.1.2 Contractor is solely responsible for all construction means, methods, techniques, operations, sequences, and procedures, and for coordinating all portions of the Work.
- 3.1.3 The Contractor shall assign a full-time person as its representative for this Contract. This person shall be acceptable to the Owner and shall have a cell phone at which he or she can be reached at all times.
- 3.1.4 The Contractor shall also have at all times an Office Manager and a Superintendent assigned to this Contract. Additional staff will be provided depending on the volume of work. For each Job Order issued, the Contractor shall identify the Superintendent responsible for that Job Order. The Superintendent shall be reachable 24 hours a day, seven days a week. If the named Superintendent is not available because of illness or vacation or the like, the Contractor shall notify the Owner of a substitute Superintendent. At all times, the Contractor shall provide at least one Superintendent for every four Job Orders. Whenever, in the sole discretion of the Owner, the Contractor is not providing a sufficient level of supervision, the Owner may direct the Contractor to increase the level of supervision for any or all projects, including but not limited to the right to direct the Contractor to assign a full time, dedicated Superintendent for any project; submit daily management, inspection, activity, and planning reports; substitute subcontractors; submit daily photographs of the work in place and the work areas prepared for the next day's work; and develop a site specific quality control program, all at no cost to the Owner. In the event the Owner's personnel are required to provide direction or supervision of the work in the field because the Contractor has not provided sufficient supervision, the Contractor shall reimburse the Owner \$75 per hour for such effort.
- 3.1.5 Contractor will not be relieved from its obligations to perform the Work in accordance with the requirements of the Contract Documents, either by the activities or duties of Owner or Owner's Consultants in their administration of the Contract, or by inspections, tests, acceptance, or approvals required or performed by persons other than Contractor.
- 3.1.6 Contractor must at all times enforce good order and discipline among its employees and must not employ on the Work anyone not skilled in the task assigned.
- 3.1.7 Contractor warrants to Owner that all materials and equipment provided pursuant to the Contract are new unless otherwise specified, and that all Work is of good quality, free from faults and defects and in conformance with the requirements of the Contract Documents. All Work not conforming to these requirements, including substitutions not properly accepted and authorized by Owner's Authorized Representative may be considered defective. Upon request at any time, Contractor must furnish evidence, satisfactory to Owner, demonstrating the quality of installed materials and equipment.
- 3.1.8 Unless otherwise provided in the Contract Documents, the Contractor must provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.
- 3.1.9 Contractor has charge and care of all Work and all materials to be used therein (including materials for which Contractor has received partial payment or materials which have been furnished by Owner) until Acceptance of the Work. Contractor bears the risk of injury, loss, or damage to any part thereof by the action of the elements or from any other cause, whether arising from the performance or nonperformance of the Work, except as otherwise expressly provided.

- 3.1.10 Contractor must rebuild, repair, restore, and make good all injuries, losses, or damages to any portion of the Work or the materials by any cause before Completion and Acceptance.
- 3.1.11 Contractor must Provide suitable drainage and erect such temporary structures as are necessary to protect the Work or materials from damage. Suspension of the Work from any cause whatever will not relieve Contractor of responsibility for the Work and materials as herein specified.
- 3.1.12 Contractor must properly store materials which have been partially paid for by Owner or which have been furnished by Owner. Such storage by Contractor is on behalf of Owner who shall at all times be entitled to the possession of such materials. Contractor must promptly return such materials to the Project Site when requested. Contractor must not dispose of any of the materials so stored except upon Owner's written authorization.

3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY THE CONTRACTOR

- 3.2.1 The Contractor must carefully study and compare the requirements of the Contract Documents with each other and must advise the Owner, in writing, of any errors, inconsistencies or omissions discovered. If the Contractor performs any Work knowing it involves a recognized error, inconsistency, or omission in the requirements of the Contract Documents, without such notice to the Owner, the Contractor assumes responsibility for such performance and will bear the cost for correction.
- 3.2.2 The Contractor must take field measurements and verify field conditions and must compare such field measurements, conditions and other related information known to the Contractor with the requirements of the Contract Documents before beginning the Work.
- 3.2.3 In accordance with Public Contract Code §7104, Public Work involving digging trenches or other excavations that extend deeper than four (4) feet below the surface, the Contractor must promptly, and before such conditions are disturbed, notify the Owner in writing of:
 - .1 Material that the Contractor believes may be material that is hazardous waste, as defined in §25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with applicable laws.
 - .2 Subsurface or latent physical conditions at the site differing from those indicated.
 - .3 Unknown physical conditions at the site of any unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract Documents.
- 3.2.4 In response to Contractor's written notice as required by Public Contract Code §7104:
 - .1 Owner will promptly investigate the conditions, and if Owner finds that such conditions materially differ, or involve hazardous waste, and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the Work, a Change Order will be issued in accordance with Document 00700.6, "Changes in the Work."
 - .2 In the event that a Dispute arises between the Owner and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the Work, the Contractor shall not be excused from any completion date(s) provided for by the Contract Documents, but shall proceed with all Work to be performed under the Contract. The Contractor will retain any and all rights provided either by Contract or by law that pertain to the resolution of Disputes and protests between the contracting parties.

3.3 DOCUMENTS AND SAMPLES AT THE PROJECT SITE

- 3.3.1 The Contractor must maintain at the Project Site one (1) copy of the Record Documents including but not limited to Drawings, Project Manual, Addenda, Change Orders,

Supplemental Job Order, Requests for Information, Field Modifications, and Additional Detailed Instructions.

- 3.3.2 The Contractor must maintain the Record Documents in good and current condition and post all changes and clarifications to the Contract Documents on a daily basis as they occur.
- 3.3.3 The Contractor must mark the record Drawings to record actual field dimensions of installed Work.
- 3.3.4 The Contractor must maintain a record Project Manual in good order and indicate by marking in the appropriate section of the Project Manual, the selected product or material that was approved for incorporation in the Work.
- 3.3.5 At least one (1) copy of all Owner accepted Shop Drawings, Product Data, Samples, and similar Submittals must be maintained at the Project Site in good and current condition and made available to Owner upon request.
- 3.3.6 The Contractor and each Subcontractor must prepare and maintain Daily Reports to document the progress of the Work. Daily Reports must be in a format proscribed or approved by the Owner's Project Manager and completely filled out on a daily basis. One (1) copy of each daily report must be submitted to Owner's Project Manager the following workday or as otherwise Directed by the Owner's Project Manager. The corresponding activity numbers from the Official Progress Schedule must identify Work activities on the Daily Reports. It is the responsibility of the Contractor to gather all daily reports and submit to Owner's Project Manager as one package.
- 3.3.7 The Contractor and each Subcontractor must prepare and maintain incident reports to document unusual occurrences including but not limited to breaches of on-site security, altercations, vehicle or construction equipment accidents, and complaints from neighbors, etc. Incident reports must be in a format prescribed or approved by the Owner's Project Manager, completely filled out at or about the time of the occurrence of the incident. Three (3) copies of the incident report must be submitted to Owner's Project Manager within 24 hours of the incident. Information related to follow-up investigation(s) of the incident must be submitted to the Owner's Project Manager upon request.
- 3.3.8 The Contractor and each Subcontractor must prepare accident reports to document all reportable accidents at the Project Site. Accident reports must be in a format prescribed or approved by the Owner's Project Manager, completely filled out at or about the time of the occurrence of the accident. Three (3) copies of the accident report must be submitted to Owner's Project Manager within 24 hours of the accident. Information related to follow-up investigation(s) of the accident must be submitted to the Owner's Project Manager upon request.
- 3.3.9 The Contractor must arrange for the review or selection of any heavy or large material (or color) samples to be made at vendor shops or facilities and, after being suitably tested and accepted, must arrange for samples of the selected material (or colors) to be maintained at the job-site in a secure location for use during construction to verify the acceptability of materials and/or work.

3.4 ACCESS TO WORK

- 3.4.1 The Contractor must provide Owner continuous access to the Work.

3.5 USE OF PROJECT SITE

- 3.5.1 Contractor must confine operations at the Project Site to areas permitted by law, ordinances, permits and the Contract Documents, and must not unreasonably encumber the Project Site with any materials, equipment, temporary structures, or temporary measures.
- 3.5.2 Contractor's employees, or others subject to the Contractor's control, are not permitted to

reside on the Project Site in temporary living facilities.

3.6 WORKPLACE ENVIRONMENT

- 3.6.1 The use or possession of alcohol, weapons, or illegal controlled substances by the Contractor, or others subject to the Contractor's control, on County property is prohibited.
- 3.6.2 The Contractor must ensure and maintain a workplace environment free of personal harassment and intimidation.
- 3.6.3 Conduct that creates an intimidating, hostile, or offensive workplace environment is prohibited. Such conduct includes, but is not limited to, the following:
- .1 Verbal harassment, e.g., epithets, derogatory comments, or slurs;
 - .2 Physical harassment, e.g., assault, impeding or blocking movement, gestures, or any physical interference with normal work or movement;
 - .3 Visual forms of harassment, e.g., derogatory posters, letters, poems, graffiti, cartoons, or drawings.
- 3.6.4 Unwelcome and unwanted sexual advances constitute sexual harassment that is prohibited. For example, requests for sexual favors and verbal or physical conduct of a sexual nature are prohibited.
- 3.6.5 Equal Opportunity/Nondiscrimination
- No party contracting with the County will discriminate against any subcontractor, employee, or applicant for employment, because of age, race, color, national origin, ancestry, religion, sex/gender, sexual orientation, mental disability, physical disability, medical condition, political beliefs, organizational affiliations, or marital status. It is further the policy of the County that no party contracting with the County may discriminate in the provision of services under the contract because of age, race, color, national origin, ancestry, religion, sex/gender, sexual orientation, mental disability, physical disability, medical condition, political beliefs, organizational affiliations, or marital status.
- 3.6.6 It is the responsibility of the Contractor to:
- .1 Inform its employees and Subcontractors that behavior that creates an intimidating, hostile, or offensive workplace environment is prohibited;
 - .2 Create a workplace environment that is free from harassment; and,
 - .3 Take corrective action to stop prohibited behavior/conduct.
- 3.6.7 If in the opinion of the Owner's Authorized Representative, any employee of the Contractor or Contractor's Subcontractors violate the prohibitions of this Document 00700.3.6, "Workplace Environment", Contractor must immediately remove that person or Subcontractor from the Project upon Owner's request, and such person or Subcontractor must not be permitted to perform further Work on the Project Site.
- 3.6.8 No Smoking
- It is the policy of the County that all contractors and their employees, agents, and subcontractors who will have any contact with County property pursuant to a contract with the County must comply with the County's No Smoking Policy set forth in Board Policy 3.47.

3.7 SUPERVISION

- 3.7.1 Prior to Contractor mobilization to the Project Site, Contractor must submit to the Owner in writing a letter naming the Contractor's Authorized Representative who will have the

authority to represent and act for Contractor at the Project Site. Communications provided to the Contractor's Authorized Representative will be as binding as if provided directly to the Contractor.

- 3.7.2 When Contractor is comprised of two (2) or more persons, firms, partnerships, or corporations functioning as a joint venture, Contractor must submit a letter to the Owner, before starting Work, stating the name of one (1) authorized representative who has the authority to represent and act for Contractor.
- 3.7.3 Contractor's Authorized Representative must be present at the Work site at all times while any Work is in progress. When Work is not in progress and during periods when Work is suspended, the Contractor's Authorized Representative must nevertheless keep the Owner's Project Manager advised of their whereabouts and the whereabouts of the Contractor's site superintendents so that they may readily be reached and available for consultation at the Project Site at any time.
- 3.7.4 Prior to Contractor mobilization to the Project Site, Contractor must submit to the Owner the telephone and/or pager numbers at which the Contractor's Authorized Representative can be reached at all times. In the event it is necessary for the Contractor's Authorized Representative to be absent from the Project Site, the Contractor's Authorized Representative will, except in the case of personal emergency, give written notice to the Owner's Project Manager designating an acting representative. The absence must not exceed 48 hours without prior written approval of the Owner's Project Manager.
- 3.7.5 The Contractor must supervise and direct the Work. The Contractor is responsible for, and has control of, construction means, methods, techniques, sequences, procedures, safety precautions and programs in connection with the Work, and for coordinating the Work unless otherwise noted or specified in the Contract Documents.
- 3.7.6 The Contractor is responsible for acts and omissions of the Contractor's employees, Subcontractors, Sub-Subcontractors or Suppliers and their agents and employees, and other persons performing portions of the Work pursuant to a direct or indirect contract with the Contractor or at its direction.
- 3.7.7 If any person or Subcontractor working at the direction or subject to the control of the Contractor refuses or fails to carry out a properly given Order by the Owner's Authorized Representative or is, in the Owner Representative's opinion, incompetent, disorderly, or acting in an improper manner, Contractor must immediately remove that person or Subcontractor from the Project upon Owner's written request, and such person or Subcontractor must not be permitted to perform further Work on the Project.

3.8 DISRUPTION OF OWNER'S NORMAL OPERATIONS

- 3.8.1 Contractor must give timely advance notice to Owner of Work that is likely to be disruptive to Owner's normal operations at or near the Project Site. If Contractor does not so advise Owner, Owner has the right to temporarily suspend Contractor's Work or to require Contractor to modify its Work operations to eliminate any disruption, and Contractor is not entitled to any adjustment in the Job Order Price or Job Order Completion Time for any delay or additional costs associated therewith.

3.9 LABOR

3.9.1 Hours of Labor

- .1 Eight hours labor constitutes a legal day's work. Contractor shall forfeit as a penalty to Owner, \$25.00 for each worker employed in the execution of the Contract by Contractor or any Subcontractor for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any one calendar day or forty (40) hours in any one calendar week in violation of the provisions of the California Labor Code, and in particular, §1810 through §1815 thereof, except that work performed by employees of Contractor or any Subcontractor in excess of eight

(8) hours per day, or forty (40) hours during any one week, shall be permitted upon compensation for all hours worked in excess of eight (8) hours per day, or forty (40) hours per week, at not less than one and one-half (1-1/2) times the basic rate of pay, as provided in §1815.

3.9.2 Prevailing Wage

- .1 The services to be performed pursuant to this Agreement are “public works” subject to California Labor Code Section 1771, et. seq. and the applicable implementing regulations. The General Prevailing Wage Rates issued by the California Department of Industrial Relations may be adjusted by the State during the term of this Agreement. Notwithstanding any other provisions of this Agreement, Contractor will not be entitled to any adjustment in compensation rates in the event there are adjustments to the General Prevailing Wage Rates.
- .2 Contractor shall comply with California Labor Code §1775, whereby Contractor shall be assessed a penalty for each calendar day or portion thereof, for each worker paid less than the stipulated prevailing rates for such work or craft in which such worker is employed for any Work done pursuant to the Contract by Contractor or any Subcontractor in violation of the California Labor Code and in particular §1770 through §1780. In addition to said penalty and pursuant to §1775, Contractor shall pay each worker the difference between such stipulated prevailing wages and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate.
- .3 Contractor and each Subcontractor must, pursuant to California Labor Code §1776, submit a certified weekly payroll within ten (10) Days after the Owner’s request for submission of certified weekly payroll records. The certified payroll must include the date of actual payment of wages for each worker employed on the Project and a breakdown of each payment including all fringe benefits included in such wage for each worker. The responsibility for compliance with California Labor Code §1776 is the responsibility of the prime Contractor.
- .4 Contractor must submit two (2) copies of said payroll to Owner on the California Department of Industrial Relations standard Form A-1-131 “Public Works Payroll Reporting Form.” Other forms may be used provided they exactly duplicate the format, dimensions, and wording of Form A-1-131.
- .5 Pursuant to the provisions of California Labor Code §1770 and following, the California Department of Industrial Relations has ascertained the general prevailing rate of wages (which rate includes employer payments for health and welfare, vacation, pension, and similar purposes) applicable to the Work, for straight time, overtime, Saturday, Sunday, and Holiday work. The Holiday wage rate listed shall be applicable to all holidays recognized in the collective bargaining agreement of each craft, classification, or type of workers concerned. Said prevailing wage rates are on file in the Office of the Clerk of the Board of Supervisors, incorporated herein by reference, and copies of which are available to any interested party on request. The rates are also available on the State of California’s Department of Industrial Relations home page website at <http://www.dir.ca.gov>.
- .6 If Contractor uses a craft or classification not shown on the prevailing wage determinations, Contractor may be required to pay the wage rate of that craft or classification most closely related to it, shown in the general determinations in effect when the Bids were received. Pursuant to California Labor Code §1773.2, Contractor shall prominently post a copy of such prevailing wages at each job site.
- .7 Pursuant to Public Contract Code §6109, the Contractor shall not perform Work on this public works project with any Subcontractor who is ineligible to perform Work on a public works project pursuant to §1777.1 or §1777.7 of the Labor Code. Any contract

on a public works project entered into between the Contractor and a debarred Subcontractor is void as a matter of law. A debarred Subcontractor may not receive any public money for performing Work as a Subcontractor on a public works contract, and any public money that may have been paid to a debarred Subcontractor by the Contractor on this Project shall be returned to the Owner. The Contractor shall be responsible for the payment of wages to workers of a debarred Subcontractor who has been allowed to work on the Project.

- .8 Pursuant to Labor Code §1771.5.b.6, the Owner will withhold contract payments equal to the amount of underpayment and applicable penalties when, after investigation, it is established that underpayment of prevailing wage has occurred.

3.9.3 Certified Payrolls

- .1 Contractor must submit two (2) copies of certified weekly payrolls for the periods covered by each Progress Payment. Certified Payroll records must be submitted within ten (10) calendar days from the Progress Payment period end date.
- .2 Pursuant to California Labor Code §1776, in the event that the contractor fails to comply within the 10-day submission period, the contractor must forfeit twenty-five dollars (\$25) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated.
- .3 Pursuant to California Labor Code §1776, the responsibility for compliance with the requirements of California Labor Code §1776 is the responsibility of the prime Contractor.

3.9.4 Apprentices

- .1 Contractor's attention is directed to the provisions of §1777.5 and §1777.6 of the California Labor Code regarding the employment of apprentices by Contractor and any Subcontractors, and §1777.7 regarding penalties for noncompliance. Contractor and all Subcontractors shall comply with the requirements of said Sections in the employment of apprentices. It is Owner's policy to encourage the employment and training of apprentices on public works contracts in accordance with local apprenticeship standards.

3.9.5 Workers Travel & Subsistence Payments

- .1 Contractor's attention is directed to the provisions of California Labor Code §1773.8 that requires Contractor to make travel and subsistence payments in accordance with collective bargaining agreements applicable to each worker needed to execute the Work.

3.10 SATURDAY, SUNDAY, HOLIDAY, AND OVERTIME WORK

- 3.10.1 Unless otherwise specified in the Job Order no construction Work shall be done on Saturdays, Sundays or holidays recognized by the County government and no Work shall be performed outside of Normal Hours Of Work without the prior consent of the Owner's Project Manager, unless required in the Contract Documents. Normal Working Hours are standard shift work between the hours of 7:00 A.M. – 5:00 P.M., Monday through Friday, excluding County holidays.
- 3.10.2 Whenever the Contractor intends to perform overtime work or work on Saturday, Sunday, or a legal holiday recognized by the County, the Contractor must request permission by giving written notice to the Owner's Project Manager at least 2 workdays prior to performing the Work.
- 3.10.3 Unless specifically provided or required by the Contract Documents, Contractor shall receive no additional compensation for any overtime work (i.e., work in excess of: Eight (8) hours in any one Day; forty (40) hours in any one calendar week; or evening, night,

legal holidays observed by Owner, or weekend work).

- 3.10.4 Prior to the start of such Work, when necessary, the Contractor must arrange with the Owner for the continuous or periodic inspection of the Work and tests of materials.
- 3.10.5 Should the Contractor find it necessary in order to complete the Work according to the Official Progress Schedule to perform certain of Contractor's operations on Saturdays, Sundays, holidays or during other overtime hours, these operations will be performed as part of the Work included in the Job Order Price and do not constitute a basis for additional compensation. At the Owner's option the Contractor may be required to compensate the Owner for inspection, testing, security, or management costs during Work performed outside of Normal Hours Of Work. Owner has the right and authority to deduct the cost of all such inspections, testing, security, or management costs from any payments due or that become due Contractor.
- 3.10.6 The Owner has the right to Order Contractor to perform Work outside Normal Hours Of Work. Owner will issue such Order in writing. If the Owner Orders the Contractor to perform Work outside Normal Hours Of Work, the Contractor must make all arrangements to supply an adequate Work force for the task to be accomplished and will be compensated for the premium portion of the wages paid, plus labor burdens applicable to the premium portion only of the wages paid. Contractor must submit copies of Contractor's payrolls indicating the premium wages actually paid, and the Owner will issue a Change Order to reimburse the Contractor for Contractor's actual costs only. The Owner will pay all extra expense of Owner's inspection.

3.11 NORMAL HOURS OF WORK

- 3.11.1 Normal Hours Of Work for Contractor's operations, which are located within city limits, must comply with city ordinances or requirements of the city. Contractor's operations in the County's unincorporated areas or areas which border a city, town or other county must comply with requirements of Santa Clara County or requirements adopted by other jurisdictions, whichever are more stringent. In case of conflict between the requirements of a city, the County, and the requirements of the Contract Documents, the most restrictive requirements will govern.

3.12 ORDER OF WORK

- 3.12.1 Contractor must follow any sequence of operations required by the Contract Documents.
- 3.12.2 Full compensation for conforming to such requirements will be considered as included in the prices paid for the various Contract items of Work and no additional compensation will be allowed therefore.

3.13 CLEANUP

- 3.13.1 Contractor must continuously keep the Project Site and surrounding areas free from waste materials and/or rubbish caused by its operations or rubbish from any source that accumulates within the Project Site and any other area designated by the Owner's Project Manager for use by the Contractor.
- 3.13.2 When cleanup is paid for as a separate Bid item, full compensation for such work must be included in the Bid price for cleanup.
- 3.13.3 When the Bid price is a lump sum, or there is no unit price item for cleanup, full compensation for cleanup will be considered to have been included in the various items of Work.
- 3.13.4 Contractor must, before certifying that the entire Work of the Project is complete and/or requesting Completion inspection, clean material storage sites and all ground occupied or affected in connection with the Work or designated portion of the Work, and must leave all parts of the Project in a neat and presentable condition satisfactory to Owner's Project

Manager.

- 3.13.5 Upon completion of the Work or any designated part thereof, Contractor must promptly remove all its waste materials, rubbish, and debris, and all its tools, construction equipment, machinery and surplus materials from the Project area or the completed part.
- 3.13.6 If the Contractor fails to clean up as required by the Contract Documents, Owner may do so and the cost thereof will be charged to the Contractor and deducted from progress payments due or to become due to the Contractor.

3.14 DISPOSAL OF MATERIAL OUTSIDE PROJECT AREA

- 3.14.1 Contractor is responsible for making all arrangements and paying all costs for disposal of materials outside the Project area.
- 3.14.2 When any material is to be disposed of outside the Project area, at other than a public disposal site, Contractor must first obtain written permission from the property owner of the proposed disposal site. Before any material is disposed of on said site, Contractor must obtain written permission from the Owner to dispose of the material at the location designated in said permit.
- 3.14.3 Disposal of Hazardous Materials must comply with all legal requirements, including but not limited to containerization, labeling, manifesting, transportation, disposal site, and use of properly trained personnel. No later than 15 Days after Contractor's request for Final Inspection, Contractor must submit copies of all Hazardous Waste Manifests signed by Toxic Substances Disposal Facilities ("TSDFs") and certificates of disposal, to prove that Contractor has legally disposed of such materials. Submit three (3) copies of each manifest.

3.15 HAZARDOUS MATERIALS

- 3.15.1 Contractor must comply with all Federal, State, County and local laws, statutes, ordinances, and other regulations covering the use, storage, transportation, and disposal of any Hazardous Materials on the Project. Contractor must obtain all permits and pay all fees and taxes for all services and materials required to perform the Project.
- 3.15.2 The term "Hazardous Materials" as used herein means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace of the environment.
- 3.15.3 Prior to starting Work, Contractor must submit to Owner three (3) copies of a list of all Hazardous Materials expected to be used on the Project. Contractor must keep a copy of the list at the Project Site. This list must include but not be limited to any cleaners, solvents, paints, or explosive charges used in the Work. Contractor must submit one (1) copy of OSHA Form 20 – Material Safety Data Sheet ("MSDS") for each material listed and must advise every person at or near the Project Site of these materials, of proper handling, and of proper action in case of accident or exposure.
- 3.15.4 Contractor must safely contain and store all its Hazardous Materials, and in the event of spill or discharge, must immediately notify all required Federal, State, County and local agencies including the fire department. Contractor must protect personnel from exposure and provide treatment as necessary.
- 3.15.5 Contractor must immediately advise Owner of any potentially Hazardous Materials encountered at the Project Site and must take all necessary action to prevent exposure of personnel until the material is identified and proper action can be taken.
- 3.15.6 Contractor must not store or use any Hazardous Materials near air intakes or doors and windows serving persons on or off the Project Site without proper protection and safeguards to prevent exposure.

- 3.15.7 Contractor must exercise all required precautions and safeguards in the storage, use and disposal of Hazardous Materials. Nothing in this Document 00700.3.15, "Hazardous Materials", relieves Contractor of responsibility for compliance with all applicable laws and statutes, or other provisions of the Contract, particularly Contractor's responsibility for damage and preservation of life and property

3.16 SAFE USE OF PESTICIDES

- 3.16.1 Contractor must comply with all Federal, State and County rules and regulations governing pesticides that are required or used in performing Work. Contractor must comply with the County's Integrated Pest Management Ordinance.
- 3.16.2 The term pesticide includes, but is not limited to: herbicides, insecticides, fungicides, rodenticides, germicides, nematocides, bactericides, inhibitors, fumigants, defoliants, desiccants, soil sterilants, repellents, and any substance or mixture of substances intended for preventing, repelling, mitigating, or destroying weeds, insects, diseases, rodents, or nematodes, and any substance or mixture of substances intended to use as a plant regulator, defoliant, or desiccant.
- 3.16.3 Contractor must comply with Division B28 of the Santa Clara County Ordinance Code relating to integrated pest management and pesticide use. Division B28 includes, but is not limited to specific requirements for:
- .1 restricted or prohibited use of certain pesticides
 - .2 record keeping
 - .3 reporting
 - .4 public notice and posting requirements

3.17 TRENCHING AND EXCAVATION

- 3.17.1 Before any excavation, Contractor must, pursuant to California Government Code §4216 and Cal/OSHA 8CCR1540, outline the excavation in white paint (preferably chalk or water base), provide two workdays notice to Underground Service Alert (1-800-227-2600), obtain a locator number, and follow all necessary procedures to avoid underground facility damage.
- 3.17.2 Before any excavation five feet or more in depth:
- .1 Contractors must, pursuant to California Labor Code §6705, submit to Owner specific plans showing details of provisions for worker protection from caving ground. This in no way relieves Contractor from the requirement of maintaining safety in all operations performed by Contractor or Subcontractors. Submit eight (8) copies of the plans.
 - .2 The detailed plans showing design of all shoring, bracing, sloping or other provisions shall be prepared at Contractor's sole expense by a California registered Civil or Structural Engineer. Owner's acceptance only constitutes acknowledgment of the submission and does not constitute review or approval of the designs, design assumptions, criteria, accuracy, completeness, suitability for use, implementation, or any other quality of the plans, which are solely the responsibility of Contractor and Contractor's Engineer.

3.18 AIR POLLUTION CONTROL

- 3.18.1 Contractor and each Subcontractor must comply with all air pollution control rules, regulations, ordinances, statutes, and Project specific permit requirements of the Bay Area Air Pollution Control District and all other regulatory agencies that apply to any Work performed. If there is a conflict between the Bay Area Air Pollution Control District rules, regulations, ordinances, and statutes and the rules, regulations, ordinances, and statutes of other regulatory agencies, the most stringent shall govern.

- 3.18.2 Contractor must not discharge smoke, dust, or any other air contaminants into the atmosphere in such quantity as will violate any regulations.
- 3.18.3 Contractor must minimize dust nuisances resulting from performance of the Work, both inside and outside the Project limits, by applying either water or dust palliative, or both.

3.19 WATER POLLUTION CONTROL

- 3.19.1 Contractor must comply with all Federal, State, and local water pollution prevention and storm drain pollution prevention rules, regulations, ordinances, statutes, guidelines, and Project specific permit requirements.
- 3.19.2 If required by law, ordinance, regulation, code, permit or the requirements of the Contract Documents, Contractor must prepare a Project Specific Storm Water Pollution Prevention Program (SWPPP).
- 3.19.3 Contractor must exercise every reasonable precaution to protect storm drains, channels, and all bodies of water from pollution, and must conduct and schedule operations so as to avoid or minimize muddying and silting of any waters. Contractor must construct whatever facilities are necessary or requested by Owner to provide prevention, control, and abatement of water pollution.
- 3.19.4 No provision of the Contract Documents relieves Contractor of responsibility for compliance with California Fish and Game Code §5650 et seq, and §12015 et seq, and applicable regulations of the Regional Water Quality Control Board, Santa Clara County flood control and water district requirements, or other applicable statutes relating to prevention and removal of water pollution.
- 3.19.5 Compliance with water pollution requirements does not relieve Contractor from responsibility to comply with all provisions of the Contract Documents, particularly Contractor's responsibilities for damage and preservation of property.

3.20 SOUND CONTROL

- 3.20.1 The Contractor must comply with all CAL OSHA requirements.
- 3.20.2 The Contractor must comply with all local sound control and noise level rules, regulations, and ordinances that apply to any Work performed pursuant to the requirements of the Contract Documents.
- 3.20.3 Each internal combustion engine, used for any purpose on the Project or related to the Project, must be equipped with a muffler of a type recommended by the Manufacturer. No internal combustion engine shall be operated on the Project without said muffler.
- 3.20.4 Noise level from and hours of Contractor's operations, that are located within city limits, must comply with city ordinances or requirements. Contractor's operations in the County's unincorporated areas or areas which border a city, town or other county must comply with the noise level requirements per the Santa Clara County Ordinance Code or requirements adopted by other jurisdictions, whichever are more stringent. Contractor's attention is directed to the current Santa Clara County Ordinance Code, section B11-194 2.6 "Construction/Demolition" for the maximum acceptable noise levels.
- 3.20.5 Noise level requirements apply to all equipment used in the Project including, but not limited to, trucks, transit mixers, or equipment that may or may not be owned by the Contractor. The use of loud sound signals must be avoided in favor of warning lights except those required by safety laws for the protection of personnel.

3.21 WORKER'S SANITARY PROVISIONS & USE OF OWNER'S FACILITIES

- 3.21.1 Contractor must conform to the rules and regulations for sanitary provisions established by the State, the County of Santa Clara, and any other applicable jurisdictions.
- 3.21.2 Contractor must Provide and maintain toilets for use by its employees. These

accommodations must be maintained in a neat and sanitary condition, and must comply with all applicable laws, ordinances and regulations pertaining to public health and sanitation.

- 3.21.3 Contractor's personnel must not use Owner's facilities without express written permission, which will be at Owner's sole discretion. Such Owner's facilities include but are not limited to toilet facilities, food service facilities (cafeteria and coffee shop), utilities services of any kind, carts, fire extinguishers, parking, storage space and any other facilities and services.

3.22 CUTTING AND PATCHING

- 3.22.1 Contractor is responsible for all cutting, fitting, or patching required to complete the Work or to make its parts fit together properly.
- 3.22.2 Contractor must not damage or endanger any portion of the Work, or the work of Owner or any separate contractors, by cutting, patching, or otherwise altering any work.
- 3.22.3 Contractor must not cut or otherwise alter the work of Owner or any separate contractor except with the written consent of Owner and such separate contractor. Contractor must not unreasonably withhold from Owner or any separate contractor its consent to cutting or otherwise altering the Work.
- 3.22.4 Cutting and Patching by Others: The Contractor is responsible for any and all cutting, fitting, and patching required to complete Contractor's Work or join its Work with the work of others, except as otherwise specifically provided for in the Contract Documents.

3.23 TESTS AND INSPECTIONS

- 3.23.1 The Contractor must at all times permit Owner, its agents, officers, employees, Consultants, and representatives to visit the Project Site and inspect the Work, including shops where Work is in preparation. This obligation includes maintaining proper facilities and safe access for such inspection. When the Contract Documents require a portion of the Work be tested, such portion of Work must not be covered up until inspected and accepted by Owner. The Contractor is solely responsible for notifying Owner where and when the Work will be ready for inspection and testing. Should any Work be covered without the required testing and acceptance, such Work must be uncovered and recovered at the Contractor's expense.
- 3.23.2 If Owner determines that portions of the Work require additional testing, inspection or acceptance not included in the requirements of the Contract Documents, the Owner will instruct the Contractor, in writing, to make arrangements for additional testing, inspection or acceptance by an entity acceptable to the Owner, and the Contractor must give 48 hours written notice to Owner of where and when tests and inspections will be conducted so that Owner may observe the procedures. Owner will bear the costs except as provided in Document 00700 - Sub-Part 3.23.3.
- 3.23.3 If procedures for additional testing, inspection or acceptance required by Document 00700 - Sub-Part 3.23.2 reveal failure of a portion(s) of the Work to comply with the requirements of the Contract Documents, the Contractor will bear all costs made necessary by such failure(s) including those of repeated procedures and compensation for Owner's services and expenses.
- 3.23.4 Certificates of testing, inspection, acceptance, or approval will, unless otherwise required by the Contract Documents, be secured by the Contractor, and submitted to the Owner within two (2) Days after completion of each test, inspection, acceptance, or approval.
- 3.23.5 The Contractor will not be relieved of its obligations to perform the Work in accordance with the requirements of the Contract Documents by tests, inspections, acceptance, or approvals required or performed by persons other than the Contractor.
- 3.23.6 The Contractor is responsible for inspections of portions of its Work and the work of others already completed to determine that such portions are in proper condition to

receive subsequent Work.

- .1 If the Contractor determines that Work performed on the Project does not comply with the requirements of the Contract Documents, Contractor must repair or replace such defective Work at the Contractor's sole expense.
- .2 If Contractor determines that completed work of others is not in proper condition to receive its Work, Contractor must immediately notify the Owner in writing and must not proceed with the affected portion of its Work without Direction from the Owner.

3.24 OFFICIAL PROGRESS SCHEDULE

- 3.24.1 The Contractor and Owner have reviewed the Progress Schedule with the requirements of the Contract Documents. The Owner's review and acceptance of the Contractor's Progress Schedule was for compliance with the requirements of the Contract Documents only. Review and acceptance by the Owner of the Contractor's Progress Schedule(s) does not mean approval of the sequence or duration of the tasks shown and does not relieve the Contractor of any of the Contractor's responsibility for the accuracy or feasibility of the Official Progress Schedule, or of the Contractor's obligation to meet the date of final Project Completion. The Owner's review and acceptance of the Contractor's Progress Schedule does not expressly or impliedly warrant, acknowledge, or admit the reasonableness of the logic, durations, cost, manpower or equipment loading indicated in the Official Progress Schedule.

3.25 CERTIFICATION BY CONTRACTOR OF RECYCLED CONTENT

- 3.25.1 The Contractor must certify in writing, under penalty of perjury, to Owner, the minimum, if not exact, percentage of recycled content, both post-consumer material and secondary material, as defined in Public Contract Code §12169, and §12213, in materials, goods, or supplies offered or products used in the performance of the Contract, regardless of whether the product meets the required recycled percentage as defined in Public Contract Code §12161 and §12200. The Contractor may certify that the product contains zero recycled content.
- 3.25.2 The California Integrated Waste Management Board (CIWMB) requires all Cities and Counties to develop a Source Reduction and Recycling Program (SRRP) for all development projects such that solid waste intake to landfills is reduced. This project is included in the CIWMB/SRRP requirements; therefore, the Contractor is required to ensure that debris generated from demolition or construction activities is recycled or salvaged in accordance with all state and local CIWMB requirements.

3.26 SUBMITTALS

3.26.1 General

- .1 Shop Drawings, Product Data, Samples, and similar Submittals are not Contract Documents. Their purpose is to demonstrate those portions of the Work for which Submittals are required and the way the Contractor proposes to conform to the information provided and the design concept expressed in the Contract Documents.
- .2 All Submittals are instruments of Contractor. By submitting Shop Drawings, Product Data, Samples and similar Submittals, Contractor represents that the Contractor has determined and verified materials, construction methods, field measurements and related field construction criteria, coordinated the Work of the Subcontractors, and has checked and coordinated the information contained within the Submittal with the requirements of the Contract Documents and other Submittals.
- .3 Owner's review of Submittals is for general compliance with the requirements of the Contract Documents. Contractor is solely responsible for all quantities, dimensions, weights, gauges, materials, Fabrication processes, construction methods, coordination with the Work of other trades, and construction safety precautions.

Owner's review does not relieve the Contractor of responsibility for errors and omissions in the Submittals or from responsibility for proper fitting and construction of the Work, nor from furnishing materials and Work required by Contract Documents that may not be indicated or shown on the Submittal(s).

- .4 Owner's review of Contractor's Submittal(s) does not relieve Contractor of any responsibilities for the successful completion of the Work in conformity with the requirements of the Contract Documents. The Owner may reject any defective Work notwithstanding any review or previous acceptance of a Submittal associated with the Work.
- .5 The Contractor is not relieved of the responsibility for any deviation from the requirements of the Contract Documents by Owner's review of Submittals unless the Contractor has specifically informed Owner, in writing, of such deviation at the time of Submittal, and Owner has provided specific written consent to each specific deviation. Making notations on the Submittal of proposed deviation is not sufficient to satisfy this requirement. Each proposed deviation must be clearly noted on the Submittal and separately itemized and explained in writing in the transmittal accompanying the Submittal. For each Submittal, the Contractor must indicate that the Submittal contains "**No Deviations**" or itemize the proposed deviations on the transmittal accompanying the Submittal. This written list of deviations is in addition to any indications or marks on the Shop Drawings, Product Data, Coordination Drawings, Samples, or other Submittals indicating the proposed deviations.
- .6 No Work requiring Submittals shall be performed until Owner has accepted the pertinent Submittals. Where a Submittal is required, any related Work performed before the Owner's review and acceptance of the Submittal will be at Contractor's sole risk, expense, and responsibility.
- .7 All required Preconstruction Submittals must be submitted within the time stated in the Job Order or if no time is stated, within five (5) business days of the start date for the Work as stated in the Notice to Proceed. General acceptance of submittals by the Owner does not constitute specific Approval by the Owner's Project Manager for deviation from date for Preconstruction Submittals. Contractor must make a specific request in writing for each proposed deviation and the Owner's Project Manager must grant specific written Approval for each proposed deviation to the cut-off date.
- .8 When certification of materials, systems or equipment is required by the Contract Documents, Design Professional and Owner are entitled to rely upon the accuracy and completeness of such certifications and the calculations and other professional analysis supporting the certifications.
- .9 When descriptive catalog designations, including Manufacturer's name, product brand name, or model number(s) are referred to in the Contract Documents, such designations shall be considered as being those found in industry publications of current issue at date of first Notice to Bidders.
- .10 Contractor must allow sufficient time for reviews, revisions, and resubmittals to avoid delays in the Work. No extension of the Job Order Completion Time will be authorized because of failure to transmit Complete Submittals enough in advance of the Work to permit processing within the timeframes allowed by Contract. Contractor is responsible for all costs of delays caused by Submittals that are tardy or are not Complete Submittals.
- .11 Submittals not required by the Contract Documents will not be reviewed and will "Returned Without Action" or may be discarded.
- .12 If a returned Submittal is required to be resubmitted more than once due to Contractor's failure to comply the Submittal requirements, Contractor may be charged all costs associated with re-review of the Submittal. The charges may be deducted

from progress payments due or to become due to the Contractor.

- .13 Do not highlight pertinent Submittal information with markings that turn opaque when copied. Improperly highlighted Submittals may be returned to Contractor "Returned Without Action."

3.26.2 Contractor's Responsibilities

- .1 Contractor must, at its own expense, provide for Owner's review all Submittals required by the Contract Documents.
- .2 If a Submittal deadline submission date is not stated in the Contract Documents for a specific Submittal or group of Submittals, make the Submittal or group of Submittals far enough in advance to avoid any Critical Path delay to the Official Progress Schedule.
- .3 Before submission, Contractor must:
 - .a Determine and verify all field dimensions and conditions
 - .b Verify and correlate all dimensions in the Contract Documents with field dimensions and conditions
 - .c Verify materials, catalog numbers and similar data.
 - .d Coordinate Contractor's Work with that of Subcontractors
 - .e Coordinate the Work of the Subcontractors Work with that of each other.
 - .f Review and coordinate all Subcontractors' Submittals with the requirements of the Contract Documents
 - .g Review and coordinate all Submittals with Submittals previously accepted by the Owner
 - .h Coordinate as required with all public agencies involved.
 - .i Secure necessary approvals from public agencies and others and signify by stamp or other means that they have been secured.
 - .j Verify the feasibility of the construction methods
 - .k Coordinated the Submittal with Construction safety precautions
 - .l Review and coordinate all Contractor's Submittals with the requirements of the Contract Documents
- .4 Submittals must be provided to the Owner as Complete Submittal(s) for each Definable Feature of Work and must not be Submitted piecemeal. Owner has the right to withhold action on partial Submittals until the missing Submittal items are received or return the partial Submittal to the Contractor "Returned Without Action." At Owner's sole discretion, the Owner may agree to review a Contractor's partial Submittal. If the Owner agrees to review a Contractor's partial Submittal, and the submittal is marked "No Exceptions Taken," or "Make Corrections Noted" the Owner's acceptance of the partial Submittal subject to its compatibility with future Submissions and additional partial Submissions for portions of the Work not covered in the reviewed partial Submission and does not constitute acceptance of the deletion of specified or required items not shown in the partial Submission.
- .5 Coordinate submission of Submittals for related parts of the Work so the Submittals maybe reviewed concurrently. Owner has the right to withhold action on a Submittal requiring coordination with other Submittals until related Submittals are received.
- .6 Prior to Submission to the Owner, Contractor must certify all Submittals for compliance with the requirements of the Contract Documents. The Owner and

Owner's Consultants are entitled to rely upon the Contractor's certification and the accuracy and completeness of the Contractor's efforts supporting such certification.

- .7 Contractor must resubmit Submittals as required until Owner's acceptance is obtained.
- .8 Contractor must make any required corrections and resubmit corrected Submittals until achieving acceptance.
- .9 Unless otherwise specifically stated in the Contract Documents, Contractor must resubmit Submittals requiring resubmission within twenty-one (21) Days of return of Submittal by Owner.
- .10 On resubmittals, clearly indicate all revisions, changes, and deviations from the original Submittal. This includes directing specific attention, in writing, to revisions other than those requested by the Owner on previous Submittals.
- .11 Contractor must include answers to any questions or clarifications required by Subcontractors and/or Suppliers.

3.26.3 Submittal Copies

- .1 Generally, the number of required copies of Submittals is established or summarized in the Job Order's Request for Proposal and Final Scope of Work.

3.26.4 Minimum Submittal Review Times

- .1 Time for review shall commence on Owner's receipt of a Complete Submittal.
- .2 Time for review shall end on Owner's return of Submittal.
- .3 Unless otherwise specifically provided for in the Job Order Schedule, allow at least fourteen (14) Days for Owner's review and return following Owner receipt of a Complete Submittal.
- .4 Allow additional time if processing must be delayed to permit coordination with subsequent Submittals. Owner will advise Contractor when a Submittal being processed must be delayed for coordination.
- .5 Allow at least fourteen (14) Days for Owner's review and response to resubmittals.

3.26.5 Action & Distribution

- .1 When "No Exceptions Taken" is indicated, Contractor may proceed with Fabrication, Manufacture, or construction, providing such Work complies with the requirements of the Contract Documents.
- .2 When "Make Corrections Noted" is indicated, Contractor may proceed with Fabrication, Manufacture, or construction, providing such Work complies with the requirements of the Contract Documents and the corrections noted. The above two categories are considered as accepted Submittals. When other notations are indicated, Contractor is advised that no Work shall be Fabricated, Manufactured, or constructed, and Contractor must make a revised submission.
- .4 Contractor must promptly distribute copies of the accepted Submittals to its Subcontractors, Suppliers, vendors, Fabricators and/or Manufacturers as applicable.
- .5 Submittals received from sources other than through Contractor's office will be "Returned Without Action" or may be discarded.
- .6 Submittals that are not required by the Contract Documents may be returned to the Contractor "Returned Without Action" or may be discarded.
- .7 Informational Submittals, on which Owner is not required to take action, will not be

returned to the Contractor.

3.26.6 Use for Construction

- .1 Use only final Submittals with mark(s) indicating acceptance by Owner or Designer of Record.
- .2 No portion of Work requiring Submittals shall be commenced until Owner or Designer of Record, on the Owner's behalf, has accepted the Submittal.
- .3 Contractor must Fabricate, construct, and furnish all Work in accordance with the accepted Submittals.
- .4 Contractor must immediately upon receipt from Owner, distribute Owner accepted Submittals to all parties concerned.
- .5 Contractor must keep at least one (1) copy of each accepted Submittal at the job site.

3.27 SHOP DRAWINGS

- 3.27.1 Contractor must furnish Shop Drawings for temporary work and methods of construction such as formwork, falsework, and for other temporary work and methods of construction Contractor proposes to use.
- 3.27.2 Contractor must Furnish scaled drawings showing how the Work of all trades (HVAC, plumbing, fire protection, electrical, etc.) will coordinate to form a complete Installation, and where Work affects existing buildings or parts thereof, and/or existing utilities.
- 3.27.3 Present Shop Drawings in a clear and thorough manner. Identify details by reference to sheet and detail, schedule, and room numbers shown on Drawings.

3.28 RESERVED

3.29 SAMPLES

- 3.29.1 Contractor must submit without charge such Samples as may be required by the Contract Documents.
- 3.29.2 Unless a greater quantity is required elsewhere in the Contract Documents, three (3) of each required Sample must be Submitted.
- 3.29.3 Tags or labels shall be securely affixed to samples and contain as a minimum, the following information: Project Name, Contractor's Name, Contract Title and Number, Date, Transmittal Number, Product Manufacturer's or Fabricator's Name, trade name, lot style, color, model, etc., locations of use, and Contract Document reference.
- 3.29.4 Owner will retain one of each Sample.
- 3.29.5 Contractor must not use any materials or equipment for which Samples are required to be submitted until Owner has performed such Submittal review, save only at Contractor's risk and expense.
- 3.29.6 Owner's review of any Sample is only for the characteristics thereof or for the uses named in such review and no other. Owner's acceptance of any Sample is not a modification or change of any requirements of the Contract Documents. Upon Owner's acceptance of any Sample or material, no additional Sample of that material will be considered and no change in brand or make is permitted.
- 3.29.7 Where variation in color, pattern, texture, or other characteristic is inherent in the material or product to be Provided, the Contractor must Submit at least 3 multiple units that show approximate limits of the variations. Installed items or materials exceeding the variation of the accepted samples are considered defective Work.

3.30 SUBSTITUTIONS

- 3.30.1 Whenever in the Contract Documents any material, product, thing, or service is indicated or specified by grade, patent, brand, trade, or proprietary name, or by Manufacturer, such specifications shall be deemed to be followed by the term "Or Equal" unless the Contract Documents provide that use of the item specified is necessary in the public interest or to match other such items in use or to be used.
- 3.30.2 Reserved
- 3.30.3 If the material, product, thing, or service offered by Contractor is not, in the opinion of the Owner's Authorized Representative, substantially equal or better than that specified, then Contractor must furnish that material, product, thing, or service specified or one that in the opinion of the Owner's Authorized Representative is substantially equal or better in every respect.
- 3.30.4 The burden of proof as to the equality of any material, product, thing, or service Contractor proposes for Product Substitution is the responsibility of the Contractor.
- 3.30.5 The opinion of the Owner's Authorized Representative of the substantial equality or superiority of any material, product, thing, or service proposed for substitution will be based on but not be limited to consideration of such factors as: physical characteristics of weight, gauge, composition, hardness, toughness, ductility, durability, brittleness, etc., as compared to the specified item, or as delineated in the Contract Documents; dimensional compatibility with the materials it combines with to produce a unified design system; compatibility with products in use by Owner elsewhere; all aspects of finished appearance including form, texture and color, that may affect other design elements; performance, functionality, and ease and economy of maintenance and operation. Owner's Authorized Representative will review and respond in writing to substitution submittals within fourteen (14) days after receipt of all information Owner requires to make a final determination.
- 3.30.6 Owner will consider Job Order Proposals for substitution of materials, Products, things, or services only when such Job Order proposals are accompanied by full and complete technical data, and all other information requested by the Owner is submitted, in order to evaluate the proposed Product Substitution. Owner may require substantiating documents to prove quality, delivery time, and cost. Burden of proof as to comparative quality, suitability, and performance of offered materials, Products, things, or services is the responsibility of the Contractor. Owner's Authorized Representative will be the sole judge as to such matters. In the event Owner's Authorized Representative rejects the use of such Alternative(s) submitted, then one of the particular materials, Named Products, things, or services originally specified in the Contract Documents must be Provided.
- 3.30.7 Contractor is responsible for all design and engineering costs, Submittal and resubmittal costs, and costs of associated changes, for the review and acceptance of all proposed and accepted Product Substitutions. Costs incurred by Owner for additional Design Professional and/or CM services to process, design, engineer or adapt Product Substitutions may be deducted from payments to Contractor.
- 3.30.8 Installation of Substitutions
- .1 Contractor must replace any substitution(s) installed without Owner's consent with the specified item(s) at Contractor's expense.
 - .2 Contractor must not proceed with any Product Substitution or change until Owner's Authorized Representative has completed all reviews, made recommendations, and granted consent.
 - .3 If Owner's Authorized Representative accepts a Product Substitution, Contractor must make all changes in the Work including changes to Contract and Record Documents at no additional cost to Owner.

- .4 If an accepted Product Substitution is more expensive than the specified material, process, or article Contractor must bear all additional costs of such material, process, or article so Provided.
- .5 If mechanical, electrical, structural, or other changes are required for the Installation or fit of Alternative materials, articles, or equipment, or because of deviations from Contract Drawings and Specifications, such changes must not be made without written consent of the Owner's Authorized Representative, and must be made without additional cost to Owner.

3.31 COMPLIANCE WITH LAWS AND REGULATIONS

- 3.31.1 Contractor must keep informed of governmental regulations that may affect the Work. Contractor must observe and comply with, and must cause all agents, employees, Subcontractors and Suppliers to observe and comply with said regulations. Contractor shall hold harmless and indemnify Owner and all its officers, employees and consultants against any liability or claim arising from or based upon the violation of any such regulations by Contractor, its agents, employees, representatives or Subcontractors and Suppliers.
- 3.31.2 This Contract is a Type I Contract, subject to the Resolution of Contracting Principles adopted by the Board of Supervisors on October 28, 1997. Accordingly, the Contractor must comply with all of the following:
 - .1 Contractor must, during the term of this Contract, comply with all applicable federal, state, and local rules, regulations, and laws.
 - .2 Contractors must maintain financial records adequate to show that County funds paid pursuant to the Contract were used for purposes consistent with the terms of the Contract. These records must be maintained during the term of this Contract and for a period of three (3) years from the termination of this Contract or until all Claims, if any, have been resolved, whichever period is longer, or longer if otherwise required pursuant to other provisions of this Contract.
- 3.31.3 The failure of the Contractor to comply with Document 00700 - Sub-Part 3.31.2 or any portion thereof may be considered a material breach of this Contract and may, at the option of the Owner, constitute a basis for the termination of the Contract. The Contractor will be furnished reasonable notice of any intended termination based on noncompliance with Document 00700 - Sub-Part 3.31.2, in accordance with Article 2.

3.32 TAXES, UTILITIES, PERMITS, AND FEES

- 3.32.1 Taxes: Contractor must pay any or all taxes imposed by Federal, State, or local governments, that were legally enacted as of the Bid date or subsequently enacted during the Contract Time, including but not limited to Federal excise tax and all State and local sales and use taxes. Owner will not furnish any tax exemption certificate or any document designed to exempt Contractor from payment of any tax on labor, services, materials, transportation, or any other items provided by Contractor pursuant to the Contract Documents.
- 3.32.2 Utilities: Unless otherwise stated in the Job Order, Contractor must arrange and pay for utility companies to provide and install permanent utility services and metering devices. Contractor must also pay for all utility usage charges until Owner's Authorized Representative recommends final Acceptance of the Work to the Board of Supervisors.
- 3.32.3 Permits & Fees: Contractor must obtain and pay for all building permits, encroachment permits, and all other permits and governmental fees, licenses, and inspections necessary for the proper execution and completion of the Work, unless otherwise provided in the Job Order.
 - .1 Contractors must give all necessary notices and comply with all laws, ordinances,

rules, regulations, and lawful Orders relating to the Work, and to the preservation of the public health and safety, unless otherwise Directed by Owner's Project Manager.

- .2 If Contractor performs any work contrary to such laws, ordinances, Orders, rules and regulations, Contractor shall bear all costs attributable thereto.
- .3 Contractors will not be charged for any permit required by County ordinances and issued by the County of Santa Clara.
- .4 Contractors will be reimbursed for the direct cost of any required permits through a Non-Prepriced item with no mark-up.

- 3.32.4 Royalties & License Fees: Contractor must pay all royalties and license fees, and must defend all suits or claims for infringement of any patent rights and save Owner and its Consultants on this Project harmless from loss on account thereof.

3.33 EQUAL OPPORTUNITY REQUIREMENTS

- 3.33.1 The County of Santa Clara is an equal opportunity employer. Contractor must comply with all applicable Federal, State, and local laws and regulations including Santa Clara County's equal opportunity requirements. Such laws include but are not limited to the following: Title VII of the Civil Rights Act of 1964 as amended; Americans with Disabilities Act of 1990; The Rehabilitation Act of 1973 (§503 and 504); California Fair Employment and Housing Act (Government Code §12900 et seq.); California Labor Code §1101 and §1102. Contractor must not discriminate against any Subcontractor, employee, or applicant for employment because of age, race, color, national origin, ancestry, religion, sex/gender, sexual orientation, mental disability, physical disability, medical condition, political beliefs, organizational affiliations, or marital status in the recruitment, selection for training including apprenticeship, hiring, employment, utilization, promotion, layoff rates of pay or other forms of compensation.

3.34 PATENTS

- 3.34.1 Contractor must assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated in the Work, and must indemnify and hold harmless Owner and Owner's authorized representatives and Consultants, from all suits at law, or actions of every nature for, or on account of the use of any patented materials, equipment, devices, or processes.

3.35 NON-WAIVER

- 3.35.1 Neither Acceptance of, nor payment for the Work or any part thereof, nor any extension of the Contract Time, nor any possession or use by Owner, will operate as a waiver of any of the provisions of the Contract, nor will a waiver of any breach of the Contract be held to be a waiver of any other or subsequent breach.
- 3.35.2 Conformance with any provisions in one part of the Contract Documents will not relieve Contractor from its responsibilities as set forth elsewhere in the Contract Documents.

3.36 UNFAIR BUSINESS PRACTICES CLAIMS

- 3.36.1 The Contractor's attention is directed to the following provisions of the Public Contract Code §7103.5 and Government Code §4550 through §4554, which are applicable to the Contractor and its Subcontractors: In entering into a public works contract or a subcontract to supply goods, services or materials pursuant to a public works contract, the Contractor or Subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have pursuant to Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or pursuant to the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders Final Payment to the contractor, without further

acknowledgment by the parties.

3.37 STANDARDS FOR WORK & MATERIALS

- 3.37.1 Work: The Work must comply with all governing codes, including standards referred to by such codes and the Contract Documents, except said requirements are considered as minimum. When the Contract Documents call for materials of higher quality or performance, or larger sizes or capacity than required by said codes or standards, the requirements of the Contract Documents take precedence. This requirement does not operate to allow deviations from minimum code requirements.
- 3.37.2 Material: Material specified by reference to the number, symbol or title or a specific standard, such as a commercial standard, a Federal specification, a trade association standard, or other similar standard, must comply with the requirements thereof.
- 3.37.3 References: Standards referred to, except as modified in the Contract Documents, have full force and effect as though printed in the Contract Documents. Standards are not repeated, because Contractor and its Subcontractor and Suppliers are expected to be familiar with requirements governing or applicable to their work.
- 3.37.4 Intent: The Work of this Contract includes the furnishing of all labor, materials, equipment, tools, supervision, services, and all other items needed to complete all the Work in accordance with the requirements of the Contract Documents. The Work encompasses all materials, labor, etc., not specifically mentioned in nor depicted by the Contract Documents, but that can reasonably be inferred as being necessary for complete performance of the Work.

3.38 CONFORMITY WITH CONTRACT DOCUMENTS & ALLOWABLE DEVIATIONS

- 3.38.1 The Contract Documents show such information as reasonably needed to convey a comprehensive idea of the Work contemplated. All authorized alterations affecting the requirements and information in the Contract Documents must be in writing.
- 3.38.2 Work and materials must conform to the lines, grades, cross sections, dimensions, and material requirements, including tolerances, shown on the Drawings, or indicated in the Project Manual. Although measurement, sampling, and testing may be considered evidence as to such conformity, Owner's Authorized Representative is the sole judge as to whether the Work or materials deviate from the requirements of the Contract Documents, and the decision of the Owner's Authorized Representative as to any allowable deviation therefrom is final.
- 3.38.3 Contractor must follow any required sequence of operations set forth in the Contract Documents.

3.39 CONTROL OF MATERIALS

- 3.39.1 General Requirements
- .1 Contractor must not purchase any materials, supplies, or equipment for the Work subject to any security interest or subject to a conditional sale or other agreement by which any interest therein or in any part thereof is retained by the seller or the Supplier.
 - .2 Contractor warrants free and clear title to all material, supplies, and equipment Installed or incorporated in the Work and agrees upon Completion of the Work to deliver the premises, together with all improvements and appurtenances constructed or placed thereon by Contractor, to Owner free from any claims, liens, or charges of any kind. Contractor nor any person, firm, or corporation furnishing materials, labor or services for any Work has the right to place a lien upon the premises or any improvement or appurtenances therein.
 - .3 Nothing contained herein shall defeat or impair the right of persons furnishing

materials, labor, or services covered by any bond provided by Contractor for their protection, or any rights pursuant to any law permitting such persons to look to funds due Contractor held by Owner.

- .4 **The provisions of this Document 00700.3.39.1, "General Requirements", must be inserted in all Subcontracts and material contracts** and notice of its provisions must be provided to all persons furnishing material for the Work when no formal contract is entered into for such material.

3.39.2 Source of Supply & Quality of Materials

- .1 Contractor must furnish all materials required to complete the Work, except materials that are designated in the Contract Documents to be furnished by Owner, or furnished by Owner in the performance of extra Work.
- .2 Contractor must incorporate in the Work only materials conforming to the requirements of the Contract Documents.
- .3 All materials Provided must be new, except as may be specifically provided in the Contract Documents.
- .4 Inspections and tests may be made by Owner or its designated representatives, but such inspections and tests shall not be considered as a guaranty of acceptance of such material nor of continued acceptance of material offered as similar to that which may have been inspected or tested.
- .5 All Owner performed inspections and tests are for Owner's benefit and are not a substitute for Contractor's own quality control program.

3.39.3 Owner Furnished Items

- .1 Owner Furnished Items will be available at the dates and at the locations designated in the Job Order.
- .2 Contractor is responsible for all items furnished by Owner in Contractor's custody. Once Owner Furnished Items are furnished to Contractor, loss or damage from any cause whatsoever must be remedied by Contractor who will be liable for the cost of replacing Owner Furnished Items and such costs may be deducted from any monies due or to become due to Contractor.

3.39.4 Foreign Materials & Assemblies

- .1 Contractor must deliver materials or assemblies which are Manufactured or Fabricated outside of the United States ("Foreign Materials & Assemblies") to a location in Santa Clara County unless otherwise Directed in the Contract Documents, where they must be retained for sufficient time to permit inspection, sampling, and testing.
- .2 Contractor, at no cost to Owner, must supply all facilities and arrange for all testing required by Owner. All testing by Contractor is subject to witnessing by Owner.
- .3 Contractor must furnish Owner a Certificate of Compliance from the Manufacturer or fabricator of any Foreign Materials or Assemblies in accordance with Document 00700.3.39.7, "Certificate of Compliance." In addition, Contractor must furnish certified mill test reports clearly identifiable to the lot of material where required in the Project Manual or otherwise requested by Owner.
- .4 Use of steel Manufactured outside the United States is restricted to steel which can be positively identified as having been rolled at the heat for which certified mill tests can be produced.
- .5 Where Manufactured materials requiring mill test reports or Fabricated assemblies involving the welding of steel for structural steel members or the casting and

prestressing of precast prestressed concrete members are to be performed outside the United States, such Manufactured materials or Fabricated structural members shall be provided only from those foreign Manufacturers and Fabricators who have previously established, to Owner's satisfaction, that they have the experience, knowledge, trained personnel, quality controls, equipment, and other facilities required to produce the quality and quantity of Work required.

.6 At Owner's option, prequalification of the plant and Manufacturer or Fabricator will be established either by the submission of detailed written proof thereof or through in-plant inspection by representatives of the Owner, or both.

- .7 Contractor must make written application to Owner for approval for foreign Fabrication at the earliest possible time but in no case later than with the Contractor's Job Order Proposal. The application must list the specific units or portion of Work that will be Fabricated outside of the United States.

- .8 Reserved

- .9 All documents pertaining to the Contract, including but not limited to, correspondence, Bid Documents, Shop Drawings, Product Data, Record Documents, Requests for Information, and all other Submittals and data must be written in the English language and all numerical data must use the foot-pound-second system of measurement.

- .10 Attention is directed to Document 00700.7.3, "Liquidated Damages." Contractor is not entitled to an extension of Job Order Completion Time for acts or events occurring outside of the United States, and it is Contractor's responsibility to deliver Foreign Materials & Assemblies into the continental United States in sufficient time to permit timely receipt at the Project Site.

3.39.5 Defective Materials

- .1 All materials that Owner has determined do not conform to the requirements of the Contract Documents will be rejected whether in place or not. Contractor must remove all rejected materials immediately from the Project Site, unless otherwise permitted by Owner's Project Manager. No rejected material, or repaired defective material, shall be used in the Work, without Owner's written acceptance.
- .2 Upon Contractor's failure to comply promptly with any Order of Owner made pursuant to the provisions in this Document 00700.3.39.5, "Defective Materials", Owner has the right and authority to cause the removal and replacement of rejected material and to deduct the cost thereof from any monies due or to become due to Contractor.

3.39.6 Inspection at Source of Supply

- .1 Owner may inspect the production of any material, or the Manufacture of any product at the source of supply. Such inspection, however, will not be undertaken until Owner is assured of the cooperation and assistance of both Contractor and producer. Owner or its authorized representatives shall have free entry at all times to the parts of the plant Manufacturing or producing such materials. Adequate facilities must be provided free of charge to make the necessary inspections. Owner assumes no obligation to inspect materials at source of supply.

3.39.7 Certificate of Compliance

- .1 Owner may permit the use of certain materials or assemblies before sampling and testing if accompanied by a Certificate of Compliance stating that the materials comply in all respects with the requirements of the Contract Documents. The Manufacturer of the material or assembly must sign the Certificate of Compliance. A Certificate of Compliance must be submitted with each lot of material delivered to the Project and the lot so certified must be clearly identified in the Certificate of Compliance.
- .2 Owner may sample and test all materials used pursuant to a Certificate of Compliance

at any time. The fact that material is used pursuant to a Certificate of Compliance does not relieve Contractor of responsibility for incorporating material in the Work which conforms to the requirements of the Contract Documents; and any such material not conforming to such requirements will be subject to rejection whether in place or not.

- .3 Owner reserves the unrestricted right to refuse to permit the use of material pursuant to a Certificate of Compliance.
- .4 Owner will set the form of the Certificate of Compliance and its disposition.

3.39.8 Testing

- .1 Contractor must furnish without cost to Owner, adequate samples of all materials necessary for testing.
- .2 Tests must be by a Laboratory accepted by Owner and paid for by Contractor.
- .3 Contractor must pay all costs of all tests.
- .4 If a test fails, Contractor must pay for subsequent tests until passage.
- .5 The Laboratory must submit certified copies of all test reports directly to Owner and Contractor by 10 a.m. of the second workday after performing each test.

3.39.9 Property Rights in Materials

- .1 Nothing in the Contract Documents shall be construed as vesting in Contractor any right of property ownership in the materials used in the Work after they have been attached or affixed to the Work or the soil, or after payment has been made for ninety percent (90%) of the value of materials delivered to the site of the Work, or stored subject to or within the control of Owner. All such materials become the property of Owner upon being so attached or affixed or upon payment of ninety percent (90%) of the value of material delivered to the Work site or stored subject to or within the Owner's control.

END ARTICLE 3

ARTICLE 4 — SUBCONTRACTORS**4.1 SUBLETTING AND SUBCONTRACTING**

The Contractor must designate Subcontractors and the Subcontractor Value with each Job Order Proposal. The Contractor is required to post all Job Order Detailed Scopes of Work and associated subcontractor trade lists to the Gordian 'Tools for Contractors and Subcontractors' website within three working days of receiving a Request for Job Order Proposal and Detailed Scope of Work from the Owner.

- 4.1.1 The Contractor must adhere to the rules governing subcontracting as set forth in the Subletting and Subcontracting Fair Practices Act, commencing with Public Contract Code §4100 for Subcontractors listed as part of each Job Order Proposal. Subcontractor substitutions must be in accordance with provisions of the Subletting and Subcontracting Fair Practices Act, beginning with Public Contract Code §4100. Violations of this Act by the Contractor may subject the Contractor to penalties and disciplinary action pursuant to the Subletting and Subcontracting Fair Practices Act.
- 4.1.2 The Contractor is responsible for all Work performed pursuant to the requirements of the Contract Documents, including Work Subcontracted to others. All persons engaged in the Work of the Project are the responsibility of and subject to the control of the Contractor.
- 4.1.3 No Subcontractor will be recognized as such, and all persons engaged in the Work will be considered as employees of Contractor who is responsible for their work, which is subject to all the provisions of the Contract Documents.
- 4.1.4 When any Subcontractor fails to execute a portion of the Work in a manner satisfactory to Owner, the Contractor must remove such Subcontractor immediately upon written notice from Owner, and the Subcontractor must not again be employed on the Project.
- 4.1.5 Although the Project Manual is divided into Documents, Articles, Parts, Sub-Parts and Divisions, Sections, and Paragraphs it is not intended to provide a basis for the Bidding, assignment, or performance of the Work. Contractor is fully responsible for assigning the Work to the various Subcontractors, Suppliers and vendors that will be bidding or performing the Work. The Owner will not entertain requests to arbitrate disputes among Subcontractors or between the Contractor and Subcontractor(s) concerning responsibility for performing any part of the Work.

4.2 SUBCONTRACTUAL RELATIONS

- 4.2.1 By an appropriate agreement, Contractor shall require each Subcontractor and Supplier, to the extent of that Subcontractor's or Supplier's Work, to be bound to Contractor by the terms of the Contract, and to assume toward Contractor all the obligations and responsibilities which Contractor, by these Contract Documents, assumes toward Owner.
- 4.2.2 Said subcontracts and agreements must preserve and protect Owner's rights pursuant to the Contract with respect to the Subcontractor's or Suppliers Work so the subcontracting thereof will not prejudice such rights. Contractor must require each Subcontractor to enter into similar agreements with its Sub-subcontractors.
- 4.2.3 Contractor must make available to each proposed Subcontractor and Supplier, prior to execution of the subcontract or agreement, copies of the Contract Documents to which the Subcontractor or Supplier will be bound and, upon written request of the Subcontractor or Supplier, identify to the Subcontractor or Supplier any terms and conditions of the proposed subcontract or agreement that may be at variance with the Contract. Each Subcontractor must similarly make copies of all such Documents available to its proposed Sub-subcontractors.

4.3 CONTROL OF SUBCONTRACTORS

- 4.3.1 Contractor must:

- .1 Schedule and coordinate the Work of all Subcontractors;
- .2 Instruct all Subcontractors to consult with other Subcontractors to ascertain the locations of their various materials and to familiarize themselves with their own material locations, making such changes as required to obtain the best results;
- .3 Instruct all Subcontractors to schedule their Work and cooperate with the other Subcontractors to avoid delays, interferences, and unnecessary work, to conform to the schedule of operations as indicated in the Official Progress Schedule and make Installations when and where directed.
- .4 Make all necessary changes, including removing and reinstalling of materials, at their sole expense if they fail to check with other Subcontractors, and their Installed Work is later found to interfere with Work of other Subcontractors.
- .5 Follow up to ensure that all Subcontractors Install their Work when and where directed.

END ARTICLE 4

ARTICLE 5 — CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS**5.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND AWARD SEPARATE CONTRACTS**

- 5.1.1 Owner has the right to perform work at any time related to the Project with its own forces and/or to Award separate contracts in connection with other portions of the Project or other work on the site pursuant to these or similar conditions of this Contract.
- 5.1.2 When separate contracts are Awarded for different portions of the project or other work on the site, the term contractor in the Contract Documents in each case means the contractor who executes each separate Owner/Contractor Agreement.

5.2 COOPERATION WITH OWNER'S FORCES AND OTHER CONTRACTORS EMPLOYED BY OWNER

- 5.2.1 Unless otherwise indicated in the Contract Documents, Owner will provide for the coordination of the work of Owner's own forces and of each separate contractor with the Work of the Contractor, who must cooperate therewith as provided herein.
- 5.2.2 When Contractor and one or more other contractors are employed by Owner on related or adjacent work, Contractor must not cause any unnecessary delay or hindrance to the other contractors.
- 5.2.3 If the performance of the Work of this Contract is likely to be interfered with by the simultaneous performance of the work of some other separate contract or contracts, the Owner will decide which contractors or Contractor may proceed.

5.3 MUTUAL RESPONSIBILITY

- 5.3.1 The Contractor must cooperate fully with Owner and all separate contractors including utility companies with regard to the execution of their Work as follows:
 - .1 The Contractor must cooperate fully with Owner and all separate contractors with regard to introduction and storage of their materials and equipment.
 - .2 The Contractor must coordinate with Owner, all separate contractors, and all utility companies with regard to construction scheduling, sequence of operations and site access, all subject to approval of the Owner. Contractor must include activities in Contractor's Progress Schedule for all on-site activities performed by utility companies.
 - .3 The Contractor must coordinate and accommodate the concurrent installation of inserts, hangers, blocking, and all other items or embeds to be installed by others within or upon the Contractor's Work. The Contractor must coordinate and schedule the concurrent installation of these items in such a manner to cause no Critical Path delay to its Work or the work of others.
 - .4 The Contractor must include interface flags in its Progress Schedule, monitor the schedule and progress of each other contractor whose work affects its Work, and is responsible for giving timely written notice to Owner of potential problems or interface issues.
 - .5 The Contractor must properly connect the Work to the work of Owner or the separate contractors.
 - .6 The Contractor must inspect the work of Owner or other contractors affecting the Work and promptly report to the Owner in writing irregularities or defects in the separate work that render it unsuitable for reception or connection of the Work.
 - .7 Failure of the Contractor to inspect and report constitutes acceptance of the other work as fit and proper to receive the Work, except as to defects that may develop in the other work after execution of the Contractor's Work.

5.4 DISPUTES BETWEEN SEPARATE CONTRACTORS

- 5.4.1 Contractor is responsible to the other contractors for all damage to the other contractors' work, persons, or property caused by Contractor's operations, and for any loss suffered by such other contractors caused by Contractor's own unnecessary delays or failure to finish Work within the Job Order Completion Time(s) specified. Contractor must indemnify and hold harmless Owner for any damages and losses caused by Contractor in connection with this Document 00700.5, "Construction by Owner or by Separate Contractors."
- 5.4.2 Should the Contractor cause damage to the work or property of any separate contractor on the Project, the Contractor must, upon due notice, resolve the claim directly with such other contractor. If such separate contractor initiates legal action or alternative dispute resolution (ADR) process, Owner will notify the Contractor who must defend Owner in such proceedings at the Contractor's sole expense.
- 5.4.3 If a monetary obligation results from any lawsuit or ADR proceeding against the Owner, the Contractor is solely responsible for satisfying such obligation. In addition, the Contractor must pay Owner for all attorneys' fees, and court costs as well as administrative, professional, consultant, inspection, testing and other consulting as service costs that Owner has incurred.
- 5.4.4 The Contractor must promptly remedy damage wrongfully caused by the Contractor to any completed or partially completed construction or to any property of Owner or separate contractors.

5.5 OWNER'S RIGHT TO CLEAN UP

- 5.5.1 If a disagreement or Dispute arises among the Contractor, separate contractors and/or Owner as to the responsibility pursuant to their respective contracts for maintaining the Project Site and surrounding areas free from waste materials and rubbish, Owner may clean up or cause to be cleaned up the waste, materials, and rubbish and allocate the costs among those responsible, and deduct each contractor's share from progress payments due or to become due to each Contractor.

END ARTICLE 5

ARTICLE 6 — CHANGES IN THE WORK**6.1 GENERAL**

- 6.1.1 Owner may at any time, without notice to the Sureties, by written Order, make changes in the Work within the general scope of the Job Order, including but not limited to additions, deletions, or other revisions, and in the method and manner of performing the Work. Such changes will be Ordered in either of two ways, by:
- .1 **Field Modification**, which is a written instruction, clarification or additional information communicated by Owner to Contractor Directing or Authorizing a minor adjustment in the Work or the requirements of the Contract Documents that does not change the Job Order Price or Job Order Completion Time; or by
 - .2 **Supplemental Job Order**, which is a written amendment to the Job Order, changing the Work, and/or the Contract Documents, and/or the Job Order Price, and/or the Job Order Completion Time, Approved by the Owner's Authorized Representative.
- 6.1.2 The procedures for the issuance of such a Supplemental Job Order are the same as the procedures for the issuance of the original Job Order detailed in Supplementary General Conditions section 2.2. Any additions or deletions are therefore calculated by using the appropriate item in the Construction Task Catalog, times the quantity to be adjusted, times the appropriate Adjustment Factor. Time will be adjusted as appropriate for the Detailed Scope of Work.
- 6.1.3 Adjustment of Job Order Completion Time: There will be no adjustment of the Job Order Completion Time for changes that do not impact the Critical Path of the Official Progress Schedule. Contractor must document for the Owner how the change affected the Critical Path of the Official Progress Schedule and how the change increased (or decreased) the Job Order Completion Time to complete the Work.
- 6.1.4 Equipment on the Work
- .1 The rental time to be paid for equipment already on the Project Site will be the time the equipment is in operation on the Work being performed, and in addition, will include the time required to move the equipment to the location of the Work and return it to the original location, except that moving time will not be paid for if the equipment is used at the Project Site for activities besides the Supplemental Job Order Work.

6.2 RESERVED**6.3 DELETED WORK**

- 6.3.1 When Work is deleted, the Owner is entitled to a credit for the deleted Work.
- 6.3.2 The adjustment to the Job Order Price for deleted Work will be reflected in the Supplemental Job Order.
- 6.3.3 If Contractor has ordered acceptable material for the deleted Work before the date of notification of such deletion by Owner, and if orders for such material cannot be canceled, such material will be paid for by Owner at Contractor's actual cost. In such case, the material paid for will become Owner's property and Owner will pay the actual cost of any further handling. If the material is returnable to the vendor and if Owner so Directs, Contractor must return the material and Owner will pay the actual costs of returning the material, including reasonable and verifiable handling and restocking charges.
- 6.3.4 The actual costs or charges to be paid by Owner to Contractor for deleted Work will be computed in the same manner as the original Job Order with negative quantities.

6.4 DIFFERING SITE CONDITIONS

- 6.4.1 Contractor must immediately, and in any event no later than twenty-four (24) hours after discovery, and before such conditions are disturbed, notify Owner in writing of:
- .1 Subsurface or latent physical conditions at the Project Site which Contractor asserts differ materially from those indicated in the Contract Documents; or
 - .2 Unknown physical conditions at the Project Site, of an unusual nature, which Contractor asserts differ materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract.
- 6.4.2 Owner will promptly investigate the conditions. If Owner finds that such conditions do materially differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the Work pursuant to this Contract, whether or not changed as a result of such conditions, an equitable adjustment will be made by the issuance of a Supplemental Job Order.
- 6.4.3 Contractor has no right to an adjustment in Job Order Price or the Job Order Completion Time pursuant to this Document 00700.6.4, "Differing Site Conditions", unless Contractor submitted the notice required in Document 00700 - Sub-Part 6.4.1, except that Owner may extend the notification time upon Contractor's written request in order to obtain additional relevant information.
- 6.4.4 Contractor has no right to an adjustment in Job Order Completion Time or Job Order Price after accepting Final Payment pursuant to this Contract.

6.5 RESERVED**6.6 CONTRACTOR'S ACCEPTANCE OF JOB ORDERS**

- 6.6.1 Contractor's written acceptance of a Job Order or Supplemental Job Order constitutes final and binding agreement to the provisions thereof and a waiver of all Claims in connection therewith, whether direct, indirect, or consequential. A general statement that the Contractor reserves their right to Claim additional time and/or money at a future date for Work associated with the Job Order is not permitted.

6.7 RESERVED**6.8 RESERVED**

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END ARTICLE 6

ARTICLE 7 — TIME**7.1 JOB ORDER COMPLETION TIME**

- 7.1.1 Time is of the essence of this Contract.
- 7.1.2 Contractor must complete the entire Work of the Job Order Project and designated portions thereof within the Job Order Completion Time (s) stated in the Job Order, or any authorized extension(s) thereof.
- 7.1.3 Failure of Contractor to include an element of the Work required for performance of this Contract in the Official Progress Schedule, or inaccuracy in the Official Progress Schedule, does not relieve Contractor from responsibility for accomplishing the Work within the Job Order Completion Time(s) designated in the Job Order and will not constitute grounds for delay in completion of the Work or designated portion on the Work.
- 7.1.4 The Contractor must provide an adequate workforce, materials of proper quality, and equipment to properly execute the Work and to ensure completion of each part of the Work in with in the Job Order Completion Time.

7.2 NOTICE TO PROCEED

- 7.2.1 Owner's Notice to Proceed will state the first Day of the Contract Time.
- 7.2.2 Notwithstanding other provisions of the Contract Documents, Owner is not obligated to accept or to pay for Work Provided by the Contractor prior to the first Day of the Job Order Completion Time designated in the Job Order Contract Notice to Proceed, whether or not Owner has knowledge of the furnishing of such Work.
- 7.2.3 Reserved
- 7.2.4 The Contractor will not be allowed on the site of the Work until the Contractor's Contract Bonds and insurance comply with requirements of the Contract Documents.

7.3 LIQUIDATED DAMAGES

- 7.3.1 All Work and designated portions of the Work must be completed and ready for full use by Owner on, or prior to, the Job Order Completion Time(s) for the Work or designated portions of the Work specified in the Job Order or any authorized extension thereof.
- 7.3.2 If Contractor fails to complete the Work or designated portions of the Work within the Job Order Completion Time(s) as agreed upon based on the Approved Work Schedule, or any authorized extension thereof, it is understood and agreed that Owner will suffer damage. When Liquidated Damages are specified in the Job Order, the parties agree that it is impractical and extremely difficult to determine the amount of actual damage, it is agreed that Contractor will pay as fixed and liquidated damages, and not as a penalty, the sums set forth in the Job Order for each and every calendar Day of delay until the Work is completed, and Contractor and its Sureties are liable for the amount thereof. If Liquidated Damages are not specified in the Job Order, Owner may collect actual damages from contractor for late performance of the work.
- 7.3.3 Contractor acknowledges that the Liquidated Damages amounts set forth in the Job Order constitute a reasonable estimate of the damages Owner will actually suffer every Day during which completion of the Work or designated portion of the Work is avoidably delayed beyond the expiration of the Job Order Completion Time(s) designated in the Contract Documents Approved Work Schedule.
- 7.3.4 Owner may withhold actual or Liquidated Damages (per Job Order) from payments due to Contractor as such damages accrue, or, at Owner's discretion, withhold Liquidated Damages from any payments that may become due, including retention and Final Payment (pursuant to California Government Code §53069.85).

7.4 ACCELERATION

- 7.4.1 Owner reserves the right to Direct the Contractor to accelerate performance of the Work or any portion of the Work by Supplemental Job Order. No action or direction of Owner other than an express written Order to accelerate performance of the Work shall be construed by the Contractor to be direction to accelerate the Work.
- 7.4.2 If the Contractor believes that some action or inaction on the part of Owner constitutes an acceleration directive, the Contractor must immediately notify the Owner in writing that the Contractor considers the actions or inaction an acceleration directive. This written notification must detail the circumstances of the acceleration directive.
- 7.4.3 Contractor must keep Daily cost and other Project records related to the Owner's acceleration Directive separate from other Project costs and records and must submit a written Daily record of acceleration cost to Owner at the end of each Day.
- 7.4.4 Allowable labor costs are limited to overtime or shift premium costs. Allowable equipment costs are only the cost of added equipment mobilized to the site to accomplish the accelerated Work effort.

7.5 INSPECTIONS AND CERTIFICATION

- 7.5.1 When Contractor believes the Work is complete, Contractor must submit to the Owner two (2) copies of a written certification that the Work is complete and request inspection by the Owner.
- 7.5.2 Within 7 Days of receipt of the request, the Owner will determine if the Work is sufficiently complete to be inspected and inspect the Work and prepare a list of deficiencies in the completed Work (Deficiency/Punch List.)
- 7.5.3 If the Owner determines that Work is not sufficiently complete to be inspected, the Owner will issue a notice to the Contractor stating the Work is not sufficiently complete to be inspected. When Contractor believes the Work is complete, Contractor must request another Inspection, which will be processed pursuant to Document 00700 - Sub-Part 7.5.2.
- 7.5.4 When the Work including correction of all deficiencies identified in the Owner's Deficiency List is acceptable to the Owner, the Owner will send a letter acknowledging Completion to the Contractor. The Completion letter will identify the actual date of Completion.
- 7.5.5 Liquidated Damages for late completion of the Work will cease to accrue on the date of actual Completion identified in the Owner's Completion letter. Such letter will not constitute Acceptance but will establish conformity with the requirements of the Contract Documents for the Work and will serve to establish the date for cessation of the accrual of the Liquidated Damages.
- 7.5.6 If Contractor requests a third inspection of Work that is still incomplete, Owner may charge Contractor for the cost of inspection, and may deduct the amount from payments due or that become due to Contractor.

7.6 DELAY AND TIME EXTENSIONS

- 7.6.1 The Owner will consider extensions to the Job Order Completion Time(s) for the following reasons only if they affect the Critical Path of the Official Progress Schedule.
 - .1 Acts of God (as defined in public contract code §7105(b)(2)), or of the public enemy, acts of Government, acts of Owner, fires, floods, epidemics, quarantine restrictions, sanctioned strikes, freight embargoes, unusually severe weather, or delays of Subcontractors or Suppliers arising from unforeseeable causes beyond the control

and without the fault or negligence of both Contractor and such Subcontractors or Suppliers.

- .2 Delays in progress due to an act of neglect by Owner only for the amount of delay time that occurs after Contractor has notified Owner in writing and the Owner has had a reasonable time to respond to the notification.
- .3 An Approved Supplemental Job Order that by the issuance of this Supplemental Job Order designates a new Job Order Completion Time.
- .4 Adjustments to the Contract Time(s) due to weather will be allowed only for unusually severe weather or resulting site conditions that affect the progress of activities on the Critical Path of the Official Progress Schedule.
- .5 No Job Order Completion Time extension for rain will be allowed for any month until the number of Days of rain for that month as indicated below has been exceeded. Rainfall will be considered unusually severe only when the Days of rain (defined as more than one-tenth (1/10th) of an inch of rain per Day) in any month exceed the following number of Days of rain per month:

<u>Month</u>	<u>No. of Days</u>
January	10
February	9
March	7
April	3
May	1
June	0
July	0
August	0
September	3
October	7
November	9
December	10

- .6 Contractor must exercise due diligence in protecting the Work and the Work site from the adverse impacts of weather by:
 - .a taking appropriate preventative actions before anticipated inclement weather to protect the Work and Work site from the potential adverse effects of the weather;
 - .b taking corrective action during the inclement weather to protect the Work and Work site from the actual and potential adverse effects of the inclement weather; and
 - .c taking correction action after the inclement weather to remedy, prevent, and/or mitigate the negative impacts of the adverse weather on the Work and the Work site.
- 7.6.2 Within twenty-four (24) hours from the beginning of any Critical Path delay to the Official Progress Schedule, Contractor must notify Owner in writing of the causes of delay.
- 7.6.3 Within fourteen (14) Days from the end of any Critical Path delay to the Official Progress Schedule, Contractor must submit two (2) hard copies and electronic data files on Compact Disks, of all supporting information to validate the impact of the delay on the Job Order Completion Time.
- 7.6.4 Owner will ascertain the facts and the extent of the delay and adjust the Job Order Completion Time(s) for completing the Work when, in Owner's judgment, the facts justify an adjustment. Owner's determination is final and conclusive.
- 7.6.5 Delay and Contractor's entitlement for delay will be determined as follows:

-
- .1 The following definitions apply to Document 00700.7.6, "Delay and Time Extension":
 - .a **"Excusable Delay"** means any delay in the Work caused by conditions beyond the control and without the fault or negligence of the Contractor.
 - .b **"Excusable Non-Compensable Delay"** means any Excusable Delay not solely the responsibility of the Contractor, such as, earthquake, fire, flood, cyclone, and inclement weather conditions that caused a delay of Work on the Critical Path. The financial inability of the Contractor or any Subcontractor, Sub-subcontractor or Supplier, or the default of any Subcontractor, Sub-subcontractor or Supplier is not a condition beyond the Contractor's control. An Excusable Non-Compensable Delay may entitle the Contractor to an extension of the Job Order Completion Time, but will not entitle the Contractor to any adjustment of the Job Order Price.
 - .c **"Excusable Compensable Delay"** means any Excusable Delay caused by a delay of the Work on the Critical Path for which the Owner is solely responsible and which delay is unreasonable given the circumstances and not within the contemplation of the parties. An Excusable Compensable Delay may entitle the Contractor to an extension of the Job Order Completion Time and an adjustment of the Job Order Price.
 - .d **"Non-Excusable Delay"** means any delay in the Work resulting from causes within the control of the Contractor or due to the fault or negligence of the Contractor or its Subcontractors or Suppliers. A Non-excusable Delay shall not entitle the Contractor to an extension of the Job Order Completion Time or an adjustment of the Job Order Price.
 - .2 Whenever the Contractor foresees any delay in the prosecution of the Work, the Contractor must notify the Owner in writing of the potential delay. Such notification must specify with detail the cause asserted by the Contractor for the potential delay and provide a description of the anticipated effect of the potential delay on the most recent Updated Official Progress Schedule including identification of the activity numbers of the affected activities. Failure of the Contractor to submit such a notice within seven (7) Days after recognition of any incident or event giving rise to the potential delay will constitute a waiver by the Contractor of any request for extension of the Job Order Completion, and no extension of the Job Order Completion Time will be granted as a consequence of such delay.
 - .3 Within twenty-four (24) hours from the beginning of any Critical Path delay to the Official Progress Schedule, Contractor must submit written notice to the Owner of the delay. The notice must include identification of the affected activities, evidence of the cause of the delay, and within 14 Days of the end of the Critical Path delay, Contractor must submit a Time Impact Analysis per Document 00700.7.6.6, "Time Impact Analysis."
 - .4 Owner has no obligation to consider any request for extension to the Job Order Completion Time(s) unless the Contractor satisfies the requirements set forth in the Contract Documents for providing notice of potential delay and submission of a Time Impact Analysis establishing the impact of the delay on the Critical Path of the Official Progress Schedule.
 - .5 Owner is not responsible to the Contractor for any constructive acceleration due to Contractor's failure to comply with the submission and justification requirements of the Contract Documents for Job Order Completion Time extension requests. The Contractor's failure to perform in accordance with the Official Progress Schedule shall not be excused because the Contractor has submitted Job Order Completion Time extension requests, unless and until Owner Approves such requests.
 - .6 Extension to the Job Order Completion Time(s) will not be allowed for delays on paths

of activities containing Total Float Time per the latest Updated Official Progress Schedule, providing such delay does not exceed the Total Float Time(s) on paths of activities on the latest Updated Official Progress Schedule.

- .7 Any extension of Job Order Completion Time(s) granted the Contractor pursuant to this Document 00700.7, "Time", does not constitute a waiver by Owner of, nor a release of the Contractor from, the Contractor's obligation to perform the Work within the Job Order Completion Time(s) specified by the Contract Documents, as modified by the particular extension in question. Owner's decision to grant an extension of the Job Order Completion Time(s) due to one circumstance set forth in one request, shall not be construed as a grant of an extension for any other circumstance or the same circumstance occurring at some other time, and shall not be viewed by the Contractor as a precedent for any other request for extension of the Job Order Completion Time(s).
- .8 If Owner Orders the Contractor to suspend Work pursuant to Document 00700.2, "Administration of the Contract", the Contractor will not be entitled to any extension of the Job Order Completion Time(s), damages resulting from the suspension, unless the Contractor can establish that the suspension was Ordered without reasonable justification.

7.6.6 Time Impact Analysis

- .1 The time impact analysis must provide information justifying the request for extension of the Job Order Completion Time(s) and stating the extent of the adjustment requested for the alleged delay. Time impact analysis must be in form and content acceptable to the Owner and include, but not be limited to, the following:
 - .a Time impact analyses must be based on analyzing the Official Progress Schedule in effect at the time the alleged delay or impact first occurred.
 - .b The Contractor must present fragmentary Critical Path Method (CPM) type network windows (fragments) in time scaled precedent format, illustrating how Contractor proposes to incorporate the alleged delay into the Updated Official Progress Schedule in effect at the time the alleged delay or impact first occurred.
 - .c The Contractor must identify the activities that are proposed to be amended due to the alleged delay.
 - .d The Contractor must identify the preceding and succeeding activities in the Official Progress Schedule to which the fragment(s) is to be connected.

7.6.7 Weather Delays

- .1 Except for rain, if weather conditions are the basis for delays in the continuance or completion of the Work or any designated portion of the Work, Contractor must substantiate that the weather conditions were abnormal, based on the climatological data for the immediately preceding 10-year period, and could not have been reasonably anticipated.
- .2 Rain will not be considered abnormal unless it results in precipitation that exceeds the maximum daily precipitation for the cumulative number of Days per month indicated in Document 00700 - Sub-Part 7.6.1.
- .3 When the amount of rain is considered to be abnormal, extensions to the Job Order Completion Time(s) will be granted where the condition of the site, as determined by the Owner, is such that Contractor can perform no Work identified as Critical Path Work of the Official Progress Schedule.

7.6.8 Concurrent Delays

- .1 If an *Excusable Non-Compensable Delay* and an *Excusable Compensable Delay* operate to concurrently delay completion of the Work, the maximum extension of the Job Order Completion Time will be the number of Days from the commencement of the first delay to the cessation of the delay which ends last. Any adjustment of the Job Order Price will be in accordance with Document 00700.6, "Changes in the Work", and will be based only on the number of Days of *Excusable Compensable Delay*, less the duration of the concurrence.
- .2 If a *Non-excusable Delay* operates to concurrently delay completion of the Work with an *Excusable Non-Compensable Delay*, the maximum extension of the Job Order Completion Time will be the number of Days of concurrent delay plus the non-concurrent portion of the *Excusable Non-Compensable Delay*. The entire delay is non-compensable.
- .3 If a *Non-excusable Delay* operates to concurrently delay completion of the Work with an *Excusable Compensable Delay* the maximum extension of the Job Order Completion Time will be the number of Days of concurrent delay plus the non-concurrent portion of the *Excusable Compensable Delay*. Any adjustment of the Job Order Price will be in accordance with Document 00700.6, "Changes in the Work", and will be based only on the non-concurrent portion of the *Excusable Compensable Delay*.

END ARTICLE 7

ARTICLE 8 — PAYMENTS**8.1 GENERAL**

- 8.1.1 Unless otherwise expressly provided for, Contractor shall accept the Job Order Price provided in the Job Order as full payment for all Work.
- 8.1.2 Reserved
- 8.1.3 Payment will not be made for: materials wasted or disposed of in a manner not called for pursuant to the Contract; rejected material of any kind; material rejected after it has been placed; and material placed outside of the Work limits shown on the Drawings. No compensation will be made for disposing of rejected or excess material.
- 8.1.4 Whenever Owner performs any portion of the Work at Contractor's request, the cost thereof will be charged against Contractor, and may be deducted from any amount due or to become due from Owner.
- 8.1.5 Whenever immediate action is required to prevent impending injury, death, or property damage, and precautions which are Contractor's responsibility have not been taken, Owner may, after reasonable attempt to notify Contractor, cause such precautions to be taken and charge the cost thereof to Contractor, or may deduct such cost from any amount due or become due from Owner. Owner's action or inaction given such circumstances shall not be construed as relieving Contractor or its Surety from any liability for such circumstances.
- 8.1.6 Payment does not relieve Contractor from its Contract obligations pursuant to the Contract; nor is such payment to be construed to be acceptance of any of the Work. Payment shall not be construed as the transfer of ownership of any equipment or materials to Owner. Responsibility of ownership shall remain with Contractor who is obligated to store, protect, repair, replace, rebuild, or otherwise restore any fully or partially completed Work for which payment has been made; or replace any materials or equipment required to be Provided pursuant to the Contract which may be damaged, lost, stolen, or otherwise degraded in any way before Acceptance of the Work, except as provided in Document 00700.13.1, "Use Before Acceptance."

8.2 PROGRESS PAYMENTS

- 8.2.1 General: Contractor will be paid for the actual percentage of Work complete; however, in no event will the total payment exceed the total Job Order Price.
- 8.2.2 Reserved
- 8.2.3 Reserved
- 8.2.4 No payments will be made to Contractor until Contractor has met the requirements of Document 00700.3.24, "Official Progress Schedule."
- 8.2.5 Before submitting an Application for Payment (Final or Partial) the Contractor shall reach an agreement with the Project Manager concerning the percentage complete of the Detailed Scope of Work and the dollar value for which the Application for Payment may be submitted.
- 8.2.6 The Owner will make one payment for all Job Orders that have a Job Order Completion Time of 45 days or less, or a Job Order Price of \$25,000 or less. For all other Job Orders, the Owner may make partial, monthly payments based on a percentage of the work completed.
- 8.2.7 The Owner will establish the monthly pay period end dates. The Contractor must base their monthly progress payment period end dates on the dates established by the Owner.

- 8.2.8 Establishing the Work completed for each monthly request for payment is an estimate only, and no inaccuracy or error in said estimates operate to release Contractor or its Sureties from damages arising from such Work or from complying with each and every provision of the requirements of the Contract Documents. Owner has the right to correct any error made in any estimate for payment.
- 8.2.9 No such estimate or payment is required to be made when, in Owner's judgment, the Work is not proceeding in accordance with the requirements of the Contract Documents, or when in Owner's judgment the total value of the Work done since the last pay estimate amounts to less than \$500.
- 8.2.10 Contractor is not entitled to have any payment made for Work performed so long as any lawful or proper Order concerning the Work or any portion thereof given by Owner to Contractor shall not have been followed.

8.3 RETENTION

- 8.3.1 Owner will retain five percent (5%) of the estimated value of the Work done, and five percent (5%) of the value of the materials procured and delivered but not yet used, or procured and stored in accordance with Section 01290, "Payment Procedures", as part security for the fulfillment of the Contract requirements by Contractor, and will pay to Contractor, while carrying on the Work, the balance not retained, as aforesaid, after deducting therefrom all previous payments and all sums to be withheld or retained pursuant to the provisions of the Contract Documents or allowed or required by law. No such estimate or payment shall be construed to be an acceptance of any defective Work or improper materials.
- 8.3.2 Reserved
- 8.3.3 In addition to any remedy authorized by law, all or a portion of the Job Order Price due Contractor and considered necessary by the Owner to satisfy pending or reasonably anticipated suits or claims for damages, may be withheld by Owner until disposition has been made of such suits or claims.

8.4 TIMELY PROGRESS PAYMENTS & INTEREST

- 8.4.1 California Public Contract Code §20104.50 sets forth the Legislature's intent for prompt payment to contractors and establishes the following procedures for timely progress payments and payment of interest:
- .1 Any local agency which fails to make any progress payment within thirty (30) Days after receipt of an undisputed and properly submitted payment request from a contractor on a construction contract shall pay interest to the contractor equivalent to the legal rate set forth in subdivision (a) of §685.010 of the Code of Civil Procedure.
 - .2 Upon receipt of a payment request, each local agency shall act in accordance with the following:
 - .a Each payment request shall be reviewed by the local agency as soon as practicable after receipt for the purpose of determining that the payment request is a proper payment request.
 - .b Any payment request determined not to be a proper payment request suitable for payment shall be returned to the Contractor as soon as practicable, but not later than seven (7) Days, after receipt. A request returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reasons why the payment request is not proper.
 - .c The number of Days available to a local agency to make a payment without incurring interest pursuant to California Public Contract Code §20104.50 shall be reduced by the number of Days by which a local agency exceeds the seven Day

return requirement.

- .d A "progress payment" includes all payment due contractors, except that portion of the Final Payment designated by the contract as retention earnings.
- .e A payment request shall be considered properly executed if funds are available for payment of the payment request, and payment is not delayed due to an audit inquiry by the financial officer of the local agency.

8.5 SECURITIES IN LIEU OF RETENTION

- 8.5.1 Attention is directed to Document 00700.8.3, "Retention", relating to the retention of funds during Contract performance, and to the requirements of California Public Contract Code §22300.
- 8.5.2 Contractor may substitute securities in lieu of the retention specified in Document 00700.8.3, "Retentions." At Contractor's request and expense, securities equivalent to the amount retained shall be deposited with Owner, or with a State or Federally chartered bank as escrow agent, who shall pay such monies to Contractor upon satisfactory Completion of the Contract.
- 8.5.3 Securities eligible for substitution hereunder shall be limited to those listed in California Government Code §16430, or to bank or savings and loan certificates of deposit. Contractor must be the beneficial owner of any securities so substituted for monies retained and shall receive any interest or income thereon.
- 8.5.4 Any Escrow Agreement entered into pursuant to this Document 00700.8.5, "Securities in Lieu of Retention", must be executed on the form furnished in the Bid Documents, Document 00550, "Escrow Agreement For Securities In Lieu Of Retention". If the Contractor elects to receive interest on monies withheld in retention by a public agency, or to deposit securities in lieu of retention, the Contractor must, at the request of any Subcontractor performing more than five percent of the Contractor's total Bid, make that option available to the Subcontractor.

8.6 STOP NOTICES

- 8.6.1 Owner will comply with California Civil Code Title 15, Chapter 4, §3179 and following, regarding Stop Notices.
- 8.6.2 All Preliminary and Stop Notices must be sent to the County at the address stated in the Notice to Bidders, and in accordance with the "STOP NOTICE INFORMATION" sheet in the Bid Form (Document 00410).

8.7 PAYMENTS WITHHELD

- 8.7.1 Owner may withhold payment(s) in whole or in part to such extent as may be necessary to protect Owner from loss from but not limited to:
 - .1 Defective work not remedied;
 - .2 Third party claims filed or reasonable evidence indicating probable filing of such claims;
 - .3 Failure of Contractor to make payments properly to Subcontractors for labor, materials, or equipment;
 - .4 Reasonable evidence that the Work cannot be completed for the unpaid balance of the Job Order Price, including any Liquidated Damages thereby due;
 - .5 Damage to Owner or another contractor, or to other work or property;
 - .6 Reasonable evidence that the Work will not be or had not been completed within the Job Order Completion Time;

- .7 Failure to carry out the Work in accordance with the requirements of the Contract Documents, including failure to make required Submittals;
 - .8 Failure to submit certified weekly payrolls;
 - .9 Stop Notices filed, as more specifically provided in Document 00700.8.6, "Stop Notices"; Failure or refusal of Contractor to fully comply with the Contract requirements; or
 - .10 Costs to Owner resulting from failure of Contractor to complete the Work or designated portions of the Work within the Job Order Completion Time(s).
- 8.7.2 Whenever Owner withholds any monies otherwise due Contractor, Owner will furnish written notice of the amount withheld and the reasons therefore to Contractor.

END ARTICLE 8

ARTICLE 9 — PROTESTS, DISPUTES & CLAIMS**9.1 DECISIONS BY OWNER'S AUTHORIZED REPRESENTATIVE**

- 9.1.1 Protests, Disputes and Claims of Contractor arising from the Contract will be decided by Owner's Authorized Representative who will furnish the decision to Contractor in writing.

9.2 NOTICE OF POTENTIAL CLAIM

- 9.2.1 Contractor is not entitled to additional compensation for any cause unless Contractor submits to the Owner a written notice of the potential Claim as hereinafter specified.
- 9.2.2 The written notice of potential Claim must set forth the reasons for which Contractor believes additional compensation and/or time will or may be due, the nature of the costs and/or time involved, and, insofar as possible, the amount of the potential Claim. The said notice as above required must have been submitted to Owner before Contractor performs the Work giving rise to the potential Claim for additional compensation and/or time so that Owner may undertake investigations and evaluations and provide direction, if appropriate, to mitigate damages and avoid delay in the progress of the Work, if based on an act or failure to act by Owner, or in all other cases within fourteen (14) Days after the happening of the event, thing or occurrence giving rise to the potential Claim.

9.3 CONTEMPORANEOUS DOCUMENTATION

- 9.3.1 Contractor must contemporaneously generate full and complete records of the cost and time incurred to perform Disputed Work.
- 9.3.2 Beginning with the first day on which any Disputed Work is performed, and each following Day, Contractor must maintain detailed hourly records of labor, construction equipment, and services, and itemized records of materials and equipment used each Day in the performance of the Disputed Work. Such records must be of a form acceptable to Owner, must be signed by Contractor, and are subject to verification by Owner.

9.4 PROTESTS

- 9.4.1 If Contractor contends that it was Directed by Owner to perform Work outside the requirements of the Contract Documents, or if Contractor considers any direction, instruction, or decision of Owner to be incorrect or improper, Contractor must immediately notify Owner's Authorized Representative in writing before proceeding with such Work.

If Contractor proceeds with such Work without complying with the requirements of Document 00700 - Sub-Part 9.4.1 above, providing advance written notification, Contractor will be deemed to have assented that the Work is within the Contract's requirements, and Contractor will have forfeited any right to a protest or Claim.

9.5 DISPUTES

- 9.5.1 A Dispute is a written disagreement submitted by the Contractor seeking adjustment of Contract terms, payment of money, extension of Job Order Completion Time or other relief with respect to the terms of the Contract.
- 9.5.2 A Dispute is not a Claim.
- 9.5.3 Each Dispute must involve only one issue to be decided by the Owner
- 9.5.4 Dispute documentation must be complete when submitted.
- 9.5.5 The evaluation of the Contractor's position will be based on Owner's records and the Dispute documentation submitted by Contractor.
- 9.5.6 Contractor must furnish Dispute documentation in the following format:
- .1 Introduction and Issue Identification
 - .2 Background

- .3 Chronology
 - .4 Contractor's Position (Reason for County's potential liability)
 - .5 Supporting documentation of merit
 - .6 Supporting documentation of damages
 - .7 Schedules (if appropriate)
 - .8 Productivity exhibits (if appropriate)
- 9.5.7 Supporting documentation of merit must be cited by reference, photocopies, or explained. Supporting documentation may include, but not be limited to General Conditions, General Requirements, Technical Specifications, Drawings, correspondence, conference notes, Shop Drawings and other Submittals, Submittal logs, survey books, inspection reports, delivery schedules, test reports, daily reports, subcontracts, fragmentary Critical Path method schedules, photographs, technical reports, Requests for Information, field instructions, and other related records necessary to support the merit of Contractor's position.
- 9.5.8 Supporting documentation of damages must be cited, photocopied, or explained. Supporting documentation may include but not be limited to any or all documents related to the preparation and submission of the Bid; Subcontractor, Supplier or vendor files and cost records; certified payroll reports, materials, equipment, and construction equipment and services costs; purchase orders; invoices; project as-planned and as-built costs; Subcontractor and Supplier payment documentation; quantity reports; other related records; general ledger and any other accounting materials necessary to support the Contractor's position.
- 9.5.9 The Owner may elect to enter into discussions and/or negotiations with the Contractor for the purpose of resolving the Dispute. Negotiations on Disputed Work are for settlement purposes only and are not binding.
- 9.5.10 Owner's Authorized Representative will decide Disputes. The Contractor will be furnished with a written copy of the Owner's decision.

9.6 CLAIMS

- 9.6.1 A Claim is a separate unresolved Dispute by the Contractor for:
- .1 a Job Order Completion Time extension;
 - .2 payment of money or damages arising from Work done by, or on behalf of, the Contractor pursuant to the contract for a public work 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 Owner.
- 9.6.2 If a Dispute or Disputes have not been resolved to the satisfaction of the Contractor, the Contractor may submit a Claim along with detailed documentation supporting the Claim.
- 9.6.3 A single Claim may include multiple issues. However, each issue in a Claim must be separately identified and supported.
- 9.6.4 Contractor must submit certified copies of the Claim documentation. Certification must be provided in accordance with Document 00700 - Sub-Part 9.6.10.
- 9.6.5 All Claim documentation must be complete when submitted.
- 9.6.6 Each issue to be decided by the Owner must be clearly identified in the Claim. Issues not clearly identified and included in the certified Claim will not be considered.
- 9.6.7 The evaluation of the Contractor's Claim will be based on Owner's records and the certified Claim documentation submitted by Contractor.
- 9.6.8 Claim Documentation: Claim documentation must conform to generally accepted auditing

standards and must be in the following format:

- .1 Introduction
 - .2 General Background Discussion
 - .3 Summary of Issues and Damages
 - .4 Issues
 - .a Index of Issues
 - .b For Each Issue (Begin each issue on a new page)
 - .1 Background
 - .2 Chronology
 - .3 Contractor's Position (Reason for County's potential liability)
 - .4 Supporting Documentation of Merit
 - .5 Supporting Documentation of Damages
 - .6 Schedules (if appropriate)
 - .7 Productivity exhibits (if appropriate)
 - .5 Supporting documentation of merit must be cited by reference, photocopies, or explained. Supporting documentation may include, but not be limited to General Conditions, General Requirements, Technical Specifications, Drawings, correspondence, conference notes, Shop Drawings and other Submittals, Submittal Logs, survey books, inspection reports, delivery schedules, test reports, daily reports, subcontracts, fragmentary Critical Path method schedules, photographs, technical reports, Requests for Information, field instructions, and other related records necessary to support the merit of Contractor's position
 - .6 Supporting documentation of damages must be cited, photocopied, or explained. Supporting documentation may include but not be limited to any or all documents related to the preparation and submission of the Bid; Subcontractor, Supplier or vendor files and cost records; certified payroll reports, materials, equipment, and construction equipment and services costs; purchase orders; invoices; project as-planned and as-built costs; Subcontractor and Supplier payment documentation; quantity reports; other related records; general ledger and any other accounting materials necessary to support the Contractor's position.
- 9.6.9 Each original copy of the Claim must include the following certification, signed in the same manner as the Agreement was signed:
- Under the penalty of law for perjury or falsification and with specific reference to the California False Claims Act, Government Code §12650 et seq., the undersigned,

(name)

(title)

(company)

hereby certifies that this Claim is made in good faith, is a true statement of the actual costs incurred and time sought, is fully supported pursuant to the Contract between parties, that the supporting documentation is accurate and complete to the best of my knowledge and belief, and that the amount requested accurately reflects the Contract adjustments for which Owner is responsible.

Dated _____

Signed _____

Subscribed and sworn before me this _____ day of _____

(Notary Public)

My Commission Expires _____

9.6.10 Failures to submit the notarized certification will be sufficient cause for rejecting the Claim submission.

9.6.11 If Contractor is unable to support any part of a certified Claim and it is determined that such inability is attributable to falsity of such certification or misrepresentation of fact or fraud by Contractor, Contractor shall be liable to Owner for three (3) times the amount of damages which Owner sustains, plus the cost of civil action, and may be liable to Owner for a civil penalty of up to Ten Thousand Dollars (\$10,000) for each false claim.

9.7 CLAIMS UNDER \$375,000

9.7.1 The provision of Public Contract Code §20104 et seq. relating to the resolution of construction Claims of three hundred seventy-five thousand dollars (\$375,000) or less which arise between a contractor and a local agency are hereby incorporated in this Contract and are *italicized* for ease of use. Documentation that is necessary to substantiate Claims submitted pursuant to this section must comply with the format requirements of Document 00700.9.6.8, "Claim Documentation."

- .1 *Claims for \$375,000 or below (Public Contract Code - §20104) Application of article; provisions included in plans and specifications (paragraph numbering modified to be consistent with General Conditions outline format);*
 - .a *This article applies to all public works claims of three hundred seventy-five thousand dollars (\$375,000) or less which arise between a contractor and local agency.*
 - .b *This article shall not apply to any claims resulting from a contract between a contractor and a public agency when the public agency has elected to resolve any disputes pursuant to Article 7.1 (commencing with §10240) of Chapter 1 of Part 2.*
 - .c *"Public work" has the same meaning as in Sections §3100 and §3106 of the Civil Code, except that "public work" does not include any work or improvement contracted for by the state or the Regents of the University of California.*
 - .d *"Claim" means a separate demand by the contractor for (A) a time extension, (B) payment of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public work and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (C) an amount the payment of which is disputed by the local agency.*
 - .e *The provisions of this article or a summary thereof shall be set forth in the plans or specifications for any work which may give rise to a claim under this article.*

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- .f This article applies only to contracts entered into on or after January 1, 1991.*
- .2 Claims for \$375,000 or below (Public Contract Code - §20104.2) Claims; requirements; tort claims excluded. For any claim subject to this article, the following requirements apply:*
- .a The claim shall be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of Final Payment. Nothing in this subdivision is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims.*
- .b For claims of less than fifty thousand dollars (\$50,000), the local agency shall respond in writing to any written claim within 45 Days of receipt of the claim, or may request, in writing, within 30 Days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.*
- .c If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.*
- .d The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 15 Days after receipt of the further documentation or within a period of time no greater than that taken by the claimant in producing the additional information, whichever is greater.*
- .e For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the local agency shall respond in writing to all written claims within 60 Days of receipt of the claim, or may request, in writing, within 30 Days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.*
- .f If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.*
- .g The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 30 Days after receipt of the further documentation, or within a period of time no greater than that taken by the claimant in producing the additional information or requested documentation, whichever is greater.*
- .h If the claimant disputes the local agency's written response, or the local agency fails to respond within the time prescribed, the claimant may so notify the local agency, in writing, either within 15 Days of receipt of the local agency's response or within 15 Days of the local agency's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issue in dispute. Upon a demand, the local agency shall schedule a meet and confer conference within 30 Days for settlement of the dispute.*
- .i Following the meet and confer conference, if the claim or any portion remains in dispute, the 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 the claimant submits his or her written claim pursuant to subdivision (a) until the time that claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.*
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- .j This article does not apply to tort claims and nothing in this article is intended nor shall be construed to change the time periods for filing tort claims or actions specified by 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.*
- .3 Claims for \$375,000 or below (Public Contract Code - § 20140.4) Civil action procedures; mediation and arbitration; trial de novo; witnesses. The following procedures are established for all civil actions filed to resolve claims subject to this article:*
- .a Within 60 Days, but no earlier than 30 Days, following the filing or responsive pleading, the court shall submit the matter to nonbinding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within 15 Days by both parties of a disinterested third person as mediator, shall be commenced within 30 Days of the submittal, and shall be concluded within 15 Days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties. If the parties fail to select a mediator within the 15-Day period, any party may petition the court to appoint the mediator.*
- .b If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with §1141.10) of Title 3 of Part 3 of the code of Civil Procedure, notwithstanding §1141.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with §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.*
- .c Notwithstanding any other provision of law, upon stipulation of the parties, arbitrators appointed for purposes of this article shall be experienced in construction law, and, upon stipulation of the parties, mediators and arbitrators shall be paid necessary and reasonable hourly rates of pay not to exceed their customary rate, and such fees and expenses shall be paid equally by the parties, except in the case of arbitration where the arbitrator, for good cause, determines a different division. In no event shall these fees or expenses be paid by state or county funds.*
- .d In addition to Chapter 2.5 (commencing with § 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, any party who after receiving an arbitration award requests a trial de novo but does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, pay the attorney's fees of the other party arising out of the trial de novo.*
- .e The court may, upon request by any party, order any witnesses to participate in the mediation or arbitration process.*
- .4 Claims for \$375,000 or below (Public Contract Code - §20140.6) Payment on undisputed portion of claim; interest on arbitration awards or judgments:*
- .a No local agency shall fail to pay money as to any portion of a claim which is undisputed except as otherwise provided in the contract.*
- .b In any suit filed under § 20104.4, the local agency shall pay interest at the legal rate on any arbitration award or judgment. The interest shall begin to accrue on the date the suit is filed in a court of law.*

9.8 MEDIATION

- 9.8.1 Authorizations: In the event of a Claim that is not resolved by negotiation, Owner and Contractor agree to attempt to resolve it by Mediation. Mediation is voluntary, non-binding, and intended to provide an opportunity for the parties to evaluate each other's cases and

arrive at a mutually agreeable solution. These provisions relating to voluntary Mediation are not be construed or interpreted as mandatory arbitration.

- 9.8.2 Statutory Procedures for Claims Resolution: Proceeding with mediation does not in any way waive or extend the applicable statutes of limitations for filing Claims against governmental entities pursuant to the California Government Code §900 et seq.
- 9.8.3 Initiation of Mediation: Either party to a Dispute or Claim may initiate Mediation by notifying the other party or parties in writing.
- 9.8.4 Request for Mediation: A Request for Mediation must set forth a brief statement of the nature of the Claim, the names, addresses, and phone numbers of the parties, and identify their authorized representative, if any, in the Mediation.
- 9.8.5 Selection of Mediator: Upon receipt of a Request for Mediation, within fourteen (14) Days, the parties will meet and confer to select an appropriate Mediator agreeable to all parties. If the parties cannot agree on a Mediator, they hereby agree to accept a Mediator appointed by a recognized association such as the American Arbitration Association.
- 9.8.6 Conflict of Interest of Mediator: No person may serve as a Mediator in any Dispute in which that person has any financial or personal interest in the outcome of the Mediation. Before accepting an appointment, the prospective Mediator must disclose any circumstances likely to create a presumption of bias. Upon receipt of such information, the parties will meet and confer and decide whether or not to select another Mediator.
- 9.8.7 Vacancies: If the Mediator is unwilling or unable to serve, another Mediator will be selected unless the parties agree otherwise.
- 9.8.8 Representations: Any party may be represented by persons of their choice who must have full authority to negotiate. The names and addresses of such persons must be communicated in writing to all parties and to the Mediator.
- 9.8.9 Times and Place of Mediation: The Mediator sets the time of each Mediation session. The Mediation will be held at any convenient location agreeable to the Mediator and the parties, as the Mediator determines. All reasonable efforts will be made by the parties and the Mediator to schedule the first session within sixty (60) Days after selection of the Mediator.
- 9.8.10 Briefing Schedule: As directed by the Mediator, each party must provide the Mediator with a brief setting forth its position with regard to the issues that need to be resolved. At the discretion of the Mediator, the parties may mutually exchange the briefs.
- 9.8.11 At the first session, the parties will be expected to produce all information reasonably required for the Mediator to understand the issue presented. The Mediator may require each party to supplement such information.
- 9.8.12 Authority of Mediator: The Mediator does not have authority to impose a settlement upon the parties but will attempt to help the parties reach a satisfactory resolution of their Dispute. The Mediator is authorized to conduct joint and separate meetings with the parties and to make oral and written recommendations for settlement. Whenever necessary, the Mediator may obtain expert advice concerning technical aspects of the Dispute, provided the parties agree and assume the expenses of obtaining such advice. Arrangements for obtaining such advice will be made by the Mediator or the parties, as the Mediator shall determine. The Mediator is authorized to end the Mediation whenever, in the Mediator's judgment, further efforts at Mediation would not contribute to a resolution of the Dispute between the parties.
- 9.8.13 Privacy: Mediation sessions are private. The parties and their representatives may attend Mediation sessions. Other persons may attend only with the permission of the parties and with the consent of the Mediator.
- 9.8.14 Confidentiality: Confidential information disclosed to a Mediator by the parties or by

witnesses in the course of the Mediation will not be divulged by the Mediator. All records, reports, or other documents received by a Mediator while serving as Mediator are confidential. The Mediator is not compelled to divulge such records or to testify in regard to the Mediation in any adversary proceeding or judicial forum.

- 9.8.15 The parties shall maintain the confidentiality of the Mediation and shall not rely on, or introduce as evidence in any arbitration, judicial or other proceedings: (a) views expressed or suggestions made by the other party with respect to a possible settlement of the Dispute; (b) statements made by the other party in the course of the Mediation proceedings; (c) proposals made or views expressed by the Mediator; (d) whether the other party had or had not indicated willingness to accept a proposal for settlement made by the Mediator.
- 9.8.16 No Stenographic Record: There will be no stenographic record of the Mediation.
- 9.8.17 Termination of Mediation: The Mediation may be terminated: (a) by the execution of a settlement agreement by the parties; (b) by a written declaration of the Mediator to the effect that further efforts at Mediation are no longer worthwhile; or (c) by a written declaration of a party or parties to the effect that the Mediation proceedings are terminated.
- 9.8.18 Exclusion of Liability: No Mediator is a necessary party in judicial proceedings related to the Mediation. No Mediator is liable to any party for any act or omission in connection with any Mediation conducted hereunder.
- 9.8.19 Interpretation and Application of Mediation Provisions: The Mediator will interpret and apply these Mediation provisions insofar as they relate to the Mediator's duties and responsibilities.
- 9.8.20 Expenses: The expenses of witnesses for the parties will be paid by the party producing the witnesses. All other expenses of the Mediation, including required traveling and other expenses of the Mediator, the expenses of any witness called by the Mediator, and the cost of any proofs or expert advice produced at the request of the Mediator, will be apportioned as the Mediator finds appropriate or as otherwise agreed to by the parties.

9.9 UNSUCCESSFUL NEGOTIATIONS

- 9.9.1 Unsuccessful negotiations to resolve Claims or Disputes are for settlement purposes only and are not binding.

END ARTICLE 9

ARTICLE 10 — PROTECTION OF PERSONS AND PROPERTY**10.1 SAFETY PROVISIONS**

- 10.1.1 Contractor is solely and completely responsible for conditions of the job site, including safety of all persons and property during performance of work. This requirement applies continuously and is not limited to Normal Hours Of Work. No act, service, drawing or construction review, acceptance or other act by Owner, Inspector, Consultant, or any other representative of Owner is intended to include review of the adequacy of Contractor's safety measures at or near the Project Site, at any place of Fabrication, or anywhere else.
- 10.1.2 Contractor must take all necessary precautions on the Work for the safety of its workers, of Owner's employees and the public, and must comply with all applicable Federal, State, and local safety laws and codes to prevent accidents or injury to persons on, about, or adjacent to where the Work is being performed.
- 10.1.3 Contractor must erect and properly maintain at all times, as required by the conditions and progress of the Work, all appropriate safeguards for the protection of workers and the public, and post danger signs warning against construction hazards, such as fire, toxics, pesticides, chemicals, odors, noise, vibration, equipment operations, obstructions, falling objects, falls and all other construction related hazards.
- 10.1.4 Contractor must designate a responsible member of its organization who will be present on the Project Site and who has the duty for prevention of accidents. Prior to starting Work, Contractor must submit a letter to the Owner providing the name and position of the person so designated.

10.2 CONFINED SPACE ENTRY PROGRAM

- 10.2.1 Contractor must comply with all State and Federal OSHA requirements, and all of Owner's requirements regarding entry into confined spaces including but not limited to the following:
 - .1 Before starting any Work, submit for Owners review and acceptance four (4) copies of a Confined Space Entry Program applying to all existing permit-required confined spaces identified by Owner in the Contract Documents, or defined by regulations, and any confined spaces identified or created by Contractor or Owner during the Job Order Completion Time. Owner has the right to identify additional spaces to be treated as confined spaces by Contractor at any time during the Job Order Completion Time, without changing the Job Order Price or Job Order Completion Time if such additional spaces were created by Contractor.
 - .2 Maintain written records of all entries into confined spaces and all activities conducted in confined spaces.
 - .3 Coordinate all entry operations with Owner when both Contractor's personnel and Owner's personnel will be working in or near a confined space in the Project area. Owner will endeavor to give Contractor at least twenty-four (24) hours advance notice of such entry except in unforeseen situations and emergencies.
 - .4 Inform Owner in writing at the conclusion of entry operations regarding the permit space program followed and any hazards confronted or created in permit spaces during entry operations.

10.3 PUBLIC SAFETY AND CONVENIENCE

- 10.3.1 Contractor must provide for the safety of the public during construction and conduct its operations to minimize the amount of work posing potential hazards to the public.
- 10.3.2 Contractor must pave pedestrian openings through falsework or Provide full width continuous wood walks and keep all walkways clear. Contractor must protect

pedestrians from falling objects and water runoff. Overhead protection for pedestrians must extend not less than four (4) feet beyond the edge of a structure.

- 10.3.3 Contractor's equipment must enter and leave the Project area via access routes designated or accepted in writing by Owner and move in the direction of public traffic at all times. All movements on or across public traveled ways must not endanger public traffic.
- 10.3.4 Contractor must immediately remove any spillage, debris, dirt, or mud resulting from hauling operations along or across any public traveled way.
- 10.3.5 Contractor must minimize inconvenience or obstruction to the public. When Contractor's operations create a condition hazardous to the public, Contractor must furnish, erect, and maintain such Temporary Fencing, barricades, lights, signs, and other devices as are necessary for direction of the public or to avoid accidents, damage, or injury to the public. Contractor must furnish such flagmen and guards as are necessary to direct the public or to give adequate warning of any hazardous conditions.

10.4 PROTECTION AND RESTORATION OF PROPERTY

- 10.4.1 California Civil Code §832 provides requirements relating to notification of adjacent property owners (30 Day notification required) and protection of adjacent property when performing excavation that may adversely impact the lateral and subjacent support to adjoining land or structures. In addition to these requirements and any other requirements imposed by law, Contractor must shore up, brace, underpin, and protect as may be necessary, all foundations and other parts of all existing structures adjacent to and adjoining the site of the Work which are in any way affected by the excavations or other operations connected with the Work pursuant to this Contract. Whenever any notice is required to be furnished by Owner or Contractor to any adjoining or adjacent landowner or other party before commencement of any Work pursuant to this Contract, Contractor must provide such notice. Contractor must indemnify and hold Owner harmless from any damages for which Owner may become liable in consequence of such injury or damage to adjoining or adjacent structures and premises.
- 10.4.2 Contractor must immediately repair any damage, arising from or in consequence of the performance of the Contract, to improvements or property, whether above or below the ground, private or public, within or adjacent to the Project. If, in Owner's opinion, Owner's best interests require such repair to be made before execution of any part of the Work included in this Contract, Owner will so notify Contractor who will delay or discontinue the performance of that part of the Work until the necessary repair has been made. Such delay shall not be considered unavoidable, and no extension of the Job Order Completion Time shall be allowed.
- 10.4.3 When Ordered by Owner to make any such repair, Contractor must start work thereon within four (4) hours and must prosecute the same with diligence to completion. Upon Contractor's failure to comply with such Order, or upon Contractor's failure to make immediate Emergency repairs which are necessary in the best interests of Owner or the public, Owner may cause such repairs to be made and deduct the costs thereof from any money due, or that may become due Contractor.
- 10.4.4 In an Emergency affecting the safety of life or property, including adjoining property, Contractor is authorized to act at its discretion, without special instructions or authorization from Owner, to prevent such threatened loss or injury, and Contractor must act whether or not instructed by Owner. Contractor must maintain adequate protection against damage to life and property involved in Project and on property adjacent thereto until Acceptance and must Provide all necessary guards, barricades, night lights, facilities, tools, equipment, materials and other needed or required protective devices.
- 10.4.5 Contractor will until Acceptance maintain adequate protection of all its Work and work

performed by others pursuant to the Contract Documents from damage, loss, or defacement. Contractor must repair or replace any such damage and remove any damaged or defaced material or equipment from the premises at no extra cost to Owner except as may be due directly to errors in the Contract Documents or caused by Owner.

- 10.4.6 The Contractor must ensure the limits of Work to be free of graffiti or other similar defacements during the entire Job Order Completion Time; if such defacement occurs, the Contractor must promptly remove, repair, or correct the affected area(s). The Contractor must protect all exposed finished surfaces within the limits of Work (both temporary and final), with anti-graffiti coatings, and maintain such protection continuously during the entire Job Order Completion Time.

10.5 PRESERVATION OF CULTURAL RESOURCES

- 10.5.1 Pursuant to the National Historic Preservation Act of 1966, State laws and County ordinances, the following procedures are implemented to ensure historic preservation and fair compensation to Contractor for construction delays that may occur due to cultural resources discoveries.
- 10.5.2 In the event potentially historical, architectural, archaeological, or cultural resources (hereinafter "resources") are discovered during subsurface excavations at the Project Site, the following procedures apply:
- 10.5.3 Owner will issue a "Cultural Resources – Suspend Work Order" Directing Contractor to temporarily suspend all operations at the location of such potential resources.
- 10.5.4 Such "Cultural Resources – Suspend Work Order" will be effective until such time as a qualified Consultant can assess the value of such resources and make recommendations. Any "Cultural Resources – Suspend Work Order" will contain the following:
- .1 A description of the potential resource, its location, and the area where Contractor's Work is suspended;
 - .2 A description of what part or all of Contractor's Work is suspended;
 - .3 Instructions regarding suspension of orders by Contractor for materials and services;
 - .4 Guidance regarding action to be taken by Subcontractors;
 - .5 Estimated duration of the temporary suspension.
- 10.5.5 If the Consultant determines that the potential find is indeed a cultural resource, Owner will, as expeditiously as possible, advise Contractor in writing of the action to be taken regarding the find, and the anticipated time frame and extent of any Work suspension.
- 10.5.6 Adjustment of Contract Time and Contract Sum
- .1 If, in the Notice to Bidders, the Work site was deemed "Archaeologically Sensitive", then the Job Order Completion Time(s) includes four (4) weeks of temporary suspension for cultural resources finds and there will be no payment for such suspension or any inefficiencies related thereto, up to a maximum cumulative duration of four (4) weeks delay to the Critical Path(s) of the Official Progress Schedule. If such suspension occurs, the first four (4) weeks of the Critical Path delay will be treated as an **excusable non-compensable delay** and the Job Order Completion Time will be extended in accordance with Document 00700.7.6, "Delay and Time Extensions."
 - .2 If a cultural discovery at an Archaeologically Sensitive site results in a cumulative Critical Path delay that exceeds four (4) weeks, then Contractor will be entitled to an adjustment for the Critical Path delay in excess of four (4) weeks by the issuance of a Supplemental Job Order. The Critical Path delay in excess of four (4) weeks will be treated as an **excusable compensable delay** and the Job Order Completion Time

will be extended in accordance with Document 00700.7.6, "Delay and Time Extensions."

- .3 If a cultural resource discovery was unforeseen (i.e. if the Work site was not deemed "Archaeologically Sensitive" in the Notice to Bidders), Contractor may be entitled to an adjustment by Supplemental Job Order in accordance with Document 00700.7.6, "Delay and Time Extensions."
- .4 If, as a result of a temporary suspension, Owner agrees that Contractor sustains a loss which could not have been avoided by judicious handling of its forces or equipment, or by redirection of forces or equipment to perform other Work on the Contract, Contractor will be paid for idle time of equipment and labor by Force Account as provided in Document 00700.6.8, "Force Account Work."

10.5.7 Documentation

- .1 Beginning with the first Day of suspension, and for each following Day, Contractor must maintain detailed hourly records of the labor and equipment idled by such suspension, plus substantiation as to why such labor and equipment could not be used on other parts of the Work if such were the case. Such records must be of a form acceptable to Owner, signed by Contractor, and are subject to verification by Owner.
- .2 Failure by Contractor to furnish the aforesaid records constitutes a waiver of Contractor's right to an adjustment in the Job Order Price.

END ARTICLE 10

ARTICLE 11 — INDEMNIFICATION AND INSURANCE

11.1 EXHIBIT B-1

- 11.1.1 Indemnification and Insurance requirements are set forth in Exhibit B-1, "INSURANCE REQUIREMENTS FOR CONSTRUCTION CONTRACTS ABOVE \$25,000."
- 11.1.2 Exhibit B-1 is incorporated herein as though set forth in full.
- 11.1.3 Exhibit B-1 is located in Document 00850, "Indemnification and Insurance Requirements (Exhibit B-1)"
- 11.1.4 Contractor will be required to mail or fax all insurance documents evidencing coverage as required by 11.1.1 to the County of Santa Clara's Insurance Tracking company.
 - Mail certificates to:
 - County of Santa Clara
 - c/o Periculum Services Group
 - P.O. Box 257
 - Portland, Michigan 48875-0257
 - Fax certificates to (517) 647-7900

END ARTICLE 11

ARTICLE 12 — UNCOVERING AND CORRECTION OF WORK**12.1 GENERAL**

- 12.1.1 The Contractor must notify the Owner two (2) days prior to covering any Work.
- 12.1.2 If a portion of the Work is covered prior to Owner's review, it must, if requested in writing by the Owner, be uncovered for Owner observation and replaced at the Contractor's expense without change in the Job Order Completion Time.

12.2 CORRECTION OF WORK

- 12.2.1 The Contractor must promptly correct Work rejected by Owner or Work failing to conform to the requirements of the Contract Documents, whether or not Fabricated, Installed, or completed. The Contractor bears the costs of correcting such rejected Work, including additional testing and inspections required and compensation for Owner services and expenses made necessary thereby. Contractor must submit three (3) copies of a Corrective Action Plan to the Owner by 10 a.m. of the third workday following receipt of a notice of non-conformance from the Owner.
- 12.2.2 Notwithstanding Document 00700 - Sub-Part 12.2.1, in the event of an Emergency constituting an immediate hazard to the health or safety of Owner's employees, agents, representatives, property, or licensees, Owner may undertake, at the Contractor's expense and without prior notice, all work necessary to correct such hazardous condition(s) when it was caused by work of the Contractor not being in accordance with requirements of the Contract Documents.
- 12.2.3 The Contractor must remove from the Project Site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.
- 12.2.4 If the Contractor fails to correct nonconforming Work, as per Document 00700 - Sub-Part 12.2.1, or fails to remove nonconforming work, as per Document 00700 - Sub-Part 12.2.3, Owner may correct or remove the nonconforming Work per Document 00700 - Sub-Part 12.2.5.
- 12.2.5 If the Contractor does not submit a Corrective Action Plan or proceed with correction or removal of nonconforming Work, within such time fixed by the Contract Documents or written notice from Owner, Owner may remove and store the salvable materials, articles and/or equipment at the Contractor's expense. If the Contractor does not pay all costs of such removal and storage within 14 Days after written notice, Owner may, upon 14 additional Days written notice, sell such materials articles and/or equipment at an auction or private sale, and shall account for the proceeds thereof, after deducting costs and damages that would have been borne by the Contractor, including compensation for Owner services and expenses made necessary thereby. If the proceeds of a sale do not cover all costs that the Contractor would have borne, the Job Order Price will be reduced by the deficiency. If payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor must pay the difference to Owner.
- 12.2.6 The Contractor bears the cost of correcting destroyed or damaged Work, which is caused by the Contractor's correction, or removal of Work that is not in accordance with requirements of the Contract Documents, including work performed by Owner or separate contractors that is damaged or destroyed by the Contractor during the Job Order Completion Time or Guarantee period.
- 12.2.7 Nothing contained in this Document 00700.12.2, "Correction of the Work", establishes a period of limitation with respect to other obligations that the Contractor might have in the Contract Documents. Establishment of the Warranty/Guarantee period(s), as described in Document 00700.13.11, "Warranties & Guarantees", relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with requirements of the Contract Documents may be sought to be

enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

12.3 ACCEPTANCE OF NONCONFORMING WORK

- 12.3.1 If Owner prefers to accept any or all of the Work that is not in accordance with requirements of the Contract Documents, Owner may do so instead of requiring its correction and/or removal, in which case the Job Order Price will be reduced as appropriate and equitable. Such adjustment shall be affected whether or not Final Payment to the Contractor has been made.

END ARTICLE 12

ARTICLE 13 — FINAL COMPLETION AND ACCEPTANCE**13.1 USE BEFORE ACCEPTANCE**

- 13.1.1 Owner has the right to utilize or place into service any item of equipment or other usable portion of the Work before Acceptance of the entire Project. Whenever Owner plans to exercise said right, Owner will notify Contractor in writing, identifying the specific portion or portions of the Work to be so utilized or otherwise placed into service, hereinafter referred to as "Use Before Acceptance".
- 13.1.2 Until Owner issues such written notification, Contractor is responsible for all care and maintenance of all items or portions of the Work.
- 13.1.3 Upon Owner's issuance of written notice of Use Before Acceptance, Owner accepts responsibility for the protection and maintenance of all such items or portions of the Work described in the written notice, excepting any injury or damage resulting from Contractor's actions or negligence.
- 13.1.4 If, by reason of Owner's Use Before Acceptance, the premium for the Contractor's bodily injury and property damage insurance is increased, Owner will reimburse the Contractor for the additional amount necessarily incurred, allocable to the area and the period of Owner's occupancy, up to the Date of Acceptance of the Work.
- 13.1.5 Owner's Use Before Acceptance does not constitute Acceptance of the Work, or any portion of the Work, by Owner, nor will it relieve the Contractor of responsibility for correcting defective and/or Deficient Work or materials found at any time before Acceptance of the Work or during the Guarantee period after Owner's Acceptance. However, when the Project includes separate buildings, and one or more of the buildings is entirely occupied by Owner, then upon written request by the Contractor and by written consent from Owner, the Guarantee period on the building entirely occupied by Owner will commence to run from the date of Owner occupancy of such building or buildings.
- 13.1.6 Notwithstanding any Use Before Acceptance, Contractor retains full responsibility for fulfillment of all the requirements of the Contract Documents.

13.2 RESERVED**13.3 CONTRACTOR'S CERTIFICATION THAT ALL WORK OF THE PROJECT IS COMPLETE**

- 13.3.1 When all Work is complete and after the Contractor has performed the final cleaning, Contractor must so certify to Owner's Project Manager and request a Preliminary Walk-Through Inspection.

13.4 PRELIMINARY WALK-THROUGH INSPECTION

- 13.4.1 Within seven (7) Days of receipt of Contractor's certification that all Work is complete, Owner's Project Inspector will make a Preliminary Walk-Through Inspection with Contractor to verify that the Project is complete and ready for Final Inspection.
- 13.4.2 If Owner's Project Manager determines that the Work is not complete, Contractor will be notified in writing. Contractor must complete the Work and re-initiate procedures for another Preliminary Walk-Through Inspection. At Owner's discretion, any costs to Owner for additional Preliminary Walk-through Inspections may be charged to the Contractor.

13.5 FINAL INSPECTION

- 13.5.1 The Final Inspection will occur within seven (7) Days of the Contractor's certification of final completion if the Owner's Project Manager agrees with the Contractor's certification.
- 13.5.2 If Owner's Project Manager determines the completed Work is deficient, Contractor will be furnished with a Punchlist identifying the observed deficiencies in the completed Work. After all deficiencies have been corrected, Contractor must initiate procedures for another

Final Inspection. If Contractor requests more than two (2) Final Inspections, at Owner's discretion, any costs to Owner for additional Final Inspections may be changed to the Contractor.

13.5.3 Contractor's Progress Schedule must include activities for Final Inspection.

13.6 RECOMMENDATION FOR ACCEPTANCE

13.6.1 After Final Inspection, the Owner's Authorized Representative will recommend that the Owner formally Accept the Work if the Contractor has satisfactorily:

- .1 Corrected all deficiencies observed during the Final Inspection and no new deficiencies have been observed
- .2 Submitted Record Documents (As-Builts)
- .3 Submitted copies of all documents required by Document 00700.3.14, "Disposal of Materials Outside Project Area" and Document 00700.3.15, "Hazardous Materials"
- .4 Submitted two (2) copies of satisfactory evidence to Owner that all payrolls, material bills and other indebtedness connected with said Work have been paid
- .5 Submitted all other required contract deliverables.

13.7 ACCEPTANCE OF THE WORK

13.7.1 After the Owner's formal Acceptance of the Work, the Owner will record a Notice of Completion.

13.7.2 Owner's Acceptance establishes conformity with the Contract except for delays in completion, latent defects, fraud, or such gross errors as amount to fraud, willful misconduct, or gross negligence, and subject to any Guarantee and Warranty, express or implied.

13.7.3 Determinations by Owner's Authorized Representative that the Work is complete or Acceptance evidenced by a recorded Notice of Completion does not bar any action by the Owner against the Contractor pursuant to Document 00700.13.11, "Warranties & Guarantees"

13.8 FINAL PAYMENT

13.8.1 Provided that Owner has recorded a Notice of Completion, thirty-five (35) Days after the date of recording of the Notice of Completion by the County Recorder, Owner's Project Manager will forward a request for Final Payment for the Work done pursuant to the Contract to the County Controller for payment. Owner will withhold from Final Payment such amounts that are in Dispute between Owner and Contractor, amounts subject to offset/setoff, and all other amounts that must be withheld by law (such as Stop Notice sums.)

13.8.2 All estimates and payments made, including the final estimate and payment, are subject to correction and adjustment for clerical errors in the calculations involved in the determination of quantities and payments. Contractor and Owner agree to pay to the other any sum hereby due.

13.9 CONTRACTOR'S DUTIES AND RESPONSIBILITIES AFTER ACCEPTANCE

13.9.1 After Acceptance of the Work by the Board of Supervisors, Contractor is relieved of the duty of maintaining and protecting the entire Work, and Contractor is not required to perform any further Work thereon, except as otherwise required by law or the Contract Documents.

13.9.2 Contractor is relieved of responsibility for injury to persons or property or damage to the Work that occurs after Owner's Acceptance, provided that such injury/damage is not in

any way caused by Contractor.

- 13.9.3 Owner's Acceptance does not relieve Contractor of responsibility for faulty materials or workmanship or of complying with the requirements of Warranties and Guarantees.

13.10 RETENTION PROCEEDS, WITHHOLDING AND DISBURSEMENT

- 13.10.1 Pursuant to California Public Contract Code §7107, within sixty (60) Days after the date of "completion" of a Job Order, the retention withheld by Owner shall be released, subject to all withholds required and authorized by law including Stop Notice claims and Liquidated Damages (pursuant to California Government Code §53069.85). In the event of a Dispute between Owner and Contractor, Owner may withhold from the Final Payment an amount not to exceed one hundred fifty percent (150%) of the Disputed amount.

- 13.10.2 For purposes of release of retention, "completion" means any of the following:

- .1 The occupation, beneficial use, and enjoyment of the entire Work, accompanied by cessation of labor on the work of improvement.
- .2 The Acceptance by Owner of the Work.
- .3 After the commencement of Work, a cessation of labor on the Work for a continuous period of one hundred (100) Days or more, due to factors beyond Contractor's control.
- .4 After the commencement of Work, a cessation of labor on the Work for a continuous period of thirty (30) Days or more, if Owner records a Notice Of Cessation or a Notice Of Completion with the County Recorder.

- 13.10.3 Subject to Document 00700 - Sub-Part 13.10.4 below, within seven (7) Days from the time that all or any portion of the retention proceeds are received by Contractor, Contractor must pay each of its Subcontractors from whom retention has been withheld, each Subcontractor's share of the retention received. However, if a retention payment received by Contractor is specifically designated for a particular Subcontractor, payment of the retention shall be made to the designated Subcontractor, if the payment is consistent with the terms of the Subcontract. [public contract code §7107(d)]

- 13.10.4 Contractor may withhold from a Subcontractor its portion of the retention proceeds if a bona fide dispute exists between the Subcontractor and Contractor. The amount withheld from the retention payment shall not exceed one hundred fifty percent (150%) of the estimated value of the disputed amount.

- 13.10.5 In the event that retention payments are not made within the time periods required by Public Contract Code §7107, Owner and Contractor withholding the unpaid amounts shall be subject to a charge of two percent (2%) per month on the improperly withheld amount, in lieu of any interest otherwise due. Additionally, in any action for the collection of funds wrongfully withheld, the prevailing party shall be entitled to attorney's fees and costs.

13.11 WARRANTIES & GUARANTEES

- 13.11.1 Neither the final Acceptance, nor payment, nor any provision in the Contract Documents relieves Contractor of responsibility for faulty materials or workmanship.
- 13.11.2 Contractor must Guarantee all workmanship and materials for a period of **one year**, or as specified in the Contract Documents, from and after the Date of Acceptance of the Work by Owner. Contractor may also be required to furnish a written Guarantee covering all or certain items of Work for varying periods of time from the Date of Acceptance of the Contract. The Work to be Guaranteed, the form, and the time limit of the Guarantee will be specified in the Contract Documents. Said Guarantee must be signed and submitted to Owner before Acceptance of the Work.
- 13.11.3 The Guarantee period begins at the Date of Acceptance. Contractor must repair or replace all defective Work, together with any other Work affected by the repair or

replacement during said Guarantee period without expense whatsoever to Owner.

13.11.4 The aforesaid one-year Warranty/Guarantee period does not in any way limit or waive Owner's rights to legal recourse for latent construction defects, pursuant to California Civil Code of Procedure §337.15 nor for patent construction defects pursuant to §337.1.

13.11.5 Approximately ninety (90) Days before completion of the entire Work of the Project, Contractor must meet with Owner regarding Warranty/Guarantee requirements. Owner will establish communication procedures for notifying Contractor of Warranty defects, priorities regarding the type of defect, time required for Contractor response, and other details deemed necessary by Owner for execution of the Warranty/Guarantee.

13.11.6 In the event of Contractor's failure to comply with the requirements of any Warranty/Guarantee required by the Contract Documents within three (3) calendar Days after being notified in writing, Owner may proceed to have the defects repaired and made good at the expense of Contractor who must pay all costs and charges immediately upon demand.

13.12 RESERVED

END ARTICLE 13

ARTICLE 14 — MISCELLANEOUS PROVISIONS**14.1 CONTRACTOR'S USE OF COMPUTER SOFTWARE**

- 14.1.1 The Owner selected The Gordian Group's (Gordian) Job Order Contracting (JOC) Solution for their JOC program. The Gordian JOC Solution™ includes Gordian's proprietary JOC Information Management System ("JOC IMS"), construction cost data, and Construction Task Catalog® which shall be used by the Contractor solely for the purpose of fulfilling its obligations under this Contract, including the preparation and submission of Job Order Proposals, Price Proposals, subcontractor lists, and other requirements specified by the Owner. The Contractor shall be required to execute Gordian's General Terms of Use and pay a 1% JOC System License Fee to obtain access to the Gordian JOC Solution™. The JOC System License Fee applies to all Job Orders issued to the Contractor under the terms of this Contract. The Contractor shall include the JOC System License Fee in the Adjustment Factors.

14.2 RIGHTS IN LAND AND IMPROVEMENTS

- 14.2.1 Nothing in the Contract shall be construed as allowing Contractor to make any arrangements with any person to permit occupancy or use of any land, structure, or building within the physical limits of the Project for any purpose whatsoever, either with or without compensation, nor act in conflict with any agreement between Owner and any owner, former owner, or tenant of such land, structure, or building.
- 14.2.2 Contractor must not occupy Owner's property outside the Project limits as shown on the Plans or on maps available in Owner's offices, unless Contractor enters into a written agreement with Owner.

END ARTICLE 14

END DOCUMENT 00700

SUPPLEMENTAL GENERAL CONDITIONS

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END OF TABLE OF ARTICLES

General

The following Supplemental General Conditions contain additions, changes, and deletions that supersede the General Conditions and apply only to the Job Order Contract.

ARTICLE 1 – GENERAL PROVISIONS**1.1 ABBREVIATIONS:**

The following will be added to Section 1.1 ABBREVIATIONS:

- 1.1.1 **JOC** – Job Order Contract
- 1.1.2 **JO** – Job Order
- 1.1.3 **DSW** – Detailed Scope of Work
- 1.1.4 **RFJP** – Request for Job Order Proposal
- 1.1.5 **CTC** – Construction Task Catalog
- 1.1.6 **NPP** – Non-Prepriced

1.2 DEFINITIONS:

The Following Changes and Additions revise to Section 1.2 DEFINITIONS:

- 1.2.1 **Adjustment Factor:** The Contractor's competitively bid price adjustment to the Unit Prices as published in the Construction Task Catalog. Contractors must bid four Adjustment Factors, one set for work to be accomplished during Normal Working and Other than Normal Working Hours. All Adjustment Factors are expressed as a multiplicative increase or decrease from the published prices in the Construction Task Catalog.
- 1.2.2 **Award Criteria Figure:** The composite Adjustment Factor, used to determine the low bid, as determined on the basis of the Award Criteria Figure Formula provided in the Bid Form.
- 1.2.3 **Construction Task Catalog:** A comprehensive listing of construction related specific repair or refurbishment tasks together with a specific unit of measurement and a Unit Price. (Also referred to as the 'CTC'.)
- 1.2.4 **Detailed Scope of Work:** The complete description of services to be provided by the Contractor pursuant to an individual Job Order. The Detailed Scope of Work will include documentation for a given project. Documentation may include a narrative description of the Work, partial design documents, or full design documents, depending on the complexity of the specific project. (Also referred to as 'DSW'.)
- 1.2.5 **Facilities Adjustment Factors:** Adjustment Factors that apply when Job Order Work is performed in all locations.
- 1.2.6 **Job Order:** A document signed by the County that describes Work to be accomplished. The County has sole discretion to determine the number and scope of Job Orders issued. Each Job Order will include a Detailed Scope of Work, a firm fixed price, a time duration for the completion of the Work and any

special conditions that might apply to that specific Job Order, such as Liquidated Damages. (Also referred to as 'Project').

- 1.2.7 **Job Order Price Proposal:** A price proposal prepared by the Contractor that includes the Pre-priced Tasks, Non Pre-priced Tasks, quantities, and appropriate Adjustment Factors required to complete the Detailed Scope of Work.
- 1.2.8 **Job Order Proposal:** The documents prepared by the Contractor stating a firm fixed price to perform a specific Detailed Scope of Work. The Job Order Proposal includes shop drawings and sketches, permits and submittals as necessary, a detailed Job Order Price Proposal comprised of line items from the Construction Task Catalog®, supporting documentation for any Non Pre-priced items, a construction schedule, a list of subcontractors, and other documentation as may be required by the County prior to the issuance of a Job Order. (Also referred to as Proposal).
- 1.2.9 **Job Order Plans:** The graphic and pictorial portions of the Job Order as defined in the Detailed Scope of Work, illustrating the design, character, location, and dimensions of the Work to be performed, generally including but not limited to, elevations, sections, details, schedules, General Notes, specific notes, and diagrams. Synonymous with "Drawings", "Contract Drawings", and "Plans".
- 1.2.10 **Job Order (Task) Specifications:** Description of the manner of performing the Work, the quantities, qualities, and types of materials to be furnished.
- 1.2.11 **Joint Scope Meeting:** Meeting at the project site attended by the County and the Contractor to jointly scope the Work before the Detailed Scope of Work is finalized.
- 1.2.12 **Non-Prepriced Tasks:** Units of Work that are not included in the Construction Task Catalog but which are within the general scope and intent of this Contract. (Also referred to as 'NPP').
- 1.2.13 **Normal Working Hours:** Standard Shift Work between the Hours of Work between 6:00 AM and 6:00 PM, Monday thru Friday.
- 1.2.14 **Other than Normal Working Hours:** Hours outside Normal Working Hours including all day Saturday, Sunday, and County Holidays.
- 1.2.15 **Pre-priced Task** - A task described in, and for which a Unit Price is set forth in, the Construction Task Catalog®.
- 1.2.16 **Request for Job Order Proposal:** The County's formal request for the Contractor to provide a Job Order Proposal for the Detailed Scope of Work referenced therein. (Also referred to as 'RFJP').
- 1.2.17 **Supplemental Job Order:** A written agreement entered into after the award of the initial Job Order that alters or amends the Job Order. Changes in the Work requested are accomplished by the issuance of a Supplemental Job Order. Changes involving extensions of Job Order Completion Time, and additive or deductive changes are accomplished by issuance of a Supplemental Job Order to the original Job Order.
- 1.2.18 **Task Specifications:** Description of the manner of performing the Work, the quantities, qualities, and types of materials to be furnished.
- 1.2.19 **Unit Price:** The price published in the Construction Task Catalog® for a construction related specific repair or refurbishment task. The Unit Prices are fixed for the duration of the Contract. Each Unit Price is comprised of the Labor, Equipment and Materials costs to accomplish that

specific task. Unit Prices for new Pre-priced Tasks can be established during the course of the Contract and added to the Construction Task Catalogs®.

1.3 CONFLICTS IN THE CONTRACT DOCUMENTS

The following paragraph replaces Section 1.6.1 CONFLICTS IN THE CONTRACT DOCUMENTS:

The Contract Documents are intended to be complementary, and to describe and provide for a complete Work. The Following order of precedence governs the interpretation of the Contract Documents.

- .1 Agreement
- .2 Addenda (later takes precedence over earlier)
- .3 Job Order (Including Detailed Scopes of Work and Requests for Proposal)
- .4 Job Order plans
- .5 Project Manual (IFB/RFP)
- .6 Supplemental General Conditions
- .7 Construction Task Catalog®
- .8 The General Conditions and Requirements
- .9 Technical Specifications
- .10 Task Specifications

ARTICLE 2 — ADMINISTRATION OF THE CONTRACT

2.1 INFORMATION AND/OR SERVICES FURNISHED BY OWNER

The following paragraph is added as 2.2.3 to Section 2.2 INFORMATION AND/OR SERVICES FURNISHED BY OWNER:

County-furnished internet program will be provided to the Contractor for the posting of Job Order Scopes for subcontractors and the preparation of Job Order Price Proposals in response to County issued Request for Job Order Proposals. This program contains an electronic version (copy) of the Construction Task Catalog, which can be accessed on the Contractor's computer system to locate and select desired items from the CTC. Once the desired items are selected, the software provides for selection of quantities and based on the selected quantities, extends and totals CTC costs for each Job Order price Proposal. The program permits introduction of Non-Prepriced Tasks and the application of the Adjustment Factors. The Program will also interface with the Gordian 'Tools for Contractors and Subcontractors' website. The installation and maintenance of the software is the responsibility of the County.

2.2 ADMINISTRATION OF THE CONTRACT

The following paragraphs are added to the end of Section 2.3 ADMINISTRATION OF THE CONTRACT:

2.3.1 All work is to be performed at Journeyman level for the trade required and as specified in the Job Order Contract Technical Specifications CSI 01 – 48 manuals found on the CD provided to the Contractor at the pre-bid meeting.

2.3.2 The scope of required Work will be determined by the Detailed Scopes of Work stated in each individual Job Order. All costs incurred with preparing Job Order Proposals are the sole responsibility of the Contractor.

2.3.3. Contractor will perform Work only as authorized by Job Orders issued by the County in accordance with the 'Administration of Job Orders'. The Contractor must perform all Job Orders up to and including the Maximum Contract Value. The County must order at least the Minimum Contract Value.

2.3.4 The Contractor must provide all pricing, management, stamped or unstamped design drawings, shop drawings, documents, labor, materials, parts (to include system components), transportation, plant, supervision, and equipment needed to perform each Job Order. The Contractor must provide quality assurance as specified in strict accordance with the Contract.

2.3.5 In addition to the tasks and requirements stated in the Construction Task Catalog®, Technical Specifications CSI 01 through 48 and Task Specifications, the County may require Non Pre-priced Tasks incidental to work described in the Job Order. The parties will price these Non Pre-priced Tasks in accordance with the procedures set forth in the 'Administration of Job Orders'.

2.3.6 Credits for Pre-priced and Non Pre-priced Tasks shall be calculated at the pre-set Unit Prices and multiplied by the appropriate Adjustment Factors. The result is that a credit for Tasks that have been deleted from the Detailed Scope of Work will be given at 100% of the value at which they were included in the original Job Order Price Proposal.

2.3.7 As Directed by the County the Contractor will provide incidental architectural or engineering design services in accordance with applicable State laws and the County's insurance and indemnification requirements. All documents are subject to review and approval of the County. The County may require that design documents be prepared and provided in Computer Aided Design (CAD) format. Any cost for this work is included in the Contractor's Adjustment Factor.

2.3.8 Each Job Order will be prepared under the direction of the County.

2.3.9 The Owner may award an individual Job Order to any selected Contractor. Selection of the Contractor and award of the Job Order will be in compliance with established Owner procedures and based on one or more of the following criteria:

1. Rotational selection among all Contractors, unless otherwise determined by the Owner.
2. Evaluation of past and current performance on Job Orders of a similar nature and type of work, project size, construction management challenges, schedule performance, design management requirements, etc.

3. Balancing of workload (Job Order dollar volume and construction backlog) among Contractors.
4. Management of Job Order dollar volume within bonding limitations of the Contractor.
5. Price, as it relates to the Owner's independent cost estimate
6. Contractor's responsiveness to the Owner on Job Orders.
7. Other appropriate criteria as deemed in the best interest of the Owner.

2.1.10 County staff will notify the Contractor in writing of a Joint Scope Meeting to discuss a potential Job Order.

2.3.11 Prior to the Joint Scope Meeting, the County will provide the Contractor with all appropriate information and documentation, if any, pertaining to the potential Job Order. The Contractor and their primary trade(s) will participate in the Joint Scope Meeting and visit the proposed site with County staff. At the Joint Scope Meeting the following items will be discussed:

- .1 Job Order number and title
- .2 Existing site conditions
- .3 Presence of Hazardous Materials
- .4 Methods and alternatives for accomplishing work and value engineering
- .5 Definition and refinement of requirements
- .6 General Scope of Work
- .7 Requirements for stamped & unstamped design drawings, sketches, submittals, catalogue cuts, samples, shop drawings, etc.
- .8 Tentative construction schedule (bar chart or critical path method schedule)
- .9 **Liquidated damages if appropriate**
- .10 Preliminary quantity estimates
- .11 Staging areas, site access and protocol for admission
- .12 Special conditions regarding unique facility operations and hours of operation
- .13 Safety requirements
- .14 Special insurance requirements
- .15 Job Order Proposal due date

2.3.12 Making information available to Contractor is not to be construed in any way as a waiver of the aforesaid provisions, and **Contractor must satisfy themselves through their own investigations as to conditions to be encountered.**

2.3.13 Where investigation of subsurface conditions has been made by Owner in respect to foundation or other design, Contractor may inspect Owner's records of such investigation, including examination of samples and drill cores, if any.

2.3.14 When logs of test borings indicating a record of the data obtained by Owner's investigation of subsurface conditions are made available, **said logs represent only the investigator's opinion as to the character of material encountered in test borings and are made available only for the convenience of bidders.**

2.3.15 Investigation of subsurface conditions is made for the purpose of design, and Owner assumes no responsibility, whatsoever, in respect to the sufficiency of test borings, accuracy of the log of test borings, of other preliminary investigations, or in the interpretation thereof. **There is no warranty or guarantee, express or implied, that the conditions indicated are representative of those existing throughout the Work, or any part of it, or that unforeseen conditions may not be encountered.**

2.3.16 Upon completion of the joint scoping process, the County will issue a Request for

Job Order Proposal and a draft Detailed Scope of Work referencing any sketches, drawings, photographs, and specifications required to document accurately the work to be accomplished. The Contractor shall review the Detailed Scope of Work and request any required changes or modifications. When an acceptable Detailed Scope of Work has been prepared, the Owner will issue a Request for Proposal that will require the Contractor to prepare a Job Order Proposal. If Liquidated Damages will be applied to the Job Order, the County Representative will provide the appropriate information in the Request for Job Order Proposal or Detailed Scope of Work. The Detailed Scope of Work, unless modified by both the Contractor and the County, will be the basis on which the Contractor will develop its Job Order Proposal and the County will evaluate the Job Order Proposal. The Contractor does not have the right to refuse to perform any task or any work in connection with a particular Project.

The Job Order Price Proposal shall be based on the CTC line items associated with the Detailed Scope of Work, the unit of measure and the accurate quantities. **Failure to provide accurate Job Order Proposals based on this criterion and/or Non Pre-priced as defined, shall be cause for Non-compliance with the contract requirements.**

2.3.17 The Contractor is required to post from Gordian a Detailed Scope of Work and associated subcontractor trade list on the Gordian website, [http://www.egordian.com/Tools for Contractors and Subcontractors](http://www.egordian.com/Tools%20for%20Contractors%20and%20Subcontractors), within three working days of the issuance of the Request for Job Order Proposal and Detailed Scope of Work.

2.3.18 Job Order Proposal Development

The Contractor will prepare Proposals in accordance with the following:

.1 Pre-priced Tasks: The Contractor will identify the task and quantities required from the Construction Task Catalog® (CTC). The Unit Price set forth in the CTC serves as the base price. The value of the Job Order Price Proposal shall be calculated by summing the total of the calculations for each Pre-priced Tasks (unit price x quantity x Adjustment Factor) plus the value of all Non Pre-priced Tasks.

.2 Non Pre-priced Tasks (NPP): Non Pre-priced Tasks, if any, must be separately identified in the Proposal. These tasks are not set forth in the Construction Task Catalog®. Information submitted in support of Non Pre-priced Tasks includes, but is not be limited to, the following:

- .a Complete specifications and technical data, including task content, support drawings, task cost data, quality control and inspection requirements.
- .b Work schedule.
- .c Cost data will include a cost analysis report, establishing the basis for selecting the approach proposed for accomplishment of the task. Unless otherwise directed by the County, true and accurate cost data on subcontractor or vendor letterhead will be submitted demonstrating that the Contractor sought and received three price quotes. The Owner may require additional quotes and bids if the suppliers or subcontractors are not acceptable or if the prices are not reasonable. The Contractor will provide an installed Unit Price (or demolition price if appropriate) which will include all costs required to accomplish the Non Pre-priced Task.
- .d The final price submitted for Non Pre-priced Tasks which are performed by the Contractor will be according to the following formula:

Contractor Performed Duties

A= The number of hours for each labor classification and hourly rates

B= Equipment costs (other than small tools)

C= Three independent quotes for all materials

Total Cost for self-performed work = (A+B+C) x 10% Adjustment Factor (Only if A & B cannot be priced out of the CTC)

For Work performed by Subcontractors:

If the Work is to be subcontracted, the Contractor must submit three independent bids from Subcontractors. If three quotes or bids cannot be obtained, the Contractor will provide the reason in writing for the County's approval as to why three quotes cannot be submitted.

D = Subcontractor Costs (supported by three quotes)

Total Costs of Non Pre-Priced Task = D x 10% Adjustment Factor

- .e Following approval by the County of a Non Pre-priced Task, the Non Pre-priced Task Unit Price will be entered into the computer data base and fixed as a permanent Pre-priced task which will no longer require price justification.
 - .f The total extended price for the Non Pre-priced Task will be determined by multiplying the task Unit Price by the quantity required. The price offered in the Job Order Proposal will be determined by multiplying the total extended price by an Adjustment Factor of 1.00 (one).
 - .g If a Pre-priced Task is present in the CTC, it must be used in the formulation of the Job Order Price Proposal. Immaterial differences between the proposed Work and description of a Pre-Priced Task are not a basis for classifying a Task as Non Pre-priced. Owner's Project Manager's determination as to whether a task is a Pre-priced Task or a Non Pre-priced Task is final, binding, and conclusive upon the Contractor.
 - .h Whenever, because of trade jurisdiction rules or small quantities, the cost of a minor task in the Job Order Price Proposal is less than the cost of the actual labor and material to perform such task, the Owner may permit the Contractor to be paid for such task as a Non Pre-priced Task, or use Pre-priced labor tasks and material component pricing to cover the actual costs incurred. Provided, however, that there is no other work for that trade on the Project or other work for that trade cannot be scheduled at the same time and the final charge does not exceed \$1,000.
- .3 The Contractor's Job Order Proposal must include support documentation to indicate that adequate engineering and planning for the Job Order has been done, and that the tasks proposed are reasonable for the Work to be performed. Documentation to be submitted with the Job Order Proposal must include, but not be limited to:
- a. Job Order Price Proposal
 - b. Stamped & unstamped design drawings, calculations, specifications if required

- c. Catalog cuts
- d. Subcontractor and material supplier list
- e. Construction schedule
- f. Special Insurance
- g. For special equipment a copy of the warranty document may be required.
- h. Notification of Foreign Material (General Conditions 3.39.4)

Contractor's Job Order Proposal must be submitted by the date indicated on the RFJP. The time allowed for preparation of the Contractor's Job Order Proposal will depend on the complexity and urgency of the Job Order. On complex Job Orders, such as Job Orders requiring engineering/architectural drawings and approvals and permits, adequate time will be provided for preparation and submittal of the necessary documents and the Job Order Proposal. In urgent situations and minor maintenance and repair Job Orders requiring immediate completion, the Job Order Proposal may be required quickly.

2.2.19 Review of Job Order Proposal

- .1 The County reserves the right to reject a Job Order Proposal for any reason. The County also reserves the right not to issue a Job Order if that is determined to be in the best interests of the County to do so or if the proposed cost exceeds the County's estimate. In these instances, the Contractor has no entitlement to reimbursement for Job Order Proposal preparation expenses including but not limited to the costs to attend the Joint Scope Meeting, review the Detailed Scope of Work, prepare a Job Order Proposal (including incidental architectural and engineering services), subcontractor costs, and the costs to review the Job Order Proposal with the Owner. The County may pursue the performance of any Work by other means.
- .2 By submitting a Job Order Proposal to the County, the Contractor agrees to accomplish the Detailed Scope of Work in accordance with the Request for Proposal at the lump sum price submitted. It is the Contractor's responsibility to include all necessary Pre-priced and Non Pre-priced tasks and quantities in the Job Order Price Proposal prior to delivering it to the County.
- .3 The Contractor may choose the means and methods of construction; subject however, to the Owner's right to reject any means and methods proposed by the Contractor that:
 - .a Will constitute or create a hazard to the work, or to persons or property;
 - .b Will not produce finished Work in accordance with the terms of the Contract; or
 - .c Unnecessarily increases the price of the Job Order when alternative means and methods are available.
- .4 The County will evaluate the entire Job Order Proposal, including the correct tasks and quantities, and determine if the Contractor proposes to accomplish the Detailed Scope of Work in a manner acceptable to the County.

2.2.20 Issuance of the Job Order

- 1. A Job Order signed by the County will be provided to the Contractor. Each Job Order will include a Detailed Scope of Work, a firm fixed price, a time duration for the completion of the Work, and any special

conditions that might apply to that specific Job Order, such as Liquidated Damages. After the County issues a Job Order the Contractor's Detailed Job Order Price Proposal is of no significance. The Detailed Scope of Work becomes the Final Scope of Work. The Final Scope of Work defines the requirements of the Job Order. All provisions of this Contract are applicable to each Job Order. Job Orders will be written on an appropriate form.

2. The County may direct the Contractor to undertake and possibly complete urgent work prior to the issuance of a Job Order. The Contractor will be compensated in accordance with the provisions of this Contract. In such emergency situations and minor maintenance and repair Job Orders requiring immediate completion, the Job Order Proposal may be required quickly and the due date will be so indicated on the Request for Proposal or, as described below, the Contractor may be directed to begin work immediately with the paperwork to follow. The Contractor shall begin work as directed notwithstanding the absence of a fully developed Request for Proposal, Detailed Scope of Work, or Job Order. The Contractor shall be compensated for such work as if the work had been ordered under the standard procedures.

2.2.21 Unilateral Job Order.

If the Contractor has failed to submit a Job Order Proposal or the parties fail to reach an agreement, the County may issue a Unilateral Job Order. Compensation for the Work shall be in accordance with the CTC and terms and conditions of the Contract Documents. The Contractor must commence any work issued under a Unilateral Job Order in the time stated in the Job Order. Failure to commence Work may result in termination of this Contract for cause under 2.4.2. The issuance of a Unilateral Job Order will not prejudice any of the Contractor's rights to make claims or appeal disputed matters.

2.2.22 Computer and Communications Equipment Requirements

The Contractor must maintain in an operational condition, a computer system capable of operating the software supplied by the County.

SEE ATTACHED EXHIBIT B-1

END DOCUMENT 00850

EXHIBIT B-1

INSURANCE REQUIREMENTS FOR CONSTRUCTION CONTRACTS ABOVE \$45,000

Indemnity

To the fullest extent allowed by law, the Contractor shall indemnify, defend, and hold harmless the County of Santa Clara (hereinafter "County"), its officers, agents and employees from any claim, liability, loss, injury, or damage arising out of, or in connection with, performance of this Agreement by Contractor and/or its agents, employees, or sub-contractors, excepting only loss, injury or damage caused by the sole negligence or willful misconduct of personnel employed by the County. It is the intent of the parties to this Agreement to provide the broadest possible coverage for the County. The Contractor shall reimburse the County for all costs, attorneys' fees, expenses, and liabilities incurred with respect to any litigation in which the Contractor contests its obligation to indemnify, defend and/or hold harmless the County under this Agreement and does not prevail in that contest.

Insurance

Without limiting the Contractor's indemnification of the County, the Contractor shall provide and maintain at its own expense, during the term of this Agreement, or as may be further required herein, the following insurance coverages and provisions:

A. Evidence of Coverage

Prior to commencement of this Agreement, the Contractor shall provide a Certificate of Insurance certifying that coverage as required herein has been obtained. Individual endorsements executed by the insurance carrier must accompany the certificate. In addition, a certified copy of the policy or policies shall be provided by the Contractor upon request.

This verification of coverage shall be sent to the requesting County department, unless otherwise directed. The Contractor shall not receive a Notice to Proceed with the work under the Agreement until it has obtained all insurance required and such insurance has been approved by the County. This approval of insurance shall neither relieve nor decrease the liability of the Contractor.

B. Qualifying Insurers

1. All coverages, except surety, shall be issued by companies which hold a current policy holder's alphabetic and financial size category rating of not less than A- V, according to the current Best's Key Rating Guide or a company of equal financial stability that is approved by the County's Insurance Manager.

EXHIBIT B-1

2. When surety bonds are required, they shall be issued by companies that meet the following minimum requirements:
 - a. For projects in excess of \$250,000:
 1. A California admitted surety with either a current A.M. Best rating of A IV or a current Standard and Poors (S&P) rating of A.

OR
 2. An admitted surety insurer which complies with the provisions of the Code of Civil Procedure, Section 995.660*.

OR
 3. In lieu of 1 & 2, a company of equal financial size and stability that is approved by the County's Insurance Manager.
 - b. For projects under \$250,000:
 1. A California admitted surety with either a current A.M. Best rating of B or a current Standard and Poors (S&P) rating of BB.

OR
 2. An admitted surety insurer which complies with the provisions of the Code of Civil Procedure, Section 995.660*.

OR
 3. In lieu of 1 & 2, a company of equal financial size and stability that is approved by the County's Insurance Manager.

* California Code of Civil Procedure Section 995.660 in summary, states that an admitted surety must provide: 1) the original, or a certified copy of instrument authorizing the person who executed the bond to do so, within 10 calendar days of receipt of a request to submit the instrument; 2) a certified copy of the Certificate of Authority issued by the Insurance Commissioner, within 10 calendar days of receipt of a request to submit the copy; 3) a certificate from County Clerk of Santa Clara County that Certificate of Authority has not been surrendered, revoked, canceled, annulled or suspended, within 10 calendar days of receipt of the certificate; 4) copies of the surety's most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Article 10, within 10 calendar days of receipt of a request to submit the statements.

C. Notice of Cancellation

All coverage as required herein shall not be canceled or changed so as to no longer meet the specified County insurance requirements without 30 days' prior written notice of such cancellation or change being delivered to the County of Santa Clara or their designated agent.

EXHIBIT B-1

D. Insurance Required

1. Commercial General Liability Insurance - for bodily injury (including death) and property damage which provides limits as follows:

- a. Each occurrence - \$1,000,000
- b. General aggregate - \$2,000,000
- c. Products/Completed Operations aggregate ** - \$2,000,000
- d. Personal Injury - \$1,000,000

A minimum of 50% of each of the aggregate limits must remain available at all times unless coverage is project specific.

2. General liability coverage shall include:

- a. Premises and Operations
- b. **Products/Completed Operations with limits of two million dollars (\$2,000,000) per aggregate to be maintained for three (3) years following acceptance of the work by the County. For contracts whose maximum value is less than \$80,000, Products/Completed Operations limits shall be one million dollars (\$1,000,000) and two (2) years.
- c. Contractual Liability expressly including liability assumed under this Agreement. If the Contractor is working within fifty (50) feet of a railroad or light rail operation, any exclusion as to performance of operations within the vicinity of any railroad bridge, trestle, track, roadbed, tunnel, underpass, or crossway shall be deleted, or a railroad protective policy provided.
- d. Personal Injury liability
- e. Owners' and Contractors' Protective liability
- f. Severability of interest
- g. Explosion, Collapse, and Underground Hazards (X, C and U)
- h. Broad Form Property Damage liability

3. General liability coverage shall include the following endorsements, copies of which shall be provided to the County:

- a. **Additional Insured Endorsement**, which shall read:

EXHIBIT B-1

“County of Santa Clara, and members of the Board of Supervisors of the County of Santa Clara, and the officers, agents, and employees of the County of Santa Clara, individually and collectively, as additional insureds.”

Insurance afforded by the additional insured endorsement shall apply as primary insurance, and other insurance maintained by the County of Santa Clara, its officers, agents, and employees shall be excess only and not contributing with insurance provided under this policy. Public Entities may also be added to the additional insured endorsement as applicable, and the contractor shall be notified by the contracting department of these requirements.

b. Contractual Liability Endorsement:

Insurance afforded by this policy shall apply to liability assumed by the insured under written contract with the County of Santa Clara.

c. X C & U (Explosion, Collapse and Underground) Endorsement:

Insurance afforded by this policy shall provide X, C and U Hazards coverage.

4. Claims Made Coverage

If coverage is written on a claims made basis, the Certificate of Insurance shall clearly state so. In addition to coverage requirements above, such policy shall provide that:

- a. Policy retroactive date coincides with or precedes the Contractor's start of work (including subsequent policies purchased as renewals or replacements).
- b. Contractor will make every effort to maintain similar insurance during the required extended period of coverage following project completion, including the requirement of adding all additional insureds.
- c. If insurance is terminated for any reason, Contractor agrees to purchase an extended reporting provision of at least two years to report claims arising from work performed in connection with this Agreement or Permit.
- d. Policy allows for reporting of circumstances or incidents that might give rise to future claims.

EXHIBIT B-1

5. Automobile Liability Insurance

For bodily injury (including death) and property damage which provides total limits of not less than one million dollars (\$1,000,000) combined single limit per occurrence applicable to all owned, non-owned and hired vehicles.

6. Workers' Compensation and Employer's Liability Insurance

- a. Statutory California Workers' Compensation coverage including broad form all-states coverage.
- b. Employer's Liability coverage for not less than one million dollars (\$1,000,000) per occurrence.

7. Contractors' Equipment Insurance

On an "all risk" basis covering equipment owned, leased, or used by the Contractor. If the total value of equipment is less than \$100,000 Contractor may self-insure this exposure. If total equipment value is \$100,000 or more, insurance is required. Such insurance shall include an insurer's waiver of subrogation in favor of the County. Contractor shall hold harmless the County for any loss or damage to the Contractor's equipment. This coverage may be waived by the Insurance Manager, but the Contractor hereby releases and holds harmless the County for any loss or damages to its equipment.

8. Builder's Risk Insurance

The County shall provide Builder's Risk insurance (first party property insurance) on an all risk basis including flood with a limit of no less than the full replacement value of the work, and covering the work and all materials incorporated therein, and insuring the interests of the County, Contractor, and subcontractors. Insurance shall contain insurer's waiver of subrogation in favor of the Contractor and subcontractors. The Contractor shall be responsible for the first \$50,000 of any loss. The County's provision of Builder's risk insurance is an economic convenience to the County and does not change or revise the Contractor's responsibility for the Work until County Acceptance, including but not limited to, losses that may exceed the insurance limits. Contractor may secure additional insurance, in Contractor's sole and absolute discretion, and Contractor must include the cost of such insurance in Contractor's bid.

EXHIBIT B-1

E. Special Provisions

The following provisions shall apply to this Agreement:

1. The foregoing requirements as to the types and limits of insurance coverage to be maintained by the Contractor and any approval of said insurance by the County or its insurance consultant(s) are not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by the Contractor pursuant to this Agreement, including but not limited to the provisions concerning indemnification.
2. The County acknowledges that some insurance requirements contained in this Agreement may be fulfilled by self-insurance on the part of the Contractor. However, this shall not in any way limit liabilities assumed by the Contractor under this Agreement. Any self-insurance shall be approved in writing by the County upon satisfactory evidence of financial capacity. Contractor's obligation hereunder may be satisfied in whole or in part by adequately funded self-insurance programs or self-insurance retentions.
3. Should any of the work under this Agreement be sublet, the Contractor shall require each of its subcontractors of any tier to carry the aforementioned coverages, or Contractor may insure subcontractors under its own policies.
4. The County reserves the right to withhold payments to the Contractor in the event of material noncompliance with the insurance requirements outlined above.

F. Bond Requirements

1. Contract Bonds - Prior to execution of the Contract, Contractor shall file with the County on the approved forms, the two surety bonds in the amounts and for the purposes noted below, duly executed by a reputable surety company satisfactory to County, and Contractor shall pay all premiums and costs thereof and incidental thereto.

Each bond shall be signed by both Contractor and the sureties.

- a) The "payment bond for public works" shall be in an amount of one hundred percent (100%) of the Maximum Contract Value, as determined from the prices in the bid form, and shall insure to the benefit of persons performing labor or furnishing materials in connection with the work of the proposed Contract. This bond shall be maintained in full force and effect until all work under the Contract is completed and accepted by the County, and until all claims for materials and labor have been paid.

The "performance bond" shall be in an amount of one hundred percent (100%) of the Maximum Contract Value as determined from the prices in the bid form and shall insure the faithful performance by Contractor of all

EXHIBIT B-1

work under the Contract. It shall also insure the replacing of, or making acceptable, any defective materials or faulty workmanship.

Should any surety or sureties be deemed unsatisfactory at any time by the County notice will be given Contractor to that effect and Contractor shall forthwith substitute a new surety or sureties satisfactory to the County. No further payment shall be deemed due or will be made under the Contract until the new sureties qualify and are accepted by the County.

All alterations, time extensions, extra and additional work, and other changes authorized by the Specifications, or any part of the Contract, may be made without securing consent of the surety or sureties on the contract bonds.

- 2 Fidelity Bonds – Required only if contractor will be receiving advanced funds or payments. Before receiving compensation under this Agreement, Contractor will furnish County with evidence that all officials, employees, and agents handling or having access to funds received or disbursed under this Agreement, or authorized to sign or countersign checks, are covered by a BLANKET FIDELITY BOND in an amount of AT LEAST fifteen percent (15%) of the maximum financial obligation of the County cited herein. If such bond is canceled or reduced, Contractor will notify County immediately, and County may withhold further payment to Contractor until proper coverage has been obtained. Failure to give such notice may be cause for termination of this Agreement, at the option of County.

SECTION 01090
ABBREVIATIONS

ABBREVIATIONS: In addition to abbreviations indicated on the Drawings, references in the Project Manual to codes, regulations, trade associations, technical societies, recognized authorities, and other institutions may include the following organizations, which are sometimes referred to only by corresponding abbreviation. Not all abbreviations are listed and not all listed abbreviations are used. Unless otherwise specifically defined in the Contract Documents, when the following abbreviations are used, the intent and meaning will be interpreted as follows:

AA	Aluminum Association
AABC	Associated Air Balance Council
AAMA	Architectural Aluminum Manufacturers Association
AAN	American Association of Nurserymen
AATC	American Association of Textile Chemists
ACI	American Concrete Institute
ACIL	American Council of Independent Laboratories
ACPA	American Concrete Pipe Association
ADA	Americans with Disabilities Act
ADC	Air Diffusion Council
AFBMA	Anti-Friction Bearing Manufacturers Association
AFPA	American Forest and Paper Association
ATIS	Alliance For Telecommunication Industry Solutions
AGA	American Gas Association
AGMA	American Gear Manufacturers Association
AHA	American Hardboard Association
AHMA	Association of Home Appliance Manufacturers
AI	Asphalt Institute
AIA	American Institute of Architects
A.I.A.	American Insurance Association
AIHA	American Industrial Hygiene Association
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
ALCA	Associated Landscape Contractors of America
ALI	Associated Laboratories, Inc.
ALSC	American Lumber Standards Committee
AMCA	Air Movement and Control Association
ANSI	American National Standards Institute
AOAC	Association of Official Analytical Chemists
AOSA	Association of Official Seed Analysts
APA	American Plywood Association
API	American Petroleum Institute
APRI	Air Conditioning and Refrigeration Institute
ARMA	Asphalt Roofing Manufacturers Association
ASA	Acoustical Society of America
ASC	Adhesive and Sealant Council
APWA	American Public Works Association
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers

ASME	American Society of Mechanical Engineers
ASPA	American Sod Producers Association
ASPE	American Society of Plumbing Engineers
ASSE	American Society of Sanitary Engineering
ASSHTO	American Association of State Highway and Transportation Officials
ASTM	American Society for Testing and Materials
AWCMA	American Window Covering Manufacturers Association
AWG	American Wire Gage
AWI	Architectural Woodwork Institute
AWPA	American Wood-Preservers' Association
AWPI	American Wood-Preservers Institute
AWS	American Welding Society
AWWA	American Water Works Association
BHMA	Builders' Hardware Manufacturers Association
BIA	Brick Industry Association
BIFMA	Business and Institutional Furniture
CAGI	Compressed Air and Gas Institute
CalTrans	State of California, Department of Transportation
CAUS	Color Association of the United States
CBC	California Building Code
CBM	Certified Ballast Manufacturers Association
CCC	Carpet Cushion Council
CCR	California Code of Regulations
CDA	Copper Development Association
CFFA	Chemical Fabrics & Film Association, Inc.
CFR	Code of Federal Regulations
CGA	Compressed Gas Association
CISCA	Ceiling and Interior Systems Construction Association
CISPI	Cast Iron Soil Pipe Institute
CLFMI	Chain Link Fence Manufacturers Institute
CPA	Composite Panel Association
CRI	Carpet and Rug Institute
CRSI	Concrete Reinforcing Steel Institute
CRA	California Redwood Association
CSI	Construction Specifications Institute
CSS	State of California Standard Specifications
CTI	Ceramic Tile Institute of America
DIPRA	Ductile Iron Pipe Research Association
DFEH	California Department of Fair Employment and Housing
DHI	Door and Hardware Institute
DLPA	Decorative Laminate Products Association
EIA	Electronic Industries Alliance
EIMA	Exterior Insulation Manufacturers Association
EJMA	Expansion Joint Manufacturers Association
EPA	Environmental Protection Agency
ETL	ETL Testing Laboratories, Inc.
FCI	Fluid Controls Institute
FM	Factory Mutual
FS	Federal Specification of General Services Administration
FTI	Facing Tile Institute

GANNA	Glass Association of North America
GA	Gypsum Association
HEI	Heat Exchange Institute
HI	Hydronics Institute
H.I.	Hydraulic Institute
HMA	Hardwood Manufacturers Association
HPMA	Hardwood Plywood Manufacturers Association
IAMPO	International Assoc of Mechanical and Plumbing Officials
IBD	Institute of Business Designers
ICBO	International Conference of Building Officials
ICEA	Insulated Cable Engineers Association
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronic Engineers
IESNA	Illuminating Engineering Society of North America
IGCC	Insulating Glass Certification Council
IMSA	International Municipal Signal Association
IRI	Industrial Risk Insurers
ISA	Instrument Society of America
LIA	Lead Industries Association, Inc.
LPI	Lightning Protection Institute
MBMA	Metal Building Manufacturer's Association
MCAA	Mechanical Contractors Association of America
MIA	Marble Institute of America
MIL	Military Specification of U.S. Department of Defense
MSS	Manufacturers Standardization Society of the Valve and Fittings Industry
NAAMM	National Association of Architectural Metal Manufacturers
NAIMA	North American Insulation Manufacturers Association
NAPA	National Asphalt Pavement Association
NAPF	National Association of Plastic Fabricators
NBGQA	National Building Granite Quarries Association
NCMA	National Concrete Masonry Association
NCPI	National Clay Pipe Institute
NCRPM	National Council on Radiation Protection
NCSPA	National Corrugated Steel Pipe Association
NEC	National Electrical Code
NECA	National Electrical Contractors Association
NEII	National Elevator Industry, Inc.
NEMA	National Electrical Manufacturers Association
NETA	International Electrical Testing Association
NFPA	National Fire Protection Association
NHLA	National Hardwood Lumber Association
NLGA	National Lumber Grades Authority
NPCA	National Paint and Coatings Association
NRCA	National Roofing Contractors Association
NWWDA	National Wood Window and Door Association
NSF	National Sanitation Foundation
NTMA	National Terrazzo and Mosaic Association
NUSIG	National Uniform Seismic Installation Guidelines
OSHA	Occupational Safety and Health Administration
PCA	Portland Cement Association
PCI	Precast Concrete Institute

PDI	Plumbing and Drainage Institute
PEI	Porcelain Enamel Institute
RFCI	Resilient Floor Covering Institute
RIS	Redwood Inspection Service [Grading Rules]
RMA	Rubber Manufacturers Association
SDI	Steel Deck Institute
S.D.I.	Steel Door Institute
SGCC	Safety Glazing Certification Council
SIGMA	Sealed Insulating Glass Manufacturers Association
SJI	Steel Joist Institute
SMA	Screen Manufacturers Association
SMACNA	Sheet Metal and Air Conditioning Contractor's National Association, Inc.
SAE	Society of Automotive Engineers
SPRI	Single Ply Roofing Institute
SSMA	Steel Stud Manufacturers Association
SSPC	Steel Structures Painting Council
SSPMA	Sump and Sewage Pump Manufacturers Association
STI	Steel Tank Institute
SWI	Steel Window Institute
SWPA	Submersible Wastewater Pump Association
TCA	Tile Council of America
TCIA	Tree Care Industry Association
TPI	Truss Plate Institute
UBC	Uniform Building Code
UFAC	Upholstered Furniture Action Council
UMC	Uniform Mechanical Code
UPC	Uniform Plumbing Code
UL	Underwriters' Laboratories, Inc.
UNI	Uni-Bel PVC Pipe Association
USC	United States Code
USP	U.S. Pharmacopeial Convention
USEPA	United States Environmental Protection Agency
WA	Wallcovering Association
WCLIB	West Coast Lumber Inspection Bureau
WDMA	Window and Door Manufacturers Association
WIC	Woodwork Institute of California
WLPDIA	Western Lath, Plaster, Drywall Industries Association
WRI	Wire Reinforcement Institute
WSC	Water Systems Council
WSFI	Wood and Synthetic Flooring Institute
WWPA	Western Wood Products Association

END OF SECTION 01090

PART 1 - GENERAL**1.01 SUMMARY**

- A. This Section includes:
1. Part 1 - General
 - a. 1.01 –
 - b. 1.02 - Related Documents And Sections
 - c. 1.03 – Definitions
 - d. 1.04 – Cost Breakdown
 - e. 1.05 – Payment for Materials On-hand
 - f. 1.06 – Applications for Payment
 - g. 1.07 - Payment Application Form and Submission
 - h. 1.08 – Administrative Submittals Required With Payment Applications
 2. Part 2 – Products (Not Used)
 3. Part 3 – Execution (Not Used)
 4. Part 4 – Forms
 - a. Cost Breakdown Form 01290F-1

1.02 RELATED DOCUMENTS AND SECTIONS

- A. Document 00700.8, "Payments"
- B. Section 01450, "Contractor's Quality Control (QC) System"
- C. Section 01320, "Contractor Progress Documentation"

1.03 DEFINITIONS

- A. **Materials On Hand** - Acceptable materials procured and delivered to the Project Site and suitably protected but not yet used in the Project, and at sole discretion of the Owner's Authorized Representative, acceptable materials stored at off-site locations. All off-site storage must be in secured facilities with insurance coverages acceptable to Owner. Contractor's surety must consent in writing to Contractor's request for payment for materials stored off-site.

1.04 COST BREAKDOWN

- A. Coordinate preparation of the Cost Breakdown with preparation of the Contractor's Baseline Schedule.
 1. Correlate line items in the Cost Breakdown with other required administrative forms and schedules including payment request forms.
 2. Submit the Cost Breakdown to the Owner as required in Section 01320, "Contractor Progress Documentation."
- B. The Cost Breakdown must differentiate costs of labor, materials, equipment, supplies, overhead (including general conditions costs), and profit. The Cost Breakdown must cover and be cross-referenced to the activities on the Official Progress Schedule. The Cost Breakdown will be used in coordination with the Official Progress Schedule and as a basis for progress payments.
- C. Mobilization cost and payment thereof is governed by Document 00700.8.2.3, "Mobilization Costs." Separate mobilization costs must not be shown on the Cost Breakdown.
- D. Except as Directed by the Owner, Submittal activities, Shop Drawing activities, and other similar general conditions administrative or engineering activities must not be cost loaded.

- E. Submit Cost Breakdown information, as appropriate, for each activity on the Official Progress Schedule. Costs must be broken down, organized, and formatted as shown on Cost Breakdown Form 01290F-1 at the end of Section 01290, "Payment Procedures."
- F. Each Subcontractor's activities must be separately identified on Cost Breakdown Form 01290F-1. The sum of the labor, materials, equipment, overhead and profit values for the Work of each Subcontractor identified on the Cost Breakdown Form must equal the value of the Subcontract between the Contractor and the Subcontractor indicated.
- G. The sum of the values of the Contractor's activities on Cost Breakdown Form plus the sum of the values of the Subcontractors activities on the Cost Breakdown Form 01290F-1 must equal the Contract Sum for the Project.
- H. Overhead (including general requirements costs), and profit must be proportionally prorated over all cost loaded activities as a fixed percentage of the value of each activity.
- I. A Cost Breakdown may be rejected if in Owner's opinion any item is unbalanced.

1.05 PAYMENT FOR MATERIALS ON HAND

- A. Materials On Hand must be collected together and separated from other materials and clearly identified as property of Owner and must be accessible to Owner at all reasonable times for examination or other legal purposes.
- B. For Materials On Hand to be considered for payment Contractor must request payment for them on Owner furnished or Owner Approved forms including accompanying documentation as required by Owner. Contractor must submit an original and two (2) copies to Owner not later than two weeks prior to the end of the payment application period. All accompanying documentation required by the Owner including evidence of purchase (and warehouse receipt when required) must be attached to the original. The Contractor must certify in writing that the subject materials meet the requirements of the Contract Documents.
- C. The Contractor must submit and the Owner must have accepted all shop drawings and submittals for the Materials On Hand prior to the Contractor's request for payment for said Materials On Hand.
- D. The provisions allowing payment for Materials On Hand are intended to be applied to large items of equipment and construction materials of special manufacture or order for the Project.

1.06 APPLICATIONS FOR PAYMENT

- A. The cut-off date (last day) for each progress payment is the last day of the month or as otherwise Directed by the Owner.
- B. The period of construction Work covered by each application for payment is the period beginning the first day of the payment application period and ending with the last day of the payment application period.
- C. Before the end of each payment application period, Contractor and Owner's Project Manager will jointly review Contractor's estimate of items of Work completed and acceptable Materials On Hand for which Contractor is requesting a progress payment. The joint review (job walk) will occur at the Project site.
- D. Prior to the joint review, Contractor must provide Owner with two (2) copies of a progress estimate worksheet showing each activity on the Official Progress Schedule that has been started but is not yet complete. The worksheet will be used during the joint review to document the actual physical percentage complete of each started but uncompleted activity.
- E. After the joint review, Contractor must prepare on Owner furnished or Owner Approved forms, a formal request for payment. Two (2) copies the formal request for payment must be submitted to the Owner no later than one day after the end of the payment period.
- F. With the submission of the formal request for payment, Contractor must provide two (2)

copies of an updated Cost Breakdown, showing the total value, percentage completed, and earned value of each item. The updated Cost Breakdown must be submitted to Owner on Owner-furnished or Owner Approved forms.

- G. Payment will be due to Contractor thirty (30) Days after receipt by Owner of a properly prepared progress payment request from the Contractor. Returned and resubmitted progress payment requests must state resubmission date.

1.07 PAYMENT APPLICATION FORM AND SUBMISSION

- A. Use forms as furnished or Approved by the Owner.
- B. Complete every entry on form.
- C. All amounts billed must be submitted as whole dollar amounts.
- D. A person authorized to sign legal documents for Contractor must sign the formal payment application.
- E. The Owner will return incomplete applications "Returned Without Action."
- F. Entries must match data on the Approved Cost Breakdown
- G. Include amounts of executed Change Orders as separate line items in the Cost Breakdown
- H. Submit the signed original and one (1) copy of each application for payment to the Owner by a method ensuring receipt by Owner within 24 hours.
- I. Owner will release retention in accordance with article 8.3; Contractor should not invoice Owner for retention.

1.08 ADMINISTRATIVE SUBMITTALS COINCIDING WITH PAYMENT APPLICATIONS

- A. Administrative actions and submittals that must coincide with submittal of each application for payment include the following:
 - 1. Certified Payroll (Must be submitted within 10 Days from payment period end date.)
 - 2. Updated (As-Built) Record Documents (Must be updated prior to payment period end date)
 - 3. Updated Official Progress Schedule (Must be submitted with request for Progress Payment)
 - 4. Earned Value statement based on Updated Official Progress Schedule and approved Cost Breakdown (Must be submitted with request for Progress Payment)
 - 5. Updated Procurement Status Log (Must be submitted with request for Progress Payment)
 - 6. Updated Submittal Log (Must be submitted with request for Progress Payment)
 - 7. Monthly Report (Must be submitted within 3 days from payment period end date.)
- B. Final payment application
 - 1. Submit, on forms furnished or Approved by the Owner, two (2) copies of a final application for payment with supporting documentation not previously submitted and accepted, including, but not limited, to the following:
 - a. Evidence of completion of Project closeout requirements.
 - b. Evidence that claims have been settled.
 - c. Other documents as required by the Owner.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

PART 4 - FORMS

COST BREAKDOWN FORM 01290F-1**CONTRACTOR:****ADDRESS:****BID PACKAGE:****CONTRACT NUMBER:**

CONTRACTOR/ SUBCONTRACTOR	*ACTIVITY NUMBER	ACTIVITY DESCRIPTION	LABOR \$	MATERIAL \$	EQUIPMENT \$	**SUBCONTRACTOR OVERHEAD & PROFIT @ FIXED %	**CONTRACTOR OVERHEAD & PROFIT @ FIXED %

*Activity Number from Official Progress Schedule

**Overhead (including general requirements costs), and profit must be proportionally prorated over all cost loaded activities as a fixed percentage of the value of each activity.

END OF SECTION 01290

SECTION 01310 PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section includes:
 - 1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 - Related Documents And Sections
 - c. 1.03 – Project Manager / Superintendent Safety Training
 - d. 1.04 – Coordination
 - e. 1.05 – Pre-work Verification
 - f. 1.06 – Administrative Actions
 - g. 1.07 - Conservation
 - 2. Part 2 – Products (NotUsed)
 - 3. Part 3 – Execution (NotUsed)
 - 4. Part 4 –Forms (Not Used)

1.02 RELATED DOCUMENTS AND SECTIONS

- A. Document 00700.3, “Contractor’s Responsibilities”
- B. Section 01725, “Survey & Field Engineering” Section 01315, “Project Meetings”
- C. Section 01320, “Contractor Progress Documentation”
- D. Section 01450, “Contractor’s Quality Control (QC)”

1.03 PROJECT MANAGER /SUPERINTENDENT SAFETY TRAINING

All Contractor Project Managers and on site Superintendents shall possess an OSHA 30 hr. Construction Safety, Outreach Training certificate that is not over 5 years old. Certificate shall be presented to the County before said Project Manager or Superintendent will be permitted to perform on this contract.

1.04 COORDINATION

- A. Contractor must not delegate Contractor’s responsibility for coordination of the Work to any Subcontractor.
- B. Contractor must provide a General Superintendent whose sole responsibility is administration of the Contractor’s Work and the coordination of the Work of the Contractor’s Subcontractors and suppliers.
- C. Contractor must provide administrative and supervisory personnel as needed or required for timely compliance with all administrative requirements of the Contract Documents and proper coordination of the performance of the Work.
- D. Contractor must ensure that each Subcontractor provides personnel as reasonably required for management and coordination of the Subcontractor’s Work and for coordination of the Subcontractor’s Work with the Work of the entire Project.
- E. Contractor must coordinate the Work to ensure efficient and orderly installation of each part of the Work of the entire Project including but not limited to:
 - 1. Coordinating all aspects of the Work as required to provide the Owner with a complete and operable facility.
 - 2. Coordinating the Work with the work of other contractors and entities to ensure efficient and orderly installation of each part of the Work of the entire Project.

3. Coordinating installation of different components and systems of the Work to ensure maximum accessibility for required maintenance, service, and repair.
4. Coordinating the Work included in different Sections of the Project Manual that depend on each other for proper installation, connection, and operation.
5. Coordinating the Work of all Subcontractors and suppliers.
6. Coordinating the Work in such a manner to avoid delays and permit proper and efficient installation of the Work by all Subcontractors.
7. Coordinating electrical/mechanical Work, particularly between general trades and mechanical/electrical trades, including the work of Owner and other contractors, so that sleeves, hangers, chases, openings, etc., required for pipe, conduit, and other installations of like character are duly and properly Provided and Installed as Work progresses.
8. Coordinating all cutting, fitting, and patching that may be required to make the parts of the Work come together properly for the completed Project as shown or as reasonably implied by the Contract Documents.
9. Coordinating for future installation of work by others that is not included in the Contractor's Work but is shown or specified in the Contract Documents.
10. Coordinating delivery of materials in accordance with the Official Progress Schedule
11. Coordinating and cooperating in the timing and sequencing of Contractor's Work with the work of other contractors or the Owner.
12. Sequencing the Work to obtain the best results where installation of one component of the Work depends on installation of other components, before or after its own installation.
13. Making adequate provisions to accommodate items scheduled for later installation by Contractor, Owner, or other contractors.
14. Checking the drawings of the Owner or other contractors for interferences with Contractor's Work and promptly reporting to Owner, in writing, any potential interferences between the Contractor's Work and the work of Owner or the work of other contractors.
15. Utilizing the Contract Documents and Owner accepted Submittals to check and coordinate the Work so that no interferences or conflicts between trades occur. This checking and coordination must be performed and completed before construction is commenced in each affected area and may require the preparation and submission of Coordination Drawings.
16. Furnishing to other contractors, whose work is fitted to Contractor's Work, Record Documents, Coordination Drawings, details, and erection drawings giving full information regarding the Fabrication, assembly, and installation of Contractor's Work.
17. Preparing memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings. Prepare similar memoranda for the Owner and separate contractors if coordination of their Work is required.
18. Resolving disputes between Subcontractors.

1.05 PRE-WORK VERIFICATION

A. Prior to starting a particular type or kind of Work:

1. Review all Contract Documents and other relevant data related to the type or kind of Work to be performed;
2. Check Owner accepted Submittals and verify dimensions at Project Site;
3. Review manufacturer's instructions applicable to conditions under which Work is to be installed;
4. Inspect areas, surfaces or construction receiving the Work.

-
5. Report to Owner in writing and concerns, issues, or problems observed during Contractor's Pre-Work verification.
 - B. Start of Work shall signify compliance with the above requirements and acceptance of previously placed construction or substrates as being in satisfactory condition to achieve proper installations and first quality workmanship as intended under these Contract Documents. Failure to so inspect and report to Owner shall constitute an acceptance of the previously placed construction or substrates.

1.06 ADMINISTRATIVE ACTIONS

- A. Administrative actions include, but are not limited to, the following:
 1. Preparation, update, and revision of Contractor's Official Progress Schedule (See Section 01320, "Construction Progress Documentation".)
 2. Delivery and review of Submittals. (See Section 01330, "Submittal Procedures")
 3. Project Meetings. (See Section 01315, "Project Meetings")
 4. Project closeout activities. (See Section 01770, "Closeout Procedures")
- B. Coordinate timing of required administrative actions with construction activities and activities of Owner and other contractors to avoid conflicts and ensure orderly progress of the Work.

1.07 CONSERVATION

- A. Coordinate Work to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.
- B. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

PART 4 - FORMS (Not Used)

END OF SECTION 01310

SECTION 01315 PROJECT MEETINGS

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section includes:
 - 1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 - Related Documents
 - c. 1.03 – Definitions
 - d. 1.04 – Project Meetings
 - 2. Part 2 – Products (NotUsed)
 - 3. Part 3 – Execution (NotUsed)
 - 4. Part 4 –Forms (Not Used)

1.02 RELATED DOCUMENTS

- A. Section 01320, "Construction Progress Documentation"
- B. Section 01450, "Contractor's Quality Control (QC) System"
- C. Section 01500, "Temporary Facilities and Controls"
- D. Section 01515, "Solid Waste Management and Recycling Plan"
- E. Section 01770, "Closeout Procedures"
- F. Section 01810, "General Commissioning Requirements"

1.03 DEFINITIONS

- A. **Decision/Action Tracking Report** – A report prepared by the Contractor recording all actions, commitments, and decisions (items) made at various Project Meetings and conferences. At a minimum, the report must track the name of the person responsible for the item, a description of the required action or decision, the initiation date of the item, the due date for the item, actual completion date of the item, and the current status of the item. Copies of the Decision/Action tracking report must be provided to all attendees and two (2) copies must be submitted to the Owner within twenty-four (24) hours of the meetings.

1.04 PROJECT MEETINGS

- A. General
 - 1. Contractor must inform participants of date and time of each meeting and preside at all required meetings throughout progress the Work unless otherwise Directed by Owner.
 - 2. Contractor must prepare agenda for all meetings and provide to all attendees prior to the meetings.
 - 3. Contractor must attend all meetings as required by the Contract Documents.
 - 4. Contractor must attend and/or conduct additional meetings as Directed by the Owner's Project Manager.
 - 5. Contractor must conduct meetings and conferences at the Project Site in the Contractor's on-site temporary job trailer, unless otherwise indicated or required by Owner.
 - 6. Contractor's job trailer must contain a conference table and sufficient seating to accommodate eight (8) meeting participants.

7. Contractor must prepare and distribute meeting minutes as required in individual sections of the Project Manual.
8. Whether or not Contractor is responsible for the meeting minutes, Contractor must maintain notes from all meetings and conferences in the form of a Decision/Action Tracking Report.

B. Preconstruction Conference

1. The Owner will schedule and conduct a Preconstruction Conference before starting construction but no later than 21 Days after execution of the Agreement.
2. Conference will be held at Project Site or another convenient location designated by Owner.
3. Participants:
 - a. Owner's Project Manager (Mandatory Attendance Required)
 - b. Designer of Record (Mandatory Attendance Required)
 - c. Contractor's Authorized Representative (Mandatory Attendance Required)
 - d. Contractor's QC Manager (Mandatory Attendance Required) (See Section 01450.1.08.A.2.r)
 - e. Major Subcontractors (Mandatory Attendance Required)
 - f. Testing Laboratory Representative (See Section 01430.1.08.G)
 - g. Appropriate Manufacturers
 - h. Appropriate Suppliers
 - i. Other interested parties
4. All participants at the conference must be familiar with Project and authorized to conclude matters relating to the Work.
5. Agenda: Items of significance to be discussed at the meeting include:
 - a. Introductions
 - b. Notice To Proceed (NTP)
 - c. Direction From The Owner
 - d. Emergencies
 - e. Required Notifications
 - f. Contractor Quality Control (QC) System
 - g. Testing and Inspection Laboratory
 - h. Coordination
 - i. Normal Hours Of Work
 - j. Workplace Environment
 - k. Use of Project Site
 - l. Security
 - m. Disruption of Owner's Normal Operations
 - n. Use Of Owner's Facilities
 - o. Temporary Facilities and Controls
 - p. Accepting Material Deliveries

- q. General Correspondence
- r. Additional Detailed Instructions

-
- s. Field Modifications
 - t. Requests For Information (RFI)
 - u. Change Orders
 - v. Progress Payments
 - w. Submittals (List of Owner's Submittal reviewers) (Ref01332.1.08.A)
 - x. Record Documents
 - y. Owner Furnished Contractor Installed (OFCI) Equipment
 - z. Procurement Issues
 - aa. Project Meetings
 - bb. Permits
 - cc. Fire Marshal Issues
 - dd. Subcontractor Issues
 - ee. Waste Management and Recycling Requirements
 - ff. Permanent Utilities
 - gg. Progress Cleaning
 - hh. Environmental Issues
 - ii. Schedule
 - jj. Liquidated Damages
6. The Owner will prepare meeting minutes of the Preconstruction Conference and distribute minutes to the attendees.
- C. Schedule Orientation Meeting (See Section 01320.3.03, "Schedule Orientation Meeting")
- D. Solid Waste Management Plan Meeting (See Section 01515.1.05, "Solid Waste Management and Recycling Plan")
- E. Quality Control Meetings
- 1. Contractor must conduct and take minutes of all meetings required by Section 01450, "Contractor's Quality Control (QC) System", including but not limited to:
 - a. Coordination and Mutual Understanding Meeting (See Section 01450.1.10, "Coordination and Mutual Understanding Meeting")
 - b. Recurring QC Meetings (See Section 01450.1.11, "QC Meetings")
 - c. Preparatory Phase Meetings (See Section 01450.1.12, "Three Phases of Control")
 - d. Work Phase Meetings ((See Section 01450.1.14, "QC Documentation")
- F. Progress Meetings
- 1. Owner's Project Manager will establish a schedule of construction Progress Meetings. The frequency of these Progress Meetings shall be at the discretion of Owner's Project Manager, and shall be no more often than once each week. Contractor must attend Progress Meetings at the times and locations scheduled. The progress meetings will be located at the Contractor's on-site field office unless the Owner's Project Manager approves an alternate location.
 - 2. Attendees:
 - a. Owner's Project Manager
 - b. Designer of Record
 - c. Contractor Authorized Representative
-

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- d. QC Manager (See Section 01450.1.08.A.2.r)
 - e. Appropriate Subcontractor(s)
 - f. Appropriate Suppliers
 - g. Testing Laboratory Representative (See Section 01430.1.08.G)
 - h. Other entities concerned with current progress or involved in planning, coordination, or performance of future activities must be represented at these meetings.
3. Agenda:
- a. Review and update Contractor's Decision/Action Tracking Report from previous Progress Meeting
 - b. Schedule Review
 - (1) Review progress since the last meeting
 - (2) Compare current progress against Official Progress Schedule
 - (3) Determine how construction behind schedule will be expedited
 - (4) Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - c. Review present and future needs of each entity present, including the following:
 - (1) Interface requirements
 - (2) Sequence of operations
 - (3) Status of Submittals
 - (4) Status of key deliveries
 - (5) Status of off-site fabrication
 - (6) Site access issues
 - (7) Site utilization
 - (8) Temporary facilities and controls
 - (9) Normal Hours of Work
 - d. Progress cleaning
 - e. Change Orders.
4. At a minimum, the Contractor must maintain notes for all Progress Meetings in the form of a Decision/Action Tracking Report. Copies of the Decision/Action tracking report must be provided to all attendees and two (2) copies must be submitted to the Owner within twenty-four (24) hours of the meetings.
5. Closeout Conference (See Section 01770.1.04, "Closeout Conference")
- G. Commissioning Meetings (See Section 01810, "General Commissioning Requirements")
- H. Demonstration and Training Meetings (See Section 01820, "Demonstration and Training")

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

PART 4 - FORMS (Not Used)

END OF SECTION 01315

SECTION 01325
RECORD DOCUMENTS (As-builts)

PART 1 - GENERAL

1.01 SUMMARY

A. This Section includes:

1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 – Related Documents and Sections
 - c. 1.03 - Definitions
 - d. 1.04 - Record Documents
 - e. 1.05 - Concealed Work
 - f. 1.06 – Maintenance of documents and samples
 - g. 1.07 – Record Set
 - h. 1.08 - Progress Payments
 - i. 1.09 - Closeout and Acceptance of the Work
 - j. 1.10 - Submittals
2. Part 2 – Products (Not Used)
3. Part 3 – Execution (Not Used)
4. Part 4 – Forms (Not Used)

1.02 RELATED DOCUMENTS AND SECTIONS

- A. Document 00700.3.3, “Documents & Samples at the Project Site”
- B. Document 00700.8.2, “Progress Payments”
- C. Document 00700.13.6, “Recommendation for Acceptance”
- D. Section 01290, “Payment Procedures”

1.03 DEFINITIONS

- A. **As-Builts** - A set of the Contract Documents including Drawings and Project Manual updated on a continuous basis to indicate conditions encountered and the final configuration of a Project as it was constructed. As-Builts include any change or clarification to the Contract Documents and dimensional information showing the actual locations of Installed components of the Work. (Also known as “Record Documents” or “As-Built Documents”)
- B. **Record Set** – Project Manual, Drawings, Addenda, Change Orders, Field Modifications, Requests for Information (RFI), Submittals, Product Data, Samples, Shop Drawings, Field Test and inspection records, and Coordination Drawings located at the Project Site.

1.04 RECORD DOCUMENTS

- A. As-Builts Drawings
 1. Contractor must maintain at the Project Site at least one set of As-Built Drawings indicating the actual configuration of the Project as it is constructed.
 2. The Contractor must maintain the As-Built Drawings in good and current condition and post all changes and clarifications to the As-Built Documents on a daily basis.
 3. Contractor must handle the As-Built Drawings with great care, must not use the As-Built Drawings for any other purpose, and must keep them clean and readable.
 4. The As-Built Drawings must provide sufficient detail to make it possible to correctly and easily locate, identify, and establish sizes and routing of all piping and the like, as well as other features of concealed Work.
 5. The As-Built Drawings must indicate, by appropriate notations in the As-Built Drawings, all modifications or changes made to the Drawings by Addenda, Change Order, RFI, or Field Modification.
 6. If Work is installed differently from, or in a location other than that shown on the Drawings, or if Contractor finds existing conditions to be different than indicated on the Drawings, Contractor must accurately note such variations on the As-Builts Drawings in

red pencil on a daily basis as the Work progresses.

7. Label each page of the field set of the As-Built Drawings, "As Built Record Drawings" in neat large printed letters in the lower right hand corner.
8. Contractor must post to the As-Built Drawings on a daily basis all:
 - a. Addenda
 - b. Changer Orders
 - c. Field Modifications
 - d. Requests for Information
 - e. Approved Product Substitutions
 - f. All other details and dimensions not on the Bid Documents

B. As-Built Project Manual

1. Contractor must post to the As-Built Project Manual on a daily basis:
 - a. All modifications or changes made to the Project Manual by:
 - (1) Addenda
 - (2) Change Order
 - (3) Field Modification
 - (4) Request for Information (RFI)
 - (5) Approved Product Substitutions
 - (6) All other information not in the Bid Documents
 - b. The Products selected and used in the Work of the Project
 - (1) For each Product actually Provided and/or Installed, legibly mark each section of the Project Manual to record:
 - a. Manufacturer
 - b. Trade name
 - c. Catalog number
 - d. Supplier

1.05 CONCEALED WORK

- A. The As-Built Documents must indicate the locations of underground Work and Work concealed inside any construction.
- B. Do not conceal any Work until required information is recorded in the As-Built Documents.
- C. The specific location of all turns, centerline, invert elevations and rates of fall in underground and concealed Work must be indicated.
- D. Dimensions to column lines, walls or other prominent features must be used for proper reference.
- E. Legibly mark to record actual construction:
 1. Depths of various elements of foundation in relation to finish first floor datum.
 2. Horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - a. Give sufficient horizontal and vertical dimensions to accurately trace route and invert of each concealed line or item.

-
- b. Accurately locate each capped, plugged, or stubbed line.
 - 3. Location of internal utilities and appurtenances concealed in the Work, referenced to visible and accessible features of the structure.
 - a. Give sufficient horizontal and vertical dimensions to accurately trace route and invert of each concealed line or item.
 - b. Accurately locate each capped, plugged, or stubbed line.

1.06 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Store As-Built Documents in Contractor's field office apart from documents used for construction.
- B. Provide files and racks for storage of As-Built Documents.
- C. File Record Set documents in accordance with CSI format.
- D. Maintain all documents in a clean, dry, legible condition and in good order.
- E. Do not use As-Built Documents for construction purposes.
- F. Make As-Built and Record Set documents available at all times for inspection by Owner's Project Manager.

1.07 RECORD SET

- A. Contractor must maintain at the Project Site at least one (1) copy of the Record Set including but not limited to:
 - 1. Project Manual (Bid Documents)
 - 2. Drawings (Bid Documents)
 - 3. Addenda
 - 4. Change Orders
 - 5. Field Modifications
 - 6. Requests for Information (RFI)
 - 7. Submittals
 - 8. Product Data
 - 9. Samples
 - 10. Shop Drawings
 - 11. Test and inspection records
 - 12. Coordination Drawings
 - 13. Approvals from Government Agencies and regulatory authorities
 - 14. All Correspondence

B. Record Product Data:

1. Maintain one copy of each Owner accepted Product Data Submittal at the Project Site.
2. Mark-up changes in actual Work in comparison with submitted information.
 - a. Include both variations in product as delivered to Project Site and variations from manufacturer's instructions and recommendations for installation.
 - b. Give particular attention to concealed products and portions of the Work which cannot otherwise be readily discerned at a later date by direct observation.
3. Note Related Change Orders, if any.

1.08 PROGRESS PAYMENTS

- A. The Inspector shall review the As-Built Documents prior to and as a condition of approving each progress payment.

1.09 CLOSEOUT AND ACCEPTANCE OF THE WORK

- A. Contractor must transfer all entries from the As-Built Documents that were maintained at the Project Site to a complete set of Record Documents consisting of reproducible copies of the As-Built Drawings and hard copies of the As-Built Project Manual.
- B. Contractor must mark the drawings "As-Built Record Drawings" and mark the As-Built Project Manual "As-Built Record Project Manual."
- C. Contractor must sign each drawing in the final set of As-Built Drawings and sign the cover of the final As-Built Project Manual.
- D. In accordance with Document 00700.13.6, "Recommendation for Acceptance", the Work shall not be recommended for Acceptance until Owner's Project Manager receives satisfactory Record Documents from Contractor.

1.10 SUBMITTALS

- A. Submit four (4) copies of all Record Documents (As-Builts)
- B. Accompany submittal with a transmittal letter, in duplicate, containing:
 1. Date
 2. Project title and number
 3. Contractor's name and address
 4. Title and number of each Record Document (As-Built)
 5. Signature of QC Manager or Contractor's Authorized Representative
- C. Samples
 1. Within fourteen (14) Days of Contractor's certification of completion and request for Final Inspection, Owner's Project Manager will meet with Contractor at Project Site to determine which, if any, of submitted samples maintained by Contractor during progress of the Work shall be transmitted to Owner for record purposes.
 2. Comply with Owner's instructions for packaging, identification marking, and delivery to Owner's sample storage space.
- D. Submit evidence of compliance with the requirements of Governing Agencies and regulatory authorities:
 1. Certificates of Inspection:
 - a. Elevators

- b. Fire Marshal
- 2. Other Certificates:
 - a. Occupancy Certificate from local building department
- 3. SWPPP Notice of Termination (NOT)

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

PART 4 - FORMS (Not Used)

END OF SECTION 01325

SECTION 01330 SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.01 SUMMARY

A. This Section includes:

1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 – Related Documents and Sections
 - a. 1.03 - Definitions
 - b. 1.04 - Scheduling
 - c. 1.05 - Deviations
 - d. 1.06 - Action Submittals
 - e. 1.07 - Informational Submittals
 - f. 1.08 - Identification
 - g. 1.09 - Certification
 - h. 1.10 - Packaging, Transmittal and Distribution
 - i. 1.11 - Owner or Designer of Record's Action
2. Part 2 – Products (Not Used)
3. Part 3 – Execution (Not Used)
4. Part 4 – Forms (Not Used)

1.02 RELATED DOCUMENTS AND SECTIONS

- A. Document 00700.3.26, "Submittals"
- B. Section 01310, "Project Management and Coordination"
- C. Section 01320, "Contractor Progress Documentation"
- D. Section 01332, "Submittal Log"
- E. Section 01450, "Contractor's Quality Control (QC) System"
- F. Section 01810, "General Commissioning Requirements"

1.03 DEFINITIONS

- A. **Action Submittals** - Submittals requiring Owner or Designer of Record's written response.
- B. **Informational Submittals** - Submittals not requiring Owner or Designer of Record's written response. (Survey notes, QC Manager's Daily Report, Laboratory test reports, etc.)
- C. **Preconstruction Submittals** - Action Submittals and Informational Submittals requiring Owner's acceptance before Contractor may proceed with the installation of Work or the procurement of the materials and/or equipment covered by the Submittal.

1.04 SCHEDULING

- A. Schedule preparation and processing of Submittals in accordance with other sections of the Contract Documents and the specific Submittal deadlines and timeframes stated below.
 1. Unless otherwise specifically stated in the Contract Documents, or specifically Approved in writing by the Owner's Project Manager, all Preconstruction Submittals are due no later than 45 Days from the Official Start Date stated in the Notice to Proceed. (See Document 00700.3.26.1.7) General acceptance of the Contractor's Progress Schedule, Submittal Log, or other related submittals by the Owner does not constitute specific Approval by the Owner's Project Manager for deviation from the 45 Day cut-off date for Preconstruction Submittals.

Contractor must make a specific request in writing for each proposed deviation and the Owner's Project Manager must grant specific written Approval for each proposed deviation to the cut-off date.

2. Unless a longer period is specifically stated in the Contract Documents, allow at least 21 Days for Owner's review and return of all Submittals and resubmittals. (See Document 00700.3.26.4, "Minimum Submittal Review Times" and Section 01320.3.13.B, "Submittal Log".)

1.05 DEVIATIONS

- A. Specifically identify each proposed deviation from the requirements of the Contract Documents.
 1. Only making notations on the Submittal is not sufficient to satisfy this requirement. (See also Document 00700.3.26.1.5)
 2. Each proposed deviation must be clearly highlighted, encircled, noted, or otherwise clearly identified on the Submittal **and** individually explained in writing in the transmittal accompanying the Submittal.
 3. Making notations on the Submittal without the attached written explanation will not relieve the Contractor of responsibility for deviation from the requirements of the Contract Documents.
 4. Unless specific deviations have been noted in writing by the Contractor and specifically accepted in writing by the Owner or Designer of Record, no deviations from the requirements of the Contract Documents are permitted.
- B. If a Submittal contains no proposed deviation(s) from the requirements of the Contract Documents, the Contractor must indicate on the transmittal accompanying the Submittal that the Submittal contains **"No Deviations"** from the requirements of the Contract Documents.

1.06 ACTION SUBMITTALS

- A. Prepare and submit Action Submittals required by individual sections of the Project Manual.
- B. Refer to Section 01332, "Submittal Log", for the number of copies to be submitted.
- C. Product Data
 1. Collect information into a single Complete Submittal for each Definable Feature of Work and type of product or equipment.
 2. If information must be specially prepared for Submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
 3. Mark each copy of each Submittal to show which Products and options are applicable.
 4. Include the following information, as applicable:
 - a. Manufacturer's written recommendations.
 - b. Manufacturer's product specifications.
 - c. Manufacturer's installation instructions.
 - d. Standard color charts.
 - e. Manufacturer's catalog cuts.
 - f. Diagrams showing factory-installed wiring, controls, and piping diagrams.
 - g. Printed performance curves, performance characteristics and capacities.
 - h. Operational range diagrams.
 - i. Mill reports.
 - j. Standard product operating and maintenance manuals.

- k. Compliance with recognized trade association standards.
- l. Compliance with recognized testing agency standards.
- m. Application of testing agency labels and seals.
- n. Notation of coordination requirements.
- o. Show wiring, piping diagrams, controls.

D. Shop Drawings

1. Preparation: Include the following information, as applicable:
 - a. Dimensions.
 - b. Identification of Products.
 - c. Fabrication and installation drawings.
 - d. Roughing-in and setting diagrams.
 - e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
 - f. Shopwork manufacturing instructions.
 - g. Templates and patterns.
 - h. Schedules.
 - i. Design calculations.
 - j. Compliance with specified standards.
 - k. Notation of coordination requirements.
 - l. Notation of dimensions established by field measurement.
 - m. Identify details by reference to Drawing and detail, schedule, or room numbers shown and specified.
2. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
3. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2" x 11" (215 by 280 mm) but no larger than 36" x 48" (914 mm x 1219 mm).
4. Contractor must review and coordinate all Subcontractors' Shop Drawings before submission to Owner. If required or needed, Contractor must prepare and submit Coordination Drawings.
5. Submittals must be complete for each item of Work and must not be submitted piecemeal.
6. Present Shop Drawings in a clear and thorough manner. Identify details by reference to sheet and detail, schedule, and room numbers shown on Drawings.

E. Samples

1. Refer to Section 01332, "Submittal Log" and the Technical Specifications for the number of Samples to be submitted.
2. Each Sample must clearly note the manufacturer, trade name, product, lot style, color, model, etc., locations of use, and Contract Document reference.

F. Coordination Drawings (See also Section 01335, "Coordination Drawings")

1. Contractor must prepared and submit drawings to demonstrate the coordination of methods, materials, equipment, plans, or sequence the Contractor proposes to use when:
 - a. Coordination Drawings are specifically required by other sections of the Project Manual
 - b. Limited space is available for installation of different components
 - c. Coordination is required for installation of Products and materials Fabricated by separate entities
 - d. The relationship of components is shown on separate Shop Drawings or Submittals.
2. Coordination Drawings must be submitted in the format required for Shop Drawings.

1.07 INFORMATIONAL SUBMITTALS

- A. Prepare and submit Informational Submittals required by other section of the Project Manual.
 1. Number of Copies
 - a. Refer to Section 01332, "Submittal Log", for the number of copies to be submitted.
 - b. Owner will not return copies.
- B. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with the requirements of the Contract Documents. An officer or other individual authorized to sign documents on behalf of that entity must sign certificates and certifications.
- C. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with the requirements of the Contract Documents.
- D. Preconstruction Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements.
- E. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with the requirements of the Contract Documents.
- F. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of Products and equipment.
 1. Comply with requirements in Section 01770, "Closeout Procedures."
 2. Comply with the requirements of Section 01782, "Operation and Maintenance Data"
 3. Comply with the requirements of the Technical Specifications.
- G. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment.
 1. Include name of product and name, address, and telephone number of manufacturer.
 2. Include the following, as applicable:
 - a. Preparation of substrates.
 - b. Required substrate tolerances.
 - c. Sequence of installation or erection.

- d. Required installation tolerances.
 - e. Required adjustments.
 - f. Recommendations for cleaning and protection.
- H. Manufacturer's Field Reports: Prepare written information documenting factory-authorized service representative's tests and inspections. Include the following, as applicable:
- 1. Name, address, and telephone number of factory-authorized service representative making report.
 - 2. Statement on condition of substrates and their acceptability for installation of product.
 - 3. Statement that Products at Project Site comply with the requirements of the Contract Documents.
 - 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - 6. Statement whether conditions, Products, and installation will affect Warranty/Guarantee.
 - 7. Other required items indicated in individual sections of the Contract Documents.

1.08 IDENTIFICATION

- A. Place a permanent label, or title block on each Submittal for identification.
- 1. The label or title block must include:
 - a. Project name and number
 - b. Date
 - c. Name of Contractor
 - d. Unique Submittal identifier, including revision number
 - e. As appropriate:
 - (1) Name of Subcontractor
 - (2) Name of Supplier
 - (3) Name of Manufacturer
 - (4) Name of Fabricator
 - f. Number and title of appropriate section of the Project Manual
 - g. Drawing number and detail references, as appropriate
 - h. Name of firm or entity that prepared each Submittal.
- B. Contractor must provide a space approximately 3" x 3" on label or beside title block of each page of each Submittal to record review markings and action taken by Owner or Designer of Record.
- C. Contractor must number all Submittals serially and continue in sequence. Resubmittals must have suffix letter A, B, C, etc. following the original Submittal number.

1.09 CERTIFICATION (See also Section 01450.1.15.C, "Submittal Certification")

- A. After Contractor's review of each Submittal for compliance with the requirements of the Contract Documents: (See also Document 00700.3.26.2, "Contractor's Responsibilities")
- 1. Mark with certification stamp before submitting to Owner or Designer of Record.

2. Include Project name, Specification section, Contractor's signature, and date of certification.
3. The Contractor's Authorized Representative or QC Manager must wet sign and date the certification.

1.10 PACKAGING, TRANSMITTAL AND DISTRIBUTION

A. Packaging:

1. Collect individual Submittals into a Complete Submittal for each Definable Feature of Work
2. Individual Submittals and Complete Submittal must be adequately wrapped or packaged to prevent damage during delivery.
3. All reproducible drawings must be rolled and not folded.

B. Transmittal

1. Transmit each Complete Submittal using Contractor's transmittal form.
 - a. Owner and Designer of Record may discard Submittals received from sources other than Contractor.
 - b. Owner and Designer of Record will not review Submittals that are not accompanied by Contractor's transmittal and will return them "Returned Without Action."
2. On the transmittal, or a separate sheet attached to the transmittal prepared on Contractor's letterhead, record relevant information, requests for data, revisions, and each deviation from requirements of the Contract Documents, including minor variations and limitations.
3. Transmittal Form: Provide the following information:
 - a. Project name and location.
 - b. Date.
 - c. Destination (To:).
 - d. Source (From:).
 - e. Subcontractor's, Supplier's and/or manufacturer's name, address, and telephone number.
 - f. Submittal Distribution Group
 - g. Submittal Type (Type 1 or Type 2)
 - h. Reference to applicable sections or parts of the Contract Documents.
 - i. Reference to the appropriate Definable Feature of Work
 - j. Unique Submittal identifier, including revision number. Contractor must number all Submittals serially and continue in sequence. Resubmittals must have suffix letter A, B, C, etc. following the Submittal
 - k. Product identification or Shop Drawing title, number, revision, and date as applicable.
 - l. Submittal and transmittal distribution record.
 - m. Itemize each proposed deviation from the requirements of the Contract Documents. If a Submittal contains no proposed deviation(s), indicate that the Submittal contains "**No Deviations.**" Owner and Designer of Record may return Submittals "Returned Without Action" that do not list proposed deviations or state that Submittal contains "No Deviations" from the Contract Documents.
 - n. Remarks.

- o. Signature of transmitter.

C. Parallel Distribution of Submittals

1. Contractor is required to make parallel distribution of Submittals to multiple Submittal reviewers.
2. Refer to Section 01332, "Submittal Log", for distribution of Submittals.
3. Contractor must, at its own expense, make parallel distribution of all Submittals.
4. Submittals must be concurrently transmitted to all parallel reviewers.

1.11 OWNER OR DESIGNER OF RECORD'S ACTION (See also Document 00700.3.26.5, "Action and Distribution")

A. General

1. Owner will not review Submittals that do not bear the Contractor's certification stamp and will return them "Returned Without Action."

B. Action Submittals: Owner or Designer of Record will review each Submittal, make marks to indicate corrections or modifications required, and return it.

1. Owner or Designer of Record will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:
 - a. Final Unrestricted Release: When "No Exceptions Taken" is indicated, Contractor may proceed with Fabrication, Manufacture, or construction, providing such Work complies with the requirements of the Contract Documents. Final acceptance will depend on that compliance.
 - b. Final-but-Restricted-Release: When "Make Corrections Noted" is indicated, Contractor may proceed with Fabrication, Manufacture, or construction, providing such Work complies with the requirements of the Contract Documents and the corrections noted. Final acceptance will depend on that compliance.
 - c. When stamped "No Exceptions Taken" or "Make Corrections Noted" the Submittal is considered "acceptable."
 - d. Returned for Resubmittal: Where the Submittal is marked "Revise and Resubmit," do not proceed with the Work covered by the Submittal, including purchasing, Fabrication, delivery, or other activity for the product Submitted. Revise or prepare a new submittal according to the Owner's or Designer of Record's notations and corrections.
 - e. Rejected: Where the submittal is marked "Rejected," do not proceed with the Work covered by the submittal, including purchasing, Fabrication, delivery, or other activity for the product Submitted. Prepare a new Submittal for a product that complies with the requirements of the Contract Documents.
 - f. Incomplete: Where the submittal is marked "Submit Additional Information," do not proceed with the Work covered by the Submittal. Prepare additional information requested, or required by the Contract Documents, that indicates compliance.
 - g. Returned Without Action: Where the submittal is marked "Returned Without Action," it was not reviewed and Contractor must not proceed with the Work covered by the Submittal. Prepare a new Submittal that complies with the requirements of the Contract Documents.

C. Resubmittals: Contractor must make all required corrections and submit corrected resubmittals until achieving final acceptance.

D. Information Submittals: Information Submittals, on which Owner is not required to take action, will not be returned to the Contractor.

- E. Submittals received from sources other than through Contractor's office will be "Returned Without Action" or may be discarded.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION (Not Used)

PART 4 - FORMS (Not Used)

END OF SECTION 01330

**SECTION 01335
COORDINATION DRAWINGS**

PART 1 - GENERAL

1.01 SUMMARY

A. This Section includes:

1. Part 1 –General

- a. 1.01 – Summary
- b. 1.02 – Related Documents and Sections
- c. 1.03 - Definitions
- d. 1.04 - Intent
- e. 1.05 - Scheduling
- f. 1.06 - Coordination Drawings
- g. 1.07 - Contractor Responsibilities
- h. 1.08 - Coordination Drawing Requirements
- i. 1.09 - Non-conforming Work
- j. 1.10 - Submittal Requirements
2. Part 2 – Products (Not Used)
3. Part 3 – Execution (Not Used)
4. Part 4 – Forms (Not Used)

1.02 RELATED DOCUMENTS AND SECTIONS

- A. Document 00700.3.26, "Submittals"
- B. Document 00700.3.28, "Coordination Drawings"
- C. Section 01310, "Project Management and Coordination"
- D. Section 01325, "Record Documents (As-Built)"
- E. Section 01330, "Submittal Procedures"
- F. Section 01450, "Contractor's Quality Control (QC) System"

1.03 DEFINITIONS

- A. **Coordination Drawing** – Contractor prepared drawings submitted by Contractor to Owner to demonstrate the coordination of methods, materials, equipment, systems, plans, or sequence the Contractor proposes to use when limited space is available for installation of different components, coordination is required for installation of Products and materials Fabricated by separate entities, or the relationship of components is shown on separate Shop Drawings or Submittals. Coordination Drawings are not considered Contract Documents.

1.04 INTENT

- A. It is the intent of this Section to require the Contractor to prepare Coordination Drawings as necessary or required to resolve potential installation and constructability problems prior to Installation so that construction cost and schedule are not impacted.

1.05 SCHEDULING

- A. Schedule preparation and processing of Coordination Drawings in accordance with the specific Submittal deadlines and timeframes stated below.
 1. Unless otherwise specifically stated in the Contract Documents or needed for proper coordination of the installation of early Work, all Coordination Drawing Submittals are due no later than 120 Days after the Start Date stated in the Notice to Proceed.
 2. Unless a longer period is specifically stated elsewhere in the Contract Documents, allow at least 21 Days for Owner's review and return of all Coordination Drawings Submittals and resubmittals. (See Document 00700.3.26.4, "Submittal Review Times", Section 01332, "Submittal Log", and Section 01320.3.14.B, "Submittal Log".)

1.06 COORDINATION DRAWINGS

- A. Contractor must prepare and submit one (1) reproducible and eleven (11) copies of Coordination Drawings to demonstrate the coordination of methods, materials, equipment, plans, or sequence of Contractor proposes use when:

-
1. Coordination Drawings are specifically required
 2. Limited space is available for installation of different components
 3. Coordination is needed for installation of Products and materials Fabricated by separate entities
 4. The relationship of components is shown on separate Shop Drawings or Submittals.
- B. Coordination Drawings must be prepared and Submitted for the following systems, equipment, and spaces:
- a. HVAC
 - b. Plumbing
 - c. Electrical
 - d. Fire Sprinkler
 - e. All Work above ceilings performed by separate entities that must interface or for which space provided is limited.

1.07 CONTRACTOR RESPONSIBILITIES

- A. Oversee preparation of Coordination Drawings
- B. Assign space priorities
- C. Notify Owner in writing of unresolved conflicts or interferences found during preparation of Coordination Drawings.

1.08 COORDINATION DRAWING REQUIREMENTS

- A. Coordination Drawings must include but are not necessarily limited to the following:
 1. Submit combined, comprehensive mechanical and electrical systems Coordination Drawings.
 2. Include ductwork, mechanical pipe, plumbing, electrical, sprinkler systems, and ceiling systems overlaid on structural frame.
- B. Criteria:
 1. Size ductwork, mechanical pipe, plumbing, electrical, and sprinkler system components as shown on Drawings. Downsizing of Mechanical/Electrical (M/E) systems is not permitted.
 2. Show seismic restraints where required on systems.
- C. Indicate how:
 1. Work will fit in the available space
 2. Work of the various trades or systems will Interface
 3. Contractor intends to sequence the Installation

1.09 NON-CONFORMING WORK

- A. Work not installed within designated coordination areas in compliance with the Owner accepted Coordination Drawings will be considered non-conforming Work subject to removal and replacement at no additional cost to Owner.

1.10 SUBMITTAL REQUIREMENTS

- A. Submit one (1) reproducible and eleven (11) copies of each Coordination Drawing.
- B. Comply with requirements of:
 - 1. Section 01330 – “Submittal Procedures”
 - 2. Section 01450, “Contractor’s Quality Control (QC) System”
- C. Signatures required on each sheet of Coordination Drawings:
 - 1. Coordination Drawing(s) must be signed and dated by Contractor and individual Subcontractors.
 - 2. By act of signature and submittal of the single combined Coordination Drawing(s), Contractor and each Subcontractor acknowledge that Work for which Contractor or said Subcontractor is responsible has been coordinated with the Work of Contractor and all other Subcontractors.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION (Not Used)

PART 4 - FORMS (Not Used)

END OF SECTION 01335

SECTION 01430 TESTING AND INSPECTION SERVICES

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section includes:
 - 1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 – Related Sections
 - c. 1.03 – Definitions (Not Used)
 - d. 1.04 - Qualifications
 - e. 1.05 - Testing Equipment
 - f. 1.06 - Inspection and Testing Personnel and Facilities
 - g. 1.07 - Laboratory Reports
 - h. 1.08 - Laboratory Responsibilities
 - i. 1.09 - Contractor's Responsibilities
 - 2. Part 2 – Products (Not Used)
 - 3. Part 3 – Execution (Not Used)
 - 4. Part 4 – Forms (Not Used)

1.02 RELATED SECTIONS

- A. Section 01450, "Contractor's Quality Control (QC) System"
- B. Section 01320.3.09, "Short Interval Schedule"

1.03 DEFINITIONS (Not Used)

1.04 QUALIFICATIONS

- A. Testing and inspection agency must have a minimum 5 years continuing experience preceding date of these Contract Documents.
- B. Testing and inspection agency must and be qualified in accordance Section 01450, "Contractor's Quality Control (QC) System."

1.05 TESTING EQUIPMENT

- A. Testing equipment must be calibrated at intervals with devices of an accuracy traceable to either National Bureau of Standards or accepted values of natural physical constants.

1.06 INSPECTION AND TESTING PERSONNEL AND FACILITIES

- A. Testing and Inspection Agency
 - 1. The Contractor must employ and pay for the services of an independent testing and inspection agency to perform the tests and inspections required herein except where noted otherwise.
 - 2. Employment of the testing and inspection agency shall in no way relieve the Contractor's obligation to perform the Work as required in the Contract Documents.
- B. Limitations of authority of the Testing and Inspection Agency
 - 1. Testing and Inspection Agency is not authorized to:
 - a. Release, revoke, alter, or enlarge on the requirements of the Contract Documents
 - b. Approve or accept any portion of the Work, or;

- c. Perform any duties of the Contractor.
- C. All Work must conform to the requirements of all applicable laws, codes, ordinances, and regulations.
- D. Testing and Inspection Agency must perform tests and inspections as required by the Contract Documents.
- E. Testing and Inspection Agency must prepare, cure, store, and transport Project samples to the Laboratory.

1.07 LABORATORY REPORTS

- A. Within two (2) workdays after each inspection and test, submit twelve (12) copies of Laboratory report that include:
 - 1. Date issued
 - 2. Project title and number
 - 3. Name of Inspector from Testing and Inspection Agency
 - 4. Date and time of sampling or inspection
 - 5. Identification of product and Project Manual section
 - 6. Location in the Project
 - 7. Type of inspection or test
 - 8. Date of test
 - 9. Results of tests
 - 10. Conformance with Contract Documents
 - 11. Whether original test or re-test
 - 12. State/local permit number
- B. Reports must be distributed to the following:
 - 1. Owner's Design Consultant (2 copies)
 - 2. Construction Manager (1 copy)
 - 3. General Contractor (2 copies)
 - 4. Owner's Project Manager (1 copy)
 - 5. Additional Owner's Consultant(s) (2 copy)

1.08 LABORATORY RESPONSIBILITIES

- A. Provide qualified personnel at site.
- B. Cooperate with Quality Control Manager in performance of services.
- C. Perform specified inspecting, sampling, and testing of Products in accordance with specified standards.
- D. Ascertain compliance of materials and mixes with requirements of Contract Documents.
- E. Promptly notify Owner and Contractor of observed irregularities or non-conformance of Work or Products.
- F. Perform additional inspection and testing required by Quality Control Manager.
- G. Attend Preconstruction Meeting and progress meetings when requested.

1.09 CONTRACTOR'S RESPONSIBILITIES

- A. Provide all Testing and Inspection Services required by the Contract Documents and additional tests as required by the Quality Control Manager.
- B. Provide access to Work, including off-site manufacturer or fabricator's operations.
- C. Provide required quantities of material samples to be tested.
- D. Samples will be selected and taken by representative of Testing and Inspection Agency.
- E. Furnish copies of product data and test reports as required.
- F. Furnish incidental labor and facilities:
 - 1. To provide access to work to be tested;
 - 2. To obtain and handle samples at the Project Site, or at the source of the Product to be tested or inspected;
 - 3. To facilitate inspections and tests, and;
 - 4. For storage and curing of test samples at the Project Site.
- G. Include in the weekly Short Interval Schedule (SIS) submission activities that identify upcoming testing and inspection requirements.
- H. Schedule the tests and inspections required by the Contract Documents and applicable codes and regulations with the Quality Control Manager and the Testing and Inspection Agency, a minimum of 48 hours in advance.
- I. Do not cover corrected Work until said Work has been re-tested and or re-inspected.
- J. Contractor must pay costs for all Testing and Inspection required by the Contract Documents.

PART 2 - PRODUCTS (Not used)

PART 3 - EXECUTION (Not Used)

PART 4 - FORMS (Not Used)

END OF SECTION 01430

SECTION 01450 CONTRACTOR'S QUALITY CONTROL (QC) SYSTEM

PART 1 - GENERAL [OWNER'S PROJECT MANAGER & A/E TO COMPLETE SECTION 01450]

1.01 SUMMARY

A. This Section includes:

1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 – Related Documents and Sections
 - c. 1.03 - Definitions
 - d. 1.04 - References
 - e. 1.05 - Contractor's Quality Control (QC) System
 - f. 1.06 - QC System Requirements
 - g. 1.07 - QC System
 - h. 1.08 - QC Organization
 - i. 1.09 - QC Plan
 - j. 1.10 - Coordination and Mutual Understanding Meeting
 - k. 1.11 - QC Meetings
 - l. 1.12 - Three Phases of Control
 - m. 1.13 - Testing
 - n. 1.14 - QC Documentation
 - o. 1.15 - Certifications
 - p. 1.16 - Milestone Completion Inspections
 - q. 1.17 - Project Completion Inspection
 - r. 1.18 - Notification of Non-Compliance
2. Part 2 – Products (Not Used)
3. Part 3 – Execution (Not Used)
4. Part 4 – Forms

1.02 RELATED DOCUMENTS AND SECTIONS

- A. Document 00700.1.7, "Requests for Information"
- B. Document 00700.3.3, "Documents and Samples at the Project Site"
- C. Document 00700.3.13, "Cleanup"
- D. Document 00700.3.23, "Tests and Inspections"
- E. Document 00700.3.26, "Submittals"
- F. Document 00700.3.37, "Standards for Work and Materials"
- G. Document 00700.3.38, "Conformity with Contract Documents and Allowable Deviations"
- H. Document 00700.3.39, "Control of Materials"
- I. Document 00700.7.5, "Milestone Inspections and Certification"
- J. Document 00700.8, "Payments"
- K. Document 00700.12, "Uncovering and Correction of Work"
- L. Document 00700.13, "Final Completion and Acceptance"
- M. Section 01725, "Survey & Field Engineering"
- N. Section 01290, "Payment Procedures"
- O. Section 01310, "Project Management and Coordination"

- P. Section 01315, "Project Meetings"
- Q. Section 01320, "Construction Progress Documentation"
- R. Section 01330, "Submittal Procedures"
- S. Section 01430, "Testing and Inspection Services"
- T. Section 01740, "Cleaning"
- U. Section 01770, "Closeout Procedures"
- V. Section 01810, "General Commissioning Requirements")

1.03 DEFINITIONS

- A. The following definitions as used in this Section mean:
 - 1. **Alternate QC Manager** – The Owner accepted alternate QC Manager that performs the duties, responsibilities, and functions of the QC Manager when the QC Manager is absence from the Project Site.
 - 2. **Contractor's Daily Report** – See Document 00700.3.3.6 and Section 01320.3.14, "Project Reports."
 - 3. **Coordination and Mutual Understanding Meeting** – A meeting occurring after Contractor's submission of the QC Plan and before starting Work, at which the QC Manager presents the QC Program to the Owner.
 - 4. **Corrective Action Plan** – A written document submitted by the QC Manager to the Owner stating the Contractor's plan to correct an item of Work that fails to conform to the requirements of the Contract Documents. Three (3) copies of the Corrective Action Plans must be submitted with the Report of Test Results, inspection report, or Owner's non-conformance notice no later than 10 a.m. the third workday after each failed test, inspection, or receipt by Contractor of a non-conformance notice from the Owner.
 - 5. **Phase I** – The first (Preparatory) phase of the Three Phases of Control consisting of the actions required before beginning any work involving a Definable Feature of Work. (Also sometimes referred to as Preparatory Phase.)
 - 6. **Phase 2** - The second (work) phase of the Three Phases of Control consisting of the actions required to perform the work of a Definable Feature of Work. (Also sometimes referred to as Work Phase.)
 - 7. **Phase 3** - The third (follow-up) phase of the Three Phases of Control consisting of the actions required to follow-up on the Work performed. (Also sometimes referred to as Follow-up Phase.)
 - 8. **Preparatory Phase Checklist** – A checklist prepared by the QC Manager, in a format furnished or accepted by the Owner, for each Definable Feature of Work in the Preparatory Phase.
 - 9. **Preparatory Phase Meeting** – A meeting called by the QC Manager at least two (2) workdays before beginning Work on any Definable Feature of Work. The Owner's Inspector, the QC Specialist and the Contractor's supervisor responsible for the Definable Feature of Work must attend this meeting.
 - 10. **QC Documentation** - The special QC Documentation requirements summarized in "Table 01450-1 - QC Documentation"
 - 11. **QC Meetings** - Recurring QC meetings held at least once every two weeks at the Work site with Owner's Project Manager, Contractor's Project superintendent, QC Manager (if different from Contractor's Project superintendent), and QC Specialist(s).
 - 12. **QC Manager** – Contractor's employee accepted by the Owner and responsible for managing Contractor's QC System.

13. **QC Manager's Daily QC Report** – A written document prepared, certified, and submitted by the QC Manager in the format, containing the information, covering the period(s), and at the frequency required by Section 01450.1.14, "QC Documentation".
14. **QC Plan** – Contractor's written plan identifying all QC personnel, procedures, inspections, tests, instructions, reports, records, and schedules.
15. **QC Program** – Contractor's Quality Management requirements for all on-site and off-site Work, including documentation, administration, and coordination of Contractor's management, production, and QC personnel.
16. **QC Specialist** – The Quality specialist at the Project Site, in addition to other specialized testing and inspection personnel, responsible for Quality Management of a specific or specialized area of Work.
17. **QC Specialist's Daily QC Report** - A written document, in the same format as the QC Manager's Daily QC Report, prepared and signed by the QC Specialist for each day the Work is performed in his/her area of responsibility.
18. **QC System** - The means by which Contractor ensures Quality.
19. **Quality** - Conformance to the requirements established by the Contract Documents
20. **Quality Control (QC)** - The Contractor's system in place during execution of the Work, to manage and control its own, and its Supplier's and Subcontractor's activities to comply with the requirements of the Contract Documents.
21. **Quality Level** - The degree of excellence, basic nature, character, or kind of performance of a particular type of Work set forth in the Contract Documents.
22. **Quality Management** - Quality Control and assurance activities instituted to achieve the Quality Levels established by the Contract Documents.
23. **Rework Items List** - A written list of Work that does not comply with the requirements of the Contract Documents, maintained by the QC Manager, identifying the items of Work requiring correction, the date the item was originally discovered, the anticipated date for correction of the item, and the actual date of correction.
24. **Subcontractor's Daily Report** – See Document 00700.3.3.6.
25. **Submittal Log** - A written list in a format furnished by or accepted by the Owner, indicating the status of all Submittals required by the Contract Documents, grouped by Definable Feature of Work (DFOW), and prepared and maintained by the QC Manager. (See Section 01320.3.13, "Submittal Log", and Section 01332, "Submittal Log" for additional requirements)
26. **Testing Plan and Log** – A written document, prepared and maintained by the QC Manager, indicating all tests required by the Contract Documents, the entity responsible for performing the test, the date each test was conducted, the date test results were submitted to Owner, remarks, and containing the QC Managers certification that an accredited testing Laboratory was used.
27. **Three Phases of Control** - Phase I – Preparatory Phase; Phase 2 – Work Phase; and Phase III – Follow-up Phase.
28. **Work Phase** – Phase 1, Phase 2, or Phase 3.
29. **Work Phase Checklist** - The checklist prepared by the QC Manager, in a format furnished by or accepted by the Owner, for each Definable Feature of Work in the Work Phase.

1.04 REFERENCES

- A. The publications listed below are part of the requirements of the Contract Documents to the extent referenced:
1. ASTM A 880(1995) Criteria for Use in Evaluation of Testing Laboratories and Organization for Examination and Inspection of Steel, Stainless Steel, and Related Alloys
 2. ASTM C 1077(1998) Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation
 3. ASTM D 3666(2000) Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials
 4. ASTM D 3740(1999; Rev C.) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
 5. ASTM E 329(2000; Rev. A) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction
 6. ASTM E 543(1999) Agencies Performing Nondestructive Testing

1.05 CONTRACTOR'S QUALITY CONTROL (QC) SYSTEM

- A. Contractor's QC System is the means by which Contractor ensures Quality.
- B. Contractor must establish and maintain a QC System, performing sufficient inspections and tests of all items of Work, including Work of its Subcontractors and Suppliers, to ensure conformance with the requirements of the Contract Documents. Contractor's Quality Control measures must be adequate to cover all construction operations and must be correlated with the Official Progress Schedule.
- C. Contractor's QC System must include the inspections and tests required by the Contract Documents in addition to Contractor's own inspections and tests necessary to control Quality. Contractor must maintain and submit to Owner adequate records of all inspections and tests, and must submit all test results on forms furnished or accepted by Owner.
- D. Contractor must closely inspect all materials upon delivery, and all Work in progress for compliance with the requirements of the Contract Documents. Contractor must promptly reject and return all defective materials and rework any substandard Work without waiting for rejection by Owner.
- E. Contractor must submit and Owner must accept Contractor's Quality Control Plan (QC Plan) before starting any Work at the Project Site. Work will be permitted to start only after Owner reviews and accepts Contractor's QC Plan. The QC Plan must identify all QC personnel, procedures, inspections, tests, instructions, reports, records, schedules, etc.

1.06 QC SYSTEM REQUIREMENTS

- A. The QC System, as defined herein, establishes specific minimum staffing, documentation, reporting, and procedural requirements that Contractor must implement and maintain throughout the Contract Time.
- B. The following points are fundamental to the QC System:
1. Owner is not responsible for controlling the Quality of Contractor's Work.
 2. Contractor is responsible for implementing and maintaining specific minimum processes and measures for controlling the Quality of the Work.
 3. The requirements of the Contract Documents establish the Quality Level.
 4. Owner has the right to inspect the Work; Contractor has the obligation to inspect the Work.

5. Owner will review Contractor's QC System for compliance with the requirements of the Contract Documents.
6. The objective of Contractor's QC System is to prevent deficiencies in the Work.
7. Contractor must staff the Project with a QC Manager who is responsible for managing Contractor's QC System.
8. Contractor must employ specialized inspectors (QC Specialists) to assist the QC Manager. Contractor may obtain QC Specialists from outside testing and inspection firms. Their qualifications and duties are detailed in Section 01450.1.08, "QC Organization." QC Specialists must report directly to the QC Manager and must be independent of Contractor's production organization.
9. Contractor must develop and submit twelve (12) copies of a QC Plan that complies with the requirements of Section 01450.1.09, "QC Plan." The QC Plan must be submitted to, and be accepted by Owner before Contractor performs any Work on the Project Site.

1.07 QC SYSTEM

- A. Contractor must establish and maintain a QC System as described herein. At a minimum, the QC System must consist of:
 1. QC Organization
 2. QC Plan
 3. Initial Coordination and Mutual Understanding Meeting
 4. Recurring QC Meetings
 5. Three Phases of Control
 6. Testing
 7. QC Documentation
 8. QC Manager's Certifications
 9. Completion Inspections
- B. The QC System must cover on-site and off-site Work and must be correlated with the Official Progress Schedule and Short Interval Schedules.
- C. No on-site Work or testing shall be performed unless the QC Manager or Alternate QC Manager is at the Work site.
- D. Owner reserves the right to require changes in the QC Plan and operations as necessary, including removal of personnel, to ensure the specified Quality of Work. Owner reserves the right to interview any member of Contractor's QC organization at any time to verify their submitted qualifications.
- E. Contractor must notify Owner, in writing, of any proposed change to the QC Plan, including changes to QC Organization or personnel, a minimum of seven (7) Days prior to a proposed change. Proposed changes are subject to acceptance by Owner.

1.08 QC ORGANIZATION

- A. QC Manager:
 1. Provide a QC Manager at the Work site to implement and manage the QC program. Contractor's Project superintendent or Contractor's Authorized Representative may function as the QC Manager in addition to their other duties.

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2. Within seven (7) days after Award, Contactor must submit for acceptance by the Owner, three (3) copies of an Appointment letter for the QC Manager. The Appointment letter must be accompanied by a detailed resume for the candidates documenting their relevant experience and providing at least three current references. The submittal may be certified by the Owner's Authorized Representative for compliance with the Requirements of the Contract Documents. Copies of the Owner accepted Authorization letter for the QC Manager and supporting information must be included in the Contractor's CQ Plan submittal."
 3. Duties:
 - a. Be on the Work site at all times during performance of Work, with complete authority to take any action necessary to ensure conformance with the requirements of the Contract Documents. In the event of the QC Manager's absence, the Alternate QC Manager must be present and have the same authority as the QC Manager.
 - b. Implement and manage the Three Phases of Control for each Definable Feature of Work.
 - c. Immediately stop any work that does not comply with requirements of the Contract Documents, and direct removal and replacement of any defective Work.
 - d. Conduct daily inspections of Work performed to ensure compliance with requirements of the Contract Documents.
 - e. Certify daily that all Work performed, on and off the construction site, conforms to requirements of the Contract Documents. Certify daily that all materials and equipment delivered or installed in the Work comply with the requirements of the Contract Documents. Report any deficiencies and corrective action planned and taken.
 - f. Ensure that Contractor's QC Organization is adequately staffed with qualified personnel to perform all required inspections and tests.
 - g. Supervise and coordinate the inspections and tests made by the QC Organization, including the tests and inspections of the Work of Subcontractors and Suppliers.
 - h. Ensure that all required tests are performed and results are reported. Indicate whether test results do or do not conform to requirements of the Contract Documents. Submit Corrective Action Plan(s) for nonconforming items.
 - i. Recommend removal of any person from the Project that consistently fails to perform Work properly.
 - j. Report to Contractor's senior management the identity of any Subcontractor or Supplier whose Work consistently fails to meet the requirements of the Contract Documents.
 - k. Attend the Coordination and Mutual Understanding Meeting and conduct all recurring QC Meetings.
 - l. Submit one (1) copy of certified QC Manager's Daily QC Reports in the specified format.
 - m. Certify all Submittals for conformance with the requirements of the Contract Documents.
 - n. Certify each payment invoice.
 - o. Certify completion prior to requesting Milestone Completion inspection
 - p. Certify completion prior to requesting Final Inspection.
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- q. At the Work site, perform daily maintenance and updating of the following:
 - (1) Submittal Log
 - (2) Testing Plan and Log
 - (3) Rework Items List
 - (4) Record Documents (as-built Drawings and Project Manual), marked to show any deviations made from the requirements of the Contract Documents and to indicate the actual materials and equipment incorporated in to the Work.
 - (5) Records Binder containing all Quality Control records.
 - r. Attend all key Project Meetings including Preconstruction Conference, Schedule Orientation Meeting, Progress Meetings, Commissioning Meetings, Demonstration and Training Meetings, and Closeout Conference.
4. Qualifications:
- a. A minimum of 5 years experience as a superintendent, construction QC manager, construction project manager, construction project engineer, or construction manager on similar size and type of construction projects that included the major trades involved with this Project.
- B. Alternate QC Manager Duties and Qualifications:
- 1. Designate an Alternate QC Manager to serve at the Project Site in the absence of the designated QC Manager. The qualification requirements for the Alternate QC Manager are the same as for the QC Manager.
 - 2. Within seven (7) days after Award, Contractor must submit for acceptance by the Owner, three (3) copies of an Appointment letter for the Alternate QC Manager. Appointment letter must be accompanied by a detailed resumes for the candidate documenting their relevant experience and providing at least three current references. The submittal may be certified by the Owner's Authorized Representative for compliance with the Requirements of the Contract Documents. Copies of the Owner accepted Authorization letter for the Alternate QC Manager and supporting information must be included in the Contractor's CQ Plan submittal."
 - 3. The designated QC Manager must not be absent from the Project Site for more two consecutive weeks at a time.
- C. QC Specialist Duties and Qualifications:
- 1. As a minimum, provide a separate QC Specialist at the Project Site for the area of responsibility specified below.
 - 2. The QC Specialist will assist and report directly to the QC Manager and must have no Project duties other than assigned Quality Control duties.
 - 3. The QC Specialist must attend the Coordination and Mutual Understanding Meeting, be physically present at the construction site to perform the Three Phases of Control for Work in the assigned area of responsibility, at the frequency specified below and prepare required documentation.
 - 4. The QC Specialist must submit a certified and dated QC Specialist's Daily QC Report, for each day the Work is performed in his/her area of responsibility, in the same format as the QC Manager's Daily QC Report. QC Specialist's Daily QC Report must be submitted to the Owner on the next workday.
 - 5. The QC Specialist position is in addition to other specialized testing and inspection personnel to be provided by Contractor, as identified in the Contract Documents, such as manufacturer's representatives, Testing Laboratory personnel, etc.
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1.09 QC PLAN *GSA Procedure***A. Requirements:**

1. Within fourteen (14) Days of the official Contract start date stated in the Notice to Proceed, submit twelve (12) copies of a draft QC Plan covering both on-site and off-site Work. The draft QC Plan must be bound in a 3-ring binder, the pages must be numbered sequentially, and the following information must be included:
 - a. Table of Contents listing the major sections identified with tabs in the following order:
 - (1) QC ORGANIZATION
 - (2) NAMES AND QUALIFICATIONS (Resumes)
 - (3) DUTIES, RESPONSIBILITIES AND AUTHORITY OF QC PERSONNEL
 - (4) APPOINTMENT LETTERS
 - (5) CONTRACTED ORGANIZATIONS
 - (6) INITIAL SUBMITTAL LOG INFORMATION
 - (7) TESTING LABORATORY INFORMATION
 - (8) TESTING PLAN AND LOG
 - (9) REWORK TRACKING PLAN
 - (10) LIST OF DEFINABLE FEATURES OF WORK
 - b. QC organizational chart, showing the relationship of the QC Manager to Contractor's organization and officers, the Contractor's Projects superintendent, Project and QC staff, Subcontractors, testing firms, consultants, etc.
 - c. Names and qualifications, in resume format, for each person in the QC organization.
 - d. Description of duties, responsibilities, and authorities of each person in the QC organization.
 - e. Appointment letters for the QC Manager and Alternate QC Manager signed by a company officer of Contractor.).
 - f. Copy of letter of direction to QC Specialist from QC Manager outlining duties, authorities, and responsibilities.
 - g. List of subcontracted organizations such as testing firms, architects and engineers that will be employed by Contractor, and a description of the services they will provide.
 - h. Initial Submittal Log in a format furnished or accepted by Owner.
 - i. Testing Plan and Log in the format accepted by Owner, including all tests required by the Contract Documents, applicable Codes, and other tests deemed necessary by Contractor, identified by the document requiring the test, the frequency, and the person responsible for performing each test.
 - j. Testing Laboratory accreditation and capability information required by Section 01450.1.13, "Testing."
 - k. Rework Tracking Plan and Rework Items List in the format accepted by the Owner, to identify, record, track, and complete Rework items.
 - l. List of Definable Features of Work.
 - (1) A Definable Feature of Work (DFOW) is a task that is separate and distinct from other tasks and has common control requirements and work crews. Each

technical Specification Section could be considered a DFOW, but often there is more than one DFOW per Section and there may be more than one section per DFOW.

- (2) This List of DFOW's must be cross-referenced to the activities on the Official Progress Schedule and the section references from the Project Manual. This DFOW list must include, but is not limited to, all Critical Path activities.
 - (3) DFOW's are used in the Three Phases of Control and for grouping Submittals in the Submittal Log.
2. Within twenty-eight (28) Days of the official Contract start date stated in the Notice to Proceed, submit twelve (12) copies of a final draft of the QC Plan covering both on-site and off-site Work for Owner's acceptance.

1.10 COORDINATION AND MUTUAL UNDERSTANDING MEETING

- A. After submission of the final draft of the QC Plan and before starting Work, meet with Owner's Project Manager to present the QC Program.
- B. Meeting attendees will be, as a minimum, Owner's Project Manager, Contractor's Authorized Representative, Contractor's superintendent, QC Manager (if different from Contractor's Authorized Representative or superintendent), Alternate QC Manager, and QC Specialist(s).
- C. This Meeting is to develop a mutual understanding of QC Program requirements for all on-site and off-site Work, including documentation, administration, and coordination of Contractor's management, production, and QC personnel.
- D. At this meeting, Contractor must explain in detail how the Three Phases of Control will be implemented for each Definable Feature of Work.
- E. The QC Manager must conduct the Coordination and Mutual Understanding Meeting, prepare, and sign the meeting minutes, and provide copies to each attendee within 2 workdays after each Meeting.
- F. If a new QC Manager is appointed at any time during the Contract Time, the Coordination and Mutual Understanding Meeting must be repeated.

1.11 QC MEETINGS

- A. After Work begins, recurring QC Meetings will be held at least once every two weeks at the Work site with Owner's Project Manager, Contractor's Authorized Representative, Contractor's Project superintendent, QC Manager (if different from Project superintendent of Contractor's Authorized Representative), and QC Specialist(s).
 1. QC meetings may coincide with other project meetings.
 2. The QC Manager must conduct the QC Meetings, prepare, and sign the meeting minutes, and provide copies of the minutes to each attendee and submit two (2) copies to the Owner within 2 workdays after each Meeting.
- B. As a minimum, the following will be accomplished at each QC Meeting
 1. Review status of problems recorded in the minutes of previous meeting.
 2. Review Official Progress Schedule and status of Work
 - a. Work or testing accomplished since last meeting
 - b. Rework items identified since last meeting
 - c. Rework items completed since last meeting
 3. Review Submittal Log and status of Submittals
 - a. Submittals reviewed and returned since last meeting

- b. Submittals required in near future
- 4. Review Work to be done in next 2 weeks and documentation required
- 5. Establish completion dates for Rework items
- 6. Update or revise the Official Progress Schedule and Short Interval Schedules to indicate the planned and actual dates of Preparatory Phase, Work Phase, and Follow-up Phase, including testing and inspections.
- 7. Discuss proposed construction and the approach to be used to ensure Quality Work.
- 8. Identify potential problems for each Definable Feature of Work.
- 9. Discuss status of off-site Work and testing.
- 10. Review the Preparatory and Work Phase Checklists. (See Section 01450.1.14.E, "Preparatory Phase Checklist", and Section 01450.1.14.F, "Work Phase Checklist", for details on these Checklists.)
- 11. Verify that each Checklist includes a breakdown of Quality checks that will be used when performing QC functions, inspections, and tests required by the Contract Documents.
- 12. Resolve QC and production problems
 - a. Problems relating to correction of deficiencies.
 - b. Problems relating to Requests for Information (RFI's)
- 13. Address items that may require revising the QC Plan:
 - a. Changes in procedures
 - b. Changes in QC organization or personnel

1.12 THREE PHASES OF CONTROL

- A. The QC Manager must implement and manage the following Three Phases of Control for each Definable Feature of on-site and off-site Work:
 - 1. Phase I - Preparatory
 - a. The Preparatory Phase consists of the actions required before beginning any Definable Feature of Work.
 - b. The QC Manager must call a Preparatory Phase Meeting at least two (2) workdays before beginning Work on any Definable Feature of Work. The Owner's Inspector, the QC Specialist and the Contractor's supervisor responsible for the Definable Feature of Work must attend this meeting.
 - c. Perform the following before beginning Work on each Definable Feature of Work:
 - (1) Review and fill out the Preparatory Phase Checklist
 - (2) Review applicable Project Manual section(s)
 - (3) Review the Drawings
 - (4) Verify that appropriate Submittals for materials and equipment have been certified by the QC Manager, submitted, and accepted by the Owner.
 - (5) Verify receipt of factory test results, when required
 - (6) Review the Testing Plan and Log, and ensure that provisions have been made to perform the required QC testing

- (7) Examine the Work area to ensure that required preliminary Work has been completed
- (8) Examine the required materials, equipment, and Sample Work to ensure that they are on hand and conform to Submittals accepted by Owner or Designer of Record.
- (9) Discuss proposed construction, workmanship standards, tolerances, and the approach to be used to provide Quality construction by planning ahead and identifying potential problems for each Definable Feature of Work.
- (10) Document the results of the Preparatory Phase actions in the QC Manager's Daily QC Report and in the Preparatory Phase Checklist

2. Phase 2 - The Work on each Definable Feature of Work

- a. The QC Manager must notify Owner's Inspector at least 2 workdays before starting Work
- b. Before starting work on a DFOW, the QC Manager must meet with the Project superintendent, the supervisor responsible for constructing the DFOW, and the QC Specialist if applicable, to perform the following:
 - (1) Review and fill in the Work Phase Checklist
 - (2) Establish the Quality of workmanship required
 - (3) Identify and resolve potential conflicts with other Work
 - (4) Ensure that testing is performed
- c. The QC Manager must observe the Work to ensure that it complies with the requirements of the Contract Documents.
- d. The QC Manager must document the results in the QC Manager's Daily QC Report and submit the completed Work Phase Checklist to the Owner on the next workday.
- e. Repeat Phase 2 for each DFOW, for each new crew to Work on site, or when specified Quality Levels are not being met.

3. Phase 3 - Follow-Up (Performed Daily)

- a. The QC manager must perform the Follow-up Phase daily for each DFOW, or more frequently as necessary until completion, and must document the results in the QC Manager's Daily QC Report, to:
 - (1) Ensure that Work is in compliance with the requirements of the Contract Documents.
 - (2) Maintain the Quality of workmanship required.
 - (3) Ensure that the Approved Laboratory performs testing.
 - (4) Ensure that rework items are being corrected.

B. Additional Preparatory and Work Phases

- 1. The QC manager must conduct additional Preparatory and Work Phases for Definable Features of Work, if the Quality of on-going Work is unacceptable, if there are changes in the QC organization, if there are changes in on-site supervision or workers, if Work on a Definable Feature of Work is resumed after substantial period of inactivity, or if problems develop.

C. Notification Requirements for Three Phases of Control for Off-Site Work

1. Notify Owner's Inspector at least two weeks prior to the start of the Preparatory and Work Phases for off-site Work.

1.13 TESTING

- A. Contractor must perform all sampling and testing required by the Contract Documents and set forth in the Testing Plan and Log.
- B. Construction Materials Testing Laboratory Requirements:
 1. Provide and pay for an independent construction materials testing Laboratory (or laboratories, as necessary) accredited by one of the laboratory accreditation authorities listed in below to perform sampling and testing required by the Contract Documents. The Laboratory's scope of accreditation must include the ASTM standards that apply to the specific testing fields listed below. This requirement applies to the specific Laboratory performing the actual testing, not just the "Corporate Office".
 2. For testing laboratories that have obtained accreditation by an acceptable laboratory accreditation authority listed below, Contractor must submit to Owner eight (8) copies of the Certificate of Accreditation and Scope of Accreditation within seven (7) Days after the start date for the Work as stated in the Notice to Proceed. The scope of the Laboratory's accreditation must include the test methods required by the Contract Documents.
 3. Testing laboratories that have not yet obtained accreditation by an acceptable laboratory accreditation authority listed below must:
 - a. Within seven (7) Days after the start date for the Work as stated in the Notice to Proceed, submit for Owner's acceptance an acknowledgment letter from one of the acceptable laboratory accreditation authorities stating that the application for accreditation has been received and the accreditation process has started.
 - b. Within seven (7) Days after the start date for the Work as stated in the Notice to Proceed, submit for Owner's acceptance, certified statements, signed by an official of the laboratory, attesting that the proposed laboratory meets or conforms to the ASTM standards appropriate to the testing field as listed below.
 4. Acceptable Laboratory Accreditation Authorities are:
 - a. National Voluntary Laboratory Accreditation Program (NVLAP) administered by the National Institute of Standards and Technology
 - b. American Association of State Highway and Transportation Officials (AASHTO)
 - c. ICBO Evaluation Service, Inc. (ICBO ES)
 - d. American Association for Laboratory Accreditation (ASLA) program.
 5. The ASTM Standards for specific testing fields are as follows:
 - a. Construction materials: ASTM E 329
 - b. Concrete and concrete aggregates: ASTM C 1077
 - c. Steel, stainless steel, and related alloys: ASTM A 880
 - d. Nondestructive testing (NDT): ASTM E 543.
 6. Within seven (7) Days after the start date for the Work as stated in the Notice to Proceed, submit eight (8) copies of the following capability information for each proposed laboratory:
 - a. Organizational description
 - b. List and resume(s) of personnel

- c. List of equipment corresponding to each test noted in the Testing Log, and calibration certifications.
- 7. Include the above accreditation and capability information in the QC Plan.
- C. Capability Verification by Owner:
 - 1. Owner has the right to verify the adequacy of the proposed laboratory's personnel, equipment, procedures, techniques, and other items pertinent to testing with the requirements of the Contract Documents.
- D. Reports of Test Results:
 - 1. Action by testing individual or organization:
 - a. Submit actual test results.
 - b. Cite applicable requirements of the Contract Documents and the tests or analytical procedures that were used.
 - c. State whether the item tested or analyzed conforms or fails to conform to specified requirements.
 - d. Conspicuously stamp the cover sheet for each report in large red letters "CONFORMS" or "DOES NOT CONFORM" to the requirements of the Contract Documents, whichever is applicable.
 - e. A testing Laboratory representative, licensed as a Professional Engineer in the State of California and authorized to sign certified test reports, must sign all Reports of Test Results.
 - f. Submit test results directly to the Owner and Contractor by 10 a.m. of the second workday after performing each test.
- E. Action by QC Manager
 - 1. As tests are performed, record the results on the "Testing Plan and Log." Include the date each test was conducted, date the test results were submitted to Owner, remarks, and certification that an accredited testing Laboratory was used.
 - 2. If an item fails to conform, notify Owner's Inspector immediately and submit a Corrective Action Plan for the item with a copy of the Report of Test Results.
 - 3. Submit Corrective Action Plan by 10 a.m. of the third workday after each failed test.
 - 4. Submit an updated copy of the "Testing Plan and Log" at each QC Meeting.

1.14 QC DOCUMENTATION

- A. This section lists and describes the special QC Documentation required to show that materials, equipment, workmanship, fabrication, construction, and operations comply with the requirements of the Contract Documents.
- B. Before beginning Work, Contractor must obtain a set of required report forms from Owner's Project Manager. The report forms will consist of the Contractor's Daily Report, QC Manager's Daily QC Report, QC Specialist's Daily QC Report, Preparatory Phase Checklist, Work Phase Checklist, Rework Items List, Submittal Log, and Testing Plan and Log.
- C. QC Manager's Daily QC Report:
 - 1. The QC Manager must submit a certified QC Manager's Daily QC Report in the specified format. One (1) copy of each QC Manager's Daily Report must be submitted to Owner the following workday.

2. Reports are required for each day that Work is performed and for every seven consecutive calendar Days of no Work and on the last day of a no-work period. Account for each calendar day throughout the entire Contract Time.
3. Manager must prepare, sign and date each QC Manager's Daily QC Report, which must contain the following information:
 - a. Date of report, report number, Contract Number and Title.
 - b. For each of the Three Phases of Control:
 - (1) Describe each item of Work performed each day, including on-site and off-site Work.
 - (2) Reference Official Progress Schedule Activity number for each item of Work
 - (3) Reference the Definable Feature of Work
 - (4) Reference the Project Manual section(s).
 - (5) Report results of Follow-up Phase inspections.
 - c. Certify that Work for each Definable Feature of Work complies with the requirements of the Contract Documents and that required testing has been performed.
 - d. Identify who performed the testing.
 - (1) List each Rework item identified, but not corrected by close of business, along with its Official Progress Schedule Activity number.
 - (2) List each Rework item corrected from the Rework Items List along with the corrective action taken and its Official Progress Schedule Activity Number.
 - e. Include a "Remarks" section containing pertinent information including construction deficiencies encountered, QC problem areas, deviations from the QC Plan, QC meetings held, acknowledgement that Record Documents have been updated, directions received, corrective direction provided by the QC organization, and corrective actions taken by Contractor. For each remark provided, identify it by its corresponding Official Progress Schedule Activity Number.
 - f. QC Manager's Daily QC Report certification, signature, and date.
4. QC Manager's Daily QC Report Continuation Sheet: This sheet includes space for additional daily information. Continuation Sheets may be added as necessary and attached to the QC Manager's Daily QC Report.

D. Preparatory Phase Checklist:

1. The QC Manager must prepare this Checklist for each Definable Feature of Work in the Preparatory Phase. Identify this Checklist by terminology consistent with the Official Progress Schedule. Attach this Checklist to the QC Manager's Daily QC Report of the same date.
 - a. Enter Project Manual section, date of report, and Contract number
 - b. Each Definable Feature of Work, Official Progress Schedule Activity number and format must match its entry in the Preparatory Phase section of the QC Manager's Daily QC Report
 - c. Personnel Present: Report whether or not Owner's Inspector was notified. Report the names of attendees at Preparatory Phase Meeting, their position and company/organization

- d. Submittals: Indicate if Submittals have been submitted (Yes/No checkboxes) and if not, indicate what has not been submitted. Are materials on hand (Yes/No checkboxes) and if not, report any missing items. Check delivered material and equipment against Submittals accepted by the Owner or Designer of Record and report the status.
- e. Material Storage: Report if materials and equipment are stored properly (Yes/No checkboxes), and if not, the action taken
- f. Project Manual: Review and comment on the requirements of the Project Manual that describe the material, equipment, and procedures for accomplishing the Work, and clarify any differences
- g. Preliminary Work & Permits: Assure that Preliminary Work is in accordance with the requirements of the Contract Documents, and that all necessary permits are on file, and if not, report the action taken.
- h. Testing: Identify who performs tests, the test location and frequency. Review the Testing Plan, report abnormalities, and if the test facilities have been Approved.
- i. Meeting Comments: Respond to comments and remarks made during the Preparatory Phase Meeting that were not addressed in previous sections of this Checklist.
- j. Other Items or Remarks: Note any other remarks or items that were a result of the Preparatory Phase.
- k. The QC Manager must sign and date this Checklist.

E. Work Phase Checklist:

- 1. The QC Manager must prepare this Checklist for each Definable Feature of Work in the Work Phase. Identify this Checklist by Activity numbers from the Official Progress Schedule. Attach this Checklist to the QC Manager's Daily QC Report of the same date.
 - a. Enter Project Manual section, date of report, and Contract number.
 - b. Each Definable Feature of Work, Official Progress Schedule Activity Number, and index number, entry and format must match its entry in the Work Phase section of the QC Manager's Daily QC Report.
 - c. Personnel Present: Report whether or not Owner's Inspector was notified. Report the names of attendees at Work Phase meeting, their position and company/organization.
 - d. Procedure Compliance: Comment on compliance with procedures identified at Preparatory Phase and actions taken to assure that Work is in accordance with the requirements of the Contract Documents and accepted Submittals.
 - e. Preliminary Work: Assure preliminary Work is in compliance with the requirements of the Contract Documents and if not, what action is/was taken.
 - f. Workmanship: Identify where initial Work is located; if a sample panel is required (Yes/No checkboxes); is the initial Work the sample (Yes/No checkboxes); and if Yes, describe the panel location and precautions taken to preserve the sample.
 - g. Resolution: Comment on any differences and resolutions reached.
 - h. Other: Note any other remarks or items resulting from the Work Phase.
 - i. The QC Manager must sign and date this Checklist.

F. Rework Items List:

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1. The QC Manager must maintain a list of Work that does not comply with the requirements of the Contract Documents (the Rework Items List), identifying what items need to be reworked, the date the item was originally discovered, the anticipated date for correction of the item, and the actual date of correction. There is no requirement to report a Rework item that is corrected the same day it is discovered.
 2. Attach a copy of the "Rework Items List" to the last QC Manager's Daily QC Report of each month and submit to the Owner. Contractor is responsible for including on this list all items needing rework including those identified by Owner's Inspector.
- G. QC Records Binders: Establish and maintain the following in a series of 3 ring binders. Binders must be divided and tabbed as indicated below. These binders must be readily available to Owner during all Normal Hours Of Work.
1. QC Plan
 2. List of all Definable Features of Work
 3. Initial Submittal Log and all updates
 4. Testing Plan and Log and all updates
 5. QC Meeting Minutes
 6. Manufacturer's Certificates and Certificates of Compliance
 7. Contractor's Daily Reports
 8. QC Manager's Daily QC Reports
 9. QC Specialist's Daily Reports
 10. All reports of test results
 11. All summaries of test results
 12. All completed Preparatory and Work Phase Checklists, arranged by Project Manual section.
 13. Any interim Milestone inspections, arranged by Milestone number from the Official Progress Schedule.
 14. Copies of all Approved Change Orders, Field Modifications, and RFI responses, arranged in numerical order. Also include documentation that changed Work was accomplished.
 15. Copies of all Rework Items Lists.
 16. Copies of all Deficiency Lists (Punch Lists) issued by QC Staff, Contractor, or Subcontractors, and all Deficiency Lists issued by Owner.
- H. Record Documents ('as-built' Drawings and 'as-built' Project Manual):
1. In addition to the requirements of Document 00700.3.3, "Documents and Samples at the Project Site", the QC Manager must ensure that Record Documents are kept current on a daily basis and marked to show deviations from the requirements of the Contract Documents.
 2. Ensure each deviation has been identified with the appropriate modifying documentation (e.g.. Change Order #, Field Modification #, Request for Information #, etc.).
 3. The QC Manager (or assigned QC Specialist) must initial each deviation and each revision.
 4. Upon completion of the Work, the QC Manager must certify the accuracy of the Record Documents as required in Section 01450.1.15.G, "Record Document Certification."

I. Records of Contractor's Quality Control Plan and its implementation

1. Upon completion of the Work, submit three (3) copies of the records of Contractor's Quality Control Plan and its Implementation must be Submitted to the Owner in a durable plastic binder approximately 9" x 12" in size with at least the following:
 - a. Identification on, or readable through, the front cover stating the project name and nature of the document.
 - b. Front index indicating the location of major categories of data in the binder.
 - c. All test results (Code Compliance, Owner Specified and Contractor's own).
 - d. All inspection reports and records of required corrective measures.

1.15 CERTIFICATIONS**A. QC Manager's Daily QC Report Certification**

1. All signatures must be original and in "blue" ink. Stamped signatures are not acceptable.
2. QC Manager's Daily QC Report Certification: Each QC Manager's Daily QC Report must contain the following statement signed by the QC Manager:

"On behalf of Contractor, / certify that this report is complete and correct, that equipment and material used, and Work performed during this reporting period are in compliance with the requirements of the Contract Documents to the best of my knowledge, except as noted in this Report.

Certified by QC Manager _____, Date _____ "
(Signature)

B. QC Specialist's Certification

1. QC Specialist's Daily QC Report Certification: Each QC Specialist's Daily QC Report must contain the following statement signed by the QC Specialist:

"On behalf of Contractor, / certify that this report is complete and correct, that equipment and material used, and Work performed during this reporting period are in compliance with the requirements of the Contract Documents to the best of my knowledge, except as noted in this Report.

Certified by QC Specialist _____, Date _____ " (Signature)

C. Submittal Certification (See Document 00700.3.26.2.3)

1. Except for the QC Manager and Alternate QC Manager Appointment letters which may be certified by the Contractor's Authorized Representative, the QC Manager must stamp and sign each sheet of each Submittal with the following QC certifying statement (except that data submitted in bound volume or on one sheet printed on two sides may be stamped on the front of the first sheet only):

"The (equipment) (material) (article) shown and marked in this Submittal is that proposed to be incorporated with Project Name (_____), Contract Number (_____), Project Manual Section (_____), has been checked and complies in all respects, except as specifically noted in writing on the Submittal and accompanying transmittal, with the requirements of the Contract Documents, is a Complete Submittal, has been coordinated with all other accepted Submittals, and can be properly installed in the allocated spaces.

Certified by QC Manager _____, Date _____ "
(Signature)

D. Invoice Certification

1. Furnish the following certification with each payment request, signed by the QC Manager:

"The Work for which payment is requested, including Materials On Hand, is in compliance with the requirements of the Contract Documents. Record Documents ('as-built' Drawings and Project Manual) are current, accurate, and correctly show Work installed as of the date of the payment request.

Certified by QC Manager _____, Date _____ "
(Signature)

E. Milestone Completion Certification

1. Prior to requesting Milestone completion inspection, the QC Manager must furnish the following Milestone Completion Certification to Owner:

"The Work of Milestone (#) has been completed, inspected, tested and is in full compliance with the requirements of the Contract Documents except for the minor deficiencies listed in the attached Deficiency List.

Certified by QC Manager _____, Date _____ "
(Signature)

2. The Deficiency List attached to the Milestone Completion Certification must list all known deficiencies in the Work of the Milestone. Unless specifically exempted in writing by Owner's Project Manager, the Deficiency List must not include incomplete items of Work. Unless specifically exempted in writing by Owner's Project Manager, the Milestone Completion Certification will be rejected if incomplete items of Work appear on the Deficiency List.

F. Project Completion Certification

1. Prior to requesting Final Inspection of the entire Work of the Project, the QC Manager must furnish the following Project Completion Certification to Owner:

"The entire Work of the Project has been completed, inspected, tested and is in full compliance with the requirements of the Contract Documents except for the minor deficiencies listed in the attached Deficiency List.

Certified by QC Manager _____, Date _____ "
(Signature)

2. The Deficiency List attached to the Project Completion Certification must list all known deficiencies in the Work. Unless specifically exempted in writing by Owner's Project Manager, the Deficiency List must not include incomplete items of Work. Unless specifically exempted in writing by Owner's Project Manager, the Project Completion Certification will be rejected if incomplete items of Work appear on the Deficiency List.

G. Record Document Certification

1. Accompanying submission of the final Record Documents, and prior to requesting Final Payment, the QC Manager must furnish the following Certification to Owner:

"The attached Record Documents ('as-built' Drawings and Project Manual) for (Contract Name and Number) were prepared in accordance with the requirements of the Contract Documents, are accurate and complete, and may be relied on by the Owner to locate completed Work.

Certified by QC Manager _____, Date _____ "
(Signature)

- H. **Pre-functional Checklist Certification** (See Section 01810, "General Commissioning Requirements") The QC Manager must furnish the following Certification to Owner when the pre-functional checklist activities are ready to be commenced:

"On behalf of Contractor, / certify that the Systems, equipment, and Pre-functional Checklists meet the requirements of Section 01810 and the pre-functional checklist activities are ready to be commenced."

Certified by QC Manager _____, Date _____ "
(Signature)

- I. **Functional Performance Testing Certification** (See Section 01810, "General Commissioning Requirements")

1. The QC Manager must furnish the following Certification to Owner when the Systems and equipment are operational and ready for functional performance testing:

"On behalf of Contractor, / certify that the Systems and equipment are operational and are ready for functional performance testing."

Certified by QC Manager _____, Date _____ "
(Signature)

1.16 MILESTONE COMPLETION INSPECTIONS

- A. When Contractor believes the Work comprising a Milestone is complete, including final cleaning of the Work area associated with the Milestone, Contractor must submit to the Owner two (2) copies of a written certification that the Work of the Milestone is complete and request inspection by the Owner.
- B. Within 7 Days of receipt of the Milestone Completion Certification, the Owner's Project Manager will determine if the Work of the Milestone is sufficiently complete to be inspected. If the Owner's Project Manager determines that Work of the Milestone is not sufficiently complete to be inspected, the Owner's Project Manager will reject the Contractor's Milestone Completion Certification and issue a notice to the Contractor so stating. Contract must then complete the Work of the Milestone and resubmit a new Milestone Completion Certification.
- C. If the Owner's Project Manager determines that the Work is sufficiently complete to be inspected, within 21 Days of the receipt of the Milestone Completion Certification, unless a longer period is specified elsewhere in the Contract Documents, Owner's Project Manager will inspect the Work and prepare a list of deficiencies in the completed Work (Punch List.)
- D. When all the deficiencies identified in the Owner's Deficiency List are corrected, the Contractor must send a letter to the Owner requesting final verification of the correction of the items on the Deficiency List. If Owner's Project Manager determines that the items on the Deficiency List have been satisfactorily corrected, Owner's Authorized Representative will send a letter acknowledging Milestone Completion to the Contractor. The Milestone Completion letter will identify the actual date of Milestone Completion consistent with Owners final verification that the Work of the Milestone was complete and in full compliance with the requirements of the Contract Documents.

1.17 PROJECT COMPLETION INSPECTION

- A. Contractor's list of incomplete work.
1. Near the final completion of the entire Work of the Project, Contractor must conduct a detailed Project completion inspection of the Project and submit a list of Incomplete Work with a schedule for final completion thereof to Owner's Project Manager.
2. Within 60 Days after receipt of Contractor's list of Incomplete Work and schedule for final completion, Owner's Project Manager will determine appropriate dates for a Preliminary Walk-Through inspection and the Final Inspection. The Preliminary Walk-

Through and Final Inspection will not be conducted until the entire Work of the Project is complete.

B. Contractor's Certification that the entire Work of the Project is complete.

1. When all Work is complete and after the Contractor has performed the final cleaning of the entire Project Site and Work area, Contractor must so certify to Owner's Project Manager and submit a request for a Preliminary Walk-Through Inspection.
2. If the Contract Documents include a Milestone for the completion of the entire Work of the Project, the Milestone Completion Certification must be submitted concurrently with the Project Completion Certification.

C. Preliminary walk-through inspection.

1. Within seven (7) Days of receipt of Contractor's certification that the entire Work of the Project is complete, Owner's Project Inspector will make a Preliminary Walk-Through Inspection with Contractor to verify that the Project is complete and ready for Final Inspection.
2. If Owner's Project Manager determines that the Work is not complete, Contractor will be notified in writing. Contractor must complete the Work and re-initiate procedures for another Preliminary Walk-Through Inspection. At Owner's discretion, any costs to Owner for additional Preliminary Walk-through Inspections may be changed to the Contractor.

D. Final Inspection.

1. The Final Inspection will occur within twenty-one (21) Days of the Contractor's Project Completion Certification if the Owner's Project Manager agrees with the Contractor's certification.
2. If Owner's Project Manager determines the completed Work is deficient, Contractor will be furnished with a Punchlist identifying the observed deficiencies in the completed Work.
3. After all deficiencies have been corrected, Contractor must initiate procedures for another Final Inspection. If Contractor requests more than two (2) Final Inspections, at Owner's discretion, any costs to Owner for additional Final Inspections may be changed to the Contractor.

1.18 NOTIFICATION OF NONCOMPLIANCE

- A. If Owner notifies Contractor of any observed noncompliance with the foregoing requirements, Contractor must take immediate corrective action upon receipt of such notice. Such notice, when delivered to Contractor at the Project Site, is sufficient for the purpose of notification.
- B. If Contractor fails or refuses to promptly comply with any notice of noncompliance, Owner may, in addition to other remedies provided by law and/or the Contract Documents, issue an Order to the Contractor to suspend part or all of the Work until Contractor has taken satisfactory corrective action. No part of the cost or time expended by Contractor or its Subcontractors due to such Order to suspend Work shall be made the subject of a Dispute or Claim against Owner for extension of the Contract Time, Contract Sum, or for excess costs or damages of any kind.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

FORMS

END OF SECTION 01450

SECTION 01500
TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.01 SUMMARY

A. This Section includes:

1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 – Related Documents, Codes, and Standards
 - c. 1.03 - Definitions
 - d. 1.04 - Temporary Facilities and Controls
 - e. 1.05 - Utilities
 - f. 1.06 - Temporary Construction Facilities
 - g. 1.07 - Temporary Controls
 - h. 1.08 - Fire Protection
 - i. 1.09 - Submittals
2. Part 2 – Products (Not Used)
3. Part 3 – Execution (Not Used)
4. Part 4 – Forms - Table 01500-001, "Permit-required Confined Spaces"

1.02 RELATED DOCUMENTS, CODES AND STANDARDS

- A. Document 00700.3.5, "Use of Site"
- B. Document 00700.3.6, "Workplace Environment"
- C. Document 00700.3.13, "Cleanup"
- D. Document 00700.3.14, "Disposal of Material Outside Project Area"
- E. Document 00700.3.15, "Hazardous Materials"
- F. Document 00700.3.16, "Safe Use of Pesticides"
- G. Document 00700.3.17, "Trenching and Excavation"
- H. Document 00700.3.18, "Air Pollution Control"
- I. Document 00700.3.19, "Water Pollution Control"
- J. Document 00700.3.20, "Sound Control"
- K. Document 00700.3.21, "Worker's Sanitary Provisions & Use of Owner's Facilities"
- L. Document 00700.10, "Protection of Persons and Property"
- M. Document 00700.10.2.1, "Confined Space Entry Program"
- N. California Fire Code - Article 87
- O. National Fire Protection Association - Standard #1
- P. Fire Marshal Standard Details & Specifications - SI-7

1.03 DEFINITIONS

- A. **Hot Work** - Hot work includes any operations capable of initiating fires or explosions, including cutting, welding, brazing, soldering, grinding, thermal spraying, thawing pipe, torch applied roofing, or any other similar activity.
- B. **Fire Marshal** – Office of the Fire Marshal, Santa Clara County
- C. **SD&S No. SI-7** – Fire Marshal Standard Details & Specifications Number SI-7 (Construction Site Fire Safety)
- D. **Temporary Fencing** - Temporary fencing Provided and Installed by Contractor as needed by Contractor to protect equipment, field office, stored items, Project Site, and Work until final demobilization.

1.04 TEMPORARY FACILITIES AND CONTROLS

- A. Provide and pay for all temporary utilities, utility usage and service charges, utility meters,

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controls, and support facilities required for construction of the Project.

1.05 UTILITIES

A. Electricity

1. Electrical service including metering devices needed by the Contractor to perform the Work must be Provided and paid for by Contractor.
2. Arrange with utility company to provide service required for power and lighting, and pay all costs for service and for power used.
3. Install circuit and branch wiring with area distribution boxes located so that power and lighting is available throughout the construction by the use of construction-type power cords.
4. Provide adequate artificial lighting for all areas of Work in accordance with industry safety standards including OSHA requirements when natural light is not adequate for Work and for areas accessible to the public.
5. If additional temporary utility poles or electric extensions are deemed necessary by the Contractor to perform Contract Work, Contractor must submit three (3) copies of a plan showing the proposed temporary utility poles or electric extensions prior to installation. Contractor must pay for all additional temporary utility poles or electric extensions installed.

B. Telephone Service

1. Arrange with local telephone company to provide direct line telephone service at the construction site. (See Section 01500.1.08.A)
2. Minimum service required:
 - a. One direct line instrument in Field Office.
3. Pay all costs for installation, maintenance, and removal.
4. Prior to mobilization, Contractor must submit to Owner four (4) copies of a list containing all relevant personnel contact telephone numbers, including emergency contact numbers for nights, weekends, and holidays.

C. Water Service

1. Contractor must make arrangements and pay for all water and water metering devices required for construction purposes including landscape irrigation.
2. Contractor must not assume that water required for construction purposes will be available at the Project Site at the times and in the quantities required to support Contractor's construction activities.

D. Sanitary Facilities

1. Contractor must Provide and pay for an appropriate number of sanitary facilities, in compliance with all laws and regulations, for use by Contractor and Owner's personnel.
2. Regular service of the sanitary facilities must be maintained by the Contractor to keep a clean, healthy, and hygienically acceptable work environment.
3. Contractor must not use Owner's Sanitary Facilities without prior written Approval of Owner's Project Manager. (See Document 00700.3.21, "Worker's Sanitary Provisions and Use of Owner's Facilities".)

E. Waste Disposal

1. Unless otherwise specifically stated in the Contract Documents, Contractor must provide and pay for all Waste Disposal.
2. Wastes must be properly handled, stored in covered containers, and removed from the Project Site at least once each week.
3. Wood, cardboard, packing material, form lumber and similar combustible debris shall not be accumulated within buildings. Such debris, rubbish and waste material must be removed from buildings on a daily basis. (See SD&S No. SI-7)

1.06 TEMPORARY CONSTRUCTION FACILITIES

A. Field Office

1. The Contractor must maintain an active Field Office on site.
2. Contractor may bring a portable field office on site to support the Contractor's Work.
3. All project meetings will be held in the Contractor's Field Office unless otherwise Directed by Owner's Project Manager.

B. Advertising

1. Advertising is not permitted, except that Contractor's name may be placed on Contractor's field office.

C. Temporary Fencing

1. The Contractor must Install Temporary Fencing to protect equipment, field office, and stored items.
2. Contractor must Provide and pay for Temporary Fencing to protect Project Site and Work areas as needed until final demobilization.

D. Storage Areas and Sheds

1. Prior to mobilizing to the Project Site, Contractor must submit the intended location of the Contractor's storage sheds and storage areas for Owner review and acceptance.
2. Contractor must confine its apparatus, storage of materials, and construction operations to areas Approved by Owner's Project Manager.
3. Contractor must not unreasonably encumber the premises and roads with its materials and equipment.
4. The Contractor must not store bulk quantities of fuel, oils, solvents, or any other hazardous materials in storage tanks on-site.

E. Equipment Maintenance and Repair

1. The Contractor must perform equipment maintenance activities in a designated area that is prepared to protect the ground surface from spills.
2. The Contractor must collect, contain, and properly dispose of all waste material (including waste oil, coolant, grease, and equipment parts) generated from these activities on a daily basis.
3. Equipment service trucks must provide fuels and lubricants for construction equipment. Contractor must not store bulk quantities of fuel or oil in on-site storage tanks.

F. Vehicular Access

1. All vehicles must be operated in a safe manner.
2. Contractor's equipment must enter and leave the Project area via access routes designated by Owner, and move in the direction of public traffic at all times. All movements on or across public traveled ways must not endanger public traffic.

G. Parking

1. Parking for personal vehicles of Contractor's personnel must be limited to designated areas specified or Approved by Owner's Project Manager.
2. Contractor must obtain and pay for GSA "parking permits" as needed or required.
3. Personal vehicles must not be parked in the Work area.
4. Parking of construction equipment must be limited to designated areas specified or Approved by Owner.
5. All vehicles must be parked a minimum of 20 feet from new buildings under construction except construction vehicles may be temporarily parked for loading/unloading or other construction related operations as long as such vehicles are not left unattended at any time. (See Santa Clara Fire Marshall SD&S No. SI-7)

H. Progress Cleaning

1. Contractor must maintain the Project Site in a clean and orderly condition at all times.
2. The Contractor must maintain all Project areas free of waste materials, debris, dust, mud, and rubbish caused by Contractor's operations.
3. Work and storage areas must be kept clean and free of rubbish on a daily basis.
4. Contractor must immediately remove any spillage resulting from hauling operations along or across any public traveled way.
5. Contractor must perform daily inspection of Project Site, Work areas, and public traveled ways to enforce the above requirements.

I. Concrete Washout Areas

1. Concrete washout must be limited to designated areas specified or Approved by Owner.

J. Temporary Living Facilities

1. Contractor's employees, or others subject to the Contractor's control, are not permitted to reside on the Project Site in temporary living facilities.

K. On-site Fabrication areas

1. On-site Fabrication must be limited to designated areas specified or Approved by Owner.

L. Hoists, Temporary Elevators and Man-lifts

1. Provide facilities for hoisting materials and employees.
2. Do not permit employees to ride hoists that comply only with requirements for hoisting materials.
3. Selection of type, size and number of facilities is the Contractor's option.
4. Provide properly trained operating personnel for equipment.
5. Truck cranes and similar devices used for hoisting are considered equipment and not Temporary Construction Facilities.
6. Permanent Elevators
 - a. Use permanent elevators only with the express written permission of the Owner's Project Manager.
 - b. Contractor must not assume Owner will grant permission to use Permanent Elevators.
 - c. If Owner grants permission to use Permanent Elevators, Contractor must comply with all conditions and restrictions associated with Owner's permission for Contractor's use of Permanent Elevators.

M. Scaffolding

1. Furnish, erect, and maintain all required scaffolding for the Work of this Project.
2. Scaffolding and accessories must conform to all regulations governing such equipment.
3. Maintain scaffolding in conformance with all applicable safety requirements.
4. Immediately upon completion of use, remove all scaffolding and accessories from the Job Site.
5. At the Contractor's option, individual Subcontractors may provide scaffolding for their Work; however, all scaffolding remains the responsibility of the Contractor.

N. Temporary Enclosures

1. Provide temporary weather-tight enclosure of exterior walls for successive areas of building as work progresses, as necessary to provide acceptable working conditions, to provide weather protection for materials, allow for effective temporary heating, and to prevent entry of unauthorized persons.
2. Provide temporary exterior doors with self-closing hardware and padlocks.
3. Temporary Enclosures must be removable as necessary for Work and for handling of materials.

1.07 TEMPORARY CONTROLS**A. Temporary Barriers**

1. Contractor must Provide and maintain temporary barriers as needed to prevent unauthorized entry to Work areas.
2. Contractor must Provide and maintain temporary barriers as needed to protect existing facilities and adjacent properties from damage.
3. Contractor must Provide adequate measures to protect third party vehicular traffic from damage.
4. Contractor must Provide adequate measures to protect third party foot traffic from injury.
5. Install Temporary Barriers in a neat and reasonable uniform appearance, structurally adequate for required purposes.
6. Maintain Temporary Barriers during entire Construction Time.
7. Relocate Temporary Barriers as required by progress of Construction.
8. Contractor must remove Temporary Barriers when no longer needed, or at completion.

B. Protection of Work

1. Contractor must protect installed Work and Provide special protection where needed or required by the Contract Documents.
2. Contractor must Provide suitable drainage to protect the Project Site and the Work.
3. Contractor must erect such temporary structures as are necessary to protect the Work, materials, and equipment from damage.
4. Contractor must maintain staking, flagging, Temporary Fencing, and barrier fencing throughout the Contract Time as required for protecting the Work.

C. Protection of Existing Property

1. Contractor must protect all existing utilities, facilities, landscape, fencing, equipment, furniture and all other existing structures and improvements within the Project area not specifically scheduled for demolition.
2. To the extent permitted by law, any damage caused by the Contractor to existing utilities, facilities, equipment, furniture, fencing, and all other existing structures and improvements must be fully and immediately restored at the Contractor's expense.

D. Protection of Pedestrians

1. Contractor must pave pedestrian openings through falsework or Provide full width continuous wood walks, and keep all walkways clear.
2. Contractor must protect pedestrians from falling objects and water runoff.
3. Overhead protection for pedestrians must extend not less than four (4) feet beyond the edge of a structure.

E. Security

1. The security of the Project Site, Work area, and stored materials is the Contractor's responsibility during the entire Contract Time.
2. Owner is not responsible for damage to or loss of Contractor's materials and equipment

left at the Project Site.

3. Contractor must repair, replace, or restore all existing facilities, equipment, furniture, and new Work damaged, destroyed, lost, stolen, or defaced due to vandalism or theft.

F. Traffic Control:

1. The Contractor must not stage vehicles or equipment on railroad tracks, private property, or on any public street unless expressly authorized in advance by the local jurisdiction or private property owners.
2. The Contractor must keep all surface areas (i.e., site roads, off-site streets, and parking areas) clear of dirt, mud, and debris and must clean such surfaces as needed, or as Directed by the Owner's Project Manager.
3. Locate temporary roads, drives, walks and parking facilities to provide uninterrupted access to construction offices, Work and storage areas, and other areas as required for efficient execution of the Work.
4. Keep fire hydrants and water control valves free from obstruction and accessible for use.
5. Provide flagmen for traffic control as needed or required.
6. At completion of the Work, permanent roads and entranceways must be left in at least equal condition to that existing at the start of the Work, except as may be otherwise required by the Contract Documents.

G. Noise Control

1. Unless the Owner's Authorized Representative grants a waiver in writing, Contractor must comply with all local noise ordinances, and must limit the Normal Hours Of Work accordingly. (See Document 00700.3.20, "Sound Control")

H. Dust Control:

1. Contractor must minimize dust nuisances resulting from performance of the Work, both inside and outside the Project limits, by applying either water or dust palliative, or both. (See Document 00700.3.18, "Air Pollution Control")

I. Surface Water Control:

1. Contractor must:
 - a. Construct whatever temporary facilities are necessary to provide prevention, control, and abatement of water pollution. (See Document 00700.3.19, "Water Pollution Control")
 - b. Control surface drainage water to prevent damage to the Work, Project Site, or adjoining properties.
 - c. Provide whatever temporary measures are needed or required including but not limited to berms, dikes, ditches, and drains to direct surface drainage away from excavations, trenches, pits, tunnels, and other Work areas.
 - d. Provide, operate, and maintain equipment of adequate capacity to control surface water.
 - e. Dispose of drainage water in a manner to prevent flooding, erosion, or other damage to any portion of the Work, Project Site or to adjoining areas.
 - f. Plan and execute earthwork operations by methods which control surface drainage.
 - g. Expose minimum amount of bare soil at any given time.
 - h. Inspect earthwork daily for evidence of erosion and apply erosion control measures as needed or required.
2. Contractor must obtain and pay for any discharge permits required.

J. Trenching and Excavation

1. Before any excavation, Contractor must, pursuant to California Government Code

§4216 and Cal/OSHA 8CCR1540, outline the excavation in white paint (preferably chalk or water base), provide two workdays notice to Underground Service Alert (1-800-227-2600), obtain a locator number, and follow all necessary procedures to avoid underground facility damage.

2. Contractor must meet all regulatory requirements and Provide adequate temporary protection before, during, and after all Trenching and Excavation activities. (See Document 00700.3.17, "Trenching and Excavation".)

K. Pesticide Use

1. Contractor must comply with Division B28 of the Santa Clara County Ordinance Code relating to integrated pest management and pesticide use. (See Document 00700.3.16, "Safe Use of Pesticides")

L. Compliance with Owner's Policies, Ordinances, and Regulations

1. Contractor must comply with Owner's Policies, Ordinances, and Regulations regarding signs, advertising, barricades, danger signals, pesticide use, fires, smoking, security, noise, or other policies or regulations, and must require all persons employed on the Work to comply with all building or institutional regulations, and vehicle, street, and highway codes while on the premises and roads relating to the Project Site.

M. Temporary Heat and Ventilation

1. Provide temporary heat and ventilation in interior spaces prior to and when work is being performed.
2. Maintain adequate environmental conditions to facilitate progress of the Work.
3. Meet specified minimum conditions for the installation of materials.
4. Protect materials and finishes from damage due to temperature or humidity.
5. Provide adequate forced ventilation of enclosed areas for curing of installed materials, to disperse humidity, and to prevent hazardous accumulations of dust, fumes, vapors, or gases.
6. Portable heaters must be standard approved units complete with controls and meet the requirements of Section 01500.1.08.Q, "Temporary Heating Equipment."
7. Pay all costs of installation, maintenance, operation, and removal, and for fuel consumed.

N. Confined Spaces

1. Contractor must comply with all State and Federal OSHA requirements, and all of Owner's requirements regarding entry into confined spaces including but not limited to the following:
 - a. Before starting any Work, submit for Owners review and acceptance a confined space entry program applying to all existing permit-required confined spaces identified by Owner in the Contract Documents (see Table 01500-001, "Permit-required Confined Spaces"), or defined by regulations, and any confined spaces identified or created by Contractor or Owner during the Contract Time. Owner has the right to identify additional spaces to be treated as confined spaces by Contractor at any time during the Contract Time, without changing the Contract Sum or Contract Time if such additional spaces were created by Contractor.
 - b. Maintain written records of all entries into confined spaces and all activities conducted in confined spaces.
 - c. Coordinate all entry operations with Owner when both Contractor's personnel and Owner's personnel will be working in or near a confined space in the Project area. Owner will endeavor to give Contractor at least twenty-four (24) hours advance notice of such entry except in unforeseen situations and emergencies.
 - d. Inform Owner in writing at the conclusion of entry operations regarding the permit space program followed and any hazards confronted or created in permit spaces

during entry operations.

1.08 FIRE PROTECTION (See SD&S No. SI-7)

- A. Prior to performing any Work at the Project Site, Contractor must establish at the Project Site, methods, procedures, and equipment for emergency notification to the fire department via telephone. The street address of the construction site must be posted adjacent to the telephone, along with the public safety emergency telephonenumber(s).
- B. Fire Department Access Roadways
 - 1. The Project Site must be accessible by fire department apparatus by means of roadways having an all-weather driving surface of not less than 20 feet of unobstructed width.
 - 2. The Fire Department Access Roadway must have the ability to withstand the live loads of fire apparatus, and have a minimum 15 feet of vertical clearance.
 - 3. Dead-end Fire Department Access Roadway in excess of 150 feet in length must be Provided with turnarounds approved by the Fire Marshal.
 - 4. If permanent Fire Department Access Roadways are not available during any part of the Contract Time, Contractor must Provide temporary Fire Department Access Roadways complying with the following requirements:
 - a. The roadway must be approved by the Fire Marshal
 - b. As a minimum, the roadway must consist of a compacted sub-base and six inches (6") of road base material (Class II aggregate base rock), both compacted to a minimum of ninety-five (95%).
 - c. The perimeter edges of the roadway must be contained and delineated by curb and gutter or other method approved by the Fire Marshal.
 - d. Surface drainage must be Provided.
 - e. The integrity of the roadway must be maintained at all times.
 - f. The Contractor must include activities in Contractor's Progress Schedules for Fire Marshal approval and construction of the temporary Fire Department Access Roadway.
- C. Fire Alarm Systems
 - 1. Fire alarm systems must be maintained operational at all times during building alterations.
 - 2. When an alteration requires modification to a portion of the fire alarm system, the portion of the system requiring Work must be isolated and the remainder of the system must be kept in service whenever practical.
 - 3. When it is necessary to shut down an entire fire alarm system, Contractor must provide a fire watch or other mitigation approved by the Fire Marshal. The mitigation measures must remain active until the system is returned to full service.
- D. Area Separation Walls
 - 1. When area separation walls are required, the wall construction must be completed, with all openings protected, immediately after the building is sufficiently weather protected at the location of the wall(s).
 - 2. Contractor's Progress Schedule must include specific activities showing the installation of area separation walls.
- E. Fire Extinguishers
 - 1. Portable fire extinguishers must be Provided and must be mounted on a wall or post at each usable stairway such that the travel distance to any extinguisher does not exceed 75 feet.
 - 2. Mounting height to the top of the extinguisher must not exceed five feet (5').

3. Extinguishers must have not less than a 2A1 OBC rating or as otherwise directed by the Fire Marshal.
4. The Contractor must ensure an adequate number of individuals are trained in the proper use of portable fire extinguishers.

F. Standpipes

1. Where standpipes are required, the standpipes must be installed when the progress of construction is not more than 35 feet in height above the lowest level of the fire department access.
2. The standpipe system must be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring.
3. Contractor's Progress Schedule must include specific activities showing the installation of standpipes.

G. Fire Hydrants

1. If underground water mains and fire hydrants are required as part of the Work, they must be installed, completed, and in service prior to combustible construction materials accumulating on the Project Site.
2. Contractor's Progress Schedule must include specific activities showing the installation of water mains and fire hydrants.

H. Fire Sprinkler Systems

1. If automatic fire sprinkler systems are required as part of the Work, the system must be placed in service as soon possible.
2. Immediately upon the completion of sprinkler pipe installation on each floor level, the piping must be hydrostatically tested and inspected.
3. After inspection and approval from the Fire Marshal, each floor level of sprinkler piping must be connected to the system supply riser and placed into service.
4. Prior to installation of the permanent monitoring system, an exterior alarm bell may be installed and connected to a sprinkler water flow device to provide notification when the system is activated.
5. For buildings equipped with fire sprinkler systems that are undergoing alterations, the sprinkler system(s) must remain in service at all times except when system modifications are necessary.
6. Fire sprinkler systems undergoing modifications must be returned to service at the end of each workday unless otherwise approved by the Fire Marshal.
7. The Contractor must check the sprinkler control valve(s) at the end of each workday to confirm the system has been restored to service.
8. Contractor's Progress Schedule must include specific activities showing the installation of Fire Sprinkler Systems including all sequencing restrictions identified in the requirements of the Contract Documents.

I. Exiting Requirements

1. All new buildings under construction must have a least one unobstructed exit.
2. For new multi-story buildings, each level above the first story must be Provided with at least two usable exit stairs after the floor decking is installed. The stairways must be continuous and discharge to grade level.
3. Stairways serving more than two floor levels must be enclosed (with openings adequately protected) after exterior walls/windows are in place.
4. Exit stairs in new and existing, occupied buildings, must be lighted and maintained clear of debris and construction materials at all times. (Exception: For new multi-story buildings, one of the required exit stairs may be obstructed on not more than two (2) contiguous floor levels for the purposes of stairway construction; i.e., installation of

gypsum board, painting, flooring, etc.)

5. Designated exterior assembly points must be established for all construction personnel to relocate to upon evacuation.
6. Contractor's Progress Schedule must include specific activities showing the installation of exit stairs including all sequencing restrictions identified in the requirements of the Contract Documents.

J. Oily Rags

1. Oily rags and similar material must be stored in metal or other approved containers equipped with tight-fitting covers.

K. Smoking

1. Smoking is prohibited anywhere inside or on the roof of new buildings under construction or in the Work area of buildings undergoing alteration.
2. A suitable number of "NO SMOKING" signs must be posted to ensure smoking is controlled.

L. Asphalt and Tar Kettles

1. Asphalt kettles must not be located within 20 feet of any combustible material, combustible building surface or building opening.
2. With the exception of thermostatically controlled kettles, an attendant must be within 100 feet of a kettle when the heat source is operating.
3. Ladders or similar obstacles must not form a part of the route between the attendance and the kettle.
4. Kettles must be equipped with tight-fitting covers.
5. A minimum 20-B:C rated portable fire extinguisher must be located within 30 feet of each asphalt kettle when the heat source is operating.
6. Minimum 20-B:C rated portable fire extinguishers also must be located on roofs during asphalt coating operations.

M. Compressed Gases

1. Gas cylinders must be marked with the name of the contents.
2. Gas cylinders must be stored upright and secured to prevent falling.
3. When not in use, gas cylinder valve protective caps must be in place.
4. Gas cylinders must be protected against physical damage.
5. When stored, gas cylinders must be separated from each other based on their hazard classes.
6. Combustible materials must be kept a minimum of 10 feet from gas containers.
7. Gas cylinders must not be placed near elevators, unprotected platform edges or other areas where they would drop more than two feet (2').
8. Gas cylinders must not be placed in areas where they may be damaged by falling objects.
9. Ropes, chains, or slings must not be used to suspend gas cylinders unless the cylinder was manufactured with appropriate lifting attachments.

N. Liquid Petroleum Gas Storage and Use

1. Liquid petroleum gas (LP-Gas) storage and use must comply with the following:
 - a. If not prohibited by other sections of the Contract Documents, propane containers may be used in buildings under construction or undergoing major renovation as a fuel source for temporary heating for curing concrete, drying plaster and similar applications in accordance with the following:
 - (1) Heating elements (other than integral heater-container units) must be located at least 6 feet from any LP-Gas container.

- (2) Integral heater container units specifically designed for the attachment of the heater to the container, or to a supporting standard attached to the container, may be used provided they are designed and installed so as to prevent direct or radiant heat application to the LP-Gas container.
- (3) Blower and radiant type units must not be directed toward any LP-Gas container within 20 feet.
- (4) Heat producing equipment must be installed with clearance to the combustibles in accordance with the manufacturer's installation instructions.
- (5) Cylinders must comply with DOT cylinder specifications and must be secured in an upright position.
- (6) Regulators must be approved for use with LP-Gas. Fittings must be designed for at least 250-psig service pressure.
- (7) Hoses must be designed for a working pressure of at least 350 psig (unless limited to 5 psig) and shall be a maximum of 6 feet in length.
- (8) Portable heaters must be equipped with an approved automatic device to shut off the flow of gas to the main burner and to the pilot in the event of flame extinguishment or combustion failure.
- (9) Portable heaters with an input of more than 50,000 Btu/hr must be equipped with either a pilot that must be "proved" before the main burner can be turned on, or provided with an approved electronic ignition system.
- b. In addition to the above, for LP-Gas storage/use in buildings undergoing alteration and that are fully or partially occupied, the following shall also apply:
 - (1) Specific approval must be obtained from the Fire Marshal prior to bringing LP-Gas containers onto the Project Site.
 - (2) The maximum water capacity of individual containers shall be 5-gallon water capacity and the number of containers in the building shall not exceed the number of workers assigned to using the LP-Gas.
 - (3) Containers having a water capacity greater than 2 1/2 lb. [1 quart] must not be left unattended.

O. Hot Work

1. The use of Hot Work equipment must be in accordance with the following guidelines, including a pre-site inspection, fire watch and post inspection procedures.
 - a. Pre-site Inspection: An inspection of the Hot Work site must be conducted by the Contractor or his/her designee prior to Hot Work operations to ensure:
 - (1) the Hot Work site is clear of combustibles or that combustibles are protected;
 - (2) exposed construction is of noncombustible materials or that combustible materials are protected;
 - (3) openings are protected;
 - (4) there are no exposed combustibles on the opposite side of partitions, walls, ceilings, floors, etc.;
 - (5) fire extinguishers are available, fully charged, and operable; and
 - (6) fire watch personnel are assigned, equipped and trained.
 - b. Fire Watch: The sole duty of fire watch personnel must be to watch for the occurrence of fire during and after Hot Work operations.
 - (1) Individuals designated to fire watch duty must have fire-extinguishing equipment readily available and must be trained in the use of such equipment.
 - (2) Personnel assigned to fire watch must be responsible for extinguishing spot fires and communicating an alarm.

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- (3) Hot Work conducted in areas with vertical and horizontal fire exposures that cannot be observed by a single individual must have additional personnel assigned to fire watches to ensure that all exposed areas are monitored.
 - c. Post Inspection: The fire watch must be maintained a minimum of 30 minutes after the conclusion of the Work to look out for leftover sparks, slag, or smoldering combustibles.
 - P. Combustion Powered Equipment
 - 1. Combustion powered equipment must be used in accordance with the following:
 - a. Equipment must be located so that exhausts do not discharge against combustible materials.
 - b. When possible, exhausts must be piped to the outside of the building.
 - c. Equipment must not be refueled while in operation.
 - d. Fuel for equipment must be stored in an approved area outside of the building.
 - Q. Temporary Heating Equipment (See Santa Clara Fire Marshall SD&S No. SI-7)
 - 1. Temporary heaters, such as those that are liquid petroleum gas (LP-Gas) fueled, shall be listed, and must be installed, used, and maintained in accordance with the manufacturer's instructions.
 - 2. Temporary heating devices must be secured properly and kept clear from combustible materials.
 - 3. Refueling operations must be conducted in an approved manner.
 - R. Combustible Material Storage
 - 1. Combustible construction materials must be stored a minimum of 20 feet from buildings under construction or undergoing remodel, except:
 - a. Materials staged for installation on a floor level.
 - b. When specifically approved by the Fire Marshal, materials may be stored in parking garages of Type I construction if the automatic fire sprinkler system is in service and vertical openings are protected.
 - S. Flammable and Combustible Liquids
 - 1. Storage areas for flammable and combustible liquids must be kept free of weeds and extraneous combustible material. Open flames and smoking are prohibited in flammable or combustible liquid storage areas.
 - 2. Tanks and containers must be marked with the name of the product and "FLAMMABLE KEEP FIRE AND FLAME AWAY." Tanks (containers in excess of 60 gallons) shall also be labeled, "KEEP 50 FEET FROM BUILDINGS."
 - 3. Metal containers for Class I or II liquids must be in accordance with DOT requirements or must be of an approved design. Discharge devices must not cause an internal pressure on the container. Individual containers must not be interconnected and must be kept closed when not in use.
 - 4. Secondary containment or a means of spill control, drainage control, and dike control is required for large containers (such as 55 gallon drums) and tanks as approved by the Fire Marshal.
 - 5. Plans for the installation/use of any aboveground storage tank (containers greater than 60 gallons) must be submitted to the Owner and Fire Marshal for review and permit prior to procuring proposed tank.
 - T. Burning on the Project Site is prohibited.

1.09 SUBMITTALS

- A. Contractor must submit the following items to the Owner for review and acceptance prior to mobilization:

1. Three (3) copies of a site map identifying the locations of:
 - a. Contractor's field office (See Section 01500.1.06.A)
 - b. Storage sheds and storage areas (See Section 01500.1.06.D)
 - c. Project Site access and egress points (See Document 00700.10.3.3)
 - d. Fabrication areas (See. Section 01500.1.06.K)
 - e. Equipment maintenance area (See Section 01500.1.06.E)
 - f. Parking area for personal vehicles (See Section 01500.1.06.G)
 - g. Parking and maintenance area(s) for construction equipment (See Section 01500.1.06.G)
 - h. Temporary utility poles or electric extensions (See. Section 01500.1.05.A.5)
 - i. Concrete washout area(s) (See. Section 01500.1.06.I)
 - j. Temporary and/or Construction Fencing location(s)
 2. Eight (8) copies of a written description of what types of materials will be used as temporary barriers and protection and how they will be utilized. (See Section 01500.1.07, "Temporary Controls")
 3. Three (3) copies of a letter designating an authorized representative for the Contractor who will have the authority to represent and act for Contractor at the Project Site. (See Document 00700.3.7.1). Include the telephone and/or pager numbers at which the Contractor's Authorized Representative can be reached at all times. (See Document 00700.3.7.4)
 4. Four (4) copies of a confined space entry program applying to all existing permit-required confined spaces identified by Owner in the Contract Documents, or defined by regulations, and any confined spaces identified or created by Contractor or Owner during the Contract Time.
- B. Contractor must submit one reproducible and eleven (11) copies of the following items for Owner and Fire Marshal review and acceptance:
1. Plans for the installation/use of any aboveground storage tank (containers greater than 60 gallons).
 2. Plans for temporary Fire Department Access Roadways, if needed.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

PART 4 - FORMS (Not Used)

END OF SECTION 01500

SECTION 01515

SOLID WASTE MANAGEMENT AND RECYCLING PLAN

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section includes:
 - 1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 – Related Sections
 - c. 1.03 - Definitions
 - d. 1.04 - Intent
 - e. 1.05 - Submittals
 - f. 1.06 - Recycling Requirements
 - 2. Part 2 – Products (NotUsed)
 - 3. Part 3 – Execution (NotUsed)
 - 4. Part 4 – Forms
 - a. Form 01515-F1 “Summary of Solid Waste Disposal and Diversion”

1.02 RELATED SECTIONS

- A. Division 1 Section 01330, “Submittal Procedures”
- B. Division 1 Section 01500, “Temporary Facilities and Controls”
- C. Division 1 Section 01740, “Cleaning”

1.03 DEFINITIONS

- A. **Inert Fill** - A permitted facility that accepts inert waste such as asphalt and concrete exclusively.
 - 1. Inert Solids/Inert Waste: Non-liquid solid waste including, but not limited to, soil and concrete, that does not contain hazardous waste or soluble pollutants at concentrations in excess of water-quality objectives established by a regional water board and does not contain significant quantities of decomposable solid waste.
- B. **Class III Landfill** - A landfill that accepts non-hazardous waste such as household, commercial and industrial waste, including construction, remodeling, repair, and demolition operations.
- C. **Construction and Demolition Waste** - Includes solid wastes, such as building materials, packaging, rubbish, debris, and rubble resulting from construction, remodeling, repair, and demolition operations.
 - 1. Rubbish: Includes both combustible and noncombustible wastes, such as paper, boxes, glass, crockery, metal and lumber scrap, tin cans, and bones.
 - 2. Debris: Includes both combustible and noncombustible wastes, such as leaves and tree trimmings that result from construction or maintenance and repair work.
- D. **Chemical Waste** - Includes petroleum products, bituminous materials, salts, acids, alkalis, herbicides, pesticides, organic chemicals, and inorganic wastes.
- E. **Sanitary Wastes** – Includes:
 - 1. Garbage: Refuse and scraps resulting from preparation, cooking, distribution, or consumption of food.
 - 2. Sewage: Domestic sanitary sewage.

1.04 INTENT

- A. Owner is committed to promoting efforts to have the Work performed in an environmentally sensitive manner.
- B. To promote this effort the Contractor is required to:
 - 1. Make reasonable efforts to affect optimum control of solid wastes.
 - 2. Prepare and comply with a Project specific Solid Waste Management Plan.

1.05 SUBMITTALS

- A. Submit the following according to the requirements of the Contract Documents:
 - 1. Solid Waste Management Plan
 - a. No later than twenty-eight (28) Days after the start date for the Work stated in the Notice to Proceed, Contractor must schedule and conduct a meeting with Owner to discuss Contractor's proposed Solid Waste Management Plan.
 - b. No later than forty-five (45) Days after the start date for the Work stated in the Notice to Proceed, prepare, and submit four (4) copies of a written and/or graphic Solid Waste Management Plan including, but not limited to, the following:
 - (1) Permit or license and the location of the solid waste disposal area(s).
 - (2) Procedures for Recycling/Re-Use Program.
 - c. Revise and resubmit Solid Waste Management Plan as required by Owner.
 - 2. Review of the Contractor's Solid Waste Management Plan will not relieve the Contractor of responsibility for adequate and continuing control of pollutants and other environmental protection measures.
- B. No later than 15 Days after Contractor's request for Final Inspection, Contractor must submit four (1) copies of a summary of solid waste generated by the Contractor's operations.
 - 1. Submit on Form 01515-F1 or other form acceptable to Owner.
 - 2. Include manifests, weight tickets, receipts, and invoices specifically identifying the Project and waste material from:
 - a. Recycling Centers.
 - b. Class III Landfills.
 - c. Inert Fills.

1.06 RECYCLING REQUIREMENTS

- A. Recycling: Implement a recycling program that includes separate collection of waste materials of the following types:
 - 1. Concrete.
 - 2. Metal:
 - a. Ferrous.
 - b. Non-ferrous.
 - 3. Wood.
 - 4. Debris.
 - 5. Glass.
 - 6. Fluorescent light tubes
 - 7. Paper:
 - a. Bond.
 - b. Newsprint.

- c. Cardboard and paper packaging materials.
- 8. Others as appropriate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

PART 4 – FORMS

Form 01515-F1

SUMMARY OF SOLID WASTE DISPOSAL AND DIVERSION

Project Name: _____

Project Number: _____

Contractor Name: _____

Address: _____

License Number: _____

Enter the weight and cubic yardage of each Type of Material diverted or disposed of in the appropriate column.

Type of Material	Disposed in Class III Landfill	Disposed in Inert Fill	Diverted from Landfill by Recycling
Asphalt			
Concrete			
Porcelain			
Ferrous metal			
Non-ferrous metal			
Wood			
Debris			
Glass			
Red clay brick			
Bond paper			
Newsprint			
Cardboard			
Others			

END OF SECTION 01515

**SECTION 01525
FIRE PROTECTION PLAN****PART 1 - GENERAL****1.01 SUMMARY**

- A. This Section includes:
 - 1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 – Related Sections And Standards
 - c. 1.03 - Definitions
 - d. 1.04 - Fire Protection Plan Requirements
 - e. 1.05 - Implementation
 - f. 1.06 - Submission
 - 2. Part 2 – Products (Not Used)
 - 3. Part 3 – Execution (Not Used)
 - 4. Part 4 – Forms (Not Used)

1.02 RELATED SECTIONS AND STANDARDS

- A. Division 1 Section 01500, “Temporary Facilities and Controls”
- B. California Fire Code - Article 87
- C. National Fire Protection Association - Standard #1
- D. Fire Marshal Standard Details & Specifications - SI-7

1.03 DEFINITIONS

- A. **Hot Work** - Hot work includes any operations capable of initiating fires or explosions, including cutting, welding, brazing, soldering, grinding, thermal spraying, thawing pipe, torch applied roofing, or any other similar activity.
- B. **Fire Marshal** – Office of the Fire Marshal, Santa Clara County
- C. **SD&S No. SI-7** – Fire Marshal Standard Details & Specifications Number SI-7 (Construction Site Fire Safety)

1.04 FIRE PROTECTION PLAN REQUIREMENTS

- A. Contractor must prepare and submit a written Fire Protection Plan.
- B. The written Fire Protection Plan must meet the requirements of the Contract Documents and be consistent with the fire safety precautions specified in SD&S No. SI-7.
- C. At a minimum, the fire protection plan must include:
 - 1. The name and contact phone number of the person(s) responsible for compliance with the Fire Protection Plan.
 - 2. Procedures for:
 - a. Reporting emergencies to the fire department.
 - b. Emergency notification, evacuation and/or relocation of all persons in the building under construction and on the Project Site.
 - c. Hot Work operations
 - d. Management of hazardous materials

01525-1

- e. Removal of combustible debris
- f. Maintenance of emergency access roads.
- 3. Floor plans identifying the locations of:
 - a. Exits
 - b. Exit stairs
 - c. Exit routes
 - d. Portable fire extinguishers.
- 4. Site plans identifying:
 - a. Designated exterior assembly areas for each evacuation route.
 - b. Fire apparatus access roadways
 - c. On-site fire hydrants

1.05 IMPLEMENTATION

- A. Contractor is responsible for implementation of the requirements and provisions of the approved Fire Protection Plan.
- B. Contractor is responsible for communicating the requirements of the Fire Protection Plan to all Subcontractors and other personnel working at the Project Site.

1.06 SUBMISSION

- A. Submit four (4) copies of a Fire Protection Plan.
- B. Fire Marshal must approve the Fire Protection Plan prior to Contractor performing Work at the Project Site.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

PART 4 - FORMS (Not Used)

END OF SECTION 01525

SECTION 01535
CONSTRUCTION FENCING**PART 1 - GENERAL****1.01 SUMMARY**

- A. This Section includes:
 - 1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 – Related Sections
 - c. 1.03 - Definitions
 - d. 1.04 - Construction Fencing
 - 2. Part 2 – Products (NotUsed)
 - 3. Part 3 – Execution (NotUsed)
 - a. 3.01 Construction
 - 4. Part 4 –Forms (Not Used)

1.02 RELATED SECTIONS

- A. Section 01500.1.09.A.1.J, Site Map Submittal
- B. Section 01500.1.06.C, “Temporary Fencing”

1.03 DEFINITIONS

- A. **Temporary Fencing** - Temporary fencing Provided and Installed by Contractor as required by other Sections of the Contract Documents.
- B. **Construction Fencing** - Temporary fencing to be Provided and Installed by Contractor for the duration of construction as required by this Section.

1.04 CONSTRUCTION FENCING

- A. Prior to start of Work at the Project Site, install site enclosure fence with suitable locked entrance gates.
- B. Locate as shown on Drawings or as Approved by Owner’s Project Manager.
- C. Locate vehicular entrance gates in suitable relation to construction facilities and to avoid interference with traffic on public thoroughfares.
- D. Locate pedestrian entrance gates as required to provide controlled personnel entry, in suitable relation to construction parking facilities.
- E. Fencing Materials:
 - 1. No. 11 gauge, 2-inch mesh, 72-inch high galvanized chain link fabric with extension arms and 3b strands of galvanized barbed wire.
 - 2. Galvanized steel posts; 1-1/2 inch O.D. line posts and 2 inch O.D. corner posts.

PART 2 - PRODUCTS (Not Used)**PART 3 - EXECUTION****3.01 CONSTRUCTION**

- A. Construct open-mesh fence in accordance with industry standards.

PART 4 - FORMS (Not Used)**END OF SECTION 01535**

SECTION 01570 STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section includes:
 - 1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 – Related Documents and Sections
 - c. 1.03 - Definitions
 - d. 1.04 - SWPPP Requirements
 - e. 1.05 - Submittals
 - 2. Part 2 – Products (Not Used)
 - 3. Part 3 – Execution (Not Used)
 - 4. Part 4 – Forms (Not Used)

1.02 RELATED DOCUMENTS AND SECTIONS

- A. Document 00700.3.19, "Water Pollution Control"
- B. Section 01330, "Submittal Procedures."
- C. Section 01450, "Contractor's Quality Control (QC) System"

1.03 DEFINITIONS

- A. **NOI** - Notice of Intent
- B. **SWPPP** - Storm Water Pollution Prevention Plan
- C. **NOT** - Notice of Termination

1.04 SWPPP REQUIREMENTS

- A. The project will comply with the NPDES General Construction Activity Storm Water Permit administered by the Regional Water Quality Control Board.
- B. Prior to construction grading for the proposed land uses, the Owner will file a "Notice of Intent" (NOI) to comply with the General Permit.
- C. The Contractor must prepare and maintain for the entire construction period a Storm Water Pollution Prevention Plan (SWPPP) which addresses measures Contractor will implement to minimize and control construction and post-construction storm water runoff.
- D. At a minimum, the following measures must be included in the SWPPP:
 - 1. Burlap bags filled with drain rock will be installed around storm drains to route sediment and other debris away from the drains.
 - 2. Earthmoving or other dust-producing activities will be suspended during periods of high winds.
 - 3. All exposed or disturbed soil surfaces will be watered at least twice daily to control dust.
 - 4. Stockpiles of soil or other materials that can be blown by the wind will be watered or covered.
 - 5. All trucks hauling soil, sand, and other loose materials will be covered and maintain at least two feet of freeboard
 - 6. All paved access roads, parking areas, staging areas and residential streets adjacent to

the construction sites will be swept daily (with water sweepers).

- E. Contractor must submit twelve (12) copies of the draft SWPPP to the Owner for review and acceptance prior to construction.
- F. The certified SWPPP must be available at the Project Site and must be updated to reflect current site conditions.
- G. When the construction phase is complete, Contractor must file a Notice of Termination (NOT) for the General Permit for Construction with the Regional Water Quality Control Board and applicable Governmental Agency. The NOT must document that all elements of the SWPPP have been executed, construction materials and waste have been properly disposed of, and a post-construction storm water management plan is in place as described in the SWPPP for the site. Submit three (3) copies of the NOT to the Owner.

1.05 SUBMITTALS

- A. Submit the Storm Water Pollution Prevention Plan (SWPPP) in accordance with Section 01300, "Submittal Procedures."
- B. Submit required copies of the Notice of Termination (NOT) to the Owner

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

PART 4 - FORMS (Not Used)

END OF SECTION 01570

SECTION 01600

PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.01 SUMMARY

A. This Section includes:

1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 – Related Documents and Sections
 - c. 1.03 - Definitions
 - d. 1.04 -Product Delivery, Storage, and Handling
 - e. 1.05 - Packaging
2. Part 2 – Products
 - a. 2.01 - Unauthorized Products
 - b. 2.02 - Product Availability
 - c. 2.03 - Product Requirements
3. Part 3 – Execution (Not Used)
4. Part 4 –Forms (Not Used)

1.02 RELATED DOCUMENTS AND SECTIONS

- A. Document 00700.3.25, "Certification by Contractor of Recycled Content"
- B. Document 00700.3.26, "Submittals"
- C. Document 00700.3.30, "Substitutions"
- D. Division 1 Section 01330, "Submittal Procedures"
- E. Division 1 Section 01630, "Product Substitution Procedures"

1.03 DEFINITIONS

- A. **Products** - Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock.
 1. The term "Product" includes the terms "material," "equipment," "system," and terms of similar intent.
 2. Product means New Products including material, machinery, components, equipment, fixtures, and systems forming the Work.
 - a. Product does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work.
 - b. Products may also include existing materials or components required for reuse.
- B. **Named Products** - Products identified in the Contract Documents by Manufacturer's product name. Named Products may include Manufacturer's make or model number or other designation.
- C. **New Products** - Items that have not previously been incorporated into another project or facility, 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.
- D. **Manufacturer's Warranty** - Preprinted written Warranty published by individual Manufacturer for a particular Product and specifically endorsed by Manufacturer to Owner.

1.04 PRODUCT DELIVERY, STORAGE, AND HANDLING**A. Delivery**

1. Deliver Products using means and methods that will prevent damage, deterioration, and loss, including theft.
2. Schedule delivery to minimize long-term storage at Project Site and to prevent overcrowding of Project or Work areas.
3. 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.
4. 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.
5. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that Products are undamaged and properly protected.

B. Storage

1. Store Products using means and methods that will prevent damage, deterioration, and loss, including theft.
2. Comply with Manufacturer's written instructions for storage.
3. Store Products to allow for inspection and measurement of quantity or counting of units.
4. Store materials in a manner that will not endanger Project premises or personnel.
5. 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.
6. Comply with product Manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
7. Protect stored products from damage.
8. For exterior storage of fabricated products, place on sloped supports above ground.
 - a. Cover products subject to deterioration with impervious sheet covering and provide ventilation to avoid condensation.
 - b. Store loose granular materials on solid surfaces in well-drained area; prevent mixing with foreign matter.

C. Handling

1. Handle Products using means and methods that will prevent damage, deterioration, and loss, including theft.
2. Comply with Manufacturer's written instructions for handling.
3. Provide equipment and personnel to handle products by methods to prevent soiling or damage.

1.05 PACKAGING

- A. Provide reusable or recyclable packaging for items delivered to the Project Site such as construction materials, operations and maintenance materials, furniture, equipment, and other large objects.
- B. For items over 75 pounds or larger than 120 cubic feet, polystyrene "peanuts" shall not be used with packaging.
- C. Use products with natural or recycled content.

1. Plastic sheets or films will be allowed only if labeled with recycling symbol-indicating type of plastic.
 2. Reusable Packaging: Items such as blankets, skids and crates must be returned to the manufacturer or transportation company for future reuse as packaging materials.
 3. Recyclable Packaging: Items such as boxes, cardboard and paper that will be delivered to a recycling center after use.
- D. Properly dispose of packaging materials and clean surrounding areas of packaging debris immediately after unpacking of Products.

PART 2 - PRODUCTS

2.01 UNAUTHORIZED PRODUCTS

- A. Products required for Work must not contain asbestos or polychlorinated biphenyls (PCB).
- B. If the Contract Documents name a Product, Provide the Named Product unless the Owner's Authorized Representative, through the Substitution process, accepts an equal Product. (See Section 01630, "Product Substitution Procedures")

2.02 PRODUCT AVAILABILITY

- A. Prior to Bid, Contractor must verify that Named Products, including sole source Products can be obtained, delivered, and installed within the Time Period(s) stated in the Bid Documents.
- B. Owner does not warrant that Named Products including sole source Products are available within the Time Period(s) required by the Bid Documents. Contractor must verify availability of Named Products before submitting a Bid.
- C. By submitting a Bid, Contractor represents to the Owner that Contractor has verified the availability of Named Products, the Named Products including sole source Products are currently available, and the Work or designated portion of the Work can be completed within the Contract Time(s).

2.03 PRODUCT REQUIREMENTS

- A. Provide Products that:
 1. Comply with the requirements of the Contract Documents
 2. Have been accepted by the Owner for incorporation into the Work
 3. Are undamaged
 4. Are new at time of installation, unless otherwise indicated in the Contract Documents.
- B. Provide products complete with:
 1. Accessories
 2. Trim
 3. Finish
 4. Fasteners
 5. Gauges
 6. All other items needed for a complete installation.
- C. Standard Products
 1. 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.
- D. Owner has the right to reject Products with Manufacturer's Warranties that are in conflict with requirements of the Contract Documents.
- E. Products required to be supplied in quantity must be interchangeable.

PART 3 - EXECUTION (Not Used)

PART 4 - FORMS (Not Used)

END OF SECTION 01600

SECTION 01630 PRODUCT SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section includes:
 - 1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 – Related Documents
 - c. 1.03 Definitions (Not Used)
 - d. 1.04 - General
 - e. 1.05 - Submission Requirements
 - f. 1.06 - Owner's Action
 - 2. Part 2 – Products
 - 3. Part 3 – Execution (Not Used)
 - 4. Part 4 – Forms (Not Used)
 - a. Form 01630-F1 (Substitution Request Form)

1.02 RELATED DOCUMENTS

- A. Document 00200.16, "Substitution of Alternative Materials, Articles, or Equipment"
- B. Document 00700.3.30, "Substitutions"

1.03 DEFINITIONS (Not Used)

1.04 GENERAL

- A. Owner's Authorized Representative will consider proposals for Substitution of a service, product, material, process, or article only when such proposals are:
 - 1. Submitted within the time periods stated in the Contract Documents
 - 2. Accompanied by full and complete technical data
 - 3. All supporting information requested by Owner's Authorized Representative to substantiate or prove quality, delivery time, and cost are submitted
 - 4. Substitution request is accompanied by Substitution Request Form (Form 01630-F1) at the end of this Section 01630, "Product Substitution Procedures", properly completed by Contractor, and properly certified by the Contractor's Authorized Representative. If the Substitution request is a pass through request from a Subcontractor, both Contractor's Authorized Representative and an officer of the Subcontractor must certify the Substitution requests.
- B. The burden of proof as to the equality of any service, product, material, process, or article Contractor proposes for Substitution rests with Contractor.
- C. The Contractor must not order substitute services, products, materials, or articles without prior written acceptance of the Substitution by Owner's Authorized Representative.
- D. The Owner has the right to reject proposals due to insufficient information.
- E. Contractor must certify that proposed Substitution meets or exceed all the requirements of the Contract Documents.

- F. Contractor must assume responsibility for Owner's additional costs related to the redesign and/or modifications to any parts of the Work and/or Contract Documents caused by the Substitutions.
- G. Contractor's Substitution requests that do not comply with the requirements of the Contract Documents may be returned to Contractor without review.
- H. If Contractor's Substitution request is returned without review or returned rejected, Contractor must furnish the originally specified items

1.05 SUBMISSION REQUIREMENTS

- A. Limit each request to one proposed Product Substitution.
- B. Submit three (3) copies of each request for Substitution.
- C. Identify product or fabrication or installation method to be replaced including specification Section number and title and Drawing numbers and titles.
- D. Include three (3) copies of completed and signed Substitution Request Form 01630-F1, furnished at the end of this Section 01630, "Product Substitution Procedures."
- E. Submit the following documentation:
 - 1. Statement indicating why specified material or product cannot be provided.
 - 2. Coordination information including:
 - a. A list of changes or modifications needed to other parts of the Work that are necessary to accommodate proposed Substitution.
 - b. A list of changes or modifications to work performed by Owner and/or separate contractors that are necessary to accommodate proposed Substitution.
 - 3. Detailed comparison including:
 - a. Comparison of significant qualities of proposed Substitution with those of the Work specified. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 - 4. Drawings to same (or larger) scale as pertinent portions of Contract Documents, marked to show:
 - a. How differences will be accommodated.
 - b. Complete system/assembly as revised
 - c. Difference(s) in size, configuration, connections, service, accessibility, or any other significant characteristics.
 - 5. Contractor must show complete layout of system unless it is identical to the layout shown in the Contract Documents. Show unchanged portion to indicate clearances, etc. relative to changed portion.
 - 6. Wherever applicable, include complete detail drawings of supports for all Substitute equipment and complete load calculations for adequacy of support prepared and signed by a California Registered Engineer.
 - 7. Product Data, including drawings and descriptions of Products and fabrication and installation procedures.
 - 8. Samples, where applicable or requested.

9. List of similar installations for completed projects with project names and addresses and names and addresses of Architects and Owners.
 10. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 11. Research/evaluation reports evidencing compliance with building codes in effect for Project from a model code organization acceptable to authorities having jurisdiction.
 12. Evidence that proposed product provides specified Warranty
 13. Cost information, including a proposal of change, if any, in the Contract Sum.
- F. Submit a detailed comparison of Contractor's Progress Schedule with and without using proposed Substitution showing effect on the Contract Time(s).
- G. If specified product cannot be provided within the Contract Time(s), include letter from Manufacturer, on Manufacturer's letterhead, stating the reason(s) for the lack of availability or delays in delivery.
- H. Provide Contractor's certification that proposed Substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
- I. Provide Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed Substitution to produce indicated results.

1.06 OWNER'S ACTION

- A. If necessary, Owner will request additional information or documentation within fourteen (14) Days of receipt of a request for Substitution.
- B. Owner will notify Contractor 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.

PART 2 - PRODUCTS (NOT USED)**PART 3 - EXECUTION (NOT USED)**

PART 4 - FORMS**FORM 01630-F1****“SUBSTITUTION REQUEST FORM”**

All Substitution requests must be accompanied by the following form, completed by the Contractor, and properly certified.

PROJECT: _____

OWNER'S PROJECT NUMBER: _____

TO: _____

FROM: _____ DATE: _____

RE: _____

SPECIFICATION TITLE: _____

DESCRIPTION: _____

SECTION: _____ PAGE: _____ DOCUMENT/PARAGRAPH: _____

PROPOSED SUBSTITUTION: _____

MANUFACTURER: _____

ADDRESS: _____

PHONE: _____

TRADE NAME: _____ MODEL NUMBER: _____

INSTALLER: _____

ADDRESS: _____

PHONE: _____

HISTORY: ☐ New Product ☐ 2-5 Years Old ☐ 5-10 Years Old ☐ More Than 10 Years Old

SIMILAR INSTALLATION:

Project: _____ Architect: _____

Address: _____ Owner: _____

Date Installed: _____

Differences between proposed substitution and specified product: _____

Required point-by-point comparative data attached. ☐ Yes ☐ No

The supporting data attached consists of ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ Other

Proposed substitution affects other parts of Work: ☐ No ☐ If Yes, please explain: _____

Reason for not providing specified item: _____

☐ Savings ☐ Cost to Owner for accepting substitution: \$ _____

Proposed Substitution changes Contract Time. ☐ No ☐ Yes _____ Days

THE UNDERSIGNED CERTIFIES:

1. Proposed Substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
2. Same Warranty will be provided for proposed Substitution as for specified product.
3. Same maintenance service and source of replacement parts, as applicable, is available.
4. Proposed Substitution will have no adverse effect on other trades and will not affect or delay progress as indicated on the current version of the Official Progress Schedule.
5. Cost and time data as stated above is complete and accurate
6. Contractor and, if applicable, Subcontractor waives right to Claim for additional costs and time related to accepted Substitution, which may subsequently become apparent.
7. Proposed Substitution does not affect dimensions and functional clearances.
8. Coordination, installation, and changes in the Work as necessary for accepted Substitution have been or will be performed in all respects.

Contractor's Certification:

Submitted by: _____ Signed by: _____

Firm: _____ Phone: _____

Address: _____

Subcontractor's Certification:

Submitted by: _____ Signed by: _____

Firm: _____ Phone: _____

Address: _____

List Attachments:

DESIGNER OF RECORD REVIEW AND ACTION

Substitution Recommended - Make Submittals in accordance with Section 01330, "Submittal Procedures".

Substitution Recommended as Noted - Make submittals in accordance with Section 01330, "Submittal Procedures".

Substitution Rejected - Use specified Products.

Substitution Request Received too late - Use specified Products.

Signed by: _____ Date: _____

Additional Comments: ☐ Contractor ☐ Subcontractor ☐ Supplier ☐ Manufacturer ☐ Architect _____

OWNER ACCEPTANCE

Substitution Accepted - Make submittals in accordance with Section 01330, "Submittal Procedures".

Substitution Accepted as Noted - Make submittals in accordance with Section 01330, "Submittal Procedures".

Substitution Rejected - Use specified Products.

Substitution Request Received too late - Use specified Products.

Signed by: _____ Date: _____

Owner's Authorized Representative

END OF SECTION 01630

SECTION 01640

OWNER FURNISHED CONTRACTOR INSTALLED (OFCI) ITEMS

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section includes:
 - 1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 – Related Documents And Sections
 - c. 1.03 - Definitions
 - d. 1.04 - OFCI Manager
 - e. 1.05 - Purchase Orders
 - f. 1.06 - OFCI Delivery Schedule
 - g. 1.07 - Shipment Delivery
 - h. 1.08 - Equipment Receiving Log
 - i. 1.09 - Storage
 - j. 1.10 - Inspection of Records
 - k. 1.11 - Damaged Merchandise
 - 2. Part 2 – Products
 - 3. Part 3 – Execution (Not Used)
 - 4. Part 4 – Forms (Not Used)
 - a. SAMPLE FORM 01640-F1, “OFCI DELIVERY SCHEDULE”

1.02 RELATED DOCUMENTS AND SECTIONS

- A. Document 00700.3.39.3, “Owner Furnished Items”
- B. Section 01320.3.05, “Baseline Schedule”

1.03 DEFINITIONS

- A. **OFCI** – Owner Furnished Contractor Installed
- B. **OFCI Manager** – Contractor’s employee accepted by the Owner and responsible for managing all OFCI items.
- C. **OFCI Delivery Schedule** – The OFCI Delivery Schedule prepared by the Contractor and submitted to the Owner in the format indicated in SAMPLE FORM 01640-F1 at the end of Section 01640.

1.04 OFCI MANAGER

- A. Prior to starting Work, submit a letter to the Owner identifying on-site individual that will act as the Contractor’s OFCI Manager.
 - 1. This OFCI Manager will be responsible for:
 - a. Furnishing information to the Owner's Project Manager on desired delivery dates.
 - b. Proper receipt and reporting of all shipments received.
 - c. Proper storage and handling of OFCI items at all times.
 - 2. If the originally designated OFCI Manager is replaced, designate a new OFCI Manager and immediately submit written notification thereof to the Owner.

1.05 PURCHASE ORDERS

- A. The Owner will furnish copies of purchase orders covering OFCI items.
 - 1. The nature of the procurement actions involved prevents the furnishing of a complete set of purchase orders immediately after the start of construction.
 - 2. Purchase Orders will be forwarded to Contractor at the time of issuance to the suppliers.
 - 3. Contractor must retain copies of Owner's Purchase Order(s) for the Contractor's control records.
 - 4. Purchase Orders for items subject to "phased" delivery will be accompanied by appropriate delivery lists.

1.06 OFCI DELIVERY SCHEDULE

- A. Develop an OFCI Delivery Schedule including description and required delivery dates (see sample Schedule at the end of this Section) for OFCI items and reference all related Activity Numbers from the Contractor's Progress Schedule. Submit to Owner no later than thirty (30) Days after the start date for the Work identified in the Notice To Proceed (NTP). Submit three (3) paper copies and corresponding electronic data files on Compact Disks (CDs). The CDs must be permanently labeled to indicate the contents of the CD and include the submittal number and data date.
- B. This OFCI Delivery Schedule must include each piece of OFCI equipment.
 - 1. For each item, complete the two dates required from the Contractor:
 - a. "Delivery No Earlier Than" date
 - b. "Delivery No Later Than" date.
- C. Contractor must add PO #, date ordered information, and Activity Numbers from the Official Progress Schedule as the information is provided or becomes available.
- D. This OFCI Delivery Schedule must be coordinated with the Owner accepted Official Progress Schedule
- E. Each month, coordinate the OFCI Delivery Schedule with the Updated Official Progress Schedule.
 - 1. Review the equipment delivery schedule not less than once each month to determine whether the construction progress dictates any revisions.
 - a. Notify Owner in writing of any changes found necessary.
 - b. If, at any time, a delivery date for an OFCI item is missed, notify Owner immediately.

1.07 SHIPMENT DELIVERY

- A. Upon receipt of a shipment of OFCI item(s), the Contractor's OFCI Manager must:
 - 1. Count the number of cartons to verify the quantity received corresponds with the freight bill.
 - a. Clearly note any discrepancies on the original freight bill or delivery ticket.
 - 2. Prior to signing for anything, carefully examine the merchandise for obvious damage
 - a. If such damage is observed, refuse the shipment.
 - b. Upon refusal, notify the Owner, and give complete details.
 - 3. Open cartons or uncrate equipment to permit examination prior to departure of the

carrier.

- a. If the size of the shipment makes this impossible, release the driver and inspect the shipment for concealed damage not later than 24 hours after receipt.
- b. If it is determined concealed damage does exist, contact Owner immediately.

1.08 EQUIPMENT RECEIVING LOG

- A. Keep an "Equipment Receiving Log," updated at all times, at the Job Site.
- B. The "Equipment Receiving Log" must be in a format furnished or Approved by the Owner.

1.09 STORAGE

- A. Store all OFCI items in a secure area either on-site or off-site.
 1. The area must be lockable and secure from vandalism or theft.
 2. It must be weatherproof and waterproof with adequate ventilation.
 3. Provide protection and security of OFCI items.
- B. Provide Certificates of Insurance for all off-site storage areas in accordance with the requirements of the Contract Documents.

1.10 INSPECTION OF RECORDS

- A. The Owner may inspect the Owner-furnished equipment records on a periodic basis during construction to assure that the data is maintained in an accurate and current condition.

1.11 DAMAGED MERCHANDISE

- A. Exterior or Visible Damage:
 1. If container received shows exterior or visible damage, make a notation to that effect on the delivery ticket and have it signed by the delivery carrier and by personnel responsible for receiving the merchandise.
 2. Refuse acceptance of damaged merchandise.
- B. Concealed Damage:
 1. If container received shows no evidence of damage, but upon examination of the contents thereof "concealed damage" is discovered, notify the Owner immediately and request an inspection.
- C. F.O.B. (Freight on Board) Shipping Point:
 1. If the merchandise is damaged Contractor must:
 - a. Request an inspection by the delivery carrier's inspector. Do not destroy the original carton, box, etc.
 - b. Notify the Owner of damaged merchandise and request replacement shipment.
 - c. Submit the following to Owner, Attention: Owner's Project Manager:
 - (1) Inspection Report
 - (2) Bill of Lading
 - (3) Invoice
 - (4) Freight Bill or Delivery Ticket
 - d. Hold the damaged merchandise until instructions for its disposition are received from the Owner.

2. F.O.B. (Freight on Board) Destination:

- a. If the merchandise is damaged and the F.O.B. is "Destination," then the complete and total liability is assumed by the Vendor from the point it is placed in the hands of the common carrier to the point of delivery. It is the Vendor's responsibility to file a claim with the carrier to recover the loss of merchandise damaged.
- b. The Contractor must:
 - (1) Request an inspection by the delivery carrier's inspector. Do not destroy the original carton, box, etc.
 - (2) Notify the Vendor of damaged merchandise and obtain authorization from Owner and replace shipment.
 - (3) Hold damaged merchandise until instructions for disposition are received from the Vendor.
 - (4) Send the following original documents to the Vendor to assist in filing claim with carrier, retaining a copy for Contractor's records:
 - a) Inspection Report
 - b) Bill of Lading
 - c) Freight Bill or Delivery Ticket

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

PART 4 - FORMS

**OFCI DELIVERY SCHEDULE
[SAMPLE FORM 01640-F1]**

<u>ORDERED</u>		<u>DESCRIPTION</u> Include the Activity Number from Official Progress Schedule	<u>DELIVERY</u>	
PO #	Date		No Earlier Than	No Later Than
Note #1: Requires Field Measurements				

END OF SECTION 01640

SECTION 01725 SURVEYING AND FIELD ENGINEERING

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section includes:
 - 1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 – Related Documents And Sections
 - c. 1.03 - Definitions
 - d. 1.04 - Field Layout
 - e. 1.05 - Locations and Elevations in the Contract Drawings
 - f. 1.06 - Survey and Site Work
 - g. 1.07 - Underground Infrastructure, Utilities & Other Facilities
 - h. 1.08 - Penetrations
 - i. 1.09 - Quality Assurance
 - j. Submittals
 - 2. Part 2 – Products
 - a. 2.01 - Equipment
 - 3. Part 3 – Execution
 - a. 3.01 - Survey
 - 4. Part 4 –Forms (Not Used)

1.02 RELATED DOCUMENTS AND SECTIONS

- A. Document 00700.3.2, “Review of Contract Documents and Field Conditions by the Contractor”
- B. Document 00700.3.26, “Submittals”
- C. Section 01310, “Project Management and Coordination”
- D. Section 01450, “Contractor’s Quality Control (QC) System”

1.03 DEFINITIONS

- A. As used in this Section 01725, “Surveying and Field Engineering”, the following definitions apply:
 - 1. **Approximate Location of Subsurface Installations** – A strip of land not more than 24 inches on either side of the exterior surface of an Existing Subsurface Installation.
 - 2. **Existing Subsurface Installation** - Any existing underground pipeline, conduit, duct, wire, or other structure.
 - 3. **Rearranged** - Rearrangement includes relocation, removal, alteration, or installation.

1.04 FIELD LAYOUT

- A. Contractor is responsible for all investigations, coordination, techniques, and determinations as may be necessary to properly fit, Install and complete the Work.
- B. Data and information shown and indicated in the Contract Documents are as accurate as could be obtained but are not guaranteed.
- C. Contractor must, before beginning any Work, compare actual Project Site conditions with the requirements of the Contract Documents, and verify all existing conditions and dimensions.

D. Verifications**1. As a minimum, Contractor must perform the following verifications:****a. Field & Site Conditions**

(1) Contractor must carefully examine and compare all the Contract Documents relating to the Work with actual field conditions, so that all Work will be accommodated in the spaces provided. The general arrangement and location of the elements of the various systems are shown on the Drawings or specified. Final locations, levels, etc., are governed by actual material sizes used, by conditions encountered, and by the sequence in which the Work is performed.

(2) Space conflicts and interferences must be resolved before any Work is installed.

2. Dimensions

a. Contractor, prior to performing any Work and as a part of the construction layout procedures, must check and verify all dimensions for accuracy, closing and clarity, and must immediately report any discrepancies to Owner for resolution before proceeding.

b. No measurements shall be scaled from Drawings. Only dimensions appearing on Drawings will be used.

c. Where manufacturer's diagrams, Shop Drawings, etc. give specific measurements of rough-in dimensions for materials or equipment and these dimensions are in conflict with dimensions indicated on Drawings, Contractor must immediately request clarifications from Owner.

d. In case of apparent error, discrepancy, omission, conflict, or obscurity in the Contract Documents, or discrepant conditions encountered at the Project Site or between Submittals, Contractor must immediately refer the matter to Owner for interpretation and/or clarification.

E. Contractor must Provide necessary lines, levels, locations, measurements, and markers for all on the Work and be responsible for their accuracy.

F. On building structures, Contractor must lay out on forms, walls, floors, and columns, the exact location of partitions as a guide to all trades.

1.05 LOCATIONS AND ELEVATIONS IN THE CONTRACT DRAWINGS

A. Property lines, location lines, and elevations of components of the Work are shown on the Contract Drawings.

B. Grade elevations shown for various parts of the Work are taken from a bench mark shown on the Contract Drawings, or if not shown, will be designated by the Owner in writing before starting Work.

1.06 SURVEY AND SITE WORK

A. Contractor must perform all survey and site Work necessary to locate and layout the construction in plan and elevation.

B. Contractor must set all stakes and marks necessary to establish the lines and grades required for the Project, and perform all survey work to layout all Work including batter boards, roads, parking lots, site utilities, and control lines.

C. Contractor must protect and maintain marks, lines, benchmarks, monuments, etc. which have previously been installed and/or are required for construction and inspection purposes. Monuments or stakes that are disturbed or destroyed due to Contractor's negligence or failure to pursue the Work diligently must be re-established at Contractor's expense.

1.07 UNDERGROUND INFRASTRUCTURE, UTILITIES & OTHER FACILITIES

- A. Attention is directed to California Government Code §4215 and §4216 concerning protection of underground infrastructure in public contracts.
- B. Contractor must ascertain the exact location of **all** underground and concealed facilities in the Project area prior to doing any work that may damage such facilities or interfere with their service. As a minimum, at least forty-eight (48) hours before any such work is planned, Contractor must have a locating service survey the area. When shown on the Drawings, the locations of Existing Subsurface Installations are the Approximate Location of Subsurface Installations, and the accuracy or completeness of this information is not guaranteed. There may be Existing Subsurface Installations not known to Owner or located differently than indicated in the Contract Documents.
- C. Contractor must protect from damage utilities and any other Existing Subsurface Installations that are to remain in place, be relocated, or otherwise Rearranged. As used herein, rearrangement includes relocation, removal, alteration, or installation.
- D. If Contractor discovers underground facilities not indicated in the Contract Documents, Contractor must immediately notify Owner in writing. Contractor must not disturb, disconnect, or damage any existing facilities, unless specifically indicated in the Contract Documents to be relocated, removed, or otherwise revised. Should Contractor disturb, disconnect, or damage any existing facilities or utilities, Contractor will bear all expenses of whatever nature arising from such disturbance or the replacement or repair thereof.
- E. The right is reserved to the owners of facilities or their authorized agents, to enter the Project with Owner's approval to make such changes as are necessary to rearrange their facilities or to make necessary corrections or repairs to their properties. Contractor must cooperate with forces engaged in such work and must conduct operations in such a manner as to avoid any unnecessary delay or hindrance to the work being performed by such other forces.
- F. Contractor must obtain authorization from the utility involved and notify Owner at least 72 hours in advance, when it is necessary to interrupt any existing utility service to make connections. Interruption in utility service must be of the shortest possible duration for the Work at hand and must be Approved in advance by Owner.
- G. Where rearrangement of facilities is necessary, Contractor must coordinate its Work with such rearrangement, and Contractor must make all arrangements with the owner of such facilities for such coordination.
- H. When ordered by Owner in writing, Contractor will rearrange any facility necessary to accomplish the Project and such work will be paid for as extra Work if it is not indicated in, or cannot reasonably be inferred from, the Contract Documents.
- I. If Contractor desires to rearrange any utility or facility for its convenience in order to facilitate its construction operations, and if such rearrangement is in addition to, or different from any rearrangements indicated in the Contract Documents, Contractor must make all necessary arrangements with Owner and the owners of such utility or facility for such rearrangement and bear all expenses in connection therewith.
- J. Where Owner determines that rearrangement of a utility or facility, the existence of which is not shown in the Contract Documents, is essential to accommodate the Project, Owner may rearrange such utility or facility by other forces.
- K. Per Government Code §4215, Contractor will not be assessed Liquidated Damages for any delay in completing the Project when such delay is caused by the failure of a utility owner or the County to remove or relocate existing utilities that were the responsibility of the utility owner or County to remove or relocate.

1.08 PENETRATIONS

- A. Contractor is responsible for all penetrations through walls, floors, beams, joists, and other structural and non-structural elements of the Work for passage of pipes, conduits, ducts, or other devices.

- B. Contractor is responsible for coordinating all penetrations and securing Owner's approval for locations of all penetrations through structural floors, walls and supporting members.
- C. Contractor must schedule and coordinate the Work of all trades to locate all required penetrations. Contractor must hire an independent testing agency at Contractor's expense, to locate reinforcing bars or imbedded items within concrete or masonry walls, floors, columns, or beams, and to perform such other tests as may be necessary or Directed to attain required results.

1.09 QUALITY ASSURANCE

- A. Surveys must be performed under the direction and with the review of a land surveyor licensed in the State of California.
- B. All survey documentation must be signed and stamped by the licensed Land Surveyor in responsible charge of the work.
- C. The Contractor must review all information to ensure it is technically accurate and complies with the requirements of this Section 01725, "Surveying and Field Engineering", before providing to the Owner.

1.10 SUBMITTALS

- A. Prior to performing any survey Work, submit eight (8) copies of the qualifications of the California Licensed land surveyor.
- B. No later than 15 Days after Contractor's request for Final Inspection, Contractor must three (1) copies of Contractor's survey records to the Owner.

PART 2 - PRODUCTS

2.01 EQUIPMENT

- A. The Contractor must provide necessary survey equipment and materials to obtain the required locations and elevations to the precision specified.

PART 3 - EXECUTION

3.01 SURVEY

- A. Elevation surveys must be referenced to the County of Santa Clara datum, and must be performed to within one one-hundredth (0.01) of a foot (ft.), unless otherwise specified.
- B. Location surveys must be referenced to the baseline and survey control points shown on the Contract Drawings. Locations must be provided to within one one-hundredth (0.01) of a foot (ft.), unless otherwise specified.
- C. The Contractor's survey records must be made available and/or submitted to the Owner when requested by Owner.

PART 4 - FORMS (Not Used)

END OF SECTION 01725

SECTION 01731
CUTTING AND PATCHING**PART 1 - GENERAL****1.01 SUMMARY**

- A. This Section includes:
 - 1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 – Related Documents And Sections
 - c. 1.03 - Definitions
 - d. 1.04 - General
 - e. 1.05 - Interface with work of Others
 - f. 1.06 - Submittals
 - g. 1.07 - Quality Control
 - 2. Part 2 – Products
 - a. 2.01 - Materials
 - 3. Part 3 – Execution
 - a. 3.01 - Examination
 - b. 3.02 - Preparation
 - c. 3.03 - Cutting
 - d. 3.04 - Patching
 - e. 3.05 - Performance
 - 4. Part 4 – Forms (Not Used)

1.02 RELATED DOCUMENTS AND SECTIONS

- A. Document 00700.3.22, “Cutting and Patching”
- B. Section 01330, “Submittal Procedures.”
- C. Section 01500.1.08.O, “Hot Work.”

1.03 DEFINITIONS

- A. **CUTTING-AND-PATCHING** - Includes, but is not necessarily limited to, demolition and repair of nominally completed and previously existing work in order to accommodate coordination of Work, installation of Work, uncovering Work for access or inspection, and to obtain samples for testing or similar purposes. It also includes integral cutting and patching during manufacturing, fabricating, erecting, and installing processes for individual items of the Work.
- B. **HOT WORK** - Hot work includes any operations capable of initiating fires or explosions, including cutting, welding, brazing, soldering, grinding, thermal spraying, thawing pipe, torch applied roofing, or any other similar activity.

1.04 GENERAL

- A. Contractor is responsible for all cutting, fitting, or patching required to complete the Work and to make its parts fit together properly.
- B. Contractor must rework and patch to match existing surfaces at removed or demolished items.
- C. Patching must achieve security, strength, and weather protection, and must preserve continuity of existing fire ratings.

- D. Patching must successfully duplicate undisturbed adjacent finishes, colors, textures, and profiles. Where there is disagreement as to whether duplication is successful or has been achieved to a reasonable degree, the Owner's judgment shall be final.

1.05 INTERFACE WITH WORK OF OTHERS

- A. The Contractor is responsible for any and all cutting, fitting, and patching required to join its Work with the work of others, except as otherwise specifically stated for in the Contract Documents.
- B. Contractor must not cut or otherwise alter the work of Owner or any separate contractor except with the written consent of Owner and such separate contractor.
- C. Contractor must include interface flags in their Progress Schedule indicating points of interface of its Work with the work of others.

1.06 SUBMITTALS

- A. Comply with requirements of Section 01330, "Submittal Procedures."
- B. Submit written request to Owner in advance of cutting or alteration that affects:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather exposed or moisture resistant element.
 - 3. Efficiency, maintenance, or safety of any operational element.
 - 4. Visual qualities of sight exposed elements.
 - 5. Work of Owner or separate contractor.
 - 6. Include in request:
 - a. Identification of Project.
 - b. Location and description of affected work.
 - c. Necessity for cutting or alteration.
 - d. Description of proposed Work and Products to be used.
 - e. Method for keeping existing utilities in service.
 - f. Alternatives to cutting and patching.
 - g. Date and time the Work will be executed.
 - h. Anticipated results in terms of variations from originally completed Work.
 - i. Where applicable include a description of circumstances which led to need for cutting and patching.
- C. Review by Owner or Design Professional prior to proceeding with proposed cutting-and-patching does not negate Owner's right to later require complete removal and replacement of Work found to be cut and patched in an unsatisfactory manner.
- D. Where cutting and patching involves addition of reinforcement to structural elements, obtain details and engineering calculations prepared by California Registered Structural Engineer indicating how reinforcement is to be integrated with the original structure.
- E. List utilities that will be disturbed or affected, including those that will be relocated and those that will be temporarily out of service. Indicate how long utility service will be disrupted.

1.07 QUALITY CONTROL

- A. Requirements for Structural Work:
 - 1. Do not cut and patch structural Work in manner resulting in reduction of load-carrying capacity or load/deflection ratio.

2. Obtain Owner's written acceptance of Submittal before proceeding with cutting and patching of structural steel, structural concrete, foundation construction, basement or retaining walls, curtain walls, pressurized piping, vessels, and equipment.
- B. Operational and Safety Limitations:
1. Do not cut and patch operational elements or safety-related components in manner resulting in reduction of capacities to perform as intended or resulting in decreased operational life, increased maintenance, or decreased safety.
 2. Obtain Owner's acceptance of Submittal before proceeding with cutting and patching primary operational systems and equipment; water, moisture, vapor, air, or smoke barriers; membranes and flashings; noise and vibration control elements and systems; control, communication, conveying, and electrical wiring systems; and similar categories.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. For replacement of Work removed, use only materials that comply with the pertinent requirements of the Contract Documents. (Those required and accepted for original installation.)
- B. For any proposed change in materials, Submit request for Substitution as described in Section 01630, "Product Substitution Procedures."

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine existing conditions prior to commencing Work, including elements subject to damage or movement during fitting, cutting, and patching.
- B. After uncovering existing Work, assess conditions affecting performance of work.

3.02 PREPARATION

- A. Provide temporary supports to ensure structural integrity of the Work.
- B. If Hot Work is involved, comply with the requirements of Section 01500.1.08.O, "Hot Work."
- C. Provide devices and methods to protect other portions of Project from damage.
- D. Provide protection from elements for areas that may be exposed by uncovering work.
- E. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- F. Except as otherwise indicated, proceed with cutting and patching at earliest feasible time in each instance, and perform work promptly.

3.03 CUTTING

- A. Cut by methods least likely to damage retained and adjoining Work.
- B. Review proposed procedure with original installer where possible, and comply with installer's recommendations.
- C. Uncover work to install improperly sequenced work.
- D. Remove and replace defective or non-conforming work.
- E. Remove samples of installed work for testing when requested.
- F. Provide openings in the Work for penetration of mechanical and electrical work.
- G. Employ original installer or fabricator where possible to perform cutting for:
 1. Weather exposed and moisture resistant elements; or
 2. Visually exposed surfaces.

- H. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- I. Comply with requirements of The Civil Drawings, where cutting and patching requires excavating and backfilling.

3.04 PATCHING

- A. Execute patching to complement adjacent Work.
- B. Fit Products together to integrate with other Work.
- C. Avoid damage to other Work and provide appropriate surfaces to receive patching and finishing.
- D. Employ original installer where possible to perform patching for weather exposed and moisture resistant elements, and visually exposed surfaces.
- E. Restore patched areas with new Products in accordance with requirements of Contract Documents.
- F. Fit patches tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.

3.05 PERFORMANCE

- A. Performing cutting or patching operations means acceptance of existing conditions by Contractor.
- B. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.
- C. By-pass utility services such as pipe or conduit, before cutting, where services are required to be removed, relocated, or abandoned.
 - 1. Remove pipe or conduit in walls to be relocated, abandoned, or removed.
 - 2. Cap, valve, or plug, and seal the remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after by-passing and removing.
- D. Where feasible, inspect and test patched areas to demonstrate integrity of installation.
- E. Remove and replace Work judged by Designer of Record to be visually unsatisfactory.
- F. Perform cutting, fitting, and patching in a manner to prevent damage to Contractor's Work and work by others and to provide proper surfaces for the installation of materials, equipment, and repairs.
- G. Do not cut nor alter structural members without prior written acceptance of Owner.
- H. Adjust and fit Products to provide a neat installation.
- I. Refinish cut and patched surfaces to match adjacent finish.
 - 1. For continuous surfaces, refinish to nearest intersection or natural break.
 - 2. For an assembly, refinish entire assembly.
- J. Over patched wall or ceiling surfaces, refinish to nearest cut-off line for entire surface, such as intersection with adjacent wall or ceiling, beam, pilasters, or to nearest opening frame, unless otherwise indicated.
- K. Refinished surfaces must not present a spotty, touched-up appearance.

PART 4 - FORMS (Not Used)

END OF SECTION 01731

**SECTION 01740
CLEANING****PART 1 - GENERAL****1.01 SUMMARY**

- A. This Section includes:
 - 1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 – Related Documents And Sections
 - c. 1.03 – Definitions
 - d. 1.04 - General Cleanup Responsibility
 - e. 1.05 - Immediate Cleanup Activities
 - f. 1.06 - Daily Cleanup Activities
 - g. 1.07 - Weekly Cleanup Activities
 - h. 1.08 - Owner's Right to Cleanup
 - i. 1.09 - Storage and Disposal
 - j. 1.10 - Sand Blasting
 - k. 1.11 - Final Cleaning
 - 2. Part 2 – Products (Not Used)
 - 3. Part 3 – Execution (Not Used)
 - 4. Part 4 – Forms (Not Used)

1.02 RELATED DOCUMENTS AND SECTIONS

- A. Document 00700.3.13, "Cleanup"
- B. Document 00700.3.14, "Disposal of Materials Outside Project Area"
- C. Document 00700.5.5, "Owner's Right to Cleanup"
- D. Document 00700.7.5, "Milestone Inspections and Certification"
- E. Document 00700.13, "Completion and Acceptance"
- F. Document 00700.13.3, "Contractor's Certification that All Work of the Project is Complete"
- G. Section 01450, "Contractor's Quality Control (QC) System"
- H. Section 01500, "Temporary Facilities and Controls"
- I. Section 01515, "Solid Waste and Recycling Plan"
- J. Section 01600, "Product Requirements"
- K. Section 01770, "Closeout Procedures"

1.03 DEFINITIONS (Not Used)**1.04 GENERAL CLEANUP RESPONSIBILITY**

- A. Contractor must keep the Work areas, Project Site, and surrounding areas free from waste materials, debris, and/or trash and rubbish caused by its operations.
- B. In addition to trash and rubbish generated by Contractor's operations, Contractor must keep the Work areas, Project Site, and surrounding areas free from trash and rubbish from any source that accumulates within the Work areas or Project Site or any other area designated by the Owner for use by Contractor.
- C. The Contractor must keep all surface areas (i.e., site roads, off-site streets, and parking

areas) clear of dirt, mud, and debris and must clean such surfaces as required, as needed, or as Directed by the Owner's Project Manager.

- D. Contractor's and Subcontractors' tools, scaffolding and surplus materials must be neatly stored in designated storage areas when not in use.
- E. Contractor must maintain the Project Site in a neat and orderly condition at all times.

1.05 IMMEDIATE CLEANUP ACTIVITIES

- A. Properly dispose of packaging materials and clean surrounding areas of packing debris immediately after unpacking of Products, materials, equipment, or other packaged items.
- B. Dispose of waste materials and clean surrounding areas used for worker breaks and lunch immediately after worker break or lunch. Contractor must Provide trash receptacles in break and lunch areas.
- C. Contractor must immediately remove any spillage, dirt, and mud, and/or debris resulting from Contractor's hauling or other operations along or across any public traveled way or public area.
- D. Remove debris and rubbish from pipe chases, plenums, down spouts, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- E. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.

1.06 DAILY CLEANUP ACTIVITIES

- A. Wood, cardboard, packing material, form lumber and similar combustible debris must not be accumulated within buildings and such debris, rubbish and waste material must be removed from buildings on a daily basis.
- B. Contractor must leave Work areas "broom clean", or its equivalent, on a daily basis.
- C. Contractor must remove (pick up and place in trash receptacles) rubbish from and about areas of Work and the Project Site on a daily basis.
- D. Contractor must clean the Project Site entrance area(s) of mud, dirt, displaced gravel, and rubbish each day.

1.07 WEEKLY CLEANUP ACTIVITIES

- A. Remove rubbish (pick up and place in trash receptacles) from and about the Project Construction Fencing line. This includes areas both inside and outside the of the Project Site along the Temporary and Construction Fencing and/or permanent perimeter fence line.
- B. Place concrete debris in designated areas or remove from Project Site.
- C. Stack unused shipping pallets in designated areas or remove from Project Site.
- D. Repair, replace, or remove damaged and/or torn plastic sheeting used to protect stored materials, Products or Work.
- E. Empty all trash receptacles
- F. Remove accumulated waste from the Project Site and dispose of in a proper and lawful manner.
- G. Organize and clean storage areas

1.08 OWNER'S RIGHT TO CLEAN UP

- A. Deficient cleaning or disposal operations, as determined by the Owner's Project Manager, must be immediately corrected by Contractor.

- B. After proper written notice, in cases where Contractor does not correct deficient cleaning or disposal operations, Owner may remove or cause to have removed waste materials, debris, and/or trash and rubbish, etc., and reduce the Contract Sum by the cost thereof.
- C. If a disagreement or arises between the Contractor and other separate contractors performing work at or adjacent to the Project Site, as to the responsibility pursuant to their respective contracts for maintaining the Project Site and surrounding areas free from waste materials, debris, and/or trash and rubbish, Owner may clean up or cause to be cleaned up the waste materials, debris, and/or trash and rubbish and allocate the costs among those responsible, and reduce the Contract Sum by Contractor's proportionate share of the cost thereof.

1.09 STORAGE AND DISPOSAL

A. Storage

- 1. Waste materials, trash, and rubbish must be stored in covered containers.
- 2. Storage containers must not be allowed to overflow due to excessive waste materials, trash, and rubbish being placed in the storage container.
- 3. Storage container lids must be unobstructed by waste materials, trash, and rubbish when they are in the closed position.
- 4. Storage container lids must be closed at all times except when waste materials, trash, and rubbish are being placed into or removed from the storage container.
- 5. Recyclable materials must be segregated before storage and stored in separate containers or areas.

B. Disposal

- 1. Under no circumstances shall rubbish or waste material be disposed of in fills or backfills on the Project Site.
- 2. Contractor is responsible for making all arrangements and paying all costs for disposal of waste materials, debris, and/or trash and rubbish.
- 3. Waste materials, debris, and/or trash and rubbish, must be removed from the Project Site at least once each week.
- 4. When any material is to be disposed of outside the Project area, at other than a public disposal or recycling facility, Contractor must first obtain a written permit from the property owner of the proposed disposal site, and furnish Owner said permit or a certified copy thereof together with a written release from the property owner absolving Owner from any and all responsibility in connection with the disposal of said material on said site.
- 5. Before any material is disposed of on said site, Contractor must obtain written permission from the Owner to dispose of the material at the location designated in said permit.
- 6. Disposal of Hazardous Materials must comply with all legal requirements, including but not limited to containerization, labeling, manifesting, transportation, disposal site, and use of properly trained personnel.
- 7. No later than 15 Days after Contractor's request for Final Inspection, Contractor must submit two (2) copies of all Hazardous Waste Manifests signed by Toxic Substances Disposal Facilities ("TSDF's") and certificates of disposal, to prove that Contractor has legally disposed of such materials.

8. Contractor must separate and recycle the following waste material types in accordance with Contractors Solid Waste Management Plan (See Section 01515, "Solid Waste Management and Recycling Plan")
 - a. Concrete
 - b. Metal
 - (1) Ferrous
 - (2) Non-ferrous
 - c. Wood
 - d. Debris
 - e. Glass
 - f. Paper
 - (1) Bond
 - (2) Newsprint
 - (3) Cardboard and paper packaging materials
 - g. Others as appropriate.

1.10 SAND BLASTING

- A. Sand blasting shall be only used upon receipt of written permission of the Project Manager.
- B. Perform sand blasting by experienced mechanics using sound modulated power machinery designed for this use.
 1. Comply with all applicable regulatory agencies.
 2. Use blasting aggregate uniformly graded, free from all animal or vegetable material, and not larger than No. 30 grit.
 3. Air compressor must be capable of providing air at a pressure of 100-110 pounds at 210-300 cfm. Use blast nozzle of 5/16-inch orifice.
- C. Operation
 1. Sand blast by the "flash" method.
 2. Pass continuously over the surface, to provide a uniform cutting of the surface, without pitting or excessive erosion of the basematerial.
 3. Exercise care to prevent corners or sharp edges from being broken or unduly rounded.
 4. Used aggregate must not be reused.
 5. Protect installed work of others from damage by blast, rebound, or used aggregate.
 6. Cover and protect mechanical work, air intakes, and similar items, as well as finished surfaces.
- D. Replace damaged work.
- E. Secure and pay for necessary permits required by state and local authorities having jurisdiction.

1.11 FINAL CLEANING

- A. Milestone Completion Certification
 1. Contractor must, before requesting a Preliminary Walk-Through Inspection for Milestone Completion, perform a Final Cleaning of all Work areas associated with the Milestone.
- B. Project Completion Certification

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1. Contractor must, before requesting a Preliminary Walk-Through Inspection for Final Inspection of the entire Work of the Project, perform a Final Cleaning of all Workareas and the Project Site including all areas associated with previously completed Milestones.
- C. Final Cleaning Requirements
1. General
 - a. Cleaning for specific items of Work is specified in Divisions 2 through 16.
 - b. Comply with manufacturer's instructions for cleaning operations.
 - c. Clean interior and exterior surfaces exposed to view
 - d. Remove labels that are not required as permanent labels.
 - e. Dust, dirt, stains, hand marks, paint spots, and like defects must be completely removed from surfaces.
 - f. Metal surfaces must be cleaned, using only non-corrosive and non-abrasive materials.
 - g. Remove debris and surface dust from limited-access spaces including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 2. Transparent Surfaces
 - a. Clean all glass, interior and exterior, affected by Work of this Project; including removal of foreign material from glass.
 - b. Polish transparent and glossy surfaces
 - c. Clean transparent materials, including mirrors and window/door glass, to a polished condition, removing substances that are noticeable as vision-obscuring materials.
 - d. Replace broken glass and damaged transparent materials.
 3. Soft Surfaces
 - a. Vacuum carpeted surfaces.
 - b. Vacuum all other soft surfaces.
 4. Hard Surfaces
 - a. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of dust, stains, films, and similar noticeable distracting substances.
 - b. Except as otherwise indicated, avoid disturbance of natural weathering of exterior surfaces.
 - c. Restore reflective surfaces to original reflective condition.
 - d. Clean concrete floors in unoccupied spaces broom clean.
 5. Equipment and Fixtures
 - a. Clean equipment and fixtures to sanitary condition
 - b. Clean or replace filters of mechanical equipment.
 - c. Wipe surfaces of equipment and fixtures clean, including elevator equipment and similar equipment
 - d. Remove excess lubrication and other substances.

- e. Clean plumbing fixtures to a sanitary condition, free of stains including those resulting from water exposure.
 - f. Clean food service equipment to a condition of sanitation ready and acceptable for intended food service use.
- 6. Roofs, gutters, downspouts, and drainage systems.
 - a. Clean roofs, gutters, downspouts, and drainage systems.
- 7. Exterior Grounds
 - a. Clean Project Site (yard and grounds), including landscape development areas, of litter, surplus materials, and foreign substances.
 - b. Sweep and power wash paved areas to clean condition; remove stains, petro-chemical spills, and other foreign deposits.
 - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
- 8. Lights and Lamps
 - a. Clean light fixtures and lamps so as to function with full efficiency.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

PART 4 - FORMS (Not Used)

END OF SECTION 01740

SECTION 01770 CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.01 SUMMARY

A. This Section includes:

1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 – Related Documents And Sections
 - c. 1.03 - Definitions
 - d. 1.04 - Closeout Conference
 - e. 1.05 - Contractor's List of Incomplete Work
 - f. 1.06 - Spare Parts
 - g. 1.07 - Operations and Maintenance (O&M) Manuals
 - h. 1.08 - Final Cleaning
 - i. 1.09 - Contractor's Certification that all the Work of the Project is complete
 - j. 1.10 - Preliminary Walk-through Inspection
 - k. 1.11 - Final Inspection
 - l. 1.12 - Project Records
 - m. 1.13 - Final Payment Application
 - n. 1.14 - Recommendation for Acceptance
 - o. 1.15 - Acceptance of the Work
 - p. 1.16 - Final Payment
2. Part 2 – Products (Not Used)
3. Part 3 – Execution (Not Used)
4. Part 4 – Forms (Not Used)

1.02 RELATED DOCUMENTS AND SECTIONS

- A. Document 00700.3.13, "Cleanup"
- B. Document 00700.3.14, "Disposal of Material Outside Project Area"
- C. Document 00700.3.25, "Certification by Contractor of Recycled Content"
- D. Document 00700.3.26, "Submittals"
- E. Document 00700.7.5, "Milestone Inspections and Certification"
- F. Document 00700.8, "Payments"
- G. Document 00700.13, "Final Completion and Acceptance"
- H. Section 01290, "Payment Procedures"
- I. Section 01310, "Project Management and Coordination"
- J. Section 01325, "Record Documents (As-builts)".
- K. Section 01330, "Submittal Procedures"
- L. Section 01450, "Contractor's Quality Control (QC) System"
- M. Section 01500, "Temporary Facilities and Controls"
- N. Section 01515, "Solid Waste Management and Recycling Plan"
- O. Section 01740, "Cleaning"

1.03 DEFINITIONS

- A. **Incomplete Work** – Work required by the Contract Documents that is not yet installed.
- B. **Deficient Work** – Installed Work that does not meet all the requirements of the Contract Documents.

1.04 CLOSEOUT CONFERENCE

- A. The Owner's Project Manager will schedule and Closeout Conference approximately 90 Days before scheduled completion of the entire Work of the Project.
- B. Conference will be held at Project Site or another convenient location designated by Owner's Project Manager.
- C. Attendees:
 - 1. Owner's Project Manager (Mandatory Attendance Required)
 - 2. Contractor's Authorized Representative (Mandatory Attendance Required)
 - 3. Contractor's QC Manager (Mandatory Attendance Required) (See Section 01450.1.08.A.2.r)
 - 4. Other interested parties
- D. Agenda: Items of significance, as appropriate to the Project, to be discussed at the meeting include the following:
 - 1. Closeout process
 - 2. Closeout Submittals
 - 3. Final Cleaning
 - 4. Project completion certification
 - 5. Outstanding Change Orders
 - 6. Contractor Certifications
 - 7. Warranties/Guarantees
 - 8. Record Documents (As-Builts)
 - 9. QC Documents
 - 10. Spare Parts
 - 11. Keys
 - 12. Owner Fixture, Furniture, and Equipment (FF&E) Schedule
 - 13. Operation and Maintenance Manuals
 - 14. Building Commissioning
 - 15. Owner Training
 - 16. Certificate of Occupancy
 - 17. Recycled Content Certification
 - 18. Deficiency List Process (Punch List)
 - 19. Unresolved Disputes and Claims
 - 20. Early Release of Retention
 - 21. Final Payment
 - 22. Demobilization Schedule

23. Security

- E. The Owner will prepare meeting minutes of the Closeout Conference and distribute minutes to the attendees.
- F. Follow-up closeout meetings will occur at least monthly until Owner's Authorized Representative recommends Acceptance of the Project to the Board of Supervisors.
- G. At a minimum, the Contractor will maintain notes for the Closeout Conference and all follow-up closeout meetings in the form of a Decision/Action Tracking Report.

1.05 CONTRACTOR'S LIST OF INCOMPLETE WORK

- A. Near the final completion of the entire Work of the Project, but not less than ninety (90) Days prior to anticipated date of Final Inspection, Contractor must conduct a detailed inspection of the Project, and submit a list of Incomplete Work with a schedule for final completion thereof to Owner's Project Manager.
- B. Within 60 Days after receipt of Contractor's list of Incomplete Work and schedule for final completion, Owner's Project Manager will determine approximate dates for a Preliminary Walk-Through inspection and the Final Inspection. The Preliminary Walk-Through Inspection and Final Inspection will not be conducted until the entire Work of the Project is complete.

1.06 SPARE PARTS

- A. All Spare Parts required by the Contract Documents must be submitted to the Owner at least ninety (90) Days before Contractor's request for Final Inspection of the Work.

1.07 OPERATION AND MAINTENANCE DATA

- A. All Operations and Maintenance (O&M) Data required by the Contract Documents must be submitted as follows:
 - 1. **Initial Submittal:** Submit twelve (12) draft copies of each O&M manual at least sixty (60) Days before certifying completion of the entire Work of the Project.
 - 2. **Final Submittal:** Submit twelve (12) copies of each O&M manual in final form no later than fifteen (15) Days after Contractor's certification that the entire Work of the Project is complete.
 - 3. **Corrected Final Submittal:** Correct or modify each O&M manual to comply with Owner's comments. Submit twelve (12) copies of each corrected Final Submittal within fifteen (15) Days of receipt of Owner's comments on the Final Submittal.

1.08 FINAL CLEANING

- A. Contractor must, before requesting the Preliminary Walk-Through Inspection perform a Final Cleaning of all Work areas and the Project Site including all areas associated with previously completed Milestones.

1.09 CONTRACTOR'S CERTIFICATION THAT ALL WORK OF THE PROJECT IS COMPLETE

- A. When the entire Work of the Project is complete and after the Contractor has performed the Final Cleaning, Contractor must so certify and request a Preliminary Walk-Through Inspection.
- B. Contractor's Certification must include a Contractor generated list of Deficient Work.
- C. Unless specifically exempted in writing by Owner's Project Manager, the Contractor's Project Completion Certification will be rejected if Incomplete Work items appear on the Contractor's list of Deficient Work.

1.10 PRELIMINARY WALK-THROUGH INSPECTION

- A. Within seven (7) Days of receipt of Contractor's certification that the entire Work of the Project is complete, Owner's Project Inspector will make a Preliminary Walk-through Inspection with Contractor to verify that the Project is complete and ready for Final Inspection.
- B. If Owner's Project Manager determines that the Work is not complete, Contractor will be notified in writing. Contractor must complete the Work and re-initiate procedures for another Preliminary Walk-Through Inspection. At Owner's discretion, any costs to Owner for additional Preliminary Walk-through Inspections may be changed to the Contractor.

1.11 FINAL INSPECTION

- A. If the Owner's Project Manager agrees with the Contractor's certification, the Final Inspection will occur with twenty-one (21) Days of the Contractor's certification of final completion of the entire Work of the Project.
- B. If Owner's Project Manager determines the completed Work is deficient, Contractor will be furnished with a Punchlist identifying the observed deficiencies in the completed Work. After all deficiencies have been corrected, Contractor must initiate procedures for another Final Inspection. If Contractor requests more than two (2) Final Inspections, at Owner's discretion, any costs to Owner for additional Final Inspections may be charged to the Contractor.

1.12 PROJECT RECORDS

- A. No later than 15 Days after Contractor's request for Final Inspection, Contractor must submit all required Project Records, including but not limited to:
 - 1. Copies of all Hazardous Waste Manifests signed by Toxic Substances Disposal Facilities ("TSDFs") and certificates of disposal (See Document 00700.3.14.3)
 - 2. Contractor's certification of the minimum, if not exact, percentage of recycled content used in the performance of the Work. (See Document 00700.3.25, "Certification by Contractor of Recycled Content") Submit four (4) copies.
 - 3. Summary of solid waste generated by the Contractor's operations. (Form 01515-F1) (See Section 01515.1.05.B)
 - 4. Record Documents (As-Builts) (See Section 01450.1.15.G, "Record Document Certification") (See Section 01325.1.07, "Record Set") (See Document 00700.13.6, "Recommendation for Acceptance")
 - 5. Executed Contractor's Warranty/Guarantee (See Document 00700.13.12, "Warranty/Guarantee Form")
 - 6. Records of Contractor's Quality Control Plan and its implementation (See Section 01450.1.14.J, "Records of Contractor's Quality Control Plan and its implementation.")
 - 7. Copies of the Contractor's survey records (See Section 01725.1.10.B, Survey Records)

1.13 FINAL PAYMENT APPLICATION (See Section 01290.1.08.B, Final Payment Application)

- 1. After all Project Records have been submitted, Contractor must submit two (2) copies of their Final Payment Application with supporting Project closeout documentation including, but not limited, to the following:
 - a. Evidence of completion of Project closeout requirements.
 - b. Evidence that claims have been settled.
 - c. Other documents as required by the Owner.

1.14 RECOMMENDATION FOR ACCEPTANCE

- A. Owner's Authorized Representative will recommend that the Board of Supervisors formally Accept the Work if the Contractor has satisfactorily:
 - 1. Corrected all Deficient Work observed during the Final Inspection of the entire Work of

the Project.

2. Submitted all required Project Records
3. Submitted satisfactory evidence to Owner that all payrolls, material bills and other indebtedness connected with said Work have been paid
4. Submitted all other required Contract deliverables.

1.15 ACCEPTANCE OF THE WORK

- A. Acceptance of the Work will be made by the Board of Supervisors only in regular session and only after the Owner's Authorized Representative has recommended Acceptance.
- B. Depending on the Boards regular session schedule, Contractor's compliance with the Project closeout timeframes and other factors, Acceptance by the Board may not occur for many months after the physical Work of the Project is completed.
- C. Contractor must take special note that, unless otherwise stated in the Contract Documents, without regard to the dates(s) items of work were actually put into service, all Guarantees/Warranties will commence on the date of Acceptance of the entire Work of the Project by the County of Santa Clara Project Manager and a Notice of Completion is submitted and approved by the County Project Manager.
- D. After the Project Manager's acceptance of the entire Work, the County will record a Notice of Completion.

FINAL PAYMENT

- A. Within thirty-five (35) Days after the date of recording of the Notice of Completion by the County Recorder, Owner's Project Manager will forward a request for Final Payment for the Work to the County Controller for payment.
- B. Owner will withhold from Final Payment such amounts that are in Dispute between Owner and Contractor, amounts subject to offset/setoff, and all other amounts that must be withheld by law (such as Stop Notice sums.)

PART 2 -PRODUCTS (Not Used)

PART 3 -EXECUTION (Not Used)

PART 4 - FORMS (Not Used)

END SECTION 01770

SECTION 01782
OPERATION AND MAINTENANCE DATA

PART 1 -GENERAL**1.01 SUMMARY**

A. This Section includes:

1. Part 1 – General
 - a. 1.01 –Summary
 - b. 1.02 - Related Documents And Sections
 - c. 1.03 – Definitions
 - d. 1.04 – Required O&M Documentation
 - e. 1.05 - Submittals
2. Part 2 - Products
 - a. 2.01 – O&M Documentation Directory
 - b. 2.02 – Emergency Manuals
 - c. 2.03 – Operation Manuals
 - d. 2.04 – Required O&M Documentation
 - e. 2.05 – Systems and Equipment Maintenance Manual
 - f. 2.06 – Final Commissioning Report
3. Part 3 – Execution
 - a. 3.01 - General
 - b. 3.02 – Manufacturers' Data
 - c. 3.03 – Drawings
4. Part 4 - Forms (Not Used)

1.02 RELATED DOCUMENTS AND SECTIONS

A. Section 01810, "General Commissioning Requirements"

1.03 DEFINITIONS

- A. **O&M** - Operations and Maintenance
- B. **O&M Documentation** – O&M Documentation Directory, manuals, and Final Commissioning Report consisting of:
1. O&M Documentation Directory
 2. Emergency Manual
 3. Operations Manual
 4. Product Maintenance Manual
 5. Systems and Equipment Maintenance Manual
 6. Final Commissioning Report
- C. **System** - An organized collection of parts, equipment, or subsystems united by regular interaction.
- D. **Subsystem** - A portion of a system with characteristics similar to a system.

1.04 REQUIRED O&M DOCUMENTATION

- A. O&M Documentation Directory: Prepare a separately bound directory that provides an organized reference to all O&M Documentation.
- B. Emergency Manual: Assemble a complete set of emergency information including procedures for use by emergency personnel and by Owner's operating personnel for various types of emergencies.
- C. Operations Manual: Assemble information needed for daily operations and management of Systems and equipment.
- D. Product Maintenance Manual: Assemble a complete set of maintenance data indication care and maintenance of each product, material, and finish incorporated into the Work.
- E. Systems and Equipment Maintenance Manual: Assemble information of each System, Subsystem, and piece of equipment not part of a System.
- F. Final Commissioning Report (See 01810.3.16, "Final Commissioning Report")

1.05 SUBMITTALS

- A. **Initial Submittal:** Submit twelve (12) draft copies of each manual at least sixty (60) Days before certifying completion of the entire Work of the Project.
- B. **Final Submittal:** Submit twelve (12) copies of each manual in final form no later than fifteen (15) Days after Contractor's certification that the entire Work of the Project is complete.
- C. **Corrected Final Submittal:** Correct or modify each manual to comply with Owner's comments. Submit twelve (12) copies of each corrected Final Submittal within fifteen (15) Days of receipt of Owner's comments on the Final Submittal.

PART 2 - PRODUCTS

2.01 O&M DOCUMENTATION DIRECTORY

- A. Organization: Include a section in the directory for each of the following:
 - 1. List of documents.
 - 2. List of systems.
 - 3. List of equipment.
 - 4. Table of contents.
- B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
- C. 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.
- D. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with the 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."

2.02 EMERGENCY MANUALS

- A. Include emergency information that must be immediately available during emergency situations to protect life and property and to minimize disruptions to building occupants.
- B. Content: Organize manual into a separate section for each of the following:

1. Type of emergency.
 2. Emergency instructions.
 3. Emergency procedures.
- C. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:
1. Fire.
 2. Flood.
 3. Earthquake.
 4. Gas leak.
 5. Water leak.
 6. Power failure.
 7. Water outage.
 8. System, subsystem, or equipment failure.
 9. Chemical release or spill.
- D. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.
- E. Emergency Procedures: Include the following, as applicable:
1. Instructions on stopping.
 2. Shutdown instructions for each type of emergency.
 3. Operating instructions for conditions outside normal operating limits.
 4. Required sequences for electric or electronic systems.
 5. Special operating instructions and procedures.

2.03 OPERATION MANUAL

- A. Include information needed for daily operations and management of systems and equipment.
- B. In addition to requirements in this Section, include operation data required in individual Technical Specification Sections and the following information:
1. System, subsystem, and equipment descriptions.
 2. Performance and design criteria if Contractor is delegated design responsibility.
 3. Operating standards.
 4. Operating procedures.
 5. Operating logs.
 6. Wiring diagrams.
 7. Control diagrams.
 8. Piped system diagrams.
 9. Precautions against improper use.
 10. License requirements including inspection and renewal dates.

C. Descriptions: Include the following:

1. Product name and model number.
2. Manufacturer's name.
3. Equipment identification with serial number of each component.
4. Equipment function.
5. Operating characteristics.
6. Limiting conditions.
7. Performance curves.
8. Engineering data and tests.
9. Complete nomenclature and number of replacement parts.

D. Operating Procedures: Include the following, as applicable:

1. Startup procedures.
2. Equipment or system break-in procedures.
3. Routine and normal operating instructions.
4. Regulation and control procedures.
5. Instructions on stopping.
6. Normal shutdown instructions.
7. Seasonal and weekend operating instructions.
8. Required sequences for electric or electronic systems.
9. Special operating instructions and procedures.

E. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.

F. Piped Systems: Diagram piping as installed and indicate color-coding where required for identification.

2.04 PRODUCT MAINTENANCE MANUAL

A. Content

1. Organize manual into a separate section for each product, material, and finish.
2. Include:
 - a. Source information
 - b. Product information
 - c. Maintenance procedures
 - d. Repair materials and sources
 - e. Warranties and bonds, as described below.

B. Source Information

1. List each product included in manual identified by product name and arranged to match manual's table of contents.
2. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Project Manual Section number and title.

- C. Product Information: Include the following, as applicable:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Color, pattern, and texture.
 - 4. Material and chemical composition.
 - 5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
 - 1. Inspection procedures.
 - 2. Types of cleaning agents to be used and methods of cleaning.
 - 3. List of cleaning agents and methods of cleaning detrimental to product.
 - 4. Schedule for routine cleaning and maintenance.
 - 5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds
 - 1. Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 2. Include procedures to follow and required notifications for warranty claims.

2.05 SYSTEMS AND EQUIPMENT MAINTENANCE MANUAL

- A. Content
 - 1. For each System, Subsystem, and piece of equipment not part of a system, include:
 - a. Source information
 - b. Manufacturers' maintenance documentation
 - c. Maintenance procedures
 - d. Maintenance and service schedules
 - e. Replacement parts list and source information
 - f. Maintenance service contracts
 - g. Warranty and bond information
- B. Source Information
 - 1. List each system, subsystem, and piece of equipment included in the manual, identified by product name, and arranged to match manual's table of contents.
 - 2. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Project Manual Section number and title.
- C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
 - 1. Standard printed maintenance instructions and bulletins.
 - 2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
 - 3. Identification and nomenclature of parts and components.

-
4. List of items recommended to be stocked as spare parts.
- D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
1. Test and inspection instructions.
 2. Troubleshooting guide.
 3. Precautions against improper maintenance.
 4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 5. Aligning, adjusting, and checking instructions.
 6. Demonstration and training videotape, if available.
- E. 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.
1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
 2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.
- F. Replacement 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.
- G. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.
- H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
1. Include procedures to follow and required notifications for warranty claims.

2.06 FINAL COMMISSIONING REPORT

- A. The Contractor must prepare and submit a Final Commissioning Report summarizing all of the tasks, findings, and documenting the Commissioning process.
- B. The report must address the actual performance of the building systems in reference to the requirements of the Contract Documents.
- C. The report must include completed pre-functional inspection checklists, Functional Performance Testing records, diagnostic monitoring results, identified deficiencies, recommendations, and a summary of commissioning activities.
- D. The Final Commissioning Report must be included as part of the O&M Documentation Final Submittal (See Section 01810.3.16, "Final Commissioning Report")

PART 3 - EXECUTION

3.01 GENERAL

- A. Organization
 1. 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.
 2. Each manual must contain the following materials, in the order listed:

- a. Title page.
- b. Table of contents.
- c. Manual contents.

B. Title Page

1. Enclose title page in transparent plastic sleeve.
2. Include the following information:
 - a. Subject matter included in manual.
 - b. Name and address of Project.
 - c. Name and address of City.
 - d. Date of submittal.
 - e. Name, address, and telephone number of Contractor.
 - f. Name and address of Owner's Design Consultant.
 - g. Cross-reference to related systems in other operation and maintenance manuals.

C. Table of Contents

1. List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Section number in the Project Manual.
2. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.

D. Manual Contents

1. Organize into sets of manageable size.
2. Arrange contents alphabetically by system, subsystem, and equipment.
3. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.

E. Binders

1. Heavy-duty, 3-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.
 - a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components.
 - b. Cross-reference other binders to provide essential information for proper operation or maintenance of equipment or system.
 - c. 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.

F. Dividers

1. Heavy-paper dividers with plastic-covered tabs for each section.
2. Mark each tab to indicate contents.
3. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Project Manual Section number and title.

G. Protective Plastic Sleeves

1. Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.

H. Supplementary Text

1. Prepared on 8-1/2-by-11-inch, 20-lb/sq. ft. white bond paper.

I. Drawings

1. Attach reinforced, punched binder tabs on drawings and bind with text.
2. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
3. Do not place loose, oversize drawings in binder pockets.
4. 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.

3.02 MANUFACTURERS' DATA**A. Manufacturers' standard printed data**

1. Include only sheets pertinent to product or component installed.
2. Mark each sheet to identify each product or component incorporated into the Work.
3. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents.

B. 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.**C. Extraneous Data: Where contents of manuals include manufacturers' catalog pages, clearly indicate precise items included in this installation and delete, or otherwise clearly indicate, manufacturer's data with which this installation is not concerned.****3.03 DRAWINGS****A. 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.****B. Coordinate supplementary drawings with information contained in Record Drawings to ensure correct illustration of completed installation.****C. Do not use original Record Documents as part of operation and maintenance manuals.****PART 4 - FORMS (Not Used)****END OF SECTION 01782**

**SECTION 01810
GENERAL COMMISSIONING REQUIREMENTS**

PART 1 - GENERAL**1.01 SUMMARY**

A. This Section includes:

1. Part 1 – General
 - a. 1.01 – Summary
 - b. 1.02 - Related Documents and Sections
 - c. 1.03 - Definitions
 - d. 1.04 – General
 - e. 1.05 – Systems/Equipment Requiring Commissioning
 - f. 1.06 – Commissioning Team
 - g. 1.07 – Commissioning Process
 - h. 1.08 – Owner's Commissioning Consultant
 - i. 1.09 – Contractor's Responsibilities
 - j. 1.10 – Performance Period
 - k. 1.11 – Training and Instruction
 - l. 1.12 – Deferred and Seasonal Testing
2. Part 2 – Products
 - a. 2.01 - Test Equipment
 - b. 2.02 – Data Logging Equipment
3. Part 3 – Execution
 - a. 3.01 – General
 - b. 3.02 – Commissioning Plan
 - c. 3.03 – Initial Scope Meeting
 - d. 3.04 – Draft Commissioning Plan
 - e. 3.05 – Final Commissioning Plan
 - f. 3.06 – Pre-commissioning Inspection Checklist
 - g. 3.07 – Pre-functional Inspection Checklist
 - h. 3.08 – Functional Performance Testing
 - i. 3.09 – Commissioning Acceptance Procedures
 - j. 3.10 – Non-conformance
 - k. 3.11 – Performance Period
 - l. 3.12 – Operations & Maintenance Data
 - m. 3.13 – Training and Instruction
 - n. 3.14 – Requests for Information
 - o. 3.15 – Final Commissioning Report
4. Part 4 - Forms
 - a. Table 01810-01, "Systems/Equipment to be Commissioned"

1.02 RELATED DOCUMENTS AND SECTIONS

A. Document 00700.7.5, "Milestone Inspections and Certification."

- B. Section 01315, "Project Meetings."
- C. Section 01320, "Construction Progress Documentation"
- D. Section 01320.3.05.B.22, Performance Period Activities
- E. Section 01330, "Submittal Procedures."
- F. Section 01450, "Contractor's Quality Control (QC) System"
- G. Section 01782, "Operation and Maintenance Data"
- H. Section 01820, "Demonstration and Training"

1.03 DEFINITIONS

- A. The following definitions as used in this Section mean:
 - 1. **Commissioning** - The process to demonstrate to the Owner that systems, equipment, mechanical, electrical, controls, and special systems function together properly to meet performance requirements and design intent as shown in a composite manner in the Contract Documents.
 - 2. **Commissioning Plan** - The overall document prepared by the Contractor and accepted by the Owner, defining the overall commissioning process.
 - 3. **Owner's Commissioning Consultant (OCC)** - The Consultant hired directly by the Owner to represent the Owner throughout the commissioning process. The Owner's Commissioning Consultant does not have the authority to direct start-up, testing, or commissioning activities, or authorize changes or modifications to the requirements of the Contract Documents.
 - 4. **Subsystem** - A portion of a system with characteristics similar to a system.
 - 5. **System(s)** - Group of components and equipment functioning as a unit or performing a common function. (i.e.: Chilled Water System: consisting of piping, valves, fittings, controls, chillers, expansion tanks, air relief, chemical treatment, pumps, etc.)

1.04 GENERAL

- A. Commissioning is intended to achieve the following specific objectives:
 - 1. Verify and document that equipment is installed and started pursuant to the requirements of the Contract Documents, Manufacturer's recommendations, and to industry accepted minimum standards.
 - 2. Verify and document that equipment and systems receive complete operational checkout by installing contractors.
 - 3. Verify and document equipment and system performance.
 - 4. Ensure that the Owner's operating personnel are adequately trained on the operation and maintenance of building equipment and systems.
 - 5. Verify completeness of Operations and Maintenance Data.
- B. The commissioning process does not reduce the responsibility of the Contractor to perform and complete all Work in accordance with the requirements of the Contract Documents.

1.05 SYSTEMS/EQUIPMENT REQUIRING COMMISSIONING

- A. The systems and equipment to be commissioned for this Project are identified in the Technical Specifications and summarized in Table 01810-01, "Systems/Equipment To Be Commissioned." If a specific System or item of equipment is required to be commissioned pursuant to the Technical Specifications but is omitted from Table 01810-01, "Systems/Equipment To Be Commissioned", the omitted System or item of equipment must be commissioned as though it was included in summary Table 01810-01.

- B. Where the requirements of this Section 01810, "General Commissioning Requirements" conflict with the Technical Specifications (Divisions 2-16), the requirements of the Technical Specifications take precedence.

1.06 COMMISSIONING TEAM

- A. It is the intent that all members of the Commissioning Team cooperate with each other to fulfill their individual responsibilities and support the overall Commissioning process.
- B. The Commissioning Team consists of:
1. Contractor
 2. Contractor's Commissioning Agent
 3. Subcontractors including Testing and Balancing (TAB) Subcontractor
 4. Owner's Commissioning Consultant
 5. Owner's Design Consultants and Representatives
 6. Owner's Building Operations Staff

1.07 COMMISSIONING PROCESS

- A. The following activities describe the key tasks in the Commissioning process:
1. Scoping Meeting: All members of the Commissioning Team that will be involved in the commissioning process meet to review the scope of Work, tasks, schedules, deliverables, and responsibilities for creation and implementation of the Commissioning Plan.
 2. Commissioning Plan: The Contractor prepares and submits the Commissioning Plan. (Performance Period Monitoring and Evaluation Plan may be submitted any time up to ninety (90) Days prior to the start of the Performance Period.)
 3. Submittals: Equipment and systems documentation including detailed start-up procedures are submitted to the Owner in compliance with Section 01330, "Submittal Procedures."
 4. Pre-commissioning Checklist: Contractor must prepare pre-commissioning to verify that systems or items of equipment are actually installed in accordance with the accepted Submittal(s).
 5. Pre-Functional Checklists: Contractor must prepare pre-functional checklist for each system and/or item of equipment to verify system set points, operating strategies, required component testing, correct rotation, damper positions, etc., prior to functional testing. The purpose of the checklist is to ensure that all systems and equipment are ready for continuous operation and final testing. The pre-functional checklists must incorporate Manufacturers start-up recommendations and system operational checkout requirements.
 6. Functional Performance Testing: Contractor must perform a full range of checks and tests to determine if components, sub-systems, systems, and interfaces between systems function in accordance with the requirements of the Contract Documents. In this context, "function" includes all modes and sequences of control operation, all interlocks and conditional control response, and all specified responses to emergency conditions.
 7. Performance Period: Upon successful completion of Owner-witnessed Functional Performance Testing, systems and equipment must be operated of a Performance Period of thirty (30) consecutive calendar Days.
 8. After successful Performance Period, Contractor must prepare and submit a Final Commissioning Report.
 9. Contractor prepares and submits corrected final O&M Manuals.

10. Contractor performs Demonstration and Training of Owner's personnel.
 11. Deferred or Seasonal Testing. If approved in writing by the Owner's Authorized Representative, Contractor performs deferred or seasonal testing, as required.
- B. Scheduling
1. Contractor must integrate all key commissioning activities into Contractor's Baseline Schedule submission. (See Section 01320, "Construction Progress Documentation")
 2. Commissioning activities that must be included in the Contractor's Baseline Schedule submission include:
 - a. Initial Commissioning Plan Scoping Meeting
 - b. Submit Draft Commissioning Plan
 - c. Review and Acceptance of Draft Commissioning Plan
 - d. Submit Final Commissioning Plan
 - e. Review and Acceptance of Final Commissioning Plan
 - f. Contractor certification that pre-functional checklist activities are ready to be commenced.
 - g. Pre-functional checkout
 - h. Contractor certification that equipment and systems are operational and ready for functional performance testing.
 - i. Functional performance testing
 - j. Performance Period (30 calendar Days)
 - k. Submit Final Commissioning Report
 - l. Submit O&M Manuals (Initial, Final, and corrected Final)
 - m. Owner Training
 - n. Milestone Completion Certification
- C. Commissioning Meetings
1. A Commissioning Plan Scope Meeting will occur within thirty (30) Days of the official start date for the Contract Time stated in the Notice To Proceed (NTP) issued by the Owner.
 2. Weekly Commissioning meetings will be held beginning sixty (60) Days prior to any system or equipment start-up and will continue to be held through completion of the Performance Period.
 3. Other meetings may be required and called by the Owner's Commissioning Consultant to resolve specific Commissioning issues.
 4. Contractor must prepare and distribute minutes of all Commissioning meeting(s). (See also Section 01315, "Project Meetings.")

1.08 OWNER'S COMMISSIONING CONSULTANT

- A. The role of the Owner's Commissioning Consultant (OCC) is to perform Quality Assurance activities for the Owner. The Contractor is responsible for all Quality Control activities associated with Commissioning the Work.
- B. The Owner's Commissioning Consultant does not have the authority to modify, add to, or delete any of the requirements of the Contract Documents.
- C. The Owner's Commissioning Consultant does not have the authority to direct start-up, testing, or commissioning activities.
- D. The duties of the Owner's Commissioning Consultant are generally limited to:

1. Review of Contractor's:
 - a. Commissioning Plan
 - b. Equipment and Systems Submittals
 - c. Contractor's Systems start-up plans and schedules
 - d. Completed start-up and Functional Performance Testing documentation
 - e. Test plans, procedures, and reports
 - f. Final testing, adjusting, and balancing (TAB) reports
 - g. O&M Documentation
 - h. Training Plan and Documentation
2. Witness and verify satisfactory performance of:
 - a. Equipment and component tests
 - b. Systems and inter-systems functional performance tests.
 - c. TAB activities
3. Site observation
 - a. The Owner's Commissioning Consultant will periodically visit to the Project site to witness equipment and system installation.
 - b. Conflicts or areas needing clarification will be documented in writing by the Owner's Commissioning Consultant and will be forwarded to the Contractor for response and if required, corrective action.
4. Commissioning meetings
 - a. Require special Commissioning meetings
 - b. Attendance at all Commissioning meetings

1.09 CONTRACTOR'S RESPONSIBILITIES

- A. Coordinate and direct all Commissioning activities.
- B. Attend Commissioning Plan Scoping Meeting and additional meetings, as required by Owner's Commissioning Consultant or the Contract Documents.
- C. Prepare and submit twelve (12) copies of the Draft Commissioning Plan
- D. Prepare and submit twelve (12) copies the Final Commissioning Plan
- E. Include all key Commissioning activities in the Contractor's Baseline Schedule submission and submit updates and revisions to the Commissioning activities pursuant to the requirements of Section 01320, "Construction Progress Documentation."
- F. Develop start-up plans
- G. Ensure that the Work is performed according to the requirements of the Contract Documents and the accepted Commissioning Plan.
- H. Notify Owner's Commissioning Consultant in writing when equipment and Systems are ready for pre-commissioning checklist activities.
- I. Verify completion of pre-commissioning checklist activities
- J. Certify in writing to Owner that pre-functional checklist activities are ready to be commenced.
- K. Certify in writing that equipment and systems are operational and ready for Functional Performance Testing.

- L. Prior to certification that equipment and systems are operational and ready for Functional Performance Testing, provide the Owner's Commissioning Consultant with copies of all completed pre-commissioning checklists, completed pre-functional checklists, Owner accepted Submittals, Requests for Information (RFIs), Field Modifications, and Changer Orders related to Systems and equipment to be tested.
- M. Prepare O&M manuals, according to the requirements of Section 01782, "Operation and Maintenance Data", including updating original sequences of operation to as-built conditions.
- N. Contractor is responsible for operation and performance of systems and equipment throughout the commissioning process.
- O. Provide Owner training in accordance with Division 01820, "Demonstration and Training"

1.10 PERFORMANCE PERIOD

- A. All Commissioned equipment and Systems must operate under normal operating conditions for a minimum duration of thirty (30) consecutive Days.
- B. The performance period must occur after the completion of the Functional Performance Testing and before Contractor certifies the Work of the appropriate Milestone is complete.
- C. The Contractor must develop a written Performance Period Monitoring and Evaluation Plan and include it in the Commissioning Plan.

1.11 TRAINING AND INSTRUCTION

- A. Contractor must provide training in accordance with Section 01820, "Demonstration and Training" and as specified elsewhere within the Technical Specifications.

1.12 DEFERRED AND SEASONAL TESTING

- A. Unforeseen Conditions
 - 1. If Functional Performance Testing of a specific item of equipment or System cannot be completed due to unforeseen conditions or circumstances, at the sole discretion of the Owner's Authorized Representative, functional testing may be delayed and conducted at any time up to the end of the Warranty/Guarantee period.
 - 2. Owner's Authorized Representative must approve deferred testing in writing.
 - 3. Deferred testing must be conducted during the time period identified in the Owner's written authorization allowing deferred testing.
- B. Seasonal Testing
 - 1. Seasonal variation in operations or control strategies may require additional testing during the opposite season to verify performance of the HVAC system and controls.
 - 2. If Seasonal Testing is required by the Contract Documents, it must be identified in the Commissioning Plan.
 - 3. With the written approval of the Owner's Authorized Representative, Seasonal Testing may be performed during the Warranty/Guarantee period.

PART 2 - PRODUCTS

2.01 TEST EQUIPMENT

- A. All testing equipment, supplies, materials, power, water, gas, electrical load banks, filters, etc., required to perform startup and initial checkout and Functional Performance Testing must be provided and paid for by the Contractor.
- B. All testing equipment must be of sufficient quality, accuracy, and capacity to test or measure System and/or equipment performance for conformance with the requirements of the Contract Documents.

2.02 DATA LOGGING EQUIPMENT

- A. If needed, the Contractor must provide all data logging equipment and/or software required for recording data generated during the testing of the systems and/or equipment.

PART 3 - EXECUTION**3.01 GENERAL**

- A. Contractor must operate equipment and Systems and conduct all tests in presence of the Owner's Commissioning Consultant.
- B. Contractor must notify the Owner's Commissioning Consultant, in writing, at least seven (7) Days prior to performing any Commissioning test.
- C. Testing must be conducted under design operating conditions as defined within the Contract Documents or accepted Commissioning Plan.
- D. In addition to the copies required by Section 01332, "Submittal Log", Contractor must submit two (2) additional copies of all test reports to the Owner's Commissioning Consultant within twenty-four (24) hours of conducting each test.
- E. Functional Performance Testing must be completed and accepted by the Owner prior to commencing the thirty (30) calendar Day performance periods.
- F. All elements of Systems must be tested to demonstrate that all systems satisfy all requirements of the Contract Documents.
- G. Testing must be accomplished on hierarchical basis. Each piece of equipment must be tested for proper operation, followed by each subsystem, followed by entire system, followed by interfaces to other major systems.

3.02 COMMISSIONING PLAN

- A. The Commissioning Plan will be prepared by the Contractor and will detail the implementation of the Commissioning process. It must include the requirements that each party involved in the commissioning process will have to accomplish, including sequence, acceptance criteria, scheduling, documentation requirements, and verification procedures.
- B. Twelve (12) copies of the Draft Commissioning Plan must be submitted to the Owner no later than ninety (90) Days after initial Commissioning Plan Scoping Meeting.
- C. The Commissioning Plan must include the following:
 - 1. General Building Information
 - 2. Identify project location & address
 - 3. Building type, occupancy, and fire rating
 - 4. Building square footage & number of stories
 - 5. Project team member information:
 - a. Company Name & Address
 - b. Discipline
 - c. Phone Number
 - d. Fax
 - e. Email
 - f. Emergency 24/7 phone number
 - 6. Detailed responsibilities and/or deliverables for each member of the Commissioning Team.

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7. Equipment & system list of items to be commissioned
 8. Fire and Emergency Power Response Matrix
 9. Fire Alarm Sequence Flow Chart/Diagram
 10. Testing Plan, Approach, & Methodology
 11. Test Methods
 12. Coordination & Scheduling
 13. Deficiencies Documentation
 14. Acceptance
 15. Testing elements defined
 16. Shop Drawings that will be use during Commissioning.
 17. Delivery checklists
 18. Manufacturer's installation requirements
 19. System sequences of operations
 20. Detailed procedures for start-up and testing each listed piece of equipment and system.
 21. Pre-commissioning checklists and system pre-functional checklists.
 22. Detailed checklists for performance testing.
 23. System & equipment integration matrix
 24. Report forms that will be used.
 25. Calibration data for test equipment to be used during the Commissioning process.
 26. Performance Period Monitoring and Evaluation Plan
 27. Seasonal or Deferred Testing
 28. Other items as may be specified in Divisions 2 through 16.
- D. The Commissioning Plan must include procedures for:
1. Start-up
 2. Testing, adjusting, and balancing
 3. Verification of equipment and system performance.
 4. Verification of performance of subsystems (e.g. pumps, heat exchangers, and interconnecting piping).
 5. Verification of performance of the automatic controls in all seasonal and operational modes.
 6. Verification of the performance of the HVAC systems as a whole.
 7. Verification of the performance of all life safety devices and systems that interface with the HVAC systems.
 8. Verification of required continuous Operational testing periods for each system or item of equipment.
 9. Creation of corrective action plans for all noted deficiencies identified during the commissioning process.

3.03 INITIAL SCOPE MEETING

- A. Initial Commissioning Plan Scope Meeting must take place within thirty (30) Days from the official start date for the Contract Time stated in the Notice to Proceed (NTP) letter to the Contractor.

B. Attendees:

1. Owner's Project Manager
2. Owner's Project Inspector (Mandatory Attendance Required)
3. Owner's Commissioning Consultant (Mandatory Attendance Required)
4. Owner's Design Consultant(s)
5. Contractor's Authorized Representative
6. Contractor's CQ Manager (Mandatory Attendance Required)
7. Contractor's Commissioning Agent (Mandatory Attendance Required)
8. Appropriate Subcontractors
9. Other Interested Parties

C. The agenda must include:

1. Introductions
2. Flow of documents
3. Submittal data
4. Shop Drawings, Coordination Drawings, and single line diagrams
5. Lines of reporting & communication
6. Responsibilities
7. Commissioning Plan requirements

3.04 DRAFT COMMISSIONING PLAN**A. The Contractor must develop a draft Commissioning Plan.**

1. Twelve (12) copies of the Draft Commissioning Plan must be submitted to the Owner no later than ninety (90) Days after initial Commissioning Plan Scoping Meeting.
2. Within thirty (30) calendar Days of receipt, Owner will meet with the Contractor to discuss the Draft Commissioning Plan.

3.05 FINAL COMMISSIONING PLAN

- A. Contractor must submit twelve (12) copies of a Final Commissioning Plan to the Owner no later than 240 calendar Days from the official start date for the Contract Time stated in the Notice to Proceed (NTP) letter to the Contractor.
- B. Owner will review and return the Final Commissioning Plan submittal pursuant to Section 01330, "Submittal Procedures."

3.06 PRE-COMMISSIONING INSPECTION CHECKLIST

- A. Contractor must prepare pre-commissioning checklists for each item of equipment and System to be Commissioned.
- B. As a minimum, pre-commissioning checklists must include the following:
 1. Submittal Approvals
 2. Model (equipment nameplate and characteristics) verification
 3. Manufacture Installation Checklist
 4. System Checklist
 5. Deficiencies Documentation

6. Contractor Certification
 7. Owner notification
 8. Owner Acceptance
- C. Each item in the checklist must have a date and initial line for the Contractor to indicate successful completion of the item. Only individuals who have completed or witnessed the line item task shall make initials or checks on the forms.
- D. Contractor must identify all pre-commissioning items not successfully completed at the bottom of the checklist form or on an attached sheet. Four (4) copies of the completed checklist and any outstanding deficiencies must be submitted to the Owner within two (2) workdays of test completion.

3.07 PRE-FUNCTIONAL INSPECTION CHECKLIST

- A. Contractor must prepare pre-functional inspection checklists for each item of equipment and system to be commissioned.
- B. The pre-functional inspection checklists must contain sufficient detail to ensure that the systems/equipment are complete and operational, so that the functional performance testing can commence.
- C. At a minimum, pre-functional inspection checklists must include the following:
1. Installation checklist
 2. Manufacturer start-up and checkout procedures
 3. Fire and Emergency Power response matrix
 4. Fire Alarm Sequence Flow Chart/Diagram
 5. TAB Initial report
 6. Deficiencies Documentation
 7. Contractor Certification
 8. Owner Notification
 9. Acceptance
- D. Each item in the checklist must have a date and initial line for the contractor to indicate successful completion of the item. Only individuals who have completed or witnessed the line item task shall make initials or checks on the forms.
- E. Contractor must clearly list any items of pre-functional inspection not successfully completed at the bottom of the checklist form or on an attached sheet. Four (4) copies of the completed checklist and any outstanding deficiencies must be submitted to the Owner within two (2) workdays of test completion.

3.08 FUNCTIONAL PERFORMANCE TESTING

- A. General
1. The objective of Functional Performance Testing is to demonstrate that each system is operating according to the requirements of the Contract Documents.
 2. Functional Performance Testing comprises a full range of tests to verify that all components, equipment, Systems, and interfaces between Systems operate correctly. This includes all operating modes, interlocks, control sequences, and responses to emergency conditions.
 3. Tests must be performed on a complete system basis.

4. Contractor must operate systems and equipment throughout this testing and verification process.
5. Contractor must follow the written test procedures in the accepted Commissioning Plan.
6. Contractor must direct, coordinate, and perform all testing procedures.
7. The Contractor must document all verification testing as it occurs.
8. The Owner's Commissioning Consultant must witness all Commissioning activities.
9. The Functional Performance Test checklist contained in the accepted Commissioning Plan must be used to document the results of the Functional Performance Testing process.
10. Each System must be operated through all modes of System operation (i.e., seasonal, occupied, unoccupied, warm-up, cool-down, power failure, fire alarm, etc.) including every individual interlock and conditional control logic, all control sequences, both full- and part-load conditions, and simulation of all abnormal conditions for which there is a specified system or controls response, e.g. warm-up and cool-down test shall be a performance test, test must be timed, HVAC equipment must change the space temperature by 10 degrees (60 degrees F to 70 degrees F and 80 degrees F to 70 degrees F).
11. Temporary upsets of Systems, such as distribution fault, control loss, set-point change, equilibrium upset, and component failure must be imposed at different operation loads to determine system stability and recovery time. All data must be logged and included in the O&M Documentation. (See Section 01782, "Operation and Maintenance Data")

B. Development of Test Procedures

1. The Contractor must develop specific test procedures and forms to verify and document proper operation of each piece of equipment and System.
2. The test procedures must be included in the Final Commissioning Plan and submitted to the Owner for review.
3. The Functional Performance Testing procedure forms developed by the Contractor must include the following information:
 - a. System and equipment or component name(s).
 - b. Equipment location and ID number.
 - c. Date.
 - d. Project name.
 - e. Participating parties.
 - f. Instructions for setting up the test, including special cautions, alarm limits, etc.
 - g. Specific step-by-step procedures to execute the test.
 - h. Acceptance criteria of proper performance with a Yes / No check box.
 - i. A section for comments.
 - j. Execution of Functional Performance Tests
 - k. Test Methods
4. The Functional Performance Testing process must be accomplished for all equipment, Subsystems, Systems, and System interfaces, with a separate checklist for each to ensure that documentation specific to each is complete.
5. Functional Performance Testing and verification may be achieved by:
 - a. Direct manipulation of System inputs (i.e., heating, or cooling sensors)

- b. Manipulation of System inputs with the building automation system (i.e., software override of sensor inputs)
- c. Trend logs of System inputs and outputs using the building automation system
- d. Short-term monitoring of System inputs and outputs using stand-alone data loggers.
- e. A combination of methods may be required to completely test the entire sequence of operations. The Owner's Design Consultant will determine which method, or combination, is most appropriate.

C. Setup

- 1. Each test procedure must be performed under conditions that simulate normal operating conditions as closely as possible.
- 2. Contractor must make all necessary System modifications to produce the specified conditions (flows, pressures, temperatures, etc) necessary to execute the test.

D. Sampling

- 1. Multiple identical pieces of non-life-safety or non-critical equipment may be functionally tested using a sampling strategy.
- 2. The sampling strategy is developed by the Contractor and accepted by the Owner's Design Consultant.
- 3. If, after three attempts at testing using the accepted sampling method, failures are still present, all remaining units must be individually tested.

E. Coordination

- 1. Equipment must not be 'temporarily' started (for heating or cooling), until pre-functional checklist items and all Manufacturers' pre-start procedures are completed and moisture, dust and other environmental and building integrity issues will not interfere with the startup and/or operation and testing of the Systems and equipment.
- 2. Functional Performance Testing must not begin until pre-functional testing is completed for a given system.
- 3. The controls system and equipment it controls must not be functionally tested until all points have been calibrated and pre-functional checklists are completed.
- 4. When the functional performance of all individual systems has been proven, the interface or coordinated responses between systems must be checked. The systems involved may be within the overall HVAC Work or they may involve other Systems, such as emergency systems for fire and life safety.
- 5. If Contractors Work interfaces with Owner's existing systems, Contractor's Work will be first tested as independent building Systems followed by tests of Systems tied into Owners systems.
- 6. Each coordinated response between Systems must be demonstrated to the satisfaction of the Owner's Commissioning Consultant.
- 7. At completion of each test, Contractor must return all affected building equipment and Systems to their pre-test conditions.

F. Occupied Facilities

- 1. Testing procedures must be conducted in a manner that will not compromise the Owner's ongoing operations.
- 2. If the Contractor is unsure of test procedure's effect on an operating System, or the test procedure may cause an existing System to stop operating, Contractor must make such test procedures known to the Owner during the development of the Commissioning Plan.

3. Owner may require testing that may interrupt or compromise the Owner's existing Systems to be performed during non-peak operating periods.
4. Scheduling of such items will be at the sole discretion of the Owner.

G. Problem Solving

1. The Owner's Commissioning Consultant may offer suggestions for the Contractor to consider when resolving difficulties encountered during the Commissioning process. However, all suggestions offered by the Owner's Commissioning Consultant are not binding on the Contractor and the burden of responsibility to solve and correct deficiencies encountered during the Commissioning process is and remains the responsibility of the Contractor.

3.09 COMMISSIONING ACCEPTANCE PROCEDURES

- A. Contractor must notify the Owner's Commissioning Consultant at least two weeks prior to starting Functional Performance Tests.
- B. The Owner's Commissioning Consultant makes provisional acceptance of the Functional Performance Test after witnessing successful completion of the test.
- C. The Owner's Commissioning Consultant recommends acceptance of each test to the Owner's Design Consultant.
- D. The Owner's Design Consultant accepts/rejects the System or item of equipment after reviewing Owner's Commissioning Consultant recommendation and all test results.
- E. Contractor performs all Performance Period activities.
- F. Upon successful completion of the Performance Period and all other required items, Contractor certifies the Work is complete in accordance with Document 00700.7.5, "Milestone Inspections and Certification."

3.10 NON-CONFORMANCE

- A. If acceptable performance is not achieved:
 1. If there is no dispute on the deficiency and the responsibility to correct it:
 - a. Contractor documents the deficiency and the adjustments or alterations required to correct it.
 - b. Contractor corrects the deficiency and notifies the Owner's Commissioning Consultant that the equipment is ready to be retested.
 - c. The Owner's Commissioning Consultant witnesses the re-test when it is performed.
 2. If there is a dispute about a deficiency or who is responsible:
 - a. The deficiency is documented and the Owner and Owner's Commissioning Consultant are notified in writing by Contractor of Contractor's position.
 - b. Owner will furnish the Contractor with written clarification and/or Direction.
 - c. Once the Owner furnishes the Contractor with an interpretation and/or Direction, Contractor must proceed with the Work.
 - d. Contractor must notify the Owner and Owner's Commissioning Consultant when the equipment or is ready to be retested.
- B. Every check or test for which acceptable performance was not achieved must be repeated after the necessary corrective measures have been completed until acceptable performance is achieved.

- C. Owner's Commissioning Consultant must witness and sign-off on the correction of all performance deficiencies.

3.11 PERFORMANCE PERIOD

- A. The Performance Period in this section applies to all commissioned equipment and Systems.
- B. Upon successful completion of Owner-witnessed Functional Performance Tests, a Performance Period of thirty (30) consecutive calendar Days is required.
- C. The Performance Period commences on first day following the last approved performance test and must be completed prior to Contractor's Milestone certification.
- D. Contractor must include the Performance Period in the Contractor's Preliminary and Baseline Schedule submissions. These activities must occur after operational testing is completed and before Contractor certifies the Work of the Milestone is complete. (See Section 01320.3.05.B.22)
- E. The Contractor must verify and document during the Performance Period, under normal conditions, the performance of the commissioned equipment, systems, and related systems.
- F. During the Performance Period, Contractor must operate and maintain equipment and Systems being verified.
- G. The Contractor must review System and equipment performance during the Performance Period and correct problems as early as possible. All such corrections must be documented with date and time and copies of the documentation must be submitted to the Owner's Commissioning Consultant within 24 hours of correction.

3.12 PERFORMANCE PERIOD MONITORING AND EVALUATION PLAN

- A. At least ninety (90) Days prior to the start of the Performance Period, the Contractor must submit to Owner a written Performance Period Monitoring and Evaluation Plan.
- B. Contractor's Performance Period Monitoring and Evaluation Plan must:
 - 1. Identify Systems and equipment that will be monitored and evaluated
 - 2. Identify how specific issues and criteria for components and equipment will be monitored and evaluated, e.g. simultaneous heating and cooling, valve leak by, actuator and other control loop hunting, outdoor air functions, economizer functions, schedules, etc.
 - 3. Identify how indoor environmental conditions will be monitored and evaluated, e.g., space temperature, relative humidity, pressurization, air exchange, etc.
 - 4. Identify how inter-System interfaces will be monitored and evaluated.
 - 5. Propose for Owner's acceptance, required level of detailed documentation to verify compliance with acceptance criteria, e.g., sampling rate of trend logs, which points to graph together, graph type (time series, scatter plot) or tabular outputs needed, etc.
 - 6. Identify how the trend graphs will be developed, e.g. BAS or other means.
 - a. At a minimum, each graphs must:
 - (1) Be titled or annotated listing and describing the performance issue being displayed. Neatly by hand is acceptable.
 - (2) Show the point identity of each graph line, with date, time, values, and units clearly identifiable.
 - (3) Y-axis must be scaled to provide as much resolution as possible and two Y-axes used for multiple points with large variances in their numerical ranges.
 - (4) The time window will be narrowed to provide clear resolution, but wide enough to verify that compliance is not an anomaly in time. Use multiple time windows for the same issue as needed or requested by the Owner's Commissioning Consultant.

- (5) Electronic data behind each graph must be archived so re-graphing/reformatting can be accomplished or points used to add to another graph, etc.
 - (6) Contractor must set up trends in the BAS to ensure there will be no loss of data.
 - b. Graph Data: Analyze data and adjust graphs by adding or deleting points, zooming in on a narrower time frame, etc., to clearly illustrate the issue.
 - c. Record daily activities and conditions that may be useful in interpreting performance, e.g., weather, etc.
 7. Identify how system alarms, system failures, equipment failures, software failure, software errors, will be monitored and corrected.
 8. Identify how types of failure and types of alarms will be classified. This information must be presented in a table listing the issue type and number of occurrences. During the Performance Period, a copy of the table must be submitted to the Owner's Commissioning Consultant as requested.
 9. Identify how all maintenance and adjustment operations will be documented.
- C. Performance Period Report:
 1. Assemble the documentation from the Performance Period into a Performance Period Report and submit eight (8) copies to the Owner's within five (5) workdays of the end of the performance period.
 2. Include a summary listing all known areas that do not meet the acceptance criteria.
 3. Within seven (7) working Days after submission of the Performance Period Report, a review meeting with the Owner's Commissioning Consultant will be conducted. At the meeting the Performance Period report will be reviewed.
- D. Retests:
 1. After review of the Performance Period Report, for issues where acceptance criteria were not met, corrective actions will be identified, retests will be scheduled, and additional Performance Periods will be established.
 2. If equipment or System operates so as to demonstrate continuing compliance with the Requirements of the Contract Documents, for a period of thirty (30) consecutive Days from commencement date of Performance Period, the equipment or system will be deemed to have satisfied the Performance Period requirement.

3.13 OPERATIONS & MAINTENANCE DATA

- A. The Contractor must compile O&M Documentation for each piece of equipment or System defined in Technical Specification (Divisions 2 through 17) in accordance with Section 01782, "Operation and Maintenance Data."

3.14 TRAINING AND INSTRUCTION

- A. Training and instruction of Owner's personnel is a part of the Commissioning process and essential for the proper operation of the equipment and Systems within the Project. The Contractor must coordinate with the Owner's Commissioning Consultant for the training of Owner's personnel. Detailed requirements for training and instruction are contained in other sections of the Contract Documents including, but not limited to, Section 01820, "Demonstration and Training," and the Technical Specifications (Divisions 2 through 17).

3.15 REQUESTS FOR INFORMATION

- A. In addition to the number of copies required by other sections of the Contract Documents, Contractor must submit two (2) additional copies of all RFI's that relate to Commissioned equipment and Systems directly to the Owner's Commissioning Consultant.

3.16 FINAL COMMISSIONING REPORT

- A. The Contractor must prepare and submit twelve (12) copies of a Final Commissioning Report summarizing all of the tasks, findings, and documenting the Commissioning process.
- B. The report must address the actual performance of the building systems in reference to the requirements of the Contract Documents.
- C. The report must include completed pre-functional inspection checklists, Functional Performance Testing records, diagnostic monitoring results, identified deficiencies, recommendations, and a summary of commissioning activities.
- D. The Final Commissioning Report must be included as part of the Operation and Maintenance Data (See Section 01782.2.07, "Final Commissioning Report")

PART 4 - FORMS

TABLE 01810-01
SYSTEMS/EQUIPMENT TO BE COMMISSIONED

A. MECHANICAL

- ☐ Variable Frequency Drives
- ☐ Central Cooling Plant/Chilled Water Generation Systems
- ☐ Heating Plant/Heating Hot Water Generation Systems
- ☐ Field Erected Cooling Towers
- ☐ Central Steam generation plants
- ☐ Chemical water treatment systems
- ☐ Control air systems & dryers
- ☐ Fan Coil Units
- ☐ Air Conditioning Units
- ☐ Computer room cooling systems
- ☐ Rooftop Air Handling Units/Supply Air Systems
- ☐ Packaged Air Handling Units/Supply Air Systems
- ☐ Make-Up Air Handling Unit/Supply Air Systems
- ☐ Unit Ventilators
- ☐ Boilers
- ☐ Air Conditioning Unit/Supply Air System
- ☐ Cooling Towers
- ☐ Chillers
- ☐ Supply Fan Systems
- ☐ Exhaust Fan Systems
- ☐ CO2 monitoring and control Systems
- ☐ Electric Unit Heaters
- ☐ Ventilation, Relief or Exhaust Fan Systems
- ☐ Variable Air Volume Terminal Units - Fan Powered Type (Series or Parallel)
- ☐ Variable Air Volume Terminal Units - Cooling Only
- ☐ Building Automation System (BAS) Direct Digital Control (DDC) System

- ☐ Fuel system components and piping
- ☐ FOG cooling systems
- ☐ Other

B. PLUMBING SYSTEM

- ☐ Electric Water Heaters
- ☐ Gas Fired Water Heaters
- ☐ Water Heater Circulation Pump
- ☐ Plumbing Sump Pump
- ☐ Plumbing Fixtures
- ☐ Water pump Systems
- ☐ Sewer Lift Stations systems
- ☐ Water booster systems
- ☐ Localized temperature booster systems
- ☐ Fountain mechanical systems
- ☐ Industrial waste systems
- ☐ Landscape irrigation systems
- ☐ Other

C. FIRE PROTECTION

- ☐ Fire Protection Sprinkler System Inspector's Test Station
- ☐ Fire Protection System Dry Pipe System
- ☐ Fire Protection System Pre-action System
- ☐ Fire protection air compressors and dryers
- ☐ Fire alarm system & interface
- ☐ Smoke alarm system & interface
- ☐ Fire water pressure stations
- ☐ CO2 systems
- ☐ Clean agent extinguishing systems
- ☐ Smoke evacuation System and Integration
- ☐ Other

D. ELECTRICAL

- ☐ Lighting Systems
- ☐ Engine Generator systems
- ☐ Switchgear
- ☐ Vacuum Fault Interrupters
- ☐ Electrical Metering, Monitoring, and Control Systems
- ☐ Motors
- ☐ Automatic Transfer Switches

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- ☐ Medium Voltage Interrupter Switch
 - ☐ Transformers
 - ☐ Pad-Mounted Primary Switchgear
 - ☐ Primary Power System Cabling
 - ☐ Secondary Power System Cabling
 - ☐ Power Distribution Unit
 - ☐ Circuit Breaker Switchboards
 - ☐ Breaker trip sequencing coordination study
 - ☐ Ground fault systems
 - ☐ Service Switchboard
 - ☐ Circuit Breaker Branch Circuit Panel-boards
 - ☐ Circuit Breaker Distribution Panel-board
 - ☐ Motor Control Center
 - ☐ Other

E. SPECIAL SYSTEMS

- ☐ UPS Systems
- ☐ UPS Battery Capacity Test
- ☐ Transit Voltage Surge Suppression (TVSS) Systems
- ☐ Fire Detection and Alarm System
- ☐ Security Access System
- ☐ Building Management Systems
- ☐ Video Surveillance System - Fixed Position Camera
- ☐ Video Surveillance System - Pan Tilt and Zoom Camera
- ☐ Closed circuit television (CCTV) systems
- ☐ Supervisory Control and Data Acquisition Systems
- ☐ Other

F. AUDIO VISUAL SYSTEMS

- ☐ Video Projection
- ☐ Video Monitor System
- ☐ Sound Systems
- ☐ Computer controls
- ☐ Paging system
- ☐ Switching / Source Selection Systems
- ☐ Other

G. CONVEYANCE SYSTEMS

- ☐ Elevators
- ☐ Traction Elevators & interfaces

- ☐ Hydraulic Elevators & interfaces
- ☐ Escalators
- ☐ Moving Walks
- ☐ Vertical Wheelchair Lifts & interfaces
- ☐ Baggage Conveying & Dispensing Systems
- ☐ Other

H. COMMUNICATIONS

- ☐ Voice Paging
- ☐ Telephone
- ☐ Data Systems
- ☐ Fiber Optic Systems
- ☐ Radio and Wireless Systems
- ☐ 800Mhz Radio System
- ☐ Common User Terminal Equipment (CUTE)
- ☐ Flight Information Display Systems (FIDS)
- ☐ Station Call System
- ☐ Other

END OF SECTION 01810

SECTION 01820 DEMONSTRATION AND TRAINING

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section includes:
 - 1. Part 1 - General
 - a. 1.01 - Summary
 - b. 1.02 - Related Documents And Sections
 - c. 1.03 - Definitions
 - d. 1.04 - General
 - e. 1.05 - Pre-instruction Conference
 - f. 1.06 - Coordination
 - g. 1.07 - Instruction Program
 - 2. Part 2 - Products (Not Used)
 - 3. Part 3 - Execution
 - a. 3.01- Preparation
 - b. 3.02- Instruction
 - c. 3.03- Submittals
 - 4. Part 4 - Forms (Not Used)

1.02 RELATED DOCUMENTS AND SECTIONS

- A. Section 01810, "General Commissioning Requirements"

1.03 DEFINITIONS

- A. **Training Facilitator** - A firm or individual experienced in training or educating maintenance personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.
- B. **Instructor** - A factory-authorized service representative, experienced in operation and maintenance procedures and training.

1.04 GENERAL

- A. Contractor must procure and pay for the services of a qualified Training Facilitator to prepare instruction program and training modules, to coordinate Instructors, and to coordinate between Contractor and Owner for number of participants, instruction times, and location.
- B. Contractor must procure and pay for the services of qualified Instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
- C. Training requirements include:
 - 1. Demonstration of operation of systems, subsystems, and equipment.
 - 2. Training in operation and maintenance of systems, subsystems, and equipment.

1.05 PRE-INSTRUCTION CONFERENCE

- A. Training Facilitator must schedule conduct a Pre-instruction Conference at the Project Site with:
 - 1. Owner's Commissioning Consultant (Mandatory Attendance Required)
 - 2. Contractor's Commissioning Agent (Mandatory Attendance Required)
 - 3. Owner's Building Operations Staff (Mandatory Attendance Required)
 - 4. Contractor's QC Manager (Mandatory Attendance Required)
 - 5. Owner's Project Manager (Mandatory Attendance Required)
 - 6. Contractor's Authorized Representative (Mandatory Attendance Required)
- B. Review methods and procedures related to demonstration and training including, but not limited to, the following:
 - 1. Inspect and discuss locations and other facilities required for instruction.
 - 2. Review and finalize instruction schedule and verify availability of educational materials, instructors' personnel, audiovisual equipment, and facilities needed to avoid delays.
 - 3. Review required content of instruction.
 - 4. For instruction that must occur outside, review weather and forecasted weather conditions and procedures to follow if conditions are unfavorable.
- C. Training Facilitator must minutes of the meeting and distribute to all participants.

1.06 COORDINATION

- A. Training Facilitator must coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations.
- B. Training Facilitator must coordinate Instructors, including providing notification of dates, times, length of instruction time, and course content.
- C. Training Facilitator must coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Owner.

1.07 INSTRUCTION PROGRAM

- A. Program Structure: Training Facilitator must develop an instruction program that includes individual training modules for each system and equipment not part of a system, as required by individual Specification Sections, and as follows:
 - 1. Motorized doors, including overhead coiling doors, overhead coiling grilles, and, automatic entrance doors.
 - 2. Equipment, including stage equipment, projection screens, loading dock equipment, waste compactors, food-service equipment, residential appliances, and, laboratory fume hoods.
 - 3. Fire-protection systems, including fire alarm, fire pumps, and, fire-extinguishing systems.
 - 4. Intrusion detection systems.
 - 5. Conveying systems, including elevators, wheelchair lifts, escalators, and, cranes.
 - 6. Medical equipment, including medical gas equipment and piping.

7. Laboratory equipment, including laboratory air, and, vacuum, equipment, and piping.
 8. Heat generation, including boilers, feed water equipment, pumps, steam distribution piping, and, water distribution piping.
 9. Refrigeration systems, including chillers, cooling towers, condensers, pumps, and, distribution piping.
 10. HVAC systems, including air-handling equipment, air distribution systems, and) terminal equipment and devices.
 11. HVAC instrumentation and controls.
 12. Electrical service and distribution, including transformers, switchboards, panelboards, uninterruptible power supplies, and, motor controls.
 13. Packaged engine generators, including transfer switches.
 14. Lighting equipment and controls.
 15. Communication systems, including intercommunication, surveillance, clocks and programming, voice, and data, and, television, equipment.
- B. Training Modules: Training Facilitator must develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following:
1. Basis of System Design, Operational Requirements, and Criteria: Include the following:
 - a. System, subsystem, and equipment descriptions.
 - b. Performance and design criteria.
 - c. Operating standards.
 - d. Regulatory requirements.
 - e. Equipment function.
 - f. Operating characteristics.
 - g. Limiting conditions.
 - h. Performance curves.
- C. Documentation: Review the following items in detail:
1. Emergency manuals.
 2. Operations manuals.
 3. Maintenance manuals.
 4. Project Record Documents.
 5. Identification systems.
 6. Warranties and bonds.
 7. Maintenance service agreements and similar continuing commitments.
- D. Emergencies: Include the following, as applicable:
1. Instructions on meaning of warnings, trouble indications, and error messages.
 2. Instructions on stopping.
 3. Shutdown instructions for each type of emergency.

4. Operating instructions for conditions outside of normal operating limits.
 5. Sequences for electric or electronic systems.
 6. Special operating instructions and procedures.
- E. Operations: Include the following, as applicable:
1. Startup procedures.
 2. Equipment or system break-in procedures.
 3. Routine and normal operating instructions.
 4. Regulation and control procedures.
 5. Control sequences.
 6. Safety procedures.
 7. Instructions on stopping.
 8. Normal shutdown instructions.
 9. Operating procedures for emergencies.
 10. Operating procedures for system, subsystem, or equipment failure.
 11. Seasonal and weekend operating instructions.
 12. Required sequences for electric or electronic systems.
 13. Special operating instructions and procedures.
- F. Adjustments: Include the following:
1. Alignments.
 2. Checking adjustments.
 3. Noise and vibration adjustments.
 4. Economy and efficiency adjustments.
- G. Troubleshooting: Include the following:
1. Diagnostic instructions.
 2. Test and inspection procedures.
- H. Maintenance: Include the following:
1. Inspection procedures.
 2. Types of cleaning agents to be used and methods of cleaning.
 3. List of cleaning agents and methods of cleaning detrimental to product.
 4. Procedures for routine cleaning
 5. Procedures for preventive maintenance.
 6. Procedures for routine maintenance.
 7. Instruction on use of special tools.
- I. Repairs: Include the following:
1. Diagnosis instructions.
 2. Repair instructions.

3. Disassembly; component removal, repair, and replacement; and reassembly instructions.
4. Instructions for identifying parts and components.
5. Review of spare parts needed for operation and maintenance.

PART 2 - PRODUCTS (Not Used)**PART 3 - PART 3 -EXECUTION****3.01 PREPARATION**

- A. Assemble educational materials necessary for instruction, including documentation and training module.
- B. Assemble training modules into a combined training manual.
- C. Set up instructional equipment at instruction location.

3.02 INSTRUCTION

- A. Contractor must provide Training Facilitator and Instructors
- B. Owner will furnish personnel to describe:
 1. Basis of system design
 2. Operational requirements, criteria, and regulatory requirements.
 3. Owner's operational philosophy.
- C. Owner will furnish Contractor with names and positions of participants
- D. Scheduling
 1. Provide instruction at mutually agreed on times.
 2. For equipment that requires seasonal operation, provide similar instruction at start of each season.
 3. Schedule training with Owner at least twenty-one (21) Days in advance of the training.
- E. Evaluation
 1. At conclusion of each training module, assess and document each participant's mastery of module by use of an oral] a written] a demonstration] performance-based test.
- F. Demonstration and Training Videotape
 1. Record each training module separately.
 2. Include classroom instructions and demonstrations, board diagrams, and other visual aids, but not student practice.
 3. At beginning of each training module, record each chart containing learning objective and lesson outline.
- G. Cleanup
 1. Collect used and leftover educational materials and remove from Site and give to Owner.
 2. Remove instructional equipment.
 3. Restore systems and equipment to condition existing before initial training use.

3.03 SUBMITTALS

- A. Instruction Program

-
1. At least six (6) weeks prior to scheduled training, submit four (4) copies of an 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.
 2. Include learning objective and outline for each training module.
- B. At completion of training, submit four (4) copies of the complete training manual for Owner's use.
- C. Qualification Data
1. Training Facilitator
 - a. At least six weeks prior to training, submit four (4) copies of the qualifications of Training Facilitator
 - b. Include lists of completed projects with project names and addresses, names and addresses of architects and Owners, and other information specified
 2. Instructors
 - a. At least six weeks prior to training, submit four (4) copies of the qualifications of all Instructors
 - b. Include lists of completed projects with project names and addresses, names and addresses of architects and Owners, and other information specified
 3. Cameraman
 - a. At least six weeks prior to training, submit four (4) copies of the qualifications of Videotape cameraman
 - b. Include lists of completed projects with project names and addresses, names and addresses of architects and Owners, and other information specified.
 - c. Include list of Videotape equipment that will be used
- D. Attendance Record: For each training module, submit four (4) copies of the list of participants and length of instruction time.
- E. Evaluations: For each participant and for each training module, submit four (4) copies of the results and documentation of performance-based test.
- F. Demonstration and Training Videotape: At end of each training module submit four (4) copies of the Demonstration and Training Videotape(s).

PART 4 - FORMS (Not Used)**END OF SECTION 01820**