

**SPECIFICATIONS AND OTHER BIDDING AND CONTRACT DOCUMENTS**

**ALAMEDA COUNTY PROJECT #18001  
BHCS Data Upgrade II  
Fairmont Hospital campus  
San Leandro, California**

**MANDATORY PRE-BID SITE VISIT AND MEETING**

**Wednesday, 10-24-18 at 10:00am**

**Location:**

**15430 Foothill Blvd., San Leandro, CA**

**ALAMEDA COUNTY  
GENERAL SERVICES AGENCY  
CAPITAL PROGRAMS DEPARTMENT  
1401 LAKESIDE DRIVE, #800  
OAKLAND, CALIFORNIA  
PHONE: (510) 208-9825 FAX: (510) 208-3995**

**Engineer:  
Interface Engineering, Inc.  
135 Main Street #400  
San Francisco, CA 94105  
PHONE: (415) 489-7240**



DOCUMENT 00 01 09

## SUMMARY BIDDING CALENDAR

NOTICE – THIS SUMMARY IS FOR INFORMATIONAL PURPOSES ONLY. The dates and times listed may not be relied upon or enforced. This summary does not form a part of the contract documents and does not establish contractual obligations.

NOTICE – THIS IS A SUMMARY ONLY AND DOES NOT LIST ALL DATES, TIMES OR TIME PERIODS CONTAINED IN THE BIDDING AND CONTRACT DOCUMENTS. All bidders and contractors must refer to the actual documents for all applicable dates, times and time periods.

<u>Event</u>	<u>Date</u>	<u>Reference</u>
Contract Documents Available	<b>10-10-18</b>	00 11 16 Notice to Bidders
Pre-Bid Conference & Site Visit	<b>10-24-18 @ 10:00am</b>	00 11 16 Notice to Bidders
Last Day for Receipt of Requests for Substitutions before Receipt of Bids	<b>10 business days before date for Receipt of Bids</b>	00 21 13 Instructions to Bidders
Last Day for Receipt of Questions	<b>10 business days before date for Receipt of Bids</b>	00 21 13 Instructions to Bidders
Receipt of Bids and Bid Opening	<b>11-8-18 @ 2:00pm</b>	00 11 16 Notice to Bidders
Last Day for two lowest bidders to submit COP Forms 101A, 101B and 102	<b>By 2:00 p.m. 2 business days following the Bid Opening</b>	00 22 19 Supplementary Instructions to Bidders -Construction Outreach Program
Last Day to Submit Bid Protest	<b>5<sup>th</sup> Business Day from Date of Notice of Intent to Award</b>	00 21 13 Instructions to Bidders
Estimated Date of Notice of Award	<b>1-30-19</b>	TBD by County
Signing of Contract	<b>7 Calendar days after Notice of Award</b>	00 11 16 Notice to Bidders 00 51 00 Notice of Award
Submit Post-Award Documents	<b>7 Calendar days after Notice of Award</b>	00 21 13 Instructions to Bidders
Last Day to Submit Escrow Bid Documentation	<b>7 Calendar days after Notice of Award</b>	00 56 00 Escrow Bid Documentation
Contract Duration	<b>90 days</b>	00 52 13 Agreement Form – Stipulated Sum (Single-Prime Contract)
Contract Duration Begins	<b>Date in Notice to Proceed</b>	00 55 00 Notice to Proceed
Contract Duration Ends	<b>Date in Notice to Proceed</b>	00 55 00 Notice to Proceed
Last Day to Submit Preliminary Schedule, etc. per Notice to Proceed	<b>10<sup>th</sup> Business Day following Notice to Proceed</b>	00 55 00 Notice to Proceed

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END OF DOCUMENT

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## NOTICE TO BIDDERS

1. Notice is hereby given that The County of Alameda General Services Agency (“GSA”) Purchasing Department (“County” or “Owner”) will receive sealed bids for the following project:

### #18001 BHCS Data Upgrade II

2. Sealed Bids will be received until **2:00 p.m., Thursday November 8th, 2018**, at 1401 Lakeside Drive, 9<sup>th</sup> Floor, Oakland, California, at or after which time the bids will be opened and publicly read aloud. Any claim by a bidder of error in its bid must be made in compliance with section 5100 et seq. of the Public Contract Code. Any bid that is submitted after this time shall be non-responsive and returned to the bidder.

3. The Project consists of:

Replacement of the existing copper phone/data cabling with fiber optic cabling, connections and routing to several BHCS buildings, both underground through the existing utility tunnel, in existing and new underground conduits and overhead between existing utility poles on the Fairmont Hospital campus, San Leandro.

The **budgetary estimate** for the scope of work is **\$300,369**.

The **time to complete** this project is **Ninety (90) calendar days**.

4. All bids shall be on the Bid Form Document 00 41 13 provided by the County. Each bid must conform to and be responsive to all pertinent Contract Documents, including, but not limited to, the Instructions to Bidders Document 00 21 13 and the Supplementary Instructions to Bidders - Construction Outreach Program Document 00 22 19.
5. Bidders are strongly encouraged to review the Supplementary Instructions to Bidders – Enhanced Construction Outreach Program Document (ECOP) 00 22 19 and to begin their outreach efforts prior to the initial mandatory project job walk. The list of bidders solicited for this project include but are not limited to all those construction contractors listed in the GSA Small, Local & Emerging Program Vendor Query database located at [http://www.acgov.org/sleb\\_query\\_app/gsa/sleb/query/slebmnu.jsp](http://www.acgov.org/sleb_query_app/gsa/sleb/query/slebmnu.jsp).
6. To bid on this Project, the Bidder is required to possess one or more of the following State of California Contractor Licenses: **B General Building Contractor, C-7 Low Voltage Systems Contractor and C-10 Electrical Contractor**.

The Bidder's license(s) must remain active and in good standing throughout the term of the Contract.

7. A bid bond by an admitted surety insurer on the form provided by the County, cash, or a cashier's check or a certified check, drawn to the order of the County of Alameda, in the amount of **ten percent (10%) of the total bid price**, shall accompany the Bid Form, as a guarantee that the Bidder will, **within seven (7) calendar days after the date of the Notice of Award**, enter into a contract with the County for the performance of the services as stipulated in the bid.
8. The successful Bidder shall be required to furnish a **100% Performance Bond** and a **100% Payment Bond** if it is awarded the contract for the Work.
9. The successful Bidder may substitute securities for any monies withheld by the County to ensure performance under the Contract, in accordance with the provisions of section 22300 of the Public Contract Code.
10. The Contractor and all Subcontractors under the Contractor shall pay all workers on all work performed pursuant to this Contract **not less than the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work** as determined by the Director of the Department of Industrial Relations, State of California, for the type of work performed and the locality in which the work is to be performed within the boundaries of the County, pursuant to sections 1770 et seq. of the California Labor Code. Prevailing wage rates are also available from the County or on the Internet at: <<http://www.dir.ca.gov>>.
11. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. The following requirements apply to this bid and contract:
  - A. No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].
  - B. No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.
12. Section intentionally omitted.
13. A mandatory pre-bid conference and site visit will be held on **Wednesday October 24, 2018, at 10:00a.m. starting at the BHCS Jay Mahler Recovery Center emergency generator (southeast side of the building), 15430 Foothill Blvd (on the Fairmont Hospital campus), San Leandro, California**. All participants are required to sign in at the site. The site visit is expected to take **approx. 1.5 hours**. If mandatory, failure to attend or arrival after the material start of the meeting will render bid ineligible.



14. Contract Documents are available on **Wednesday October 10, 2018**, for review at the County offices of the General Services Agency, Capital Programs, 1401 Lakeside Dr. #800, Oakland, CA. For County office visit call the **Project Manager Jerry Loeper at (510) 208-9825** to make arrangements. In addition, Contract Documents are available for bidders' review at the locations shown on Attachment 1 to this Document.

Contract Documents are also available for purchase at **East Bay Blue Print, 1745 14<sup>th</sup> Ave, Oakland, CA**. This fee is non-refundable.

15. The County has found and determined that the following item(s) shall be used on this Project based on the purpose(s) indicated. (Public Contract Code section 3400(b)): A particular material, product, thing, or service is designated by specific brand or trade name for the following purpose(s):

- (1) Section intentionally omitted.
- (2) Section intentionally omitted.
- (3) Section intentionally omitted.
- (4) Section intentionally omitted.

14. It is County policy to minimize the expenditure of County funds on goods and services produced by any entity which buys, sell, leases or distributes commodities and/or professional services to (1) the government of Burma; or (2) any entity organized under the laws of Burma; or (3) any entity which does business with any private or public entity located in Burma, or conducts operations in Burma. Contractors are urged to comply with the policy in making purchases and subcontracts. (ref. Alameda County, Cal., Adm. Code tit.4, §4.32.050(B),(F) )

15. Contractors must comply with County Administrative Code's CONSTRUCTION DEBRIS MANAGEMENT AND GREEN BUILDING PRACTICES.

16. The County reserves the right to reject any and all bids and/or waive any irregularity in any bid received. If the County awards the Contract, the security of unsuccessful bidder(s) shall be returned **within sixty (60) days from the time the award is made**. Unless otherwise required by law, no bidder may withdraw its bid **for ninety (90) days after the date of the bid opening**.

17. The County shall award the Contract, if it awards it at all, to the lowest responsive responsible bidder based on:

- A. The **base bid amount only**.
- B. Section intentionally omitted.
- C. Section intentionally omitted.
- D. Section intentionally omitted.

Determination of the responsible bidder with the lowest responsive bid will also be subject to the terms of the Enhanced Construction Outreach Program Document 00 22 19.

END OF DOCUMENT

**PLAN ROOM ADVERTISING LIST**

<input type="checkbox"/> 1	Bay Area Builders Exchange** 3055 Alvarado Street San Leandro, CA 94577 Phone: (510) 483-8880 ;Fax: (925) 685-3424 Email: <a href="mailto:planroom@bayareabx.com">planroom@bayareabx.com</a> (This is a merger of Builders Exchange of Alameda County and Contra Costa Builders Exchange 5/18/15.)	<input type="checkbox"/> 2	San Francisco Builders Exchange 850 South Van Ness Avenue San Francisco, CA 94110 Phone: (415) 282-8220 Fax: (415) 821-0363 Email: <a href="mailto:djohnsonsf@sbcglobal.net">djohnsonsf@sbcglobal.net</a>
<input type="checkbox"/> 3	Dodge Data and Analytics (Dodge Plan Room, formerly McGraw-Hill Construction Dodge) (Online) 3315 Central Avenue Hot Springs Arkansas (AR) 71913 (Contact: Gerry McCarthy) 626-531-6818; Fax: 626-226-1623 Email <a href="mailto:gerry.mccarthy@construction.com">gerry.mccarthy@construction.com</a>	<input type="checkbox"/> 4	Small Business Exchange 703 Market Street, Suite 1000 San Francisco, CA 94103 Phone: (415) 778-6250 Fax: (415) 778-6255 Email: <a href="mailto:sbe@sbeinc.com">sbe@sbeinc.com</a>
<input type="checkbox"/> 5	Central California Builders Exchange 1244 N. Mariposa St. Fresno, Ca 93703 Phone (559) 237-1831; Fax (559) 264-2532 Email: <a href="mailto:megan@cencalbx.com">megan@cencalbx.com</a>	<input type="checkbox"/> 6	County of Alameda Current Contracting Opportunities Website located at <a href="http://www.acgov.org/gsa_app/gsa/purchasing/bid_content/contractopportunities.jsp">http://www.acgov.org/gsa_app/gsa/purchasing/bid_content/contractopportunities.jsp</a>
<input type="checkbox"/> 7	The Blue Book Building & Construction Network ( <a href="http://www.bb-bid.com">www.bb-bid.com</a> Online) Contact: Amanda Limitone, Project Communication Specialist Phone: (855) 805-2560, ext.3145; Email: <a href="mailto:alimitone@thebluebook.com">alimitone@thebluebook.com</a>		
<input type="checkbox"/> 8	Reed Construction Data** – Online/Electronic Plan Room 30 Technology Parkway South, Suite 100 Norcross, GA 30092-2912 Phone: (770) 209-3396 Jeannie Kwan; Fax (Addenda only): (800) 303-8629; Fax (Notice to Bidders/IFB): (800) 642-2437; Email (addenda only): <a href="mailto:docprocessing@reedbusiness.com">docprocessing@reedbusiness.com</a> -Send requests to advertise to above address/fax/phone- Local Email: <a href="mailto:jeannie.kwan@reedbusiness.com">jeannie.kwan@reedbusiness.com</a> (EPR: <a href="http://www.reedconstructiondata.com">http://www.reedconstructiondata.com</a> )		
<input checked="" type="checkbox"/> 9	East Bay Blue Print & Supply Co. 1745 Fourteenth Ave Oakland, CA 94606 Phone: (510) 261-2990 - Sandy Petty Email: <a href="mailto:ebbp@eastbayblueprint.com">ebbp@eastbayblueprint.com</a>		
<input type="checkbox"/> 10	Construction Bidboard, Inc.(Online)** 11622 El Camino Real, Suite 100 San Diego, CA 92130 800-479-5314 phone; 619-688-0585 fax (Contact Dorothy Ellithorpe <a href="mailto:dellithorpe@ebidboard.com">dellithorpe@ebidboard.com</a> ) <a href="mailto:planroom@ebidboard.com">Alternate: planroom@ebidboard.com</a> * <a href="mailto:ebidboard@gmail.com">ebidboard@gmail.com</a>		

\* Plans/Specs must be sent to individual Plan Rooms to ensure posting at that location.

\*\*Construction trade journals specified for alternate bidding procedures for projects between \$25,000 and \$125,000 minimum advertising requirements. County policy is to post all construction projects over \$25,000 in all listed Plan Rooms, Press/Newspaper Publications and Local Chambers of Commerce/Trade Organizations

DOCUMENT 00 21 13

## INSTRUCTIONS TO BIDDERS

Bidders shall follow the instructions in this document, and shall submit all documents, forms, and information required for consideration of a Bid.

County will evaluate information submitted by the apparent low Bidder and, if incomplete or unsatisfactory to County, Bidder's bid may be rejected at the sole discretion of County.

1. Bids are requested for a general construction contract, or work described in general, for the following project ("Project" or "Contract"):

### **#18001 BHCS Data Upgrade II**

2. County will receive sealed Bids from Bidders as stipulated in the Notice to Bidders Document 00 11 16.
3. Bidders must submit Bids on Bid Form 00 41 13 and all other required County forms. Bids not submitted on the County's required forms shall be deemed non-responsive and shall not be considered. Additional sheets required to fully respond to requested information are permissible.
4. Bidders must supply all information required by each Bid Document. Bids must be full and complete. County reserves the right in its sole discretion to reject any Bid as non-responsive as a result of any error or omission in the Bid. Bidders must complete and submit all of the following documents with Bid Form Document 00 41 13:
  - a. **Bid Bond on Bid Security Form** Document 00 43 13 or other security
  - b. **Designated Subcontractors List** Document 00 43 36
  - c. **Site-Visit Certification** Document 00 45 01
  - d. **Non-Collusion Affidavit** Document 00 45 13
  - e. **Construction Outreach Program Certifications** as required by Supplementary Instructions to Bidders – Enhanced Construction Outreach Program Document 00 22 19.
  - f. Completed **Debarment Form**, Document 00 52 13.1.
5. Bidders must submit with their Bids: cash, a cashier's check or a certified check payable to County, or a Bid Bond of **not less than ten percent (10%) of amount of base Bid, plus all additive alternates**. Required form of corporate surety, Bid Security Form, is provided by County and must be used and fully completed by Bidders choosing to provide a Bid Bond as security. The Surety on Bidder's Bid Bond must be an insurer admitted in the State of California and authorized to issue surety bonds in the State of

California. Bids submitted without necessary bid security will be deemed non-responsive and will not be considered.

6. If Bidder to whom Contract is awarded shall for **SEVEN (7) calendar days after the date of the Notice of Award**, fail or neglect to enter into Contract and submit required bonds, insurance certificates, and all other required documents, County may deposit Bid Bond, cash, cashier's check, or certified check for collection, and proceeds thereof may be retained by County as liquidated damages for failure of Bidder to enter into Contract, in the sole discretion of County. It is agreed that calculation of damages County may suffer as a result of Bidder's failure to enter into the Contract would be extremely difficult and impractical to determine and that the amount of the Bidder's required bid security shall be the agreed and conclusively presumed amount of damages.
7. Bidders must submit with the Bid the Designated Subcontractors List for those subcontractors who will perform any portion of Work, including labor, rendering of service, or specially fabricating and installing a portion of the Work or improvement according to detailed drawings contained in the plans and specifications, **in excess of one half of one percent (0.5%) of total Bid**. Failure to submit this list when required by law shall result in Bid being deemed non-responsive and the Bid will not be considered.
8. If a mandatory pre-bid conference and site visit ("Site Visit") is requested as referenced in the Instructions to Bidders, then Bidders must submit the Site-Visit Certification with their Bid. County will transmit to all prospective Bidders of record such Addenda as County in its discretion considers necessary in response to questions arising at the Site Visit. Oral statements shall not be relied upon and will not be binding or legally effective. Addenda issued by the County as a result of the Site Visit, if any shall constitute the sole and exclusive record and statement of the results of the Site Visit.
9. Bidders shall submit the Non-Collusion Affidavit with their Bids. Bids submitted without the Non-Collusion Affidavit shall be deemed non-responsive and will not be considered.
10. Bids shall be clearly written without erasure or deletions. County reserves the right to reject any Bid containing erasures or deletions.
11. Bidders shall not modify Bid Form 00 41 13 or qualify their Bids. Bidders shall not submit to the County a scanned, re-typed, word-processed, or otherwise recreated version of Bid Form 00 41 13 or other County-provided document.
12. The successful **Bidder and all its subcontractors shall pay all workers** on all work performed pursuant to this Contract **not less than the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work** as determined by the Director of the Department of Industrial Relations, State of California,

for the type of work performed and the locality in which the work is to be performed within the boundaries of the County, pursuant to sections 1770 et seq. of the California Labor Code.

13. Section intentionally omitted.
14. Submission of Bid signifies careful examination of Contract Documents and complete understanding of the nature, extent, and location of Work to be performed. Bidders must complete the tasks listed below as a condition to bidding, and submission of Bid shall constitute the Bidder's express representation to County that Bidder has fully completed the following:
  - a. Bidder has visited the Site and has examined thoroughly and understood the nature and extent of the Contract Documents, Work, Site, locality, actual conditions, as-built conditions, and all local conditions and federal, state and local laws, and regulations that in any manner may affect cost, progress, performance, or furnishing of Work or that relate to any aspect of the means, methods, techniques, sequences, or procedures of construction to be employed by Bidder and safety precautions and programs incident thereto;
  - b. Bidder has conducted or obtained and has understood all examinations, investigations, explorations, tests, reports, and studies that pertain to the subsurface conditions, as-built conditions, underground facilities, and all other physical conditions at or contiguous to the Site or otherwise that may affect the cost, progress, performance, or furnishing of Work, as Bidder considers necessary for the performance or furnishing of Work at the Contract Sum, within the Contract Time, and in accordance with the other terms and conditions of Contract Documents, including specifically the provisions of the General Conditions; and no additional examinations, investigations, explorations, tests, reports, studies, or similar information or data are or will be required by Bidder for such purposes;
  - c. Bidder has correlated its knowledge and the results of all such observations, examinations, investigations, explorations, tests, reports, and studies with the terms and conditions of the Contract Documents;
  - d. Bidder has given County prompt written notice of all conflicts, errors, ambiguities, or discrepancies that it has discovered in or among the Contract Documents and the actual conditions, and the written resolution thereof by County is acceptable to Bidder;
  - e. Bidder has made a complete disclosure in writing to County of all facts bearing upon any possible interest, direct or indirect, that Bidder believes any representative of County or other officer or employee of County presently has or

will have in this Contract or in the performance thereof or in any portion of the profits thereof;

- f. Bidder must, prior to bidding, perform the work, investigations, research, and analysis required by this document and that Bidder represents in its Bid Form 00 41 13 and the Agreement that it performed prior to bidding. Bidders are charged with all information and knowledge that a reasonable bidder would ascertain from having performed this required work, investigation, research, and analysis. Bid prices must **include entire cost of all work "incidental" to completion of the Work.**
- g. Conditions Shown on the Contract Documents: Information as to underground conditions, as-built conditions (including the utility tunnel), or other conditions or obstructions, indicated in the Contract Documents, e.g., on Drawings or in Specifications, has been obtained with reasonable care, and has been recorded in good faith. However, County only warrants, and Bidder may only rely, on the accuracy of limited types of information.
  - (1) As to above-ground conditions or as-built conditions shown or indicated in the Contract Documents, there is no warranty, express or implied, or any representation express or implied, that such information is correctly shown or indicated. This information is verifiable by independent investigation and Bidder is required to make such verification as a condition to bidding. In submitting its Bid, Bidder shall rely on the results of its own independent investigation. In submitting its Bid, Bidder shall not rely on County-supplied information regarding above-ground conditions or as-built conditions.
  - (2) As to any subsurface condition shown or indicated in the Contract Documents, Bidder may rely only upon the general accuracy of actual reported depths, actual reported character of materials, actual reported soil types, actual reported water conditions, or actual obstructions shown or indicated. County is not responsible for the completeness of such information for bidding or construction; nor is County responsible in any way for any conclusions or opinions of Bidder drawn from such information; nor is County responsible for subsurface conditions that are not specifically shown (for example, County is not responsible for soil conditions in areas contiguous to areas where a subsurface condition is shown).
- h. Conditions Shown in Reports and Drawings Supplied for Informational Purposes: Reference is made to the document entitled Geotechnical Data, and the document entitled Existing Conditions Information, for identification of:

- (1) Section intentionally omitted.
  - (2) Physical Conditions: Those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that has been utilized by Engineer in preparing the Contract Documents.
  - (3) These reports and drawings are **not** Contract Documents and, except for any "technical" data regarding subsurface conditions specifically identified in Geotechnical Data and Existing Conditions Information, and underground facilities data, Bidder may not in any manner rely on the information in these reports and drawings. Subject to the foregoing, Bidder must make its own independent investigation of all conditions affecting the Work and must not rely on information provided by County.
15. Bidders may examine any available "as-built" drawings of previous work by giving County reasonable advance notice. County will not be responsible for accuracy of "as-built" drawings. The document entitled Existing Conditions Information applies to all supplied "as-built" drawings.
  16. Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the State of California Department of Industrial Relations, are on file at the County's principal office. Prevailing wage rates are also available from the County or on the internet at (<http://www.dir.ca.gov>)
  17. All questions about the meaning or intent of the Contract Documents are to be directed in writing, including by e-mail, to County Project Manager. Interpretations or clarifications considered necessary by County in response to such questions will be issued in writing by Addenda faxed, mailed, or delivered to all parties recorded by County as having received the Contract Documents. Questions received **less than TEN (10) business days prior to the date for opening Bids** may not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
  18. Addenda may also be issued to modify other parts of the Contract Documents as deemed advisable by County.
  19. Each Bidder must acknowledge each Addendum in its Bid Form 00 41 13 by number or its Bid shall be considered non-responsive. Addenda shall be part of the Contract Documents. A complete listing of Addenda may be secured from County.
  20. Bids shall be based on products and systems specified in Contract Documents or listed by name in Addenda. County is not responsible and/or liable in any way for a Bidder's damages and/or claims related, in any way, to that Bidder's basing its bid on any



requested substitution that County has not approved. Bidders and materials suppliers who submit requests for substitutions prior to the award of the Contract must do so in writing and in compliance with Public Contract Code section 3400. All requests must comply with the following:

- a. County must receive any request for substitution a **minimum of TEN (10) business days prior to bid opening.**
  - b. Requests for substitutions shall contain sufficient information to assess acceptability of product or system and impact on Project, including, without limitation, the requirements specified in the Special Conditions and the Specifications. Insufficient information shall be grounds for rejection of substitution.
  - c. Approved substitutions shall be listed in Addenda. County reserves the right not to act upon submittals of substitutions until after bid opening.
  - d. Substitutions may be requested after Contract has been awarded only if indicated in and in accordance with requirements specified in the Special Conditions and the Specifications.
21. All Bids must be sealed, and marked with name and address of the Bidder and the Project Number, Bid number, Bid package, and time of bid opening. Bids will be received as indicated in the Notice to Bidders.
- a. Mark envelopes with the name of the Project.
  - b. Bids must be submitted at the place and by date and time shown in the Instructions to Bidders.
  - c. Bids must contain all documents as required herein.
22. Bids will be opened at or after the time indicated for receipt of bids.
23. This Contract may include alternates. Alternates are defined as alternate products, materials, equipment, systems, methods, or major elements of the construction that may, at the County's option and under terms established in the Contract and pursuant to section 20103.8 of the Public Contract Code, be selected for the Work. County shall award the Contract, if it awards it at all, to the lowest responsive responsible bidder based on the criteria as indicated in these contract documents.
24. Time for Completion: County may issue a Notice to Proceed **within NINETY (90) calendar days from the date of the Notice of Award.** Once Contractor has received the

Notice to Proceed, Contractor shall complete the Work within the period of time indicated in the Contract Documents.

- a. In the event that County desires to postpone issuing the Notice to Proceed beyond the 90-day period above, it is expressly understood that with reasonable notice to the Contractor, County may postpone issuing the Notice to Proceed.
  - b. It is further expressly understood by Bidder that Contractor shall not be entitled to any claim of additional compensation as a result of the postponement of the issuance of the Notice to Proceed beyond the 90-day period. If the Contractor believes that a postponement of issuance of the Notice to Proceed will cause a hardship to the Contractor, the Contractor may terminate the Contract. Contractor's termination due to a postponement beyond this 90-day period shall be by written notice to County **within TEN (10) calendar days after receipt by Contractor of County's Notice of Postponement.**
  - c. It is further understood by Bidder that in the event that Contractor terminates the Contract as a result of postponement by County, County shall only be obligated to pay Contractor for the Work that Contractor had performed at the time of notification of postponement and which County had in writing authorized Contractor to perform prior to issuing a Notice to Proceed.
  - d. Should the Contractor terminate the Contract as a result of a Notice of Postponement, County shall have the authority to award the Contract to the next lowest responsive responsible bidder.
25. The Bidder to whom Contract is awarded shall execute and submit the following documents **by 5:00 p.m. of the SEVENTH (7<sup>TH</sup>) calendar day following the date of the Notice of Award.** Failure to properly and timely submit these documents entitles County to reject the bid as non-responsive.
- a. **Agreement:** To be executed by successful Bidder. **Submit four (4) copies**, each bearing an original signature.
  - b. **Escrow of Bid Documentation:** This must include all required documentation. See the document Escrow of Bid Documentation for more information.
  - c. **Performance Bond (100%):** On the form provided in the Contract Documents and fully executed as indicated on the form.
  - d. **Payment Bond (100%) (Contractor's Labor and Material Bond):** On the form provided in the Contract Documents and fully executed as indicated on the form.
  - e. **Insurance Certificates and Endorsements** as required.
  - f. **Workers' Compensation Certification.**
  - g. **Prevailing Wage and Related Labor Requirements Certification.**

- h. **Hazardous Materials Certification.**
  - i. **Contractor's Safety Plan** specifically adapted for the Project.
  - j. Section intentionally omitted.
26. Any Bid protest by any Bidder regarding any other Bid must be submitted in writing to the County's GSA–Office of Acquisition Policy, ATTN: Contract Compliance Officer, located at 1401 Lakeside Drive, 10th Floor, Oakland, CA 94612, Fax: (510) 208-9720, **before 5:00 p.m. of the FIFTH (5th) business day following the date of issuance of the Notice of Intent to Award**, not the date received by the Bidder. A Bid protest received after 5:00 p.m. is considered received as of the next business day.
- a. The Bid protest must contain a complete statement of the reasons and facts for the protest.
  - b. The protest must refer to the specific portions of all documents that form the basis for the protest.
  - c. The protest must include the name, address, email address, fax number and telephone number of the person representing the protesting party.
  - d. The County Agency/Department will notify all bidders of the protest as soon as possible.
  - e. Upon receipt of written protest, GSA–Office of Acquisition Policy, or designee, will review and evaluate the protest and issue a written decision. The GSA–Office of Acquisition Policy, may, at its discretion, investigate the protest, obtain additional information, provide an opportunity to settle the protest by mutual agreement, and/or schedule a meeting(s) with the protesting Bidder and others (as appropriate) to discuss the protest. The decision on the bid protest will be issued **at least ten (10) business days prior to the Board hearing or GSA award date.**
  - f. The decision will be communicated by e-mail, fax, or US Postal Service mail, and will inform the bidder whether or not the recommendation to the Board of Supervisors or GSA in the Notice of Intent to Award is going to change. A copy of the decision will be furnished to all Bidders affected by the decision. As used in this paragraph, a Bidder is affected by the decision on a Bid protest if a decision on the protest could have resulted in the Bidder not being the apparent successful Bidder on the Bid.
  - g. The decision of the GSA-Office of Acquisition Policy on the bid protest may be appealed to the Auditor-Controller's Office of Contract Compliance & Reporting (OCCR) located at 1221 Oak St., Room 249, Oakland, CA 94612, Fax: (510) 272-6502 unless the OCCR determines that it has a conflict of interest in which case an alternate will be identified to hear the appeal and all steps to be taken by

OCCR will be performed by the alternate. The Bidder whose Bid is the subject of the protest, all Bidders affected by the GSA-Office of Acquisition Policy's decision on the protest, and the protestor have the right to appeal if not satisfied with the GSA-Office of Acquisition Policy's decision. All appeals to the Auditor-Controller's OCCR shall be in writing and submitted **within five (5) business days following the issuance of the decision by the GSA-Office of Acquisition Policy**, not the date received by the Bidder. An appeal received after 5:00 p.m. is considered received as of the next business day. An appeal received after the FIFTH (5th) business day following the date of issuance of the decision by the GSA-Office of Acquisition Policy shall not be considered under any circumstances by the GSA or the Auditor-Controller OCCR.

- h. The appeal shall specify the decision being appealed and all the facts and circumstances relied upon in support of the appeal.
- i. In reviewing protest appeals, the OCCR will not re-judge the proposal(s). The appeal to the OCCR shall be limited to review of the procurement process to determine if the contracting department materially erred in following the Bid or, where appropriate, County contracting policies or other laws and regulations.
- j. The appeal to the OCCR also shall be limited to the grounds raised in the original protest and the decision by the GSA-Office of Acquisition Policy. As such, a Bidder is prohibited from stating new grounds for a Bid protest in its appeal. The Auditor-Controller (OCCR) shall only review the materials and conclusions reached by the GSA-Office of Acquisition Policy or department designee, and will determine whether to uphold or overturn the protest decision.
- k. The Auditor's Office may overturn the results of a bid process for ethical violations by Procurement staff, County Selection Committee members, subject matter experts, or any other County staff managing or participating in the competitive bid process, regardless of timing or the contents of a bid protest.
- l. The decision of the Auditor-Controller's OCCR is the final step of the appeal process. A copy of the decision of the Auditor-Controller's OCCR will be furnished to the protestor, the Bidder whose Bid is the subject of the Bid protest, and all Bidders affected by the decision.
- m. The County will complete the Bid protest/appeal procedures set forth in this paragraph before a recommendation to award the Contract is considered by the Board of Supervisor or GSA.
- n. The procedures and time limits set forth in this paragraph are mandatory and are each Bidder's sole and exclusive remedy in the event of Bid Protest. A Bidder's

failure to timely complete both the Bid protest and appeal procedures shall be deemed a failure to exhaust administrative remedies. Failure to exhaust administrative remedies, or failure to comply otherwise with these procedures, shall constitute a waiver of any right to further pursue the Bid protest, including filing a Government Code Claim or legal proceedings.

27. A responsive bid is a solicited bid that has been determined to be in conformance with the conditions, completion or delivery requirements, and specifications detailed in the solicitation for bid. Responsive bids are those submitted on time; contain complete information, and required submittals and/or supporting documentation.
28. A responsible bidder is defined by the California Public Contract Code section 1103 as "a bidder who has demonstrated the attribute of trustworthiness, as well as quality, fitness, capacity, and experience to satisfactorily perform this public works contract".
29. County reserves the right to reject any or all bids, including without limitation the right to reject any or all nonconforming, non-responsive, unbalanced, or conditional bids, to re-bid, and to reject the bid of any bidder if County believes that it would not be in the best interest of County to make an award to that bidder, whether because the bid is not responsive or the bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by County. County also reserves the right to waive inconsequential deviations not involving price, time, or changes in the Work. For purposes of this paragraph, an "unbalanced bid" is one having nominal prices for some work items and/or enhanced prices for other work items.
30. Discrepancies between written words and figures, or words and numerals, will be resolved in favor of the figures or numerals.
31. Prior to the award of Contract, County reserves the right to consider the responsibility of the Bidder. County may conduct investigations as County deems necessary to assist in the evaluation of any bid and to establish the responsibility, including, without limitation, qualifications and financial ability of Bidders, proposed subcontractors, suppliers, and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to County's satisfaction within the prescribed time.

**END OF DOCUMENT**

DOCUMENT 00 22 19

## ENHANCED CONSTRUCTION OUTREACH PROGRAM (ECOP)

### GENERAL

#### 1. PURPOSE

1.1 It is the express purpose of the Enhanced Construction Outreach Program (ECOP) to encourage the participation in the County of Alameda, General Services Agency (GSA) capital projects of

- Minority Owned Business Enterprise (MBE),
- Woman Owned Business Enterprise (WBE),
- Local Business Enterprise (LBE) and
- Small Local Business Enterprise (SLBE)

And to ensure that all contracting firms receive an equal opportunity to bid and receive work for this project. The ECOP encourages the inclusion of small businesses in this contract in accordance with Public Contract Code § 2002.

1.2 By submitting a bid, Bidders acknowledge and agree to all Document 00 22 19 provisions contained herein.

1.3 Section intentionally omitted.

#### 2. APPLICATION

2.1 The provisions outlined in this Section 00 22 19 apply to this contract for the construction of the above-referenced project. This project is funded solely with local dollars, and these provisions shall apply to all work performed under any contract awarded as a result of this competitive process.

2.2 To be considered for a contract award, any bidder who fails to meet all ECOP goals identified herein shall be required to demonstrate to the satisfaction of the County that all good faith efforts (GFEs) were made in accordance with the criteria listed in Section 7.9, GFE 1-9. Failure of the bidder to demonstrate a good faith effort may result in the bid being deemed non-responsive.

#### 3. 3 DEFINITIONS

##### 3.1 LOCAL BUSINESS ENTERPRISE (LBE)

3.1.1 For the purposes of this program, a Local Business Enterprise means a business that is a firm or dealer with fixed offices located in, and having a street address within the County and holds a valid business license issued by the County or a city within the County **for at least 6 months prior to the date upon which a request for sealed bids or proposals is issued.**

##### 3.2 MINORITY OR WOMEN BUSINESS ENTERPRISE (MWBE)



- 3.2.1 For the purposes of this program, an MWBE is a Small Business Enterprise (SBE), as that term is defined by the State of California, that meets both of the following criteria:
- 3.2.1.1 **At least 51 percent of the business is owned by one or more minority persons or women**, or in the case of any business whose stock is publicly held, at least 51 percent of the stock is owned by one or more minority persons or women; and
- 3.2.1.2 Whose management and daily business operations are controlled by one or more minority persons or women.
- 3.2.2 An MWBE must be certified as such by local agencies identified or recognized by the County as having effective certification programs. When the State of California SBE definition is met, validation of the current certification by one of the following local agencies must be provided with the bid response:

Bay Area Rapid Transit (BART)  
The (CPUC) Supplier Clearinghouse  
Western Regional Minority Supplier Development Council (WRMSDC)  
Women's Business Enterprise National Council (WBENC)

3.3 MINORITY PERSON

- 3.3.1 Minority person, for purposes of this section, means Black Americans, Hispanic Americans, Native Americans (including American Indians, Eskimos, Aleuts and Native Hawaiians), Asian-Pacific Americans (including persons whose origins are from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the United States Trust Territories of the Pacific, Northern Marianas, Laos, Cambodia and Taiwan).

3.4 SMALL BUSINESS ENTERPRISE (SBE)

- 3.4.1 For the purposes of this program, an SBE meets the current State of California definition of a small business, which is one that:
- 3.4.1.1 Must be independently owned and operated;
- 3.4.1.2 Cannot be dominant in its field of operation;
- 3.4.1.3 Must have its principal office located in California;
- 3.4.1.4 Must have its owners (or officers in the case of a corporation) domiciled in California; and
- 3.4.1.5 Together with its affiliates, be either:

3.4.1.5.1 A business with **100 or fewer employees**, and an **average annual gross receipts of \$15 million or less over the previous three tax years**, or

3.4.1.5.2 A manufacturer with 100 or fewer employees.

3.4.1.6 An SBE must be certified or recognized as such by organizations whose certification is accepted by the California Department of General Services or by local agencies identified by the County of Alameda to have effective certification programs. Validation of the current certification by one of the following local agencies must be provided with the bid response:

Alameda County Transportation Commission (Alameda CTC)

California Department of General Services (DGS)

Port of Oakland

and, when the State SBE definition is met, Alameda County (SLEB certification)

### 3.5 SMALL LOCAL BUSINESS ENTERPRISE (S/LBE)

3.5.1 For the purposes of this program, a Small Local Business Enterprise is defined by the County of Alameda and means a business that meets the SBE definition above, and is a firm or dealer with fixed offices located in, and having a street address within the County, and holds a valid business license issued by the County or a city within the County.

## 4. **ENHANCED CONSTRUCTION OUTREACH PROGRAM (ECOP) GOALS**

### 4.1 MBE PARTICIPATION SUBCONTRACTING – 15% GOAL

4.1.1 The MBE element of the ECOP program shall include subcontractors, manufacturers, suppliers and truckers in calculating achievement of the MBE goal. Any contractor who fails to meet the MBE goals described herein must demonstrate to the satisfaction of the County of Alameda that a good faith effort was made to meet these goals in order to be considered for a contract award.

4.1.1.1 The County shall further require that in order to be awarded a contract, a prime contractor must show that a good faith effort was made to provide at least 15% of the total contract amount to MBE subcontractors, manufacturers, suppliers, and truckers.

4.1.1.2 The MBE goals must be achieved by the use of MBE subcontractors, manufacturers, suppliers, and/or truckers. If the Contractor plans to perform all the work with the Contractor's own forces, the goal will still apply and must be achieved by the use of suppliers, manufacturers, and/or truckers.

4.1.1.3 A certified MBE prime contractor **may not** apply the percentage of the prime contractor's work toward meeting the goals as set forth above. An MBE subcontractor meeting the definition of both an MBE and a WBE **may not** be used



to achieve both MBE and WBE required goals. The percentage of MBE firms utilized for the project described herein can only be applied to either MBE or WBE required goals. For purposes of meeting the MBE goals for this project, each participating MBE must be identified as an MBE.

- 4.1.1.4 Prime contractors are strongly encouraged to sub-contract with S/LBE certified MBEs to meet the goals.

#### 4.2 WBE PARTICIPATION SUBCONTRACTING – 5% GOAL

4.2.1 The WBE element of the ECOP program shall include subcontractors, manufacturers, suppliers and truckers in calculating achievement of the WBE goal. Any contractor who fails to meet the WBE goals described herein must demonstrate to the satisfaction of the County of Alameda that a good faith effort was made to meet these goals in order to be considered for a contract award.

- 4.2.1.1 The County shall further require that in order to be awarded a contract; a prime contractor must show that a good faith effort was made to provide at least 5% of the total contract amount to WBE subcontractors, manufacturers, suppliers, and/or truckers.

- 4.2.1.2 The WBE goals must be achieved by the use of subcontractors, manufacturers, suppliers, and/or truckers. If the Contractor plans to perform all the work with the Contractor's own forces, the goal will still apply and must be achieved by the use of manufacturers, suppliers, and/or truckers.

- 4.2.1.3 A certified WBE prime contractor **may not** apply the percentage of the prime contractor's work toward meeting the goals as set forth above. A WBE subcontractor meeting the definition of both an MBE and a WBE **may not** be used to achieve both the MBE and WBE required goals. The percentage of WBE firms utilized for the project described herein can only be applied to either MBE or WBE required goals. For purposes of meeting the WBE goals for this project, each participating WBE must be identified as a WBE.

- 4.2.1.4 Prime contractors are strongly encouraged to sub-contract with S/LBE certified WBEs to meet the goals.

#### 4.3 LBE PARTICIPATION GOALS – 60% GOAL

4.3.1 The LBE element of the ECOP program shall include subcontractors, manufacturers, suppliers and/or truckers in calculating achievement of the LBE goal. Any contractor who fails to meet the LBE goals described herein must demonstrate to the satisfaction of the County of Alameda that a good faith effort was made to meet these goals in order to be considered for a contract award.

- 4.3.1.1 The County shall further require that in order to be awarded a contract, a prime contractor must show that a good faith effort was made to provide at least 60% of the total contract amount to an LBE.
- 4.3.1.2 The prime contractor may count a portion or all of its work towards meeting the goal and/or the LBE goal may be achieved by the use of subcontractors, manufacturers, suppliers, and/or truckers.

4.4 S/LBE PARTICIPATION - 20% GOAL

- 4.4.1 The S/LBE element of the ECOP program shall include subcontractors, manufacturers, suppliers and/or truckers in calculating achievement of the S/LBE goal. Any contractor who fails to meet the S/LBE goals described herein must demonstrate to the satisfaction of the County of Alameda that a good faith effort was made to meet these goals in order to be considered for a contract award.
  - 4.4.1.1 The County shall further require that in order to be awarded a contract; a prime contractor must show that a good faith effort was made to provide at least 20% of the total contract amount to an S/LBE.
  - 4.4.1.2 The prime contractor may count a portion or all of its work towards meeting the goal and/or the S/LBE goal may be achieved by the use of subcontractors, manufacturers, suppliers, and/or truckers. For purposes of meeting this goal, the 20% S/LBE participation may also be counted toward achieving the 60% LBE participation goal and/or a part of the prime contractor LBE participation.

5. SMALL BUSINESS ENTERPRISE 5% BID PREFERENCE

- 5.1 Prime contractors who are certified small local businesses (S/LBE) shall be eligible to receive a 5% bid preference. Prime contractors that subcontract with certified small local businesses (S/LBE) (in accordance with the Public Contract Code 2002) for a **minimum 40% of the contract amount will also be eligible to receive this 5% bid preference.** This bid preference shall be applied by multiplying the total Base Bid amount by .95 to determine the bid amount for comparison purposes.

6. HIRING OF LOCAL APPRENTICES, YOUTH, UNEMPLOYED AND UNDEREMPLOYED RESIDENTS (FOR PROJECTS OVER \$125K, BUT UNDER \$1M)

PURPOSE

- 6.1 The County of Alameda, General Services Agency (GSA), Capital Programs (CP) strongly encourages the hiring of local apprentices, youth, unemployed and under-employed County residents to complete the work required for this project. Those firms that can demonstrate the ability and willingness to provide jobs required to complete this project to local apprentices, youth, unemployed and underemployed County residents should include such evidence in their bid response.

**7. GOOD FAITH EFFORTS, ECOP PACKAGE SUBMITTALS, AND EVALUATION PROCEDURES**

- 7.1 It is required that bidders exercise a good faith effort to secure the participation, as set forth in the specifications, of M/W/S/LBE subcontractors, manufacturers, suppliers and/or truckers on the project. Achievement of the ECOP goals shall constitute prima facie evidence of a Good Faith Effort (GFE). The failure of any bidder to make a good faith effort to achieve the specified participation of M/W/S/LBE subcontractors, manufacturers, suppliers and/or truckers shall be grounds for determining that the bid is non-responsive.
- 7.2 Upon request from GSA, **two or more responsible bidders with the lowest responsive bids** must submit to the Project Manager documentation to support the ECOP goals met and the GFEs made. The documentation submitted by each bidder shall be referred to as the ECOP Package.
- 7.3 ECOP bid submittal evaluation will initiate following GSA's determination of the two (2) or more responsible bidders who submitted the lowest responsive bids and their submission of the ECOP Package, which shall include, but not be limited to, ECOP Form 101A, 101B, 102A, 102B and 102C (provided separately as Excel fillable forms) and supporting documentation verifying ECOP goals met and GFEs made. The ECOP Package is to be submitted by the two (2) or more responsible bidders who submitted the lowest responsive bids to GSA **no later than 2:00 p.m. on the second business day following the bid opening and request by GSA.**
- 7.3.1 The individual dollar amounts to be subcontracted to the M/W/S/LBE listed in the bidder's proposal will be listed on the S/LBE Participation Information ECOP Forms 101A and 101B and the M/WBE Subcontractor Participation Information ECOP Forms 102A, 102B and 102C.
- 7.3.2 ECOP Forms 101A, 101B, 102A 102B, 102C (Excel fillable forms), signature page and supporting documentation shall be delivered to the assigned Project Manager.
- 7.4 After the bids are opened, the M/W/S/LBE subcontractors, manufacturers, suppliers and/or truckers who bid to the two (2) or more responsible bidders with the apparent lowest responsive bids are required to provide the amounts of their bids to the County for the purposes of verification. This information shall be certified by a principal of the subcontracting firm. To the extent permitted by law, the information provided by the subcontractors, manufacturers, suppliers and/or truckers will be treated as proprietary, and will be solely for the use of County staff or its agents.
- 7.5 Each ECOP Package will be reviewed and evaluated by GSA or its agents within **approximately five (5) business days of receipt** unless additional time is needed to verify the submittals. Bidders must meet all the ECOP goals **OR** make all the GFEs (see section 7.9) in order for their bid to be deemed responsive.
- 7.6 The ECOP Package must be complete, submitted on a CD or flash drive, and contain legible supporting documents:

7.6.1 ECOP Forms 101A, 101B, 102A, 102B and 102C to be completed electronically and submitted on a CD or flash drive along with the hard copy signature page and supporting documentation.

7.6.2 Supporting certification documentation for the prime contractor and each subcontractor, manufacturer, supplier and/or trucker M/W/S/LBEs submitted in the order they are listed on the ECOP forms **must be submitted as hardcopy**.

7.6.2.1 To be considered towards meeting the ECOP goals bidders must submit:

7.6.2.1.1 Acceptable certifying documentation for the prime contractor and its subcontractors, manufacturers, suppliers and/or truckers, as applicable (for example, local business license with proof of issue and expiration date, certification letters with expiration date).

7.6.2.1.2 Evidence that manufacturers, suppliers, and/or truckers are providing goods or services to subcontractors (for example, letter of intent, agreement).

7.6.3 Documents evidencing those good faith efforts that were made, submitted in the order listed in the table below with the corresponding item number (1-9) noted on each document.

7.6.4 Evidence of M/W/S/LBE participation (copies of bids, agreements, etc.) for all listed subcontractors, manufacturers, suppliers, and/or truckers that are *not* directly contracting with them (for example, material suppliers to subcontractors).

7.7 GSA reserves the right, as it may deem appropriate and necessary, to contact the two or more responsible bidders who submitted the apparent lowest responsive bids during the evaluation process for clarification and/or submission of additional ECOP Goals or GFE documentation.

#### 7.8 ECOP GOALS / GOOD FAITH EFFORTS REQUIRED

Listed in the table (below) are examples of acceptable documentation to support a determination that ECOP goals have been met

	ECOP GOALS	EXAMPLES OF ACCEPTABLE DOCUMENTATION
1	<p><b>60% Local Business Enterprise (LBE)</b></p> <p>LBE participation may consist of the Prime Contractor and Subcontractors and may count towards the LBE, SBE, MBE and/or WBE ECOP goals.</p>	<ul style="list-style-type: none"> <li>• Business license issued by the County of Alameda or a City within the County of Alameda and proof of date issued (which is <b>at least 6 months prior to the date bids were solicited</b>). OR</li> <li>• Certification letter from an acceptable certifying agency* showing a local address and issuance/expiration dates.</li> </ul>

2	<p><b>20% Certified Small Business Enterprise (SBE)</b> Certified SBEs <b>must be Local</b> (S/LBE) to be considered. S/LBE participation may consist of the Prime Contractor and Subcontractors and may count towards the LBE, SBE, MBE and/or WBE ECOP goals.</p> <p>An SBE meets the LBE definition above and the current State definition of a small business that is <b>&lt;100 employees and &lt;\$15 Million annual gross revenues (over the last three years)</b>.</p>	<ul style="list-style-type: none"> <li>• Same as LBE <i>PLUS</i></li> <li>• Current certification document or letter with SBE designation*</li> </ul>
3	<p><b>15% Minority-Owned Business Enterprise (MBE) Subcontractors</b> MBEs are defined per PCC 2000(e)(1), (e)(2) and (f) and are not required to be LBEs. An MWBE may count towards <u>only</u> MBE or WBE participation (not both); however, a local MBE may count towards both LBE and S/LBE ECOP goals.</p> <p>An MBE is a minority-owned business certified by one of the agencies listed below. An MBE can also be an SBE or LBE for purposes of meeting the SBE or LBE subcontracting goals, but an MBE cannot also be considered a WBE.**</p>	<ul style="list-style-type: none"> <li>• Current certification document, letter, etc., with MBE designation**</li> </ul>
4	<p><b>5% Woman-Owned Business Enterprise (WBE) Subcontractors</b> WBEs are defined per PCC 2000(e)(1), (e)(2) and (f) and are not required to be LBEs. An MWBE may count towards <u>only</u> MBE or WBE participation (not both); however, a local WBE may count both towards the LBE and S/LBE ECOP goals.</p> <p>A WBE is a minority-owned business certified by one of the agencies listed below. A WBE can also be an SBE or LBE for purposes of meeting the SBE or LBE subcontracting goals, but a WBE cannot also be considered an MBE.**</p>	<ul style="list-style-type: none"> <li>• Current certification document, letter, etc., with WBE designation**</li> </ul>

\* SBE certification from the following agencies is accepted: Alameda County Transportation Commission (Alameda CTC), California Department of General Services (DGS, Port of Oakland, and when the State SBE definition is met, Alameda County (SLEB certification).

\*\* When the State SBE definition is met MWBE certification from the following agencies is accepted:

Bay Area Rapid Transit (BART), the (CPUC) Supplier Clearinghouse, Western Regional Minority Supplier Development Council (WRMSDC), and Women's Business Enterprise National Council (WBENC).

7.9 The examples of GFE Indicators listed in the table below and suggested samples and are not meant to be mandatory or exclusionary. Other documentation may be acceptable as long as it evidences a GFE. For additional information regarding the ECOP Package submittals contact the GSA Contract Compliance Officer listed in Section IV below.

Required Good Faith Effort Indicators	Examples of Acceptable Documentation
1. The bidder attended mandatory pre-solicitation or pre-bid meetings that were scheduled by the local agency to inform all bidders of the ECOP requirements for the project for which the contract will be awarded.	<ul style="list-style-type: none"> <li>Copy of pre-bid meeting sign-in sheet (which is e-mailed to attendees and available on County Current Contracting Opportunities website listed below). The name of the firm must be listed.</li> </ul> <a href="http://www.acgov.org/gsa_app/gsa/purchasing/bid/content/contractopportunities.jsp">http://www.acgov.org/gsa_app/gsa/purchasing/bid/content/contractopportunities.jsp</a>
2. The bidder identified and selected specific items of the project for which the contract will be awarded to be performed by M/W/S/LBEs to provide an opportunity for participation by those enterprises.	<ul style="list-style-type: none"> <li>Copy of advertisements, certified letters, successfully completed faxes and/or other notices to M/W/S/LBEs with selected specific items identified.</li> </ul>
3. The bidder advertised, <b>not less than ten (10) calendar days before the date the bids are opened</b> , in one or more local daily or weekly newspapers, trade association publications, minority or trade-oriented publications, or trade journals for M/W/S/LBEs that are interested in participating in the project.	<ul style="list-style-type: none"> <li>Copy of advertisements placed showing publication name and date, and dated receipts.</li> <li>Dated receipt with ad copy.</li> </ul>
4. The bidder provided written notice of his or her interest in bidding on the contract to the number of M/W/S/LBEs required to be notified by the project specifications not less than ten (10) calendar days prior to the opening of bids. The bidder may utilize the list of certified local business enterprises in the on-line County Small Local Emerging Business (SLEB) Vendor Query System located at <a href="http://www.acgov.org/sleb_query_app/gsa/sleb/query/slebmenu.jsp">http://www.acgov.org/sleb_query_app/gsa/sleb/query/slebmenu.jsp</a> . The <b>minimum number of M/W/S/LBE firms required to be notified is three (3) for each item</b> of the project selected to be performed by a M/W/S/LBE, where an M/W/S/LBE subcontractor has not been secured for that item.	<ul style="list-style-type: none"> <li>Copy of dated notice, complete distribution list(s) and evidence of distribution (proof of faxes, e-mails sent etc.)</li> <li>Undelivered faxes do not count toward the effort to meet the minimum requirement</li> <li>Trades and specialties, in addition to M/W/S/LBE designation, must be clearly identified to meet the minimum requirement by using certification letter or source documentation</li> </ul>
5. The bidder followed up initial solicitations of interest by contacting the enterprises to determine with certainty whether the enterprises were interested in performing specific items of the project.	<ul style="list-style-type: none"> <li>Successfully completed telephone log containing specific dates, name of caller, person contacted and comments (i.e., why not bidding, information sent to/date)</li> </ul>



<p>6. The bidder provided interested M/W/S/LBEs with information about the plans, specifications, and requirements for the selected subcontracting or material supply work.</p>	<ul style="list-style-type: none"> <li>• Copy of published advertisements, letters, successfully completed faxes, etc. with M/W/S/LBE name/contact information including the required information or directions on how to obtain it and the date the information was provided</li> <li>• Agenda, meeting notes, etc. including specific topics discussed, M/W/S/LBE firm names and contact persons in attendance that received information, and the location and date information was provided</li> </ul>
<p>7. The bidder requested assistance from local and small business and minority and women community organizations; local and small, minority and women contractor groups, local, state, or federal M/W/S/LBE assistance offices, or other organizations that provide assistance in recruitment and placement of M/W/S/LBEs.</p>	<ul style="list-style-type: none"> <li>• Copy of dated written request and response (letter, successfully completed fax, e-mail, etc.)</li> <li>• Or 2<sup>nd</sup> written request to follow-up, if needed. Phone log is not acceptable.</li> </ul>
<p>8. The bidder negotiated in good faith with the M/W/S/LBEs and did not unjustifiably reject as unsatisfactory bids prepared by any M/W/S/LBEs as determined by GSA</p>	<ul style="list-style-type: none"> <li>• Copies or list of all bids and a spreadsheet listing all bids with firm name, contact person, bid items(s), bid price, M/W/S/LBE classification, and comments re-selection or rejection</li> <li>• M/W/S/LBE bids accepted and included in bid response</li> </ul>
<p>9. Where applicable, the bidder advised and made efforts to assist interested M/W/S/LBEs in obtaining bonds, lines of credit, or insurance required by either the GSA or the contractor.</p>	<ul style="list-style-type: none"> <li>• Copy of advertisements or other notices with specifics referencing willingness to assist M/W/S/LBEs</li> <li>• Agenda, meeting notes including presenter's name and title, specific topics discussed, handouts etc., name of M/W/S/LBE firms in attendance, contact persons who received advice, location, and</li> </ul>

7.10 The performance by a bidder of the GFE Indicators specified in the table above shall create a rebuttable presumption, affecting the burden of producing evidence, that a bidder has made a good faith effort to comply with the goals and requirements relating to participation by M/W/S/LBEs established pursuant to Section 4 herein.

## 8. JOINT VENTURES

- 8.1 Whenever a joint venture occurs involving either a prime or non-prime (for example, subcontractors, manufacturers, suppliers, and truckers) M/W/S/LBE firm at any level of contracting, trucking, manufacturing, or supplying, the prime contractor shall provide the County with a full account of the nature of ownership interests, the basis for creation of the joint venture, and the particular financial participation and administrative responsibilities of the interested parties. In evaluating the prime contractor's effort, the M/W/S/LBE percentage that is to be attributed to a joint venture shall be determined by multiplying the percentage of the total contract amount that is to be performed by the joint venture times the percentage of actual financial participation in the joint venture represented by the M/W/S/LBE business.

## **9. NONDISCRIMINATION**

### **9.1 Purpose**

- 9.1 The Contractor shall comply with the Americans with Disabilities Act and Title VII of the Civil Rights Act of 1964 and shall not, in regard to any position for which an employee or applicant for employment is qualified, discriminate against any employee or applicant for employment because of race, creed, color, disability, sex, sexual orientation, political affiliation, or by any other non-merit factors be otherwise subjected to discrimination. The Contractor shall apply the ECOP that ensures applicants are employed, and that employees are treated during employment without regard to their race, age, religion, Vietnam Era Veteran's status, political affiliation, or any other non-merit factors. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other terms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
- 9.2 Contractor shall, in all solicitations or advertisements for employees placed on behalf of the County, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, disability, sex, sexual orientation or national origin, age, religion, Vietnam Era Veteran's status, political affiliation, or any other non-merit factors.

## **SECTION II**

### **CONTRACT COMPLIANCE REQUIREMENTS**

#### **1. APPLICATION**

- 1.1 The following provisions shall apply to all contracts subject to the provisions of Section I and/or Section IV.

#### **2. ALAMEDA COUNTY CONTRACT COMPLIANCE SYSTEM**

- 2.1 Alameda County utilizes the Elation Systems contract compliance application as part of its commitment to assist contractors to comply with certain legal and contractual requirements. The Elation Systems, a secure web-based computer system, was implemented to monitor compliance and to track and report M/W/S/LBE participation in County contracts.



- 2.2 The prime contractor and all participating local and M/W/S/LBE subcontractors awarded contracts as a result of the bid process for this project are required to use the Elation System to submit ECOP information including, but not limited to, weekly certified payrolls, monthly progress payment reports and other information related to M/W/S/LBE participation. Use of the Elation System, support and training is available at no charge to prime and subcontractors participating in County contracts.
- 2.3 Upon contract award:
  - 2.3.1 The County will provide contractors and subcontractors participating in any contract awarded as a result of this bid process, a code that will allow them to register and use the Elation System free of charge.
  - 2.3.2 Contractors should schedule a representative from their office/company, along with each of their subcontractors, to attend Elation Systems training.
    - 2.3.2.1 Free multi-agency Elation Systems one-hour training sessions require reservations and are held monthly in the Pleasanton, CA area.
- 2.4 It is the Contractor's responsibility to ensure that they and their subcontractors are registered and trained as required to utilize Elation Systems.
  - 2.4.1 For systems support visit Elation Systems online at <http://www.elationsys.com/> or contact them at (925) 924-0340.
  - 2.4.2 If you have questions regarding the utilization of the Elation Systems, please contact Elation Systems or the Project Manager.

### **3. MEETINGS**

- 3.1 After the award of the contract and prior to beginning work, the General Services Agency may hold a pre-construction conference at which a representative of the Contractor and of each subcontractor must attend. As it becomes necessary during the course of the contract, the General Services Agency may call meetings of the Contractor and pertinent subcontractors.

### **4. INFORMATION AND RECORDS**

- 4.1 For the purposes of determining compliance with this program, the Contractor shall provide the County with access to all records and documents that relate to M/W/S/LBE participation. To the extent permitted by applicable law, proprietary information will be safeguarded.
- 4.2 The Contractor must submit the following information to the General Services Agency on Alameda County approved forms. All subcontractor submittals must be through the prime contractor.
  - 4.2.1 S/LBE Participation Information and M/WBE Subcontractor Participation Information, (ECOP Forms 101A, 101B, 102A, and 102B provided separately as Excel fillable forms)

submitted no later than 2:00 p.m. on the second business day following the bid opening and request by GSA.

- 4.2.2 Checklist for Review of Good Faith Efforts (ECOP Form 102C (also provided separately) submitted no later than 2:00 p.m. on the second business day following notification and request by GSA.

## 5. SUBSTITUTION OF M/W/S/LBE FIRMS

- 5.1 Substitution of other **firms** (subcontractors at any level, manufacturers, suppliers and/or truckers) for those listed in the proposal on the sheet entitled M/WBE Subcontractor Participation Information or S/LBE Participation Information **shall not** be made without prior approval of the County, and shall be in accordance with State or Federal law where applicable.

## SECTION III

### NON-COMPLIANCE WITH ECOP

#### 1. APPLICATION

- 9.3 The following provisions shall apply to all contracts subject to the provisions of Section I and/or Section IV.

#### 2. DETERMINATION OF NON-COMPLIANCE

- 9.4 During the performance of the contract, if the General Services Agency has reason to believe or finds that the Contractor has not met the ECOP requirements in the contract, the Director of the General Services Agency (or the Director's designee) shall hold a meeting with the Contractor for the purpose of determining whether the Contractor is out of compliance. If after the meeting the Contractor is found to be out of compliance, the Contractor will be notified of a public hearing. The public hearing will be held before the Board of Supervisors with a **minimum five calendar-day notice given to the Contractor**. If the Board of Supervisors finds that there has been a violation, the County will notify the Contractor in writing of the sanctions to be imposed by the Board.

#### 3. SANCTIONS

- 9.5 A finding at the public hearing that there has been a violation of the ECOP requirements of the contract shall be cause for the Board of Supervisors to impose any or all of the following sanctions:
- 9.5.1 **Withhold an additional ten percent (10%) of all further contract progress payments** until the Contractor provides evidence satisfactory to the Board of Supervisors that the condition of noncompliance has been corrected.
- 9.5.2 Suspend the contract until such time as the Contractor provides evidence satisfactory to the Board of Supervisors that the condition of noncompliance has been corrected.
- 9.5.3 Terminate the contract and collect appropriate damages from the Contractor.

- 9.5.4 Declare that the Contractor is not a responsible bidder and is ineligible to make bids on future County contracts for a stated period of time or until the Contractor can demonstrate to the satisfaction of the Board of Supervisors that the violation has been corrected.

## SECTION IV

### 1. OUTREACH

- 1.1 To promote the ECOP goals and assist contractors and subcontractors in their efforts to develop the relationships they may require to meet the ECOP goals for this project, the County will
- 1.1.1 E-mail the Notice to Bidders to vendors in the County Vendor Database and other sources. Advertise the project **once a week for at least 2 consecutive weeks** in a newspaper of general circulation in the county where the project is located, trade organizations and chambers of commerce, and plan rooms. Notice of this project will also be posted on the County Current Contracting Opportunities and Calendar of Events websites (see website URL addresses below).
- 1.1.2 Incorporate a networking and informational component in the mandatory bid walk/site visit.
- 1.1.3 Provide information about the project, the ECOP, and other current and upcoming projects at the bid conference/networking meeting.
- 1.1.4 E-mail the list of attendees from the mandatory bid walk to each attendee when issuing the first Addendum for the Project and post the attendance and first Addendum on the Current Contracting Opportunities website.

### 2. CONTRACTOR RESOURCES

The following sources may be contacted for assistance in soliciting M/W/S/LBE participation:

#### Asian American Contractors Association

Juliana Choy Sommer, President  
(415) 642-1818  
[www.aaca-sf.com](http://www.aaca-sf.com)

#### Western Regional Minority Supplier Development Council (WRMSDC) –

##### MBE certifications only

80 Swan Way, Suite 245  
Oakland, CA 94621  
(510) 686-2555  
[www.wrmsdc.org](http://www.wrmsdc.org)

#### Women's Business Enterprise National Council (WBENC)

WBE certifications only – [www.wbenc.org](http://www.wbenc.org)

Visit the following County of Alameda GSA websites for



<b>CERTIFIED SMALL LOCAL VENDORS</b>	<a href="http://www.acgov.org/sleb_query_app/gsa/sleb/query/slebresultlist.jsp?smEmInd=C">http://www.acgov.org/sleb_query_app/gsa/sleb/query/slebresultlist.jsp?smEmInd=C</a> -
<b>CURRENT CONTRACT OPPORTUNITIES</b>	<a href="http://www.acgov.org/gsa_app/gsa/purchasing/bid_content/contractopportunities.jsp">http://www.acgov.org/gsa_app/gsa/purchasing/bid_content/contractopportunities.jsp</a>
<b>UPCOMING CONTRACT OPPORTUNITIES</b>	<a href="http://www.acgov.org/gsa_app/gsa/purchasing/bid_content/futurecontractopportunities.jsp">http://www.acgov.org/gsa_app/gsa/purchasing/bid_content/futurecontractopportunities.jsp</a> -
<b>CALENDAR OF EVENTS</b>	<a href="http://www.acgov.org/calendar_app/DisplayListServlet?site=Internet&amp;ag=GSA&amp;ty=PUR">http://www.acgov.org/calendar_app/DisplayListServlet?site=Internet&amp;ag=GSA&amp;ty=PUR</a>
<b>COUNTY OF ALAMEDA HOME PAGE</b>	<a href="http://www.acgov.org/index.htm">http://www.acgov.org/index.htm</a>

## BIDDER INFORMATION AND ACCEPTANCE

*(Submit hardcopy of this completed page along with all hardcopy ECOP supporting documentation.)*

The undersigned has read and agrees to the Supplementary Instructions to Bidders – Enhanced Construction Outreach Program, Document 00 22 19 of the Bid packet and declares that the ECOP Forms 101A, 101B, 102A, 102B and 102C (Excel Fillable Forms provided separately) have been completed accurately by the Prime Firm submitting the bid.

Official Name of Bidder: \_\_\_\_\_

Street Address Line 1: \_\_\_\_\_

Street Address Line 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Webpage: \_\_\_\_\_

Type of Entity / Organizational Structure (check one):

☐ Corporation

☐ Joint Venture

☐ Limited Liability Partnership

☐ Partnership

☐ Limited Liability Corporation

☐ Non-Profit / Church

☐ Other: \_\_\_\_\_

Jurisdiction of Organization Structure: \_\_\_\_\_

Date of Organization Structure: \_\_\_\_\_

Federal Tax Identification Number: \_\_\_\_\_

Primary Contact Information:

Name / Title: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

**SIGNATURE:** \_\_\_\_\_

Name and Title of Signer: \_\_\_\_\_

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_

## EXISTING CONDITIONS INFORMATION

### 1. Summary

This document describes existing conditions at or near the Project, and use of information available regarding existing conditions. This document is **not** part of the Contract Documents. See General Conditions for definition(s) of terms used herein.

### 2. Reports and Information on Existing Conditions

- 2.1. Documents providing a general description of the Site and conditions of the Work may have been collected by County its consultants, contractors, and tenants. These documents may include previous contracts, contract specifications, tenant improvement contracts, as-built drawings, utility drawings, and information regarding underground facilities.
- 2.2. Information regarding existing conditions may be inspected at the County offices or the Construction Manager's offices, if any, and copies may be obtained at cost of reproduction and handling upon Bidder's agreement to pay for such copies. These reports, documents, and other information are **not** part of the Contract Documents.
- 2.3. Information regarding existing conditions may also be included in the Project Manual, but shall **not** be considered part of the Contract Documents.
- 2.4. The reports and other data or information regarding existing conditions and underground facilities at or contiguous to the Project are the following:
  - 2.4.1. Original Construction Drawings.
  - 2.4.2. Survey of Site.
  - 2.4.3. Hazardous Material Reports

### 3. Use of Information

- 3.1. Information regarding existing conditions was obtained only for use of County and its consultants, contractors, and tenants for planning and design and is **not** part of the Contract Documents.
- 3.2. County does not warrant, and makes no representation regarding, the accuracy or thoroughness of any information regarding existing conditions. Bidder represents and agrees that in submitting a bid it is not relying on any information regarding existing conditions supplied by County.

- 3.3. Under no circumstances shall County be deemed to warrant or represent existing above-ground conditions, as-built conditions, or other actual conditions, verifiable by independent investigation. These conditions are verifiable by Contractor by the performance of its own independent investigation, which Contractor must perform as a condition to bidding, and Contractor should not and shall not rely on this information or any other information supplied by County regarding existing conditions.
- 3.4. Any information shown or indicated in the reports and other data supplied herein with respect to existing underground facilities at or contiguous to the Project may be based upon information and data furnished to County by the County's employees and/or consultants or builders of such underground facilities or others. County does not assume responsibility for the completeness of this information, and Bidder is solely responsible for any interpretation or conclusion drawn from this information.
- 3.5. County shall be responsible only for the general accuracy of information regarding underground facilities, and only for those underground facilities that are owned by County, and only where Bidder has conducted the independent investigation required of it pursuant to the Instructions to Bidders, and discrepancies are not apparent.

#### **4. Investigations/Site Examinations**

- 4.1. Before submitting a Bid, each Bidder is responsible for conducting or obtaining any additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and underground facilities) at or contiguous to the Site or otherwise, that may affect cost, progress, performance, or furnishing of Work or that relate to any aspect of the means, methods, techniques, sequences, or procedures of construction to be employed by Bidder and safety precautions and programs incident thereto or that Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the time, price, and other terms and conditions of the Contract Documents.
- 4.2. On request, County will provide each Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies, as each Bidder deems necessary for submission of a Bid. Bidders must fill all holes and clean up and restore the Site to its former condition upon completion of its explorations, investigations, tests, and studies. Such investigations and Site examinations may be performed during any and all Site visits indicated in the Notice to Bidders and only under the provisions of the Contract Documents, including, but not limited to, proof of insurance and obligation to indemnify against claims arising from such work, and County's prior approval.

END OF DOCUMENT

DOCUMENT 00 41 13

**BID FORM – STIPULATED SUM (SINGLE-PRIME CONTRACT)**

To: The County of Alameda

From: \_\_\_\_\_  
(Proper Name of Bidder)

The undersigned declares that the Contract Documents including, without limitation, the Notice to Bidders Document 00 11 16, the Instructions to Bidders Document 00 21 13 and the Supplementary Instructions to Bidders – Construction Outreach Program Document 00 22 19 have been read and agrees and proposes to furnish all necessary labor, materials, and equipment to perform and furnish all work in accordance with the terms and conditions of the Contract Documents, including, without limitation, the Drawings and Specifications.

**PROJECT: #18001 BHCS Data Upgrade II**

(“Project” or “Contract”) and will accept in full payment for that Work the following total lump sum amount, all taxes included:

	\$ _____
	\$ _____
	\$ _____
_____ dollars	\$ _____
<b>TOTAL BASE BID</b>	

**Additive/Deductive Alternates:**

**Alternate #1**

_____ dollars	\$ _____
<b>(ADD DESCRIPTION)</b> Additive/Deductive	



**Alternate #2**

_____ dollars      \$ _____
(ADD DESCRIPTION) Additive/Deductive

**Alternate #3**

_____ dollars      \$ _____
(ADD DESCRIPTION) Additive/Deductive

Descriptions of alternates are primarily scope definitions and do not necessarily detail the full range of materials and processes needed to complete the construction.

1. **Unit Prices.** The Bidder's Base Bid includes the following unit prices, which the Bidder must provide and County may, at its discretion, utilize in valuing additive and/or deductive change orders;

_____
_____
_____

2. The undersigned has reviewed the Work outlined in the Contract Documents and fully understands the scope of Work required in this Bid, understands the construction and project management function(s) is described in the Contract Documents, and that each Bidder who is awarded a contract shall be in fact a prime contractor, not a subcontractor, to County, and agrees that its Bid, if accepted by County, will be the basis for the Bidder to enter into a contract with County in accordance with the intent of the Contract Documents.
3. The undersigned has notified County in writing of any discrepancies or omissions or of any doubt, questions, or ambiguities about the meaning of any of the Contract Documents, and has contacted the Construction Manager before bid date to verify the issuance of any clarifying Addenda.

4. The undersigned agrees to commence work under this Contract on the date established in the Contract Documents and to complete all work within the time specified in the Contract Documents.
5. The liquidated damages clause of the General Conditions and Agreement is hereby acknowledged.
6. It is understood that County reserves the right to reject this bid and that the bid shall remain open to acceptance and is **irrevocable for a period of ninety (90) days**.
7. The following documents are attached hereto:
  - a. **Bid Bond** on Bid Security Form Document 00 43 13 or other security
  - b. **Designated Subcontractors List** Document 00 43 36
  - c. **Site-Visit Certification** Document 00 45 01, if a site visit was required
  - d. **Non-Collusion Affidavit** Document 00 45 13
  - e. **Construction Outreach Program Certifications** as required by Supplementary Instructions to Bidders - Construction Outreach Program Document 00 22 19
  - f. Completed **Debarment Form**, Document 00 52 13.1

Receipt and acceptance of the following addenda is hereby acknowledged:

No.____, Dated _____	No.____, Dated _____
No.____, Dated _____	No.____, Dated _____
No.____, Dated _____	No.____, Dated _____
No.____, Dated _____	No.____, Dated _____

8. Bidder acknowledges that the license required for performance of the Work is a **B General Building Contractor, C-7 Low Voltage Systems Contractor and C-10 Electrical Contractor**.
9. The undersigned hereby certifies that Bidder is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the Work.

10. The Bidder represents that it is competent, knowledgeable and has special skills with respect to the nature, extent, and inherent conditions of the Work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the Work that may create, during the Work, unusual or peculiar unsafe conditions hazardous to persons and property.
11. Bidder expressly acknowledges that it is aware of such peculiar risks and that it has the skill and experience to foresee and to adopt protective measures to adequately and safely perform the Work with respect to such hazards (including working in the designated OSHA Confined Space environment utility tunnel).
12. Bidder expressly acknowledges that it is aware that if a false claim is knowingly submitted (as the terms "claim" and "knowingly" are defined in the California False Claims Act, Cal. Gov. Code, §12650 et seq.), County will be entitled to civil remedies set forth in the California False Claim Act. It may also be considered fraud and the Contractor may be subject to criminal prosecution.
13. The undersigned Bidder certifies that it is, at the time of bidding, and shall be throughout the period of the contract, licensed by the State of California to do the type of work required under the terms of the Contract Documents. Bidder further certifies that it is regularly engaged in the general class and type of work called for in the Contract Documents.
14. Section intentionally omitted.

Furthermore, Bidder hereby certifies to County that all representations, certifications, and statements made by Bidder, as set forth in this bid form, are true and correct and are made under penalty of perjury pursuant to the laws of California.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_

Name of Bidder \_\_\_\_\_

Type of Organization \_\_\_\_\_

Signed by \_\_\_\_\_

Title of Signer \_\_\_\_\_

Address of Bidder \_\_\_\_\_

Taxpayer's Identification No. of Bidder \_\_\_\_\_

Telephone Number \_\_\_\_\_

Fax Number \_\_\_\_\_

E-mail \_\_\_\_\_ Web page \_\_\_\_\_

Contractor's License No(s): No.: \_\_\_\_\_ Class: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

No.: \_\_\_\_\_ Class: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

No.: \_\_\_\_\_ Class: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

Department of Industrial Relations Registration Number: \_\_\_\_\_

If Bidder is a corporation, affix corporate seal.

Name of Corporation: \_\_\_\_\_

President: \_\_\_\_\_

Secretary: \_\_\_\_\_

Treasurer: \_\_\_\_\_

Manager: \_\_\_\_\_

END OF DOCUMENT

DOCUMENT 00 43 13

**BID SECURITY FORM**  
**(Bid Bond)**

**(Note: If Bidder is providing a bid bond as its bid security, Bidder must use this form, NOT a surety company form.)**

KNOW ALL PERSONS BY THESE PRESENTS:

That the undersigned, as \_\_\_\_\_ as Principal ("Principal"),

and \_\_\_\_\_ as Surety ("Surety"),

a corporation organized and existing under and by virtue of the laws of the State of \_\_\_\_\_ and authorized to do business as a surety in the State of California, are held and firmly bound unto the County of Alameda, State of California as Obligee, in the sum of

\_\_\_\_\_ (\$ \_\_\_\_\_)

lawful money of the United States of America, for the payment of which sum well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has submitted a bid to County for all Work specifically described in the accompanying bid;

Now, therefore, if the Principal is awarded the Contract and, within the time and manner required under the Contract Documents, after the prescribed forms are presented to Principal for signature, enters into a written contract, in the prescribed form in accordance with the bid, and files two bonds, one guaranteeing faithful performance and the other guaranteeing payment for labor and materials as required by law, and meets all other conditions to the contract between the Principal and the Obligee becoming effective, or if the Principal shall fully reimburse and save harmless the Obligee from any damage sustained by the Obligee through failure of the Principal to enter into the written contract and to file the required performance and labor and material bonds, and to meet all other conditions to the Contract between the Principal and the Obligee becoming effective, then this obligation shall be null and void; otherwise, it shall be and remain in full force and effect. The full payment of the sum stated above shall be due immediately if Principal fails to execute the Contract **within seven (7) days of the date of the County's Notice of Award** to Principal.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or 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 the Contract or the call for bids, or to the work, or to the specifications.

In the event suit is brought upon this bond by the Obligee and judgment is recovered, the Surety shall pay all costs incurred by the Obligee in such suit, including a reasonable attorneys' fee to be fixed by the Court.

If the County awards the bid, the security of unsuccessful bidder(s) shall be returned **within sixty (60) days from the time the award** is made. Unless otherwise required by law, no bidder may withdraw its bid **for ninety (90) days after the date of the bid opening**.

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety above named, on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

(Affix Corporate Seal)

\_\_\_\_\_  
Principal

\_\_\_\_\_  
By

(Affix Corporate Seal)

\_\_\_\_\_  
Surety

\_\_\_\_\_  
By

\_\_\_\_\_  
Name of California Agent of Surety

\_\_\_\_\_  
Address of California Agent of Surety

\_\_\_\_\_  
Telephone Number of California Agent of Surety

**Bidder must attach Power of Attorney and Certificate of Authority for Surety and a Notarial Acknowledgment for all Surety's signatures. The California Department of Insurance must authorize the Surety to be an admitted Surety Insurer.**

END OF DOCUMENT

DOCUMENT 00 43 36

## DESIGNATED SUBCONTRACTORS LIST

PROJECT: #18001 BHCS Data Upgrade II

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

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

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

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

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

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

END OF DOCUMENT



DOCUMENT 00 45 01

**SITE-VISIT CERTIFICATION**

**PROJECT: #18001 BHCS Data Upgrade II**

Check whichever option applies:

\_\_\_\_\_ I certify that I visited the Site of the proposed Work and became fully acquainted with the conditions relating to construction and labor. I fully understand the facilities, difficulties, and restrictions attending the execution of the Work under contract.

\_\_\_\_\_ I certify that \_\_\_\_\_ (Bidder's representative) visited the Site of the proposed Work and became fully acquainted with the conditions relating to construction and labor. The Bidder's representative fully understood the facilities, difficulties, and restrictions attending the execution of the Work under contract.

Bidder fully indemnifies the County of Alameda, its Architect, its Engineer, its Construction Manager, and all of their respective officers, agents, employees, and consultants from any damage, or omissions, related to conditions that could have been identified during my visit and/or the Bidder's representative's visit to the Site.

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

Date: \_\_\_\_\_

Proper Name of Bidder: \_\_\_\_\_

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

END OF DOCUMENT

# NON-COLLUSION AFFIDAVIT

## Public Contract Code Section 7106

[illegible]

Date: \_\_\_\_\_

Proper Name of Bidder: \_\_\_\_\_

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

**NON-COLLUSION AFFIDAVIT**  
**DOCUMENT 00 45 13**

DOCUMENT 00 45 26

## WORKERS' COMPENSATION CERTIFICATION

PROJECT: #18001 BHCS Data Upgrade II between County of Alameda (the "County" or the "Owner") and \_\_\_\_\_ (the "Contractor" or the "Bidder") (the "Contract" or the "Project").

Labor Code section 3700 in relevant part provides:

Every employer except the State 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 of 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 his employees.

I am aware of the provisions of section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the Work of this Contract.

Date: \_\_\_\_\_

Proper Name of Contractor: \_\_\_\_\_

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

(In accordance with Article 5 - commencing at section 1860, chapter 1, part 7, division 2 of the Labor Code, the above certificate must be signed and filed with the awarding body prior to performing any Work under this Contract.)

END OF DOCUMENT

DOCUMENT 00 45 46.01

**PREVAILING WAGE AND  
RELATED LABOR REQUIREMENTS CERTIFICATION**

PROJECT: **#18001 BHCS Data Upgrade II** between County of Alameda (the “County” or the “Owner”) and \_\_\_\_\_ (the “Contractor” or the “Bidder”) (the “Contract” or the “Project”).

I hereby certify that I will conform to the State of California Public Works Contract requirements regarding prevailing wages, benefits, on-site audits with 48-hours notice, payroll records, and apprentice and trainee employment requirements, for all Work on the above Project.

I hereby acknowledge that County will use the Alameda County Contract Compliance System, including the Elation Systems, Inc. program, to monitor contract labor compliance and Local Hiring Program compliance monitoring. Contractor shall use these Compliance Systems to meet County’s requirements, and shall participate in training as directed by County in order to become and remain competent in the use of the Compliance Systems. Costs associated with the Alameda County Contract Compliance System, including the Elation Systems, Inc. programs shall be borne by Contractor and shall not increase the cost of the Contract.

Date: \_\_\_\_\_

Proper Name of Contractor: \_\_\_\_\_

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

END OF DOCUMENT

DOCUMENT 00 45 46.04

## HAZARDOUS MATERIALS CERTIFICATION

PROJECT: #18001 BHCS Data Upgrade II ("Contract" or "Project") between the County of Alameda ("County") and \_\_\_\_\_ ("Contractor")

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

Date: \_\_\_\_\_

Proper Name of Contractor: \_\_\_\_\_

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

END OF DOCUMENT

DOCUMENT 00 45 46.06

## IMPORTED MATERIALS CERTIFICATION

PROJECT: #18001 BHCS Data Upgrade II between County of Alameda ("County" or "Owner") and \_\_\_\_\_ ("Contractor") ("Contract" or "Project").

This form shall be executed by the Contractor and by all entities that, in any way, provide or deliver and/or supply any soils, aggregate, or related materials ("Fill") to the Project Site. All Fill shall satisfy all requirements of any environmental review of the Project performed pursuant to the statutes and guidelines of the California Environmental Quality Act, and section 21000 et seq. of the Public Resources Code ("CEQA").

To the furthest extent permitted by California law, Contractor shall defend, indemnify, and hold harmless the County, its agents, representatives, officers, consultants, employees, trustees, and volunteers pursuant to the indemnification provisions in the Contract Documents for, without limitation, any claim(s) connected with providing, delivering, and/or supplying Fill.

Certification of: ☐ Delivery Firm/Transporter ☐ Supplier ☐ Manufacturer  
☐ Wholesaler ☐ Broker ☐ Retailer  
☐ Distributor ☐ Other \_\_\_\_\_

Type of Entity ☐ Corporation ☐ General Partnership  
☐ Limited Partnership ☐ Limited Liability Company  
☐ Sole Proprietorship ☐ Other \_\_\_\_\_

Name of firm ("Firm"): \_\_\_\_\_

Mailing address: \_\_\_\_\_

Addresses of branch office used for this Project: \_\_\_\_\_

If subsidiary, name and address of parent company: \_\_\_\_\_

By my signature below, I hereby certify that I am aware of section 25260 of the Health and Safety Code and the sections referenced therein regarding the definition of hazardous material. I further certify on behalf of the Firm that all soils, aggregates, or related materials provided, delivered, and/or supplied or that will be provided, delivered, and/or supplied by this Firm to the

Project Site are free of any and all hazardous material as defined in section 25260 of the Health and Safety Code. I further certify that I am authorized to make this certification on behalf of the Firm.

Date: \_\_\_\_\_

Proper Name of Contractor: \_\_\_\_\_

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

END OF DOCUMENT

DOCUMENT 00 51 00

**NOTICE OF AWARD**

Dated: \_\_\_\_\_ 2018

To: \_\_\_\_\_  
(Contractor)

To: \_\_\_\_\_  
(Address)

From: The County of Alameda

PROJECT: **#18001 BHCS Data Upgrade II** ("Project" or "Contract").

Contractor has been awarded the referenced Contract on \_\_\_\_\_, 2018, by action of the County's Board of Supervisors.

The Contract Price is \_\_\_\_\_ Dollars (\$\_\_\_\_\_),  
and includes alternates \_\_\_\_\_.

Three (3) copies of each of the Contract Documents (except Drawings and Specifications) accompany this Notice of Award. Drawings will be made available. Copies are available at cost of reproduction.

The Bidder to whom Contract is awarded shall execute and submit the following documents **by 5:00 p.m. of the SEVENTH (7<sup>TH</sup>) Calendar day following the date of the Notice of Award**. Failure to properly and timely submit these documents entitles County to reject the bid as non-responsive.

- a. **Agreement:** To be executed by successful Bidder. Submit four (4) copies, each bearing an original signature.
- b. **Escrow of Bid Documentation:** This must include all required documentation. See the document Escrow of Bid Documentation for more information.
- c. **Performance Bond (100%):** On the form provided in the Contract Documents and fully executed as indicated on the form.
- d. **Payment Bond (100%) (Contractor's Labor and Material Payment Bond):** On the form provided in the Contract Documents and fully executed as indicated on the form.
- e. **Insurance Certificates and Endorsements** as required.



- f. **Workers' Compensation Certification.**
- g. **Prevailing Wage and Related Labor Requirements Certification.**
- h. **Hazardous Materials Certification.**
- i. **Imported Materials Certification.**
- j. Completed, signed Document 00 52 13.1 **Debarment And Suspension Certification** Form

Failure to comply with these conditions within the time specified will entitle County to consider your bid abandoned, to annul this Notice of Award, and to declare your Bid Security forfeited, as well as any other rights the County may have against the Contractor.

After you comply with those conditions, County will return to you one fully signed counterpart of the Agreement.

The County of Alameda

BY: \_\_\_\_\_

NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

END OF DOCUMENT

DOCUMENT 00 51 13

## NOTICE OF INTENT TO AWARD

[DATE]

[NAME]

[COMPANY]

[ADDRESS]

[CITY, STATE ZIP]

**SUBJECT: INTENT TO AWARD A CONTRACT FOR PROJECT NO. 18001**

Thank you for your participation and interest in the County of Alameda. Based on its evaluation and acceptance of the bids submitted, GSA will be recommending to its Board of Supervisors that the contract for project number 18001 be awarded to [CONTRACTOR].

GSA's recommendation to accept and award a contract should go before the Board on Tuesday, [DATE, 2018]. Upon Board approval a draft contract will be submitted to the awardee for review. A signed contract will be issued along with an Agreement Form and Notice to Proceed. The County is unable to pay for goods and services received without a signed contract.

Below is a summary of all bids/proposals received for this project.

Bidder	Location	Bid Price*

(\*) – A 5% bid preference (stipulated in the ECOP) was given to \_\_\_\_\_; therefore, their bid is evaluated at \$\_\_\_\_\_ which makes them the lowest responsive bidder.

Please refer to Document 00 21 13 - Instructions to Bidders for additional information.

For information on other contracting opportunities please visit our websites at [http://www.acgov.org/gsa/purchasing/bid\\_content/FutureContractOpportunities.jsp](http://www.acgov.org/gsa/purchasing/bid_content/FutureContractOpportunities.jsp) for Upcoming Contracting Opportunities and [http://www.acgov.org/gsa/purchasing/bid\\_content/ContractOpportunities.jsp](http://www.acgov.org/gsa/purchasing/bid_content/ContractOpportunities.jsp) for Current Contracting Opportunities.

The County of Alameda

BY: \_\_\_\_\_

NAME: Gerald K. Loeper

TITLE: Architect, GSA Project Manager

END OF DOCUMENT

DOCUMENT 00 52 13

**AGREEMENT FORM – STIPULATED SUM  
(SINGLE-PRIME CONTRACT)**

THIS AGREEMENT IS MADE AND ENTERED INTO THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2018, by and between the County of Alameda (County”) and \_\_\_\_\_ (“Contractor”) (“Agreement”).

**WITNESSETH:** That the parties hereto have mutually covenanted and agreed, and by these presents do covenant and agree with each other, as follows:

1. **The Work:** Contractor agrees to furnish all tools, equipment, apparatus, facilities, labor, and material necessary to perform and complete in a good and workmanlike manner, the work of

PROJECT: **#18001 BHCS Data Upgrade II**  
 (“Project” or “Contract” or “Work”)

for which the Drawings and Specifications are identified by the signature of the parties to this Agreement. It is understood and agreed that the Work shall be performed and completed as required in the Contract Documents including, without limitation, the Drawings and Specifications, under the direction and supervision of, and subject to, the approval of County or its authorized representative.

2. **The Contract Documents:** The complete Contract consists of all Contract Documents as defined in the General Conditions and incorporated herein by this reference. Any and all obligations of the County and Contractor are fully set forth and described in the Contract Documents. All Contract Documents are intended to cooperate so that any Work called for in one and not mentioned in the other or vice versa is to be executed the same as if mentioned in all Contract Documents.
3. **Interpretation of Contract Documents:** Should any question arise concerning the intent or meaning of Contract Documents, including the Drawings or Specifications, the question shall be submitted to the County for interpretation. If a conflict exists in the Contract Documents, modifications, beginning with the most recent, shall control over this Agreement, which shall control over the Special Conditions, which shall control over the General Conditions, which shall control over the remaining Division 00 documents, which shall control over Division 01 Documents, which shall control over Division 02 through Division 49 documents, which shall control over figured dimensions, which shall control over large-scale drawings, which shall control over small-scale drawings. In no case shall a document calling for lower quality and/or quantity material or workmanship control. The decision of County in the matter shall be final.

4. **Time For Completion:** It is hereby understood and agreed that the work under this contract shall be **completed within One Hundred Eighty (180) consecutive calendar days** ("Contract Time") from the date specified in the County's Notice to Proceed.
5. **Completion-Extension Of Time:** Should the Contractor fail to complete this Contract, and the Work provided herein, within the time fixed for completion, due allowance being made for the contingencies provided for herein, the Contractor shall become liable to the County for all loss and damage that the County may suffer on account thereof. The Contractor shall coordinate its work with the Work of all other contractors. County shall not be liable for delays resulting from Contractor's failure to coordinate its Work with other contractors in a manner that will allow timely completion of Contractor's Work. Contractor shall be liable for delays to other contractors caused by Contractor's failure to coordinate its Work with the work of other contractors.
6. **Liquidated Damages:** Time is of the essence for all work under this Agreement. It is hereby understood and agreed that it is and will be difficult and/or impossible to ascertain and determine the actual damage that County will sustain in the event of and by reason of Contractor's delay; therefore, Contractor agrees that it shall pay to the County the **sum of One Thousand dollars (\$1,000) per day** as liquidated damages for each and every day's delay beyond the time herein prescribed in finishing the Work. It is hereby understood and agreed that this amount is not a penalty.

In the event any portion of the liquidated damages is not paid to County, County may deduct that amount from any money due or that may become due the Contractor under this Agreement. County's right to assess liquidated damages is as indicated herein and in the General Conditions.

The time during which the Contract is delayed for cause as hereinafter specified may extend the time of completion for a reasonable time as County may grant. This provision does not exclude the recovery of damages for delay by either party under other provisions in the Contract Documents.

7. **Indemnity:** To the fullest extent permitted by law (including, without limitation, California Civil Code Section 2782), Contractor shall defend (with legal counsel reasonably acceptable to the County), indemnify and hold harmless County and its officers, agents, departments, officials, representatives and employees (collectively "Indemnitees") from and against any and all claims, loss, cost, damage, injury (including, without limitation, injury to or death of an employee of Contractor or its Subcontractors), expense and liability of every kind, nature and description (including, without limitation, incidental and consequential damages, court costs, attorneys' fees, litigation expenses and fees of expert consultants or expert witnesses incurred in connection therewith and costs of investigation) which arises out of or is in any way connected to the performance of this agreement (collectively

**“Liabilities”) except where such Liabilities are caused solely by the negligence or willful misconduct of any indemnitee. The County may participate in the defense of any such claim without relieving Contractor of any obligation hereunder. This indemnification, defense, and hold harmless obligation includes any failure or alleged failure by Contractor to comply with any provision of law or the Contract Documents, including, without limitation, any stop notice actions, or liens by the California Department of Labor Standards Enforcement. This indemnity obligation shall be for the full amount of all damage to County, including defense costs, and shall not be limited by any insurance limits.**

- 7.1 Contractor shall defend (with legal counsel reasonably acceptable to the County), indemnify and hold harmless the Indemnitees from all loss, cost, damage, expense, liability or claims, in law or in equity, including attorneys’ fees, court costs, litigation expenses and fees of expert consultants or expert witnesses, that may at any time arise for any infringement of the patent rights, copyright, trade secret, trade name, trademark, service mark or any other proprietary right of any person or persons in consequence of the use by County, or any of the other Indemnitees, of articles or Services to be supplied in the performance of this Agreement.
  - 7.2 Contractor shall place in its subcontracting agreements and cause its Subcontractors to agree to indemnities and insurance obligations in favor of County and other Indemnitees in the exact form and substance of those contained in this Agreement. Contractor shall require all subcontractors to comply with all indemnification and insurance requirements of this agreement, including, without limitation, Exhibit C. Contractor shall verify subcontractor’s compliance.
- 8. Loss Or Damage:** County and its authorized representatives shall not in any way or manner be answerable or suffer loss, damage, expense, or liability for any loss or damage that may happen to the Work, or any part thereof, or in or about the same during its construction and before acceptance, and the Contractor shall assume all liabilities of every kind or nature arising from the Work, either by accident, negligence, theft, vandalism, or any cause whatever; and shall hold County and its authorized representatives harmless from all liability of every kind and nature arising from accident, negligence, or any cause whatever.
- 9. Insurance and Bonds:** Contractor shall provide all required certificates of insurance, and payment and performance bonds as evidence thereof.
- 10. Prosecution of Work:** If the Contractor should neglect to prosecute the Work properly or fail to perform any provisions of this contract, County, may, pursuant to the General Conditions and without prejudice to any other remedy it may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor.

11. **Authority of Engineer:** Contractor hereby acknowledges that the Engineer has authority to approve and/or stop Work if the Contractor's Work does not comply with the requirements of the Contract Documents and all applicable laws. The Contractor shall be liable for any delay caused by its non-compliant Work.
12. **Assignment of Contract:** Neither the Contract, nor any part thereof, nor any moneys due or to become due thereunder, may be assigned by the Contractor without the written approval of the County, nor without the written consent of the Surety on the Contractor's Performance Bond (the "Surety"), unless the Surety has waived in writing its right to notice of assignment.
13. **Classification Of Contractor's License:** Contractor hereby acknowledges that it **currently holds valid Type B, C-7 and C-10 Contractor's license(s)** issued by the State of California, Contractor's State Licensing Board, in accordance with division 3, chapter 9, of the Business and Professions Code and in the classification called for in the Contract Documents.
14. It is County policy to minimize the expenditure of County funds on goods and services produced by any entity which buys, sell, leases or distributes commodities and/or professional services to (1) the government of Burma; or (2) any entity organized under the laws of Burma; or (3) any entity which does business with any private or public entity located in Burma, or conducts operations in Burma. Contractors are urged to comply with the policy in making purchases and subcontracts. (ref. Alameda County, Cal., Adm. Code Title.4, §4.32.050(B),(F) )
15. **Payment of Prevailing Wages:** The Contractor and all Subcontractors under the Contractor shall pay all workers on all Work performed pursuant to this Contract **not less than the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work** as determined by the Director of the Department of Industrial Relations, State of California, for the type of work performed and the locality in which the work is to be performed within the boundaries of County, pursuant to sections 1770 et seq. of the California Labor Code.
16. **Contract Price:** In consideration of the foregoing covenants, promises, and agreements on the part of the Contractor, and the strict and literal fulfillment of each and every covenant, promise, and agreement, and as compensation agreed upon for the Work and construction, erection, and completion as aforesaid, County covenants, promises, and agrees that it will well and truly pay and cause to be paid to the Contractor in full, and as the full Contract Price and compensation for construction, erection, and completion of the Work hereinabove agreed to be performed by the Contractor, the following price:

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_),

in lawful money of the United States, which sum is to be paid according to the schedule provided by the Contractor and accepted by County and subject to additions and deductions as provided in the Contract. This amount supersedes any previously stated and/or agreed to amount(s).

- 17. Severability:** If any term, covenant, condition, or provision in any of the Contract Documents is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remainder of the provisions in the Contract Documents shall remain in full force and effect and shall in no way be affected, impaired, or invalidated thereby.

IN WITNESS WHEREOF, accepted and agreed on the date indicated above:

**CONTRACTOR**

**COUNTY OF ALAMEDA**

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

NOTE: If the party executing this Contract is a corporation, a certified copy of the by-laws, or of the resolution of the Board of Directors, authorizing the officers of said corporation to execute the Contract and the bonds required thereby must be attached hereto.

Approved as to form: \_\_\_\_\_  
(Deputy) County Counsel

END OF DOCUMENT



DOCUMENT 00 52 13.1

COUNTY OF ALAMEDA

**DEBARMENT AND SUSPENSION CERTIFICATION FORM**

The bidder, under penalty of perjury, certifies that, except as noted below, bidder, its Principal, and any named and unnamed subcontractor:

- Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;
- Has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency **within the past three years**;
- Does not have a proposed debarment pending; and
- Has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessary result in denial of award, but will be considered in determining bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Notes: Providing false information may result in criminal prosecution or administrative sanctions. The above certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

BIDDER: \_\_\_\_\_

PRINCIPAL: \_\_\_\_\_ TITLE: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

END OF DOCUMENT

DOCUMENT 00 55 00

**NOTICE TO PROCEED**

Dated: \_\_\_\_\_, 2018

TO: \_\_\_\_\_  
(Contractor)

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PROJECT: **#18001 BHCS Data Upgrade II**

PROJECT/CONTRACT NO.: \_\_\_\_\_ between County of Alameda  
and Contractor ("Contract").

You are notified that the Contract Time under the above Contract will commence to run on \_\_\_\_\_, **2018**. By that date, you are to start performing your obligations under the Contract Documents. In accordance with the Agreement executed by Contractor, the date of completion is \_\_\_\_\_, **2019**.

You must submit the following documents **by 5:00 p.m. of the TENTH (10<sup>TH</sup>) business day following the date of this Notice to Proceed**:

- a. Contractor's **preliminary schedule** of construction.
- b. Contractor's **preliminary schedule of values** for all of the Work.
- c. Contractor's **preliminary schedule of submittals**, including Shop Drawings, Product Data, and Samples submittals
- d. Contractor's **Safety Plan** specifically adapted for the Project.
- e. A complete subcontractors list, including the name, address, telephone number, facsimile number, California State Contractors License number, classification, and monetary value of all Subcontracts.

Thank you. We look forward to a very successful Project.

COUNTY OF ALAMEDA

BY: \_\_\_\_\_

NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

END OF DOCUMENT

DOCUMENT 00 56 00

## **ESCROW OF BID DOCUMENTATION**

### **1. Requirement to Escrow Bid Documentation**

- a. Contractor shall submit, **within SEVEN (7) calendar days after the date of the Notice of Award**, one copy of all documentary information received or generated by Contractor in preparation of bid prices for this Contract, as specified herein. This material is referred to herein as "Escrow Bid Documentation". The Escrow Bid Documentation of the Contractor will be held in escrow for the duration of the Contract.
- b. Contractor agrees, as a condition of award of the Contract, that the Escrow Bid Documentation constitutes all written information used in the preparation of its bid, and that no other written bid preparation information shall be considered in resolving disputes or claims. Contractor also agrees that nothing in the Escrow Bid Documentation shall change or modify the terms or conditions of the Contract Documents.
- c. The Escrow Bid Documentation will not be opened by County except as indicated herein. The Escrow Bid Documentation will be used only for the resolution of change orders and claims disputes.
- d. Contractor's submission of the Escrow Bid Documentation, as with the bonds and insurance documents required, is considered an essential part of the Contract award. Should the Contractor fail to make the submission within the allowed time specified above, County may deem the Contractor to have failed to enter into the Contract, and the Contractor shall forfeit the amount of its bid security, accompanying the Contractor's bid, and County may award the Contract to the next lowest responsive responsible bidder.
- e. **NO PAYMENTS WILL BE MADE, NOR WILL COUNTY ACCEPT PROPOSED CHANGE ORDERS UNTIL THE ABOVE REQUIRED INFORMATION IS SUBMITTED AND APPROVED.**
- f. The Escrow Bid Documentation shall be submitted in person by an authorized representative of the Contractor to County.

### **2. Ownership of Escrow Bid Documentation**

- a. The Escrow Bid Documentation is, and shall always remain, the property of Contractor, subject to review by County, as provided herein.

- b. Escrow Bid Documentation constitute trade secrets, not known outside Contractor's business, known only to a limited extent and only by a limited number of employees of Contractor, safeguarded while in Contractor's possession, extremely valuable to Contractor, and could be extremely valuable to Contractor's competitors by virtue of it reflecting Contractor's contemplated techniques of construction. Subject to the provisions herein, County agrees to safeguard the Escrow Bid Documentation, and all information contained therein, against disclosure to the fullest extent permitted by law.

### 3. Format and Contents of Escrow Bid Documentation

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

### 4. Submittal of Escrow Bid Documentation

- a. The Escrow Bid Documentation shall be submitted by the Contractor in a sealed container **within SEVEN (7) calendar days after the date of the Notice of Award**. The container shall be clearly marked on the outside with the Contractor's name, date of submittal, project name and the words "**Escrow Bid**

**Documentation – Intended to be opened in the presence of Authorized Representatives of Both County and Contractor".**

- b. By submitting Escrow Bid Documentation, Contractor represents that the material in the Escrow Bid Documentation constitutes all the documentary information used in preparation of the bid and that the Contractor has personally examined the contents of the Escrow Bid Documentation container and has found that the documents in the container are complete.
- c. If Contractor's proposal is based upon subcontracting any part of the work, each subcontractor whose total **subcontract price exceeds 5 percent of the total contract price** proposed by Contractor, shall provide separate Escrow Documents to be included with those of Contractor. Those documents shall be opened and examined in the same manner and at the same time as the examination described above for Contractor.
- d. If Contractor wishes to subcontract any portion of the Work after award, County retains the right to require Contractor to submit Escrow Documents for the Subcontractor before the subcontract is approved.

**5. Storage, Examination and Final Disposition of Escrow Bid Documentation**

- a. The Escrow Bid Documentation will be placed in escrow, for the life of the Contract, in a mutually agreeable institution. The cost of storage will be paid by Contractor for the duration of the project until final Contract payment. The storage facilities shall be the appropriate size for all the Escrow Bid Documentation and located conveniently to both County's and Contractor's offices.
- b. The Escrow Bid Documentation shall be examined by both County and Contractor, at any time deemed necessary by either County or Contractor, to assist in the negotiation of price adjustments and change orders or the settlement of disputes and claims. In the case of legal proceedings, Escrow Bid Documentation shall be used subject to the terms of an appropriate protective order if requested by Contractor and ordered by a court of competent jurisdiction. Examination of the Escrow Bid Documentation is subject to the following conditions:
  - (1) As trade secrets, the Escrow Bid Documentation is proprietary and confidential to the extent allowed by law.
  - (2) County and Contractor shall each designate, in writing to the other party **SEVEN (7) calendar days prior to any examination**, the names of representatives who are authorized to examine the Escrow Bid Documentation. No other person shall have access to the Escrow Bid Documentation.

- (3) Access to the documents may take place only in the presence of duly designated representatives of the County and Contractor. If Contractor fails to designate a representative or appear for joint examination on **SEVEN (7) calendar days notice**, then the County representative may examine the Escrow Bid Documents alone upon an **additional THREE (3) calendar days notice** if a representative of the Contractor does not appear at the time set.
  - (4) If a subcontractor has submitted sealed information to be included in the Escrow Bid Documents, access to those documents may take place only in the presence of a duly designated representative of the County, Contractor and that subcontractor. If that subcontractor fails to designate a representative or appear for joint examination on **SEVEN (7) calendar days notice**, then the County representative and/or the Contractor may examine the Escrow Bid Documentation without that subcontractor present upon an **additional THREE (3) calendar days notice** if a representative of that subcontractor does not appear at the time set.
- c. The Escrow Bid Documentation will be returned to Contractor at such time as the Contract has been completed and final settlement has been achieved.

END OF DOCUMENT

DOCUMENT 00 57 00

**ESCROW AGREEMENT FOR  
SECURITY DEPOSITS IN LIEU OF RETENTION**  
Public Contract Code Section 22300

This Escrow Agreement ("Escrow Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2018, by and between County of Alameda, whose address is 1401 Lakeside Dr. #800, Oakland, California ("County"); and \_\_\_\_\_, whose place of business is located at \_\_\_\_\_, ("Contractor"); and \_\_\_\_\_, a state or federally chartered bank in the state of California, whose place of business is located at \_\_\_\_\_, ("Escrow Agent").

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

1. Pursuant to section 22300 of Public Contract Code of the State of California, which is hereby incorporated by reference, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by County pursuant to the Construction Contract No. \_\_\_\_\_ entered into between County and Contractor for the **#18001 BHCS Data Upgrade II** project, in the amount of \_\_\_\_\_ dated, \_\_\_\_\_, 2018 (the "Contract"). Alternatively, on written request of Contractor, County shall make payments of the retention earnings directly to Escrow Agent. When Contractor deposits the securities as a substitute for Contract earnings, Escrow Agent shall notify County **within ten (10) calendar days of the deposit**. The market value of the securities at the time of substitution and at all times from substitution until the termination of the Escrow Agreement shall be at least equal to the cash amount then required to be withheld as retention under terms of Contract between County and Contractor.

Securities shall be held in name of County of Alameda, and shall designate Contractor as beneficial owner.

2. County shall make progress payments to Contractor for those funds which otherwise would be withheld from progress payments pursuant to Contract provisions, provided that Escrow Agent holds securities in form and amount specified above.
3. When County makes payment of retention earned directly to Escrow Agent, Escrow Agent shall hold them for the benefit of Contractor until the time that the escrow created under this Escrow Agreement is terminated. 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 County pays 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 County. These expenses and payment terms shall be determined by County, Contractor, and Escrow Agent.
5. Interest earned on securities or money market accounts held in escrow and all interest earned on that interest shall be for sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to County.
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 County to Escrow Agent** that County consents to withdrawal of amount sought to be withdrawn by Contractor.
7. County shall have the right to draw upon the securities and/or withdraw amounts from the Escrow Account in event of default by Contractor. **Upon seven (7) days written notice to Escrow Agent from County** of the default, if applicable, Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by County.
8. Upon receipt of **written notification from County certifying that the Contract is final and complete**, and that 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 monies and securities on deposit and payments of fees and charges.
9. Escrow Agent shall rely on written notifications from County and Contractor pursuant to Paragraphs 5 through 8, inclusive, of this Escrow Agreement and County and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of securities and interest as set forth above.
10. Names of persons who are authorized to give written notice or to receive written notice on behalf of County and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

**Alameda County General Services Agency  
BHCS Data Upgrade II**

**PROJECT #18001**

On behalf of County:

On behalf of Contractor:

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Address

\_\_\_\_\_  
Address

On behalf of Escrow Agent:

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Address

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

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

On behalf of County:

On behalf of Contractor:

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Address

\_\_\_\_\_  
Address

On behalf of Escrow Agent:

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Address

END OF DOCUMENT

ALAMEDA COUNTY GSA-CP

ESCROW AGREEMENT FOR  
SECURITY DEPOSITS IN LIEU OF RETENTION  
DOCUMENT 00 57 00

DOCUMENT 00 61 13.13

**PERFORMANCE BOND FORM**  
**(100% of Contract Price)**

**(Note: Bidders must use this form, NOT a surety company form.)**

KNOW ALL PERSONS BY THESE PRESENTS:

That WHEREAS, the Board of Supervisors of the County of Alameda ("County") and \_\_\_\_\_, ("Principal") have entered into a contract for the furnishing of all materials and labor, services and transportation, necessary, convenient, and proper to perform the following project:

**#18001 BHCS Data Upgrade II**  
**("Project" or "Contract")**

which Contract dated \_\_\_\_\_, **2018**, and all of the Contract Documents attached to or forming a part of the Contract, are hereby referred to and made a part hereof, and

And WHEREAS, said Principal is required under the terms of the Contract to furnish a bond for the faithful performance of the Contract;

NOW, THEREFORE, the Principal and \_\_\_\_\_  
("Surety") are held and firmly bound unto the Board of County in the penal sum of \_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_), lawful money of the United States, 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, to perform all the work required to complete the Project and to pay to County all damages County incurs as a result of the Principal's failure to perform all the Work required to complete the Project.

The condition of the obligation is such that, if the above bounden Principal, his or its heirs, executors, administrators, successors, or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and agreements in the Contract and any alteration thereof made as therein provided, on his or their part to be kept and performed at the time and in the intent and meaning, and shall indemnify and save harmless County, its trustees, officers and agents, as therein stipulated, then this obligation shall become null and void, otherwise it shall be and remain in full force and virtue.

And the Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of

time, alteration, or addition to the terms of the Contract or to the work or to the specifications.

IN WITNESS WHEREOF, two (2) 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 \_\_\_\_\_, 2018.

(Affix Corporate Seal)

\_\_\_\_\_  
Principal

\_\_\_\_\_  
By

\_\_\_\_\_  
Surety

\_\_\_\_\_  
By

\_\_\_\_\_  
Name of California Agent of Surety

\_\_\_\_\_  
Address of California Agent of Surety

\_\_\_\_\_  
Telephone Number of California Agent of  
Surety

**Bidder must attach a Notarial Acknowledgment for all Surety's signatures and a Power of Attorney and Certificate of Authority for Surety. The California Department of Insurance must authorize the Surety to be an admitted surety insurer.**

END OF DOCUMENT

DOCUMENT 00 61 13.16

**PAYMENT BOND FORM**  
**Contractor's Labor & Material Payment Bond**  
**(100% of Contract Price)**

**(Note: Bidders must use this form, NOT a surety company form.)**

KNOW ALL PERSONS BY THESE PRESENTS:

That WHEREAS, the Board of Supervisors of the County of Alameda ("County") and \_\_\_\_\_, ("Principal") have entered into a contract for the furnishing of all materials and labor, services and transportation, necessary, convenient, and proper to

**#18001 BHCS Data Upgrade II**  
(“Project”)

which Contract dated \_\_\_\_\_, **2018**, and all of the Contract Documents attached to or forming a part of the Contract, are hereby referred to and made a part hereof, and

WHEREAS, pursuant to law and the Contract, the Principal is required, before entering upon the performance of the work, to file a good and sufficient bond with the body by which the Contract is awarded in an amount equal to 100 percent (100%) of the Maximum Contract Value, to secure the claims to which reference is made in sections 9000, 9100, 9356 through 9560, and 9564 of the Civil Code of California, and division 2, part 7, of the Labor Code of California.

NOW, THEREFORE, WE, the Principal and \_\_\_\_\_, ("Surety") are held and firmly bound unto all laborers, material men, and other persons referred to in said statutes in the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), lawful money of the United States, being a sum not less than the total amount payable by the terms of Contract, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, or assigns, jointly and severally, by these presents.

The condition of this obligation is that if the Principal or any of his or its subcontractors, of the heirs, executors, administrators, successors, or assigns of any, all, or either of them shall fail to pay for any labor, materials, provisions, provender, or other supplies, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to such work or labor, that the Surety will pay the same in an amount not exceeding the amount herein above set forth, and also in case suit is brought upon this bond, will pay a reasonable attorney's fee to be awarded and fixed by the Court, and to be taxed as costs and to be included in the judgment therein rendered.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies, and corporations entitled to file claims under sections 9000, 9100, 9356 through 9560, and 9564 of the Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

Should the condition of this bond be fully performed, then this obligation shall become null and void; otherwise it shall be and remain in full force and affect.

And the Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of Contract or the specifications accompanying the same shall in any manner affect its obligations on this bond, and it does hereby waive notice of any such change, extension, alteration, or addition.

IN WITNESS WHEREOF, two (2) 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 \_\_\_\_\_, 2018.

(Affix Corporate Seal)

\_\_\_\_\_  
Principal

\_\_\_\_\_  
By

\_\_\_\_\_  
Surety

\_\_\_\_\_  
By

\_\_\_\_\_  
Name of California Agent of Surety

\_\_\_\_\_  
Address of California Agent of Surety

\_\_\_\_\_  
Telephone Number of California Agent of Surety

**Bidder must attach a Notarial Acknowledgment for all Surety's signatures and a Power of Attorney and Certificate of Authority for Surety. The California Department of Insurance must authorize the Surety to be an admitted surety insurer.**

END OF DOCUMENT

DOCUMENT 00 65 19.26

**FINAL SETTLEMENT CERTIFICATE FORM**

THIS FINAL SETTLEMENT AGREEMENT AND RELEASE OF CLAIMS  
("Agreement and Release") IS MADE AND ENTERED INTO THIS \_\_\_\_\_ DAY  
OF \_\_\_\_\_, 2019 by and between the County of Alameda ("County") and  
\_\_\_\_\_ ("Contractor"), whose place  
of business is \_\_\_\_\_.

RECITALS:

1. County and Contractor entered into PROJECT NO.: 18001 ("Contract" or  
"Project") in the County of Alameda, California.
2. The Work under the Contract has been completed.

NOW, THEREFORE, it is mutually agreed between County and Contractor as follows:

AGREEMENT

3. Contractor will only be assessed liquidated damages as detailed below:  
  
Original Contract Sum        \$ \_\_\_\_\_  
  
Modified Contract Sum        \$ \_\_\_\_\_  
  
Payment to Date                \$ \_\_\_\_\_  
  
Liquidated Damages            \$ \_\_\_\_\_  
  
Payment Due Contractor        \$ \_\_\_\_\_
4. Subject to the provisions hereof, County shall forthwith pay to Contractor the  
undisputed sum of \$ \_\_\_\_\_ ( \_\_\_\_\_  
Dollars and \_\_\_\_\_ Cents) under the Contract, less any amounts represented by  
any notice to withhold funds on file with County as of the date of such payment.
5. Contractor acknowledges and hereby agrees that there are no unresolved or  
outstanding claims in dispute against County arising from the performance of  
work under the Contract, except for the claims described in Paragraph 6 and  
continuing obligations described in Paragraph 8. It is the intention of the parties  
in executing this Agreement and Release that this Agreement and Release shall be  
effective as a full, final and general release of all claims, demands, actions, causes  
of action, obligations, costs, expenses, damages, losses and liabilities of  
Contractor against County, all its respective agents, employees, inspectors,

assignees and transferees except for the Disputed Claim is set forth in Paragraph 6 and continuing obligations described in Paragraph 8 hereof.

6. The following claims are disputed (hereinafter, the "Disputed Claims") and are specifically excluded from the operation of this Agreement and Release:

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

**[Insert information, including attachment if necessary]**

7. Consistent with California Public Contract Code section 7100, Contractor hereby agrees that, in consideration of the payment set forth in Paragraph 4 hereof, Contractor hereby releases and forever discharges County, all its agents, employees, inspectors, assignees, and transferees from any and all liability, claims, demands, actions, or causes of action of whatever kind or nature arising out of or in any way concerned with the Work under the Contract.
8. Guarantees and warranties for the Work, and any other continuing obligation of Contractor, shall remain in full force and effect as specified in the Contract Documents.
9. To the furthest extent permitted by California law, Contractor shall defend, indemnify, and hold harmless the County, its agents, representatives, officers, consultants, employees, trustees, and volunteers (the "indemnified parties") from any and all losses, liabilities, claims, suits, and actions of any kind, nature, and description, including, but not limited to, attorneys' fees and costs, directly or indirectly arising out of, connected with, or resulting from the performance of the Contract unless caused wholly by the sole negligence or willful misconduct of the indemnified parties.
10. Contractor hereby waives the provisions of California Civil Code section 1542 which provides as follows:  
A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH  
THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS  
OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE,  
WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY  
AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR.
11. The provisions of this Agreement and Release are contractual in nature and not mere recitals and shall be considered independent and severable. If any such provision or any part thereof shall be at any time held invalid in whole or in part under any federal, state, county, municipal, or other law, ruling, or regulations, then such provision, or part thereof, shall remain in force and effect to the extent permitted by law, and the remaining provisions of this Agreement and Release shall also remain in full force and effect, and shall be enforceable.



- 12.** All rights of County shall survive completion of the Work or termination of Contract, and execution of this Release.

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

COUNTY OF ALAMEDA

TITLE: \_\_\_\_\_

NAME: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

CONTRACTOR

TITLE: \_\_\_\_\_

NAME: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

END OF DOCUMENT

DOCUMENT 00 65 36

**WARRANTY FORM**

\_\_\_\_\_("Contractor") hereby agrees that the  
\_\_\_\_\_("Work" of Contractor) which Contractor has installed for  
County of Alameda ("County") for the following project:

PROJECT: **#18001 BHCS Data Upgrade II**  
("Project" or "Contract")

has been performed in accordance with the requirements of the Contract Documents and that the  
Work as installed will fulfill the requirements of the Contract Documents.

The undersigned agrees to repair or replace any or all of such Work that may prove to be defective in  
workmanship or material together with any other adjacent Work that may be displaced in connection  
with such replacement **within a period of two year(s) from the date of completion** as defined in  
Public Contract Code section 7107, subdivision (c), ordinary wear and tear and unusual abuse or  
neglect excepted. The date of completion is \_\_\_\_\_, **2019**.

In the event of the undersigned's failure to comply with the above-mentioned conditions within a  
reasonable period of time, as determined by County, but not later than seven (7) days after being  
notified in writing by County, the undersigned authorizes the County to proceed to have said defects  
repaired and made good at the expense of the undersigned. The undersigned shall pay the costs and  
charges therefor upon demand.

Date: \_\_\_\_\_

Proper Name of Contractor: \_\_\_\_\_

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Representatives to be contacted for service subject to terms of Contract:

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE NO.: \_\_\_\_\_

END OF DOCUMENT

SECTION 00 72 13

**GENERAL CONDITIONS**

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## GENERAL CONDITIONS

### 1. CONTRACT TERMS AND DEFINITIONS

#### 1.1 Definitions

Wherever used in the Contract Documents, the following terms shall have the meanings indicated, which shall be applicable to both the singular and plural thereof:

**1.1.1 Adverse Weather:** Shall be only weather that satisfies all of the following conditions: (1) unusually severe precipitation, sleet, snow, hail, heat, or cold conditions in excess of the norm for the location and time of year it occurred, (2) unanticipated, and (3) at the Project.

**1.1.2 Approval, Approved, and/or Accepted:** Refer to written authorization, unless stated otherwise.

**1.1.3 Architect:** The individual, partnership, corporation, joint venture, or any combination thereof, named as Architect, who will have the rights and authority assigned to the Architect in the Contract Documents. The term Architect means the County's Architect on this Project or the Architect's authorized representative.

**1.1.4 Architect's Supplemental Instruction:** A document prepared by the Architect to provide supplemental instructions or interpretations or to order minor changes in the work not involving an adjustment in the Contract Amount or Contract Time.

**1.1.5 Bidder:** A contractor who intends to provide a bid to the County to perform the Work of this Contract.

**1.1.6 Change Order:** A written order to the Contractor authorizing an addition to, deletion from, or revision in the Work, and/or authorizing an adjustment in the Contract Price and/or Contract Time.

**1.1.7 Construction Change Directive:** A written order prepared and issued by the County, the Construction Manager, and/or the Architect and signed by the County and the Architect, directing a change in the Work.

**1.1.8 Construction Manager:** The individual, partnership, corporation, joint venture, or any combination thereof, or its authorized representative, named as such by the County. If no Construction Manager is used on the Project that is the subject of this contract, then all references to Construction Manager herein shall be read to refer to County Project Manager.

**1.1.9 Construction Schedule:** The progress schedule of construction of the Project as provided by Contractor and approved by County.

**1.1.10 Contract, Contract Documents:** The Contract consists exclusively of the documents evidencing the agreement of the County and Contractor, identified as the Contract Documents. The Contract Documents consist of the following documents:

**1.1.10.1** Notice to Bidders

**1.1.10.2** Instructions to Bidders

- 1.1.10.3** Supplementary Instructions to Bidders – Construction Outreach Program
- 1.1.10.4** Bid Form
- 1.1.10.5** Bid Security Form
- 1.1.10.6** Designated Subcontractors List
- 1.1.10.7** Site-Visit Certification, if a site visit was required.
- 1.1.10.8** Non-Collusion Affidavit
- 1.1.10.9** Workers' Compensation Certification
- 1.1.10.10** Prevailing Wage and Related Labor Requirements Certification
- 1.1.10.11** Construction Outreach Program Certifications
- 1.1.10.12** Hazardous Materials Certification
- 1.1.10.13** Imported Materials Certification
- 1.1.10.14** Notice of Award
- 1.1.10.15** Agreement
- 1.1.10.16** Notice to Proceed
- 1.1.10.17** Escrow of Bid Documentation
- 1.1.10.18** Escrow Agreement for Security Deposits in Lieu of Retention
- 1.1.10.19** Performance Bond
- 1.1.10.20** Payment Bond (Contractor's Labor & Material Payment Bond)
- 1.1.10.21** General Conditions
- 1.1.10.22** Special Conditions
- 1.1.10.23** Hazardous Materials Procedures and Requirements
- 1.1.10.24** Divisions 00 through 49
- 1.1.10.25** All Plans, Technical Specifications, and Drawings
- 1.1.10.26** Any and all addenda to any of the above documents
- 1.1.10.27** Any and all change orders or written modifications to the above documents if approved in writing by the County.

**1.1.11** Contract Price: The total monies payable to the Contractor under the terms and conditions of the Contract Documents.

**1.1.12** Contract Time: The time period stated in the Agreement for the completion of the Work.

**1.1.13** Contractor: The person or persons identified in the Agreement as contracting to perform the Work to be done under this Contract, or the legal representative of such a person or persons.

**1.1.14** County: County of Alameda, acting through its Board of Supervisors or any of its authorized agents. The County may, at any time:

**1.1.14.1** Direct the Contractor to communicate with or provide notice to the Construction Manager or the Engineer on matters for which the Contract Documents indicate the Contractor will communicate with or provide notice to the County; and/or

**1.1.14.2** Direct the Construction Manager or the Engineer to communicate with or direct the Contractor on matters for which the Contract Documents indicate the County will communicate with or direct the Contractor.

**1.1.15** Daily Job Report(s): Daily Project reports prepared by the Contractor's employee(s) who are present on Site, which shall include the information required herein.

**1.1.16** Day(s): Unless otherwise designated, day(s) means calendar day(s).

**1.1.17** Drawings: (or "Plans") The graphic and pictorial portions of the Contract Documents showing the design, location, scope and dimensions of the work, generally including plans, elevations, sections, details, schedules, sequence of operation, and diagrams.

**1.1.18** Force Account Directive: A process that may be used when the County and the Contractor cannot agree on a price for a specific portion of work or before the Contractor prepares prices for a specific portion of work and whereby the Contractor performs the work as indicated herein on a time and materials basis.

**1.1.19** Premises: The real property owned by the County on which the Site is located.

**1.1.20** Product(s): New material, machinery, components, equipment, fixtures, and systems forming the Work, including existing materials or components required and approved by the County for reuse.

**1.1.21** Product Data: Illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate a material, product, or system for some portion of the Work.

**1.1.22** Project: The planned undertaking as provided for in the Contract Documents.

**1.1.23** Program Manager: The individual, partnership, corporation, joint venture, or any combination thereof, or its authorized representative, named as such by the County. If no Program Manager is designated for Project that is the subject of this Contract, then all references to Project Manager herein shall be read to refer to County.

**1.1.24** Provide: Shall include "provide complete in place," that is, "furnish and install," and "provide complete and functioning as intended in place" unless specifically stated otherwise.

**1.1.25** Request for Information (RFI): A written request prepared by the Contractor requesting that the Engineer provide additional information necessary to clarify

or amplify an item in the Contract Documents that the Contractor believes is not clearly shown or called for in the Drawings or Specifications or other portions of the Contract Documents, or to address problems that have arisen under field conditions.

**1.1.26 Request for Substitution:** A request by Contractor to substitute an equal or superior material, product, thing, or service for a specific material, product, thing, or service that has been designated in the Contract Documents by a specific brand or trade name.

**1.1.27 Safety Orders:** Written and/or verbal orders for construction issued by the California Division of Industrial Safety ("CalOSHA") or by the United States Occupational Safety and Health Administration ("OSHA").

**1.1.28 Safety Plan:** Contractor's safety plan specifically adapted for the Project. Contractor's Safety Plan shall comply with all provisions regarding Project safety, including all applicable provisions in these General Conditions.

**1.1.29 Samples:** Physical examples that illustrate materials, products, equipment, finishes, colors, or workmanship and that, when approved in accordance with the Contract Documents, establish standards by which portions of the Work will be judged.

**1.1.30 Shop Drawings:** All drawings, prints, diagrams, illustrations, brochures, schedules, and other data that are prepared by the Contractor, a subcontractor, manufacturer, supplier, or distributor, that illustrate how specific portions of the Work shall be fabricated or installed.

**1.1.31 Site:** The Project site as shown on the Drawings.

**1.1.32 Specifications:** That portion of the Contract Documents, Division 00 through Division 49, and all technical sections, and addenda to all of these, if any, consisting of written descriptions and requirements of a technical nature of materials, equipment, construction methods and systems, standards, and workmanship.

**1.1.33 Subcontractor:** A contractor and/or supplier who is under contract with the Contractor or with any other subcontractor, regardless of tier, to perform a portion of the Work of the Project.

**1.1.34 Submittal Schedule:** The schedule of submittals as provided by Contractor and approved by County.

**1.1.35 Surety:** The person, firm, or corporation that executes as surety the Contractor's Performance Bond and Payment Bond, and must be a California admitted surety insurer as defined in the Code of Civil Procedure Section 995.120.

**1.1.36 Work:** All labor, materials, equipment, components, appliances, supervision, coordination, and services required by, or reasonably inferred from, the Contract Documents, that are necessary for the construction and completion of the Project.

## **1.2 Laws Concerning The Contract**

Contract is subject to all provisions of the Constitution and laws of California governing, controlling, or affecting County, or the property, funds, operations, or powers of County, and such provisions are by this reference made a part hereof. Any provision required by law to be included in this Contract shall be deemed to be inserted.

### **1.3 No Oral Agreements**

No oral agreement or conversation with any officer, agent, or employee of County, either before or after execution of Contract, shall affect or modify any of the terms or obligations contained in any of the documents comprising the Contract.

### **1.4 No Assignment**

Contractor shall not assign this Contract or any part thereof including, without limitation, any services or money to become due hereunder without the prior written consent of the County. Assignment without County's prior written consent shall be null and void. Any assignment of money due or to become due under this Contract shall be subject to a prior lien for services rendered or material supplied for performance of work called for under this Contract in favor of all persons, firms, or corporations rendering services or supplying material to the extent that claims are filed pursuant to the Civil Code, Code of Civil Procedure, Government Code, Labor Code, and/or Public Contract Code, and shall also be subject to deductions for liquidated damages or withholding of payments as determined by County in accordance with this Contract. Contractor shall not assign or transfer in any manner to a Subcontractor or supplier the right to prosecute or maintain an action against the County.

### **1.5 Notice And Service Thereof**

**1.5.1** Any notice from one party to the other or otherwise under Contract shall be in writing and shall be dated and signed by the party giving notice or by a duly authorized representative of that party. Any notice shall not be effective for any purpose whatsoever unless served in one of the following manners:

- 1.5.1.1** If notice is given by personal delivery thereof, it shall be considered delivered on the day of delivery.
- 1.5.1.2** If notice is given by overnight delivery service, it shall be considered delivered on (1) day after date deposited, as indicated by the delivery service.
- 1.5.1.3** If notice is given by depositing same in United States Postal Service mail, enclosed in a sealed envelope, it shall be considered delivered three (3) days after date deposited, as indicated by the postmarked date.
- 1.5.1.4** If notice is given by registered or certified mail with postage prepaid, return receipt requested, it shall be considered delivered on the day the notice is signed for.

### **1.6 No Waiver**

The failure of County in any one or more instances to insist upon strict performance of any of the terms of this Contract or to exercise any option herein conferred shall not be construed as a waiver or relinquishment to any extent of the right to assert or rely upon any such terms or option on any future occasion. No action or failure to act by the County, Engineer, or Construction Manager shall constitute a waiver of any right or duty afforded the County under the Contract, nor shall any action or failure to act constitute

an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

**1.7 Substitutions For Specified Items**

See Special Conditions.

**1.8 Materials and Work**

**1.8.1** Except as otherwise specifically stated in this Contract, Contractor shall provide and pay for all materials, labor, tools, equipment, transportation, supervision, temporary constructions of every nature, and all other services, management, and facilities of every nature whatsoever necessary to execute and complete this Contract within the Contract Time.

**1.8.2** Unless otherwise specified, all materials shall be new, and the best of their respective kinds and grades as noted or specified and workmanship shall be of good quality.

**1.8.3** Materials shall be furnished in ample quantities and at such times as to ensure uninterrupted progress of Work and shall be stored properly and protected as required.

**1.8.4** For all materials and equipment specified or indicated in the Drawings, the Contractor shall provide all labor, materials, equipment, and services necessary for complete assemblies and complete working systems, functioning as intended. Incidental items not indicated on Drawings, nor mentioned in the Specifications, that can legitimately and reasonably be inferred to belong to the Work described, or be necessary in good practice to provide a complete assembly or system, shall be furnished as though itemized here in every detail. In all instances, material and equipment shall be installed in strict accordance with each manufacturer's most recent published recommendations and specifications.

**1.8.5** Contractor shall, after award of Contract by County and after relevant submittals have been approved, place orders for materials and/or equipment as specified so that delivery of same may be made without delays to the Work. Contractor shall, upon demand from County, present documentary evidence showing that orders have been placed.

**1.8.6** County reserves the right but has no obligation, for any neglect in complying with the above instructions, to place orders for such materials and/or equipment as it may deem advisable in order that the Work may be completed at the date specified in the Agreement, and all expenses incidental to the procuring of said materials and/or equipment shall be paid for by Contractor or withheld from payment(s) to Contractor.

**1.8.7** Contractor warrants good title to all material, supplies, and equipment installed or incorporated in Work and agrees upon completion of all Work to deliver the Site to County, together with all improvements and appurtenances constructed or placed thereon by it, and free from any claims, liens, or charges. Contractor further agrees that neither it nor any person, firm, or corporation furnishing any materials or labor for any work covered by the Contract shall have any right to lien any portion of the Premises or any improvement or appurtenance thereon, except that Contractor may install metering devices or other equipment of utility companies or of political subdivision, title to which is

commonly retained by utility company or political subdivision. In the event of installation of any such metering device or equipment, Contractor shall advise County as to owner thereof.

**1.8.8** Nothing contained in this Article, however, shall defeat or impair the rights of persons furnishing materials or labor under any bond given by Contractor for their protection or any rights under any law permitting such protection or any rights under any law permitting such persons to look to funds due Contractor in hands of County (e.g., Stop Notices), and this provision shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing material for work when no formal contract is entered into for such material.

**1.8.9** Title to new materials and/or equipment for the Work of this Contract and attendant liability for its protection and safety shall remain with Contractor until incorporated in the Work of this Contract and accepted by County. No part of any materials and/or equipment shall be removed from its place of storage except for immediate installation in the Work of this Contract. Contractor shall keep an accurate inventory of all materials and/or equipment in a manner satisfactory to County or its authorized representative and shall, at the County's request, forward it to the County.

## **2. COUNTY**

### **2.1 Occupancy**

County reserves the right to occupy portions of the Project at any time before completion. Neither the County's Final Acceptance, the making of Final Payment, any provision in Contract Documents, nor the use or occupancy of the Work, in whole or in part, by County shall constitute acceptance of Work not in accordance with the Contract Documents nor relieve the Contractor or the Contractor's Performance Bond Surety from liability with respect to any warranties or responsibility for faulty or defective Work or materials, equipment and workmanship incorporated therein.

## **3. ENGINEER**

### **3.1 Role and Authority**

The Engineer shall represent County during the Project and will observe the progress and quality of the Work on behalf of County. Engineer shall have the authority to act on behalf of County to the extent expressly provided in the Contract Documents and to the extent determined by County. Engineer shall have authority to reject materials, workmanship, and/or the Work whenever rejection may be necessary, in Engineer's reasonable opinion, to ensure the proper execution of the Contract.

### **3.2 Interpretations**

Engineer shall, with County and on behalf of County, determine the amount, quality, acceptability, and fitness of all parts of the Work, and interpret the Specifications, Drawings, and shall, with County, interpret all other Contract Documents.

### **3.3 Laws**

Engineer shall have all authority and responsibility established by law, including Title 24 of the California Code of Regulations.



### 3.4 Communications

Contractor shall provide County and the Construction Manager with a copy of all written communication between Contractor and Engineer at the same time as that communication is made to Engineer, including, without limitation, all RFIs, correspondence, submittals, claims, and proposed change orders.

## 4. CONSTRUCTION MANAGER

### 4.1 Role and Authority

If a construction manager is used on this Project ("Construction Manager" or "CM"), the Construction Manager will provide administration of the Contract on the County's behalf. After execution of the Contract and Notice to Proceed, all correspondence, and/or instructions from Contractor and/or County shall be forwarded through the Construction Manager. The Construction Manager will not be responsible for and will not have control or charge of construction means, methods, techniques, sequences, or procedures or for safety precautions in connection with the Work, which shall all remain the Contractor's responsibility.

### 4.2 Authority to Reject

The Construction Manager, however, will have authority to reject materials and/or workmanship not conforming to the Contract Documents, as determined by the County and/or the Engineer. The Construction Manager shall also have the authority to require special inspection or testing of any portion of the Work, whether it has been fabricated, installed or fully completed. Any decision made by the Construction Manager, in good faith, shall not give rise to any duty or responsibility of the Construction Manager to the Contractor, any Subcontractor, their agents, employees, or other persons performing any of the Work. The Construction Manager shall have free access to any or all parts of the Work at any time.

### 4.3 If No Construction Manager

If the County does not use a Construction Manager on this Project, all references to Construction Manager or CM shall be read as County.

## 5. INSPECTIONS AND TESTS

### 5.1 Tests and Inspections

**5.1.1** The County will select an independent testing laboratory to conduct tests. Selection of the materials required to be tested shall be by the laboratory or the County's representative and not by the Contractor. The Contractor shall notify the County's representative a sufficient time in advance of its readiness for required observation or inspection.

**5.1.2** The Contractor shall notify the County's representative a sufficient time in advance of the manufacture of material to be supplied under the Contract Documents that must by terms of the Contract Documents be tested, in order that the County may arrange for the testing of same at the source of supply. This notice shall be, **at a minimum, seventy-two (72) hours prior to the manufacture of the material** that needs to be tested.

**5.1.3** Any material shipped by the Contractor from the source of supply prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice from said representative that such testing and inspection will not be required, shall not be incorporated into and/or onto the Project.

**5.1.4** The County will select and pay testing laboratory costs for all tests and inspections. Costs of tests of any materials found to be not in compliance with the Contract Documents shall be paid for by the County and reimbursed by the Contractor or deducted from the Contract Price.

## **5.2 Costs for After Hours and/or Off Site Inspections**

If the Contractor performs Work outside the County's regular working hours or requests the County to perform inspections off Site, costs of any inspections required outside regular working hours or off Site shall be borne by the Contractor and may be invoiced to the Contractor by the County or the County may deduct those expenses from the next Progress Payment.

## **6. CONTRACTOR**

Contractor shall construct the Work for the Contract price including any adjustment(s) to the Contract Price pursuant to provisions herein regarding changes to the Contract Price. Except as otherwise noted, Contractor shall provide and pay for all labor, materials, equipment, permits, fees, licenses, facilities, transportation, taxes, and services necessary for the proper execution and completion of the Work, except as indicated herein.

### **6.1 Status of Contractor**

**6.1.1** Contractor is and shall at all times be deemed to be an independent contractor and shall be wholly responsible for the manner in which it and its Subcontractors perform the services required of it by the Contract Documents. Nothing herein contained shall be construed as creating the relationship of employer and employee, or principal and agent, between the County, or any of the County's employees or agents, and Contractor or any of Contractor's Subcontractors, agents or employees. Contractor assumes exclusively the responsibility for the acts of its employees as they relate to the services to be provided during the course and scope of their employment. Contractor, its agents, its employees and its Subcontractors shall not be entitled to any rights or privileges of County employees. County shall be permitted to monitor the Contractor's activities to determine compliance with the terms of this Contract.

**6.1.2** As required by law, Contractor and all Subcontractors shall be properly licensed and regulated by the Contractor's State License Board, 3132 Bradshaw Road, Post Office Box 2600, Sacramento, California 98826, <http://www.cslb.ca.gov>.

### **6.2 Contractor's Supervision**

**6.2.1** At all times during progress of the Work, while any work is being performed, Contractor shall keep on the Premises, and at all other locations where any Work related to the Contract is being performed, a competent project manager and construction superintendent who are employees of the Contractor, to whom the County does not object and **at least one of whom shall be fluent in English, written and verbal.**

**6.2.2** The project manager and construction superintendent shall both speak fluently the predominant language of the Contractor's employees. All workers shall be sufficiently competent in English to respond to inquiries and instructions and give directions concerning matters of safety and concerning the identification and location of site foremen, the Contractor's construction superintendent, and the Contractor's project manager.

**6.2.3** Before commencing the Work herein, Contractor shall give written notice to County of the name and relevant credentials of its project manager and construction superintendent. Neither the Contractor's project manager nor construction superintendent shall be changed **except with prior written notice to County and County's approval**, unless the Contractor's project manager and/or construction superintendent proves to be unsatisfactory to Contractor, County, any of the County's employees, agents, the Construction Manager, or the Engineer, in which case, Contractor shall notify County in writing. The Contractor's project manager and construction superintendent shall each represent Contractor, and all directions given to Contractor's project manager and/or construction superintendent shall be as binding as if given to Contractor.

**6.2.4** Contractor shall give efficient supervision to Work, using its best skill and attention. Contractor shall carefully study and compare all Contract Documents, Drawings, Specifications, and other instructions and shall at once report to County, Construction Manager, and Engineer any error, inconsistency, or omission that Contractor or its employees and Subcontractors may discover, in writing. The Contractor shall have responsibility for discovery of errors, inconsistencies, or omissions.

### **6.3 Duty to Provide Fit Workers**

**6.3.1** Contractor and Subcontractor(s) shall at all times enforce strict discipline and good order among their employees and shall not employ or work any unfit person or anyone not skilled in work assigned to that person. It shall be the responsibility of Contractor to ensure compliance with this requirement. County may require Contractor to permanently remove unfit persons from Project Site.

**6.3.2** Any person in the employ of Contractor or Subcontractor(s) whom County may deem incompetent or unfit shall be excluded from working on the Project and shall not again be employed on the Project **except with the prior written consent of County**.

**6.3.3** The Contractor shall furnish labor that can work in harmony with all other elements of labor employed or to be employed in the Work.

**6.3.4** If Contractor intends to make any change in the name or legal nature of the Contractor's entity, Contractor must first notify the County. The County shall determine if Contractor's intended change is permissible while performing this Contract.

### **6.4 Purchase of Materials and Equipment**

The Contractor is required to order, obtain, and store materials and equipment sufficiently in advance of its Work at no additional cost or advance payment from County to assure that there will be no delays.

### **6.5 Documents On Work Site**

**6.5.1** Contractor shall at all times keep on the Work Site, or such other location as County may authorize in writing **one legible copy of all Contract Documents**, including Addenda and Change Orders, and titles 19 and 24 of the California Code of Regulations, the specified edition(s) of the Uniform Building Code, all approved Drawings, Plans, Schedules, and Specifications, and all codes and documents referred to in the Specifications, and made part thereof. These documents shall be kept in good order and available to County, Construction Manager, Engineer, Engineer's representatives, and all authorities having jurisdiction. Contractor shall be acquainted with and comply with the provisions of these titles as they relate to this Project. Contractor shall also be acquainted with and comply with all California Code of Regulations provisions relating to conditions on this Project. Contractor shall coordinate with Engineer and Construction Manager.

**6.5.2** Daily Job Reports. Contractor shall maintain, **at a minimum, at least one (1) set of Daily Job Reports on the Project**. These must be prepared by the Contractor's employee(s) who are present on Site and must include, at a minimum, the following information:

- 6.5.2.1** A brief description of all Work performed on that day. This shall include a listing of what was done, which contractors were on site that day, and where on the site the work was performed.
- 6.5.2.2** A summary of all other pertinent events and/or occurrences on that day.
- 6.5.2.3** The weather conditions on that day.
- 6.5.2.4** A list of all Subcontractor(s) working on that day,
- 6.5.2.5** A list of each Contractor employee working on that day and the total hours worked for each employee.
- 6.5.2.6** A complete list of all equipment on Site that day, whether in use or not.
- 6.5.2.7** All complete list of all materials, supplies, and equipment delivered on that day.
- 6.5.2.8** A complete list of all inspections and tests performed on that day.
- 6.5.2.9** Each day Contractor shall provide a copy of the previous day's Daily Job Report to the County or the County's Construction Manager.

## **6.6 Preservation of Records**

The County shall have the right to examine and audit all Daily Job Reports or other Project records of Contractor's project manager(s), project superintendent(s), and/or project foreperson(s), all certified payroll records and/or related documents including, without limitation, payroll, payment, timekeeping and tracking documents; all books, estimates, records, contracts, documents, bid documents, bid cost data, subcontract job cost reports, and other data of the Contractor, any Subcontractor, and/or supplier, including computations and projections related to bidding, negotiating, pricing, or performing the Work or Contract modification, in order to evaluate the accuracy, completeness, and currency of the cost, manpower, coordination, supervision, or pricing data at no additional cost to the County. These documents may be duplicative and/or be in addition to any Bid

Documents held in escrow by the County. The Contractor shall make available at its office at all reasonable times the materials described in this paragraph for the examination, audit or reproduction **until three (3) years after final payment under this Contract.**

Notwithstanding the provisions above, Contractor shall provide any records requested by any governmental agency if available, after the time set forth above.

#### **6.7 Integration of Work**

**6.7.1** Contractor shall do all cutting, fitting, patching, and preparation of Work as required to make its several parts come together properly, to fit it to receive or be received by work of other contractors, and to coordinate tolerances to various pieces of work, showing upon, or reasonably implied by, the Drawings and Specifications for the completed structure, and shall conform them as County and/or Engineer may direct.

**6.7.2** All cost caused by defective or ill-timed Work shall be borne by Contractor, inclusive of repair work.

**6.7.3** Contractor shall not endanger any work performed by it or anyone else by cutting, excavating, or otherwise altering work and shall not cut or alter work of any other contractor except with the consent of County.

#### **6.8 Obtaining of Permits and Licenses**

Contractor shall secure and pay for all permits, licenses, and certificates necessary for prosecution of Work before the date of the commencement of the Work or before the permits, licenses, and certificates are legally required to continue the Work without interruption. The Contractor shall obtain and pay, only when legally required, for all licenses, permits, inspections, and inspection certificates required to be obtained from or issued by any authority having jurisdiction over any part of the Work included in the Contract. All final permits, licenses, and certificates shall be delivered to County before demand is made for final payment.

#### **6.9 Work to Comply With Applicable Laws and Regulations**

**6.9.1** Contractor shall give all notices and comply with the following specific laws, ordinances, rules, and regulations and all other applicable laws, ordinances, rules, and regulations bearing on conduct of Work as indicated and specified, including but not limited to the appropriate statutes and administrative code sections. If Contractor observes that Drawings and Specifications are at variance therewith, or should Contractor become aware of the development of conditions not covered by Contract Documents that will result in finished Work being at variance therewith, **Contractor shall promptly notify County in writing**, including by e-mail, and any changes deemed necessary by County shall be made as provided in Contract for changes in Work.

- 6.9.1.1** National Electrical Safety Code, U. S. Department of Commerce
- 6.9.1.2** National Board of Fire Underwriters' Regulations
- 6.9.1.3** Uniform Building Code, latest addition, and the California Code of Regulations, title 24, including amendments
- 6.9.1.4** Manual of Accident Prevention in Construction, latest edition, published by A.G.C. of America

- 6.9.1.5** Industrial Accident Commission's Safety Orders, State of California
- 6.9.1.6** Regulations of the State Fire Marshall (title 19, California Code of Regulations) and Pertinent Local Fire Safety Codes
- 6.9.1.7** Americans with Disabilities Act
- 6.9.1.8** Government Code of the State of California
- 6.9.1.9** Labor Code of the State of California, Division 2, part 7, Public Works and Public Agencies
- 6.9.1.10** Public Contract Code of the State of California
- 6.9.1.11** California Art Preservation Act
- 6.9.1.12** U. S. Copyright Act
- 6.9.1.13** U. S. Visual Artists Rights Act

**6.9.2** Contractor shall comply with all applicable mitigation measures, if any, adopted by any public agency with respect to this Project pursuant to the California Environmental Quality Act (Public Resources Code Section 21000 et. Seq.)

**6.9.3** If Contractor performs any Work that it knew, or through exercise of reasonable care should have known, to be contrary to any applicable laws, ordinance, rules, or regulations, Contractor shall bear all costs arising therefrom.

**6.9.4** Where Specifications or Drawings state that materials, processes, or procedures must be approved by the State Fire Marshall, or other body or agency, Contractor shall be responsible for satisfying requirements of such bodies or agencies.

## **6.10 Safety/Protection of Persons and Property**

**6.10.1** The Contractor will be solely and completely responsible for conditions of the Work Site, including safety of all persons and property during performance of the Work. This requirement will apply continuously and not be limited to normal working hours.

**6.10.2** The wearing of hard hats will be mandatory at all times for all personnel on Site. Contractor shall supply sufficient hard hats to properly equip all employees and visitors.

**6.10.3** Any construction review of the Contractor's performance is not intended to include a review of the adequacy of the Contractor's safety measures in, on, or near the Work Site.

**6.10.4** Implementation and maintenance of safety programs shall be the sole responsibility of the Contractor.

**6.10.5** The Contractor shall furnish to the County a copy of the Contractor's safety plan within the time frame indicated in the Contract Documents and specifically adapted for the Project.

**6.10.6** Contractor shall be responsible for all damages to persons or property that occur as a result of its fault or negligence in connection with the prosecution of this Contract and shall take all necessary measures and be responsible for the proper care

and completion and final acceptance by County. All Work shall be solely at Contractor's risk with the exception of damage to the Work caused by "acts of God" as defined in Public Contract Code Section 7105.

**6.10.7** Contractor shall take, and require Subcontractors to take, all necessary precautions for safety of workers on the Project and shall comply with all applicable federal, state, local, and other safety laws, standards, orders, rules, regulations, and building codes to prevent accidents or injury to persons on, about, or adjacent to premises where Work is being performed and to provide a safe and healthful place of employment. Contractor shall furnish, erect, and properly maintain at all times, all necessary safety devices, safeguards, construction canopies, signs, nets, barriers, lights, and watchmen for protection of workers and the public and shall post danger signs warning against hazards created by such features in the course of construction.

**6.10.8** Hazards Control – Contractor shall store volatile wastes in covered metal containers and **remove them from the Site daily**. Contractor shall prevent the accumulation of wastes that create hazardous conditions. Contractor shall provide adequate ventilation during use of volatile or noxious substances.

**6.10.9** Contractor shall designate a responsible member of its organization on the Project, whose duty shall be to post information regarding protection and obligations of workers and other notices required under occupational safety and health laws, to comply with reporting and other occupational safety requirements, and to protect the life, safety, and health of workers. Name and position of person so designated shall be reported to County by Contractor.

**6.10.10** Contractor shall correct any violations of safety laws, rules, orders, standards, or regulations. Upon the issuance of a citation or notice of violation by the Division of Occupational Safety and Health, Contractor shall correct such violation promptly.

**6.10.11** Contractor shall comply with any County **stormwater requirements** that are approved by the County and applicable to the Project, **at no additional cost to the County**.

**6.10.12** In an emergency affecting safety of life or of work or of adjoining property, Contractor, without special instruction or authorization, shall act, at its discretion, to prevent such threatened loss or injury. Any compensation claimed by Contractor on account of emergency work shall be determined by agreement.

**6.10.13** **All connections to public utilities and/or existing on-site services shall be made and maintained** in such a manner as to not interfere with the continuing use of same by the County during the entire progress of the Work.

**6.10.14** Contractor shall provide such heat, covering, and enclosures as are necessary to protect all Work, materials, equipment, appliances, and tools against damage by weather conditions, such as extreme heat, cold, rain, snow, dry winds, flooding, or dampness.

**6.10.15** The Contractor shall protect and preserve the Work from all damage or accident, providing any temporary roofs, window and door coverings, boxing, or other construction. The Contractor shall be responsible for existing structures, walks, roads,

trees, landscaping, and/or improvements in working areas; and shall provide adequate protection therefor. If temporary removal is necessary of any of the above items, or damage occurs due to the Work, the Contractor shall replace same at his expense with same kind, quality, and size of Work or item damaged. This shall include any adjoining property of the County and others.

**6.10.16** Contractor shall take adequate precautions to protect existing roads, sidewalks, curbs, pavements, utilities, adjoining property, and structures (including, without limitation, protection from settlement or loss of lateral support), and to avoid damage thereto, and repair any damage thereto caused by construction operations.

**6.10.17** Contractor shall confine apparatus, the storage of materials, and the operations of workers to limits indicated by law, ordinances, permits, or directions of Engineer, and shall not interfere with the Work or unreasonably encumber Premises or overload any structure with materials. Contractor shall enforce all instructions of County and Engineer regarding signs, advertising, fires, and smoking, and require that all workers comply with all regulations while on Project Site.

**6.10.18** Contractor, Contractor's employees, Subcontractors, Subcontractors' employees, or any person associated with the Work shall conduct themselves in a manner appropriate for a public site. No verbal or physical contact with the public, neighbors, or tenants, or profanity, or inappropriate attire or behavior will be permitted. County may require Contractor to permanently remove non-complying persons from Project Site.

**6.10.19** Contractor shall take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed, Contractor shall have a civil engineer, registered as a professional engineer in California, replace them at no cost to County.

**6.10.20** In the event that the Contractor enters into any agreement with owners of any adjacent property to enter upon the adjacent property for the purpose of performing the Work, Contractor shall fully indemnify, defend, and hold harmless each person, entity, firm, or agency that owns or has any interest in adjacent property. The form and content of the agreement of indemnification shall be approved by the County prior to the commencement of any Work on or about the adjacent property. The Contractor shall also indemnify the County as provided in the indemnification provision herein. These provisions shall be in addition to any other requirements of the owners of the adjacent property.

## **6.11 Working Evenings and Weekends**

Contractor may be required to work evenings and/or weekends at no additional cost to the County. Contractor shall give the County **seventy-two (72) hours notice prior to performing any evening and/or weekend work**. Contractor shall perform all evening and/or weekend work only upon County's approval and in compliance with all applicable rules, regulations, laws, and local ordinances including, without limitation, all noise and light limitations. Contractor shall reimburse the County for any expenses necessitated by the Contractor's evening and/or weekend work.

## **6.12 Badge Policy For Contractors**



All Contractors doing work for Alameda County will provide their workers with identification badges. These badges will be worn by all members of the Contractor's staff who are working in a County facility.

**6.12.1** Badges must be filled out in full and contain the following information:

**6.12.1.1** Name of Contractor and Contractor's Company logo, if any

**6.12.1.2** Name and front facial photograph of Employee

**6.12.1.3** Contractor's address and phone number

**6.12.1.4** Name and phone number of Project Manager (County)

**6.12.2** Badges are to be worn when the Contractor or his/her employees are on site and must be visible at all times. Contractors must inform their employees that they are required to allow County employees to review the information on the badges upon request

**6.12.3** Failure to display identification badges as required by this policy may result in the assessment of fines against the Contractor.

### **6.13 County Drug Policy - Drug-Free Work Place**

**6.13.1** Contractor, Contractor's employees, and Contractor's Subcontractors and their employees shall comply with the County's policy of maintaining a drug-free workplace. Neither Contractor/Subcontractor nor Contractor's/Subcontractor's employees shall unlawfully manufacture, distribute, dispense, possess or use controlled substances, as defined in 21 U.S. Code Section 812, including marijuana, heroin, cocaine, and amphetamines, at any County facility or work site. If Contractor or any employee of contractor is convicted or pleads nolo contendere to a criminal drug statute violation occurring at a County facility or work site, the Contractor **within five (5) calendar days** thereafter shall notify the head of the County department/agency for which the contract services are performed. Violation of this provision shall constitute a material breach of this contract.

### **6.14 Cleaning Up**

**6.14.1** The Contractor shall provide all services, labor, materials, and equipment necessary for protecting the Work, all Project occupants, furnishings, equipment, and building structure from damage until its completion and final acceptance by County. Dust barriers shall be provided to isolate dust and dirt from construction operations. At completion of the Work and portions thereof, Contractor shall clean to the original state any areas beyond the Work area that become dust laden as a result of the Work. The Contractor must erect the necessary warning signs and barricades to ensure the safety of all Project occupants. The Contractor at all times must maintain good housekeeping practices to reduce the risk of fire damage and must make a fire extinguisher, fire blanket, and/or fire watch, as applicable, available at each location where cutting, braising, soldering, and/or welding is being performed and locations where there is an increased risk of fire.

**6.14.2** Contractor at all times shall keep Premises free from debris such as waste, rubbish, and excess materials and equipment caused by the Work. Contractor shall

not leave debris under, in, or about the Premises, but shall promptly **remove same from the Premises on a daily basis**. If Contractor fails to clean up, County may do so, and the cost thereof shall be charged to Contractor. If Contract is for work on an existing facility, Contractor shall also perform specific clean-up on or about the Premises upon request by the County as it deems necessary for the continuing use of the facility. Contractor shall comply with all related provisions of the Specifications.

**6.14.3** If the Construction Manager, Engineer, or County observes the accumulation of trash and debris, the County will give the Contractor a **24-hour written notice to mitigate the condition**.

**6.14.4** Should the Contractor fail to perform the required clean-up, or should the clean-up be deemed unsatisfactory by the County, the County will then perform the clean-up. All cost associated with the clean-up work (including all travel, payroll burden, and costs for supervision) will be deducted from the Contract Price, or County may withhold those amounts from payment(s) to Contractor.

## **7. SUBCONTRACTORS**

### **7.1 Contractor Shall Provide Subcontractor Information**

Contractor shall provide the County with information for all Subcontracts as indicated in the Contractor's Submittals and Schedules Section herein.

### **7.2 No Contractual Relationship Between County and Subcontractors**

No contractual relationship exists between the County and any Subcontractor, Supplier, or sub-subcontractor supplier, or sub-subcontractor by reason of this Contract.

### **7.3 Contractor Binds Every Subcontractor by Terms of Contract**

Contractor agrees to bind every Subcontractor by terms of Contract as far as those terms are applicable to Subcontractor's work. If Contractor shall subcontract any part of this Contract, Contractor shall be as fully responsible to County for acts and omissions of any Subcontractor and of persons either directly or indirectly employed by any Subcontractor, as it is for acts and omissions of persons directly employed by Contractor. The divisions or sections of the Specifications are not intended to control the Contractor in dividing the Work among Subcontractors or limit the work performed by any trade.

### **7.4 No Waiver of Obligations**

County's consent to, or approval of, or failure to object to, any Subcontractor under this Contract shall not in any way relieve Contractor of any obligations under this Contract, and no such consent shall be deemed to waive any provisions of this Contract.

### **7.5 Contractor to Familiarize Itself with Laws**

Contractor is directed to familiarize itself with sections 4100 through 4114 of the Public Contract Code of the State of California, as regards subletting and subcontracting, and to comply with all applicable requirements therein. In addition, Contractor is directed to familiarize itself with Sections 1720 through 1861 of the Labor Code of the State of California, as regards the payment of prevailing wages and related issues, and to comply with all applicable requirements therein all including, without

limitation, Section 1775 and the Contractor's and Subcontractors' obligations and liability for violations of prevailing wage law and other applicable laws.

#### **7.6 Subcontractor Substitutions**

No Contractor whose Bid is accepted shall, **without written consent of the awarding authority** and in full compliance with section 4100, et seq, of the Public Contract Code, including, without limitation, sections 4107, 4107.5, and 4109 of the Public Contract Code, either:

**7.6.1** Substitute any person as a Subcontractor in place of the Subcontractor designated in the original Bid; or

**7.6.2** Permit any Subcontract to be assigned or transferred, or allow any portion of the Work to be performed by anyone other than the original Subcontractor listed in the Bid; or

**7.6.3** Sublet or subcontract any portion of the Work **in excess of one-half of one percent (1/2 of 1%) of the Contractor's total bid** as to which his original bid did not designate a Subcontractor.

#### **7.7 Subcontractor Coordination**

The Contractor shall be responsible for the coordination of the trades, Subcontractors, sub-subcontractors, and material or equipment suppliers working on the Project.

#### **7.8 Subcontractor Relations**

Contractor is solely responsible for settling any differences between the Contractor and its Subcontractor(s) or between Subcontractors.

#### **7.9 Assignment or Termination**

Contractor must include in all of its subcontracts the assignment provisions as indicated in the Termination section of these General Conditions.

### **8. OTHER CONTRACTS/CONTRACTORS**

#### **8.1 County Right to Perform**

County reserves the right to let other contracts, and/or to perform work with its own forces, in connection with the Project. Contractor shall afford other County and other contractors' reasonable opportunity for introduction and storage of their materials and execution of their work and shall properly coordinate and connect Contractor's Work with the work of County and other contractors.

#### **8.2 Protection of Work**

In addition to Contractor's obligation to protect its own Work, Contractor shall protect the work of County and any other contractor that Contractor encounters while working on the Project.

#### **8.3 Coordination with Other Work**

If any part of Contractor's Work depends for proper execution or results upon work of County or any other contractor, the Contractor shall inspect and promptly report to

the County in writing, including by e-mail, before proceeding with its Work any defects in County's or any other contractor's work that render Contractor's Work unsuitable for proper execution and results. Contractor shall be held accountable for damages to County for County's or any other contractor's work that Contractor failed to inspect or should have inspected. Contractor's failure to inspect and report shall constitute Contractor's acceptance of all County's or other contractor's work as fit and proper for reception of Contractor's Work, except as to defects that may develop in County's or other contractor's work after execution of Contractor's Work.

#### **8.4 Measurement of Work Performed**

To ensure proper execution of its subsequent work, Contractor shall measure and inspect work already in place and shall at once report to the County in writing, including by e-mail, any discrepancy between that executed work and the Contract Documents.

#### **8.5 Knowledge of Other Work**

Contractor shall ascertain to its own satisfaction the scope of the Project and nature of any County-performed work or other contracts that have been or may be awarded by County in prosecution of the Project to the end that Contractor may perform this Contract in light of the other contracts, if any.

#### **8.6 No Exclusive Occupancy of Site**

Nothing herein contained shall be interpreted as granting to Contractor exclusive occupancy of the Site, the Premises, or of the Project. Contractor shall not cause any unnecessary hindrance or delay to the use and/or operation(s) of the Premises and/or to County or any other contractor working on the Project. If simultaneous execution of any contract or operation is likely to cause interference with performance of Contractor's Contract, Contractor shall coordinate with those contractor(s), person(s), and/or entity(s) and shall notify the County of the resolution.

### **9. DRAWINGS AND SPECIFICATIONS**

#### **9.1 List of all Drawings**

A complete list of all Drawings that form a part of the Contract is to be found as an index on the Drawings themselves, and/or may be provided to the Contractor and/or in the Table of Contents.

#### **9.2 Technical and Trade Words**

Materials or Work described in words that so applied have a well-known technical or trade meaning shall be deemed to refer to recognized standards unless noted otherwise.

#### **9.3 Trade Name or Trade Term**

It is not the intention of this Contract to go into detailed descriptions of any materials and/or methods commonly known to the trade under "trade name" or "trade term". The mere mention or notation of "trade name" or "trade term" shall be considered a sufficient notice to Contractor that it will be required to complete the work so named,

complete, finished, and operable, with all its appurtenances, according to the best practices of the trade.

**9.4 The Naming of any Material and/or Equipment Shall Mean Furnishing**

The naming of any material and/or equipment shall mean furnishing and installing of same, including all incidental and accessory items thereto and/or labor, therefore, as per best practices of the trade(s) involved, unless specifically noted otherwise.

**9.5 Contract Documents are Complementary**

Contract Documents are complementary, and what is called for by one shall be binding as if called for by all. As such, Drawings and Specifications are intended to be fully cooperative and to agree. However, if Contractor observes that Drawings and Specifications are in conflict, Contractor shall promptly notify County and Engineer in writing, including by e-mail, and any necessary changes shall be made as provided in the Contract Documents.

**9.6 Drawings and Specifications are Intended to Comply With All Laws**

Drawings and Specifications are intended to comply with all laws ordinances, rules, and regulations of constituted authorities having jurisdiction, and where referred to in the Contract Documents, the laws, ordinances, rules, and regulations shall be considered as a part of the Contract within the limits specified. Contractor shall bear all expense of correcting work done contrary to said laws, ordinances, rules, and regulations.

**9.7 Plans, Drawings, Designs, Specifications are County Property**

All copies of Plans, Drawings, Designs, Specifications and copies of other incidental architectural and engineering work, or copies of other Contract Documents furnished by County, are the property of County. They are not to be used by Contractor in other work and, with the exception of signed sets of Contract Documents, are to be returned to County on request at completion of Work, or may be used by County as it may require without any additional costs to County. Neither the Contractor nor any Subcontractor, or material or equipment supplier shall own or claim copyright in the Drawings, Specifications, and other documents prepared by the Engineer. County hereby grants the Contractor, Subcontractors, sub-subcontractors, and material or equipment suppliers a limited license to use applicable portions of the Drawings prepared for the Project in the execution of their Work under the Contract Documents.

**9.8 Order of Precedence**

In the case of discrepancy or ambiguity in the Contract Documents, the order of precedence in the Agreement shall prevail.

**9.9 Resolution of Discrepancy or Ambiguity**

However, in the case of discrepancy or ambiguity solely between and among the Drawings and Specifications, the discrepancy or ambiguity shall be resolved in favor of the interpretation that will provide County with the functionally complete and operable Project described in the Drawings and Specifications.

**9.10 County Clarification**

In case of ambiguity, conflict, or lack of information, County will furnish clarifications with reasonable promptness. Should any clarification, in the opinion of Contractor, cause an increase in the Contract Price, Contractor may request a change in the Contract Price and/or Contract. **Within seven (7) days after receipt of the interpretation** or request, Contractor to submit to the Construction Manager a detailed description of the contract requirements that were exceeded and the resulting change in cost.

## **10. CONTRACTOR'S SUBMITTALS AND SCHEDULES**

Refer to Section 01 33 00 "Submittal Requirements." Contractor's submittals shall comply with the provisions and requirements of the Specifications.

### **10.1 Schedule of Work, Schedule of Submittals, and Schedule of Values**

**Within TEN (10) calendar days after the date of the Notice to Proceed** (unless otherwise specified in the Specifications), the Contractor shall prepare and submit to the County for review, in a form supported by sufficient data to substantiate its accuracy as the County may require:

#### **10.1.1 Preliminary Schedule**

A preliminary schedule of construction indicating the starting and completion dates of the various stages of the Work, including any information and following any form as may be specified in the Specifications. Once approved by County, this shall become the Construction Schedule. This schedule shall **include and identify all tasks that are on the Project's critical path** with a specific determination of the start and completion of each critical path task as well as all contract milestones and each milestone's completion date(s) as may be required by the County.

#### **10.1.2 Preliminary Schedule of Values**

A preliminary schedule of values for all of the Work, which must include quantities and prices of items aggregating the Contract Price and must subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. This preliminary schedule of values shall include, at a minimum, the following information, and the following structure:

##### **10.1.2.1** Divided into at least the following categories:

**10.1.2.1.1** Overhead and profit;

**10.1.2.1.2** Supervision;

**10.1.2.1.3** General conditions;

**10.1.2.1.4** Layout;

**10.1.2.1.5** Mobilization;

**10.1.2.1.6** Submittals;

**10.1.2.1.7** Bonds and insurance;

**10.1.2.1.8** Close-out documentation;

**10.1.2.1.9** Demolition;

- 10.1.2.1.10 Installation;
- 10.1.2.1.11 Rough-in;
- 10.1.2.1.12 Finishes;
- 10.1.2.1.13 Testing;
- 10.1.2.1.14 Punch list and acceptance.

10.1.2.2 Divided by each of the following areas:

- 10.1.2.2.1 Site work;
- 10.1.2.2.2 By each building;
- 10.1.2.2.3 By each floor.

10.1.3 The preliminary schedule of values shall not provide for values any greater than the following percentages of the Contract value:

- 10.1.3.1 Mobilization and layout combined to equal **not more than 1%**;
- 10.1.3.2 Submittals, samples and shop drawings combined to equal **not more than 3%**, bonds and insurance combined to equal **not more than 2%**.
- 10.1.3.3 Closeout documentation shall have a value in the preliminary schedule of **not less than 5%**.

10.1.4 Notwithstanding any provision of the Contract Documents to the contrary, payment of the Contractor's overhead, supervision, general conditions costs, and profit, as reflected in the Cost Breakdown, shall be paid by the County in equal installments, based on percentage complete, with the disbursement of Progress Payments and the Final Payment.

10.1.5 Contractor shall certify that the preliminary schedule of values, as submitted to the County, is accurate and reflects the costs as developed in preparing Contractor's bid. The preliminary schedule of values shall be subject to the County's review and approval of the form and content thereof. In the event that the County objects to any portion of the preliminary schedule of values, the County shall notify the Contractor, in writing, including by e-mail, of the County's objection(s) to the preliminary schedule of values. **Within five (5) calendar days of the date of the County's written objection(s)**, Contractor shall submit a revised preliminary schedule of values to the County for review and approval. The foregoing procedure for the preparation, review, and approval of the preliminary schedule of values shall continue until the County has approved the entirety of the preliminary schedule of values.

10.1.6 Once the preliminary schedule of values is approved by the County, this shall become the Schedule of Values. The Schedule of Values shall not be thereafter modified or amended by the Contractor without the prior consent and approval of the County, which may be granted or withheld in the sole discretion of the County.

#### 10.1.7 Preliminary Schedule of Submittals

A preliminary schedule of submittals, including Shop Drawings, Product Data, and Samples submittals. Once approved by County, this shall become the Submittal Schedule. All submittals shall be forwarded to the County by the date indicated on the approved Submittal Schedule unless an earlier date is necessary to maintain the Construction Schedule, in which case those submittals shall be forwarded to the County so as not to delay the Construction Schedule.

#### **10.1.8 Safety Plan**

Contractor's Safety Plan specifically adapted for the Project. Contractor's Safety Plan shall comply with the following requirements:

- 10.1.8.1** All applicable requirements of California Division of Industrial Safety ("CalOSHA") and/or of the United States Occupational Safety and Health Administration ("OSHA").
- 10.1.8.2** All provisions regarding Project safety, including all applicable provisions of these General Conditions.
- 10.1.8.3** Contractor's Safety Plan shall be in English and in the language(s) of the Contractor's and its Subcontractors' employees.

#### **10.1.9 Complete Subcontractor List**

The name, address, telephone number, facsimile number, California State Contractors License number, classification, and monetary value of all Subcontracts for parties furnishing labor, material, or equipment for completion of the Project.

#### **10.1.10 General Requirements**

- 10.1.10.1** Contractor must provide all schedules both in hard copy and electronically, in a format (e.g., Microsoft Project or Primavera) approved in advance by the County.
- 10.1.10.2** The County will review the schedules submitted, and the Contractor shall make changes and corrections in the schedules as requested by the County and resubmit the schedules until approved by the County.
- 10.1.10.3** The County shall have the right at any time to revise the schedule of values if, in the County's sole opinion, the schedule of values does not accurately reflect the value of the Work performed.
- 10.1.10.4** All submittals and schedules must be approved by the County before Contractor can rely on them as a basis for payment.

#### **10.2 Monthly Progress Schedule(s)**

**10.2.1** Upon request by the County, Contractor shall provide Monthly Progress Schedule(s) to the County. A Monthly Progress Schedule shall update the approved Construction Schedule or the last Monthly Progress Schedule, showing all work completed and to be completed. The monthly Progress Schedule shall be sent within the timeframe requested by the County and shall be in a format acceptable to the County and contain a written narrative of the progress of work that month and any changes, delays, or events that may affect the work. The process for County approval of the Monthly Progress Schedule shall be the same as the process for approval of the Construction Schedule.



**10.2.2** Contractor shall also submit Monthly Progress Schedule(s) with all payment applications.

**10.3 Safety Data Sheets (SDS)**

Contractor is required to ensure Safety Data Sheets are available in a readily accessible place at the Work Site for any material requiring a Safety Data Sheet per the Federal "Hazard Communication" standard, or employees right to know law. The Contractor is also required to ensure proper labeling on substance brought onto the job site and that any person working with the material or within the general area of the material is informed of the hazards of the substance and follows proper handling and protection procedures. **Two additional copies of the Safety Data Sheets shall also be submitted directly to the County.**

**11. SITE ACCESS, CONDITIONS, AND REQUIREMENTS**

**11.1 Site Investigation**

Before bidding on this Work, Contractor shall make a careful investigation of the Site and thoroughly familiarize itself with the requirements of the Contract. By the act of submitting a bid for the Work included in this Contract, Contractor shall be deemed to have made a complete study and investigation, and to be familiar with and accepted the existing conditions of the Site.

**11.2 Soils Investigation Report**

**11.2.1** When a soils investigation report obtained from test holes at Site is available, that report shall be available to the Contractor but shall not be a part of this Contract. Any information obtained from that report or any information given on Drawings as to subsurface soil condition or to elevations of existing grades or elevations of underlying rock is approximate only, is not guaranteed, does not form a part of this Contract, and Contractor may not rely thereon. By submitting its bid, Contractor acknowledges that it has made a visual examination of Site and has made whatever tests Contractor deems appropriate to determine underground condition of the soil.

**11.2.2** Contractor agrees that no claim against County will be made by Contractor for damages and hereby waives any rights to damages if, during progress of Work, Contractor encounters subsurface or latent conditions at Site materially differing from those shown on Drawings or indicated in Specifications, or for unknown conditions of an unusual nature that differ materially from those ordinarily encountered in the work of the character provided for in Plans and Specifications, except as indicated in the provisions of these General Conditions regarding trenches, trenching, and/or existing utility lines.

**11.3 Access to Work**

County and its representatives shall at all times have access to Work wherever it is in preparation or progress, including storage and fabrication. Contractor shall provide safe and proper facilities for such access so that County's representatives may perform their functions.

**11.4 Layout and Field Engineering**

**11.4.1** All field engineering required for layout of this Work and establishing grades for earthwork operations shall be furnished by Contractor at its

expense. This Work shall be done by a **qualified, California-registered civil engineer approved in writing by County** and design Engineer. Any required "Record" drawings of Site development shall be prepared by the approved civil engineer.

**11.4.2** The Contractor shall be responsible for having ascertained pertinent local conditions such as location, accessibility, and general character of the Site and for having satisfied itself as to the conditions under which the Work is to be performed. County shall not be liable for any claim for allowances because of Contractor's error or negligence in acquainting itself with the conditions at the Site.

**11.4.3** Contractor shall protect and preserve established benchmarks and monuments and shall make no changes in locations without the prior written approval of County. Contractor shall replace any benchmarks or monuments that are lost or destroyed subsequent to proper notification of County and with County's approval.

## **11.5 Utilities**

Utilities shall be provided as indicated in the Specifications.

## **11.6 Sanitary Facilities**

Sanitary facilities shall be provided as indicated in the Specifications.

## **11.7 Surveys**

Contractor shall provide surveys done by a **California-licensed civil engineer surveyor** to determine locations of construction, grading, and site work as required to perform the Work.

## **11.8 Regional Notification Center**

The Contractor, except in an emergency, shall contact the appropriate regional notification center **at least two (2) days prior to commencing any excavation** if the excavation will be conducted in an area or in a private easement that is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the County, and obtain an inquiry identification number from that notification center. No excavation shall be commenced and/or carried out by the Contractor unless an **inquiry identification number has been assigned to the Contractor or any Subcontractor, and the Contractor has given the County the identification number**. Any damages arising from Contractor's failure to make appropriate notification shall be at the sole risk and expense of the Contractor. Any delays caused by failure to make appropriate notification shall be at the sole risk of the Contractor and shall not be considered for an extension of the Contract time.

## **11.9 Existing Utility Lines**

**11.9.1** Pursuant to Government Code Section 4215, County assumes the responsibility for removal, relocation, and protection of main or trunk utility lines and facilities located on the Construction Site at the time of commencement of construction under this Contract with respect to any such utility facilities that are not identified in the Plans and Specifications. Contractor shall not be assessed for liquidated damages for delay in completion of the Project caused by failure of County or the owner of a utility to provide for removal or relocation of such utility facilities.

**11.9.2** Locations of existing utilities provided by County shall not be considered exact, but approximate within reasonable margin and shall not relieve Contractor of responsibilities to exercise reasonable care nor costs of repair due to Contractor's failure to do so. County shall compensate Contractor for the costs of locating, repairing damage, not due to the failure of Contractor to exercise reasonable care, and removing or relocating such utility facilities not indicated in the Plans and Specifications with reasonable accuracy, and for equipment necessarily idle during such work.

**11.9.3** No provision herein shall be construed to preclude assessment against Contractor for any other delays in completion of the Work. Nothing in this Article shall be deemed to require County to indicate the presence of existing service laterals, appurtenances, or other utility lines, with the exception of main or trunk utility lines. Whenever the presence of these utilities on the Site of the construction Project can be inferred from the presence of other visible facilities, such as buildings, meter junction boxes, on or adjacent to the Site of the construction.

**11.9.4** If Contractor, while performing Work under this Contract, discovers utility facilities not identified by County in Contract Plans and Specifications, Contractor shall immediately notify the County and the utility in writing. The cost of repair for damage to above-mentioned visible facilities without prior written notification to the County shall be borne by the Contractor.

#### **11.10 Notification**

Contractor understands, acknowledges and agrees that the purpose for prompt notification to the County pursuant to these provisions is to allow the County to investigate the condition(s) so that the County shall have the opportunity to decide how the County desires to proceed as a result of the condition(s). Accordingly, failure of Contractor to promptly notify the County in writing, including by e-mail, pursuant to these provisions, shall constitute Contractor's waiver of any claim for damages or delay incurred as a result of the condition(s).

#### **11.11 Hazardous Materials**

Contractor shall comply with all provisions and requirements of the Contract Documents related to hazardous materials including, without limitation, Hazardous Materials Procedures, and Requirements.

#### **11.12 No Signs**

Neither the Contractor nor any other person or entity shall display any signs not required by law or the Contract Documents at the Site, fences, trailers, offices, or elsewhere on the Site without specific prior written approval of the County.

### **12. TRENCHES**

#### **12.1 Trenches Greater Than Five Feet**

Pursuant to Labor Code Section 6705, if the Contract Price exceeds \$25,000 and involves the excavation of any trench or **trenches five (5) feet or more in depth**, the Contractor shall, in advance of excavation, promptly submit to the County and/or a registered civil or structural engineer employed by the County or Engineer, a detailed plan

showing the design of shoring for protection from the hazard of caving ground during the excavation of such trench or trenches.

## **12.2 Excavation Safety**

If such plan varies from the Shoring System Standards established by the Construction Safety Orders, the plan shall be **prepared by a registered civil or structural engineer**, but in no case shall such plan be less effective than that required by the Construction Safety Orders. No excavation of such trench or trenches shall be commenced until said plan has been accepted by the County or by the person to whom authority to accept has been delegated by the County.

## **12.3 No Tort Liability of County**

Pursuant to Labor Code section 6705, nothing in this Article shall impose tort liability upon the County or any of its employees.

## **12.4 No Excavation Without Permits**

The Contractor shall not commence any excavation Work until it has secured all necessary permits including the **required CalOSHA excavation/shoring permit**. Any permits shall be prominently displayed on the Site prior to the commencement of any excavation.

## **12.5 Discovery of Hazardous Waste and/or Unusual Conditions**

**12.5.1** Pursuant to Public Contract Code Section 7104, if the Work involves digging trenches or other **excavations that extend deeper than four feet below the Surface**, the Contractor shall promptly, and before the following conditions are disturbed, notify the County, in writing, including by e-mail, of any:

- 12.5.1.1** Material that the Contractor believes may be material that is hazardous waste, as defined in Section 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 provisions of existing law.
- 12.5.1.2** Subsurface or latent physical conditions at the Site differing from those indicated.
- 12.5.1.3** Unknown physical conditions at the Site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

**12.5.2** The County shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the Work, shall issue a Change Order under the procedures described herein.

**12.5.3** In the event that a dispute arises between County 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 scheduled completion date provided for in the Contract, but shall proceed with all work to be performed under the Contract.

The Contractor shall retain any and all rights provided either by Contract or by law that pertains to the resolution of disputes and protests.

### **13. INSURANCE AND BONDS**

#### **13.1 Insurance**

All insurance required of Contractor and/or its Subcontractor(s) shall be in amounts set forth in the Special Conditions and include the provisions as set forth herein.

##### **13.1.1 Commercial General Liability and Automobile Liability Insurance**

**13.1.1.1** Contractor shall procure and maintain, during the life of this Contract, Commercial General Liability Insurance and Automobile Liability Insurance that shall protect Contractor, County, Construction Manager(s), and Engineer(s) from all claims for bodily injury, property damage, personal injury, death, advertising injury, and medical payments arising from operations under this Contract. Contractor shall ensure that Products Liability and Completed Operations coverage and Fire Damage Liability is included within the above policies and within the required limits, or Contractor shall procure and maintain these coverages separately.

**13.1.1.2** Subcontractor: Contractor shall require its Subcontractors if any, to procure and maintain similar Commercial General Liability Insurance and Automobile Liability Insurance with minimum limits equal to the amount required of the Contractor. Contractor shall verify Subcontractor's compliance.

##### **13.1.2 Excess Liability Insurance**

**13.1.2.1** Contractor shall procure and maintain, during the life of this Contract, Excess Liability Insurance that shall protect Contractor, County, Construction Manager(s), and Engineer(s) in amounts and including the provisions as set forth in the Special Conditions, and that complies with all requirements for Commercial General Liability and Automobile Liability and Employers' Liability Insurance.

**13.1.2.2** Subcontractor: Contractor shall require its Subcontractor(s) if any, to procure and maintain similar Excess Liability Insurance with minimum limits equal to the amount required of the Contractor. Contractor shall verify Subcontractor's compliance.

##### **13.1.3 Workers' Compensation and Employers' Liability Insurance**

**13.1.3.1** In accordance with provisions of Section 3700 of the California Labor Code, the Contractor and every Subcontractor shall be required to secure the payment of compensation to its employees.

**13.1.3.2** Contractor shall procure and maintain, during the life of this Contract, Workers' Compensation Insurance and Employers' Liability Insurance for all of its employees engaged in work under this Contract, on/or at the Site of the Project. This coverage shall cover, at a minimum, medical and surgical treatment, disability benefits,

rehabilitation therapy, and survivors' death benefits. Contractor shall require its Subcontractor(s) if any, to procure and maintain Workers' Compensation Insurance and Employers' Liability Insurance for all employees of Subcontractor(s). Any class of employee or employees not covered by a Subcontractor's insurance shall be covered by Contractor's insurance. If any class of employee or employees engaged in Work under this Contract, on or at the Site of the Project, is not protected under the Workers' Compensation Statute, Contractor shall provide, or shall cause a Subcontractor to provide, adequate insurance coverage for the protection of any employee(s) not otherwise protected before any of those employee(s) commence work.

**13.1.4 Builder's Risk Insurance: Builder's Risk "All-Risk" Insurance.**

Contractor shall procure and maintain, during the life of this Contract, Builder's Risk (Course of Construction), or similar first party property coverage acceptable to the County, issued on a replacement cost value basis. The cost shall be consistent with the total replacement cost of all insurable Work of the Project included within the Contract Documents. Coverage is to insure against all risks of accidental physical loss and shall include without limitation the perils of vandalism and/or malicious mischief (both without any limitation regarding vacancy or occupancy), sprinkler leakage, civil authority, sonic disturbance, earthquake, flood, collapse, wind, fire, war, terrorism, lightning, smoke, and rioting. Coverage shall include debris removal, demolition, increased costs due to enforcement of all applicable ordinances and/or laws in the repair and replacement of damaged and undamaged portions of the property, and reasonable costs for the Engineer's and engineering services and expenses required as a result of any insured loss upon the Work and Project, including completed Work and Work in Progress, to the full insurable value thereof.

**13.1.5 Proof of Carriage of Insurance and Other Requirements: Endorsements and Certificates.**

**13.1.5.1** Contractor shall not commence Work nor shall it allow any Subcontractor to commence Work under this Contract, until Contractor and its Subcontractor(s) have procured all required insurance and Contractor has delivered in duplicate to the County complete endorsements (or entire insurance policies) and certificates indicating the required coverages have been obtained, and the County has approved these documents.

**13.1.5.2** Endorsements, certificates, and insurance policies shall include the following:

**13.1.5.2.1** A clause stating:

"This policy shall not be amended, canceled or modified and the coverage amounts shall not be reduced until notice has been mailed to County, Engineer, and Construction Manager stating date of amendment, modification, cancellation or reduction. Date of amendment, modification, cancellation or **reduction may not be less than thirty (30) days after date of mailing notice.**"

**13.1.5.2.2** Language stating, in particular, those insured, extent of insurance, location and operation to which insurance applies, expiration date, to whom cancelation and reduction notice will be sent, and length of notice period.

**13.1.5.3** All endorsements, certificates and insurance policies shall state that County, its Supervisors, employees, and agents, Construction Manager(s), and Engineer(s) are named additional insureds under all policies except Workers' Compensation Insurance and Employers' Liability Insurance. Contractor's and Subcontractors' insurance policy(s) shall be primary and non-contribution to any insurance or self-insurance maintained by County, its Supervisors, employees and/or agents, Construction Manager(s), and/or Engineer(s). All endorsements shall waive any right to subrogation against any of the named additional insureds.

**13.1.5.4** All policies shall be written on an occurrence form.

## **13.2 Contract Security - Bonds**

**13.2.1** Contractor shall furnish two surety bonds issued by a California admitted surety insurer as follows:

**13.2.1.1** Performance Bond: A bond in an amount **at least equal to one hundred percent (100%) of Contract Price** as security for faithful performance of this Contract.

**13.2.1.2** Payment Bond: A bond in an amount **at least equal to one hundred percent (100%) of the Contract Price** as security for payment of persons performing labor and/or furnishing materials in connection with this Contract.

**13.2.2** Cost of bonds shall be included in the Bid and Contract Price.

**13.2.3** All bonds related to this Project shall be in the forms set forth in these Contract Documents and shall comply with all requirements of the Contract Documents, including, without limitation, the bond forms.

## **14. WARRANTY/GUARANTEE/INDEMNITY**

### **14.1 Warranty/Guarantee**

**14.1.1** The Contractor shall obtain and preserve for the benefit of the County, manufacturer's warranties on materials, fixtures, and equipment incorporated into the Work.

**14.1.2** In addition to guarantees required elsewhere, Contractor shall, and hereby does guarantee and warrant all Work furnished on the job against all defects **for a period of TWO (2) years after the later of the following dates:**

**14.1.2.1** The **date of completion** as defined in Public Contract Code Section 7107, subdivision (c) and/or approval of the **Notice of Completion** by the County Board of Supervisors,

**14.1.2.2** The commissioning date for the Project, if any.

**14.1.3** At the County's sole option, Contractor shall repair or replace any and all of that Work, together with any other Work that may be displaced in so doing, that may prove defective in workmanship and/or materials within the warranty period specified in Section 00 65 36 Warranty Form, from date of completion as defined above without expense whatsoever to County. In the event of failure of Contractor and/or Surety to commence and pursue with diligence said replacements or repairs **within ten (10) days after being notified in writing**, including by e-mail, Contractor and Surety hereby acknowledge and agree that County is authorized to proceed to have defects repaired and made good at expense of Contractor and/or Surety who hereby agree to pay costs and charges therefore immediately on demand. Said notice period shall be **forty-eight (48) hours for components essential to operation** of the facility, including without limitation fire alarms, water, heat, security systems, and electrical systems.

**14.1.4** If, in the opinion of County, defective work creates a dangerous condition or requires immediate correction or attention to prevent further loss to County or to prevent interruption of operations of County, County will attempt to give the notice required above. If Contractor or Surety cannot be contacted or does not comply with County's request for correction within a reasonable time as determined by County, County may, notwithstanding the above provision, proceed to make any and all corrections and/or provide attentions the County believes are necessary. The costs of correction or attention shall be charged against Contractor and Surety of the guarantees provided in this Article or elsewhere in this Contract.

**14.1.5** The above provisions do not in any way limit the guarantees on any items for which a longer guarantee is specified or on any items for which a manufacturer gives a guarantee for a longer period. Contractor shall furnish to County all appropriate guarantee or warranty certificates as indicated in the Specifications or upon request by County.

**14.1.6** Nothing herein shall limit any other rights or remedies available to County.

## **14.2 Indemnity**

**14.2.1** To the fullest extent permitted by California law, the Contractor shall indemnify, defend with legal counsel reasonably acceptable to the County, keep and hold harmless the County and its consultants, the Engineer and its consultants, the Construction Manager and its consultants, separate contractors, and their respective board members, officers, representatives, contractors, agents, and employees, in both individual and official capacities ("Indemnitees"), against all suits, claims, liabilities, damages, losses, and expenses caused by, arising out of, resulting from, or incidental to, the performance of the Work under this Contract by the Contractor or its Subcontractors to the full extent allowed by the laws of the State of California, and not to any extent that would render these provisions void or unenforceable, including, without limitation, any such suit, claim, damage, loss, or expense attributable to, without limitation, bodily injury, sickness, disease, death, alleged patent violation or copyright infringement, or to injury to or destruction of tangible property (including damage to the Work itself) including the loss of use resulting therefrom, except to the extent caused solely by the negligence, or willful misconduct of



the Indemnitees. The County may participate in the defense of any such claim without relieving Contractor of any obligation hereunder. This agreement and obligation of the Contractor shall not be construed to negate, abridge, or otherwise reduce any right or obligation of indemnity that would otherwise exist as to any party or person described herein. This indemnification, defense, and hold harmless obligation includes any failure or alleged failure by Contractor to comply with any provision of law or the Contract Documents, including, without limitation, any stop notice actions, or liens by the California Department of Labor Standards Enforcement. This indemnity obligation shall be for the full amount of all damage to County, including defense costs, and shall not be limited by any insurance limits.

**14.2.2** The Contractor shall give **prompt notice to the County** in the event of any injury (including death), loss or damage included herein. Without limitation of the provisions herein, if the Contractor's agreement to indemnify, defend, and hold harmless the Indemnitees as provided herein against liability for damage arising out of bodily injury to persons or damage to property caused by or resulting from the negligence of any of the Indemnitees shall to any extent be or be determined to be void or unenforceable, it is the intention of the parties that these circumstances shall not otherwise affect the validity or enforceability of the Contractor's agreement to indemnify, defend, and hold harmless the rest of the Indemnitees, as provided herein, and in the case of any such suits, claims, damages, losses, or expenses caused in part by the default, negligence, or act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, and in part by any of the Indemnitees, the Contractor shall be and remain fully liable on its agreements and obligations herein to the full extent permitted by law.

**14.2.3** In any and all claims against any of the Indemnitees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the Contractor's indemnification obligation herein shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor or any Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

**14.2.4** Contractor shall place in its Subcontractor agreements and cause its Subcontractors to agree to indemnities and insurance obligations in favor of County and other Indemnities in the exact form and substance of those contained in these General Conditions (00 72 13). Contractor shall require all Subcontractors to comply with all indemnification and insurance requirements of this agreement. Contractor shall verify Subcontractor's compliance.

## **15. TIME**

### **15.1 Notice to Proceed**

**15.1.1** County may issue a Notice to Proceed **within three (3) months from the date of the Notice of Award**. Once Contractor has received the Notice to Proceed, Contractor shall complete the Work within the period of time indicated in the Contract Documents.

**15.1.2** In the event that the County desires to postpone issuing the Notice to Proceed beyond this 3-month period, it is expressly understood that with reasonable notice to the Contractor, the **County may postpone issuing the Notice to Proceed**. It is further expressly understood by Contractor that Contractor shall not be entitled to any claim of additional compensation as a result of the postponement of the issuance of the Notice to Proceed.

**15.1.3** If the Contractor believes that a postponement of issuance of the Notice to Proceed will cause a hardship to Contractor, Contractor may terminate the Contract. Contractor's termination due to a postponement shall be by **written notice to County within ten (10) days after receipt by Contractor of County's Notice of Postponement**. It is further understood by Contractor that in the event that Contractor terminates the Contract as a result of postponement by the County, the County shall only be obligated to pay Contractor for the Work that Contractor had performed at the time of notification of postponement. Should Contractor terminate the Contract as a result of a Notice of Postponement, County shall have the authority to award the Contract to the next lowest responsive, responsible bidder.

## **15.2 Computation of Time / Adverse Weather**

**15.2.1** The Contractor will only be allowed a time extension for Adverse Weather conditions if requested by Contractor and only if all of the following conditions are met:

**15.2.1.1** The weather conditions constitute Adverse Weather, as defined herein and further specified in the Special Conditions;

**15.2.1.2** Contractor can verify that the Adverse Weather caused delays **in excess of seventy-five percent (75%) for at least five hours**, of the normal labor and equipment force toward completion of the day's current controlling item(s) on the latest accepted schedule;

**15.2.1.3** The Contractor's crew is dismissed as a result of the Adverse Weather; and

**15.2.1.4** The **number of days of delay for the month** exceeds those indicated in the Special Conditions.

**15.2.2** A day-for-day extension will only be allowed for those days in excess of those indicated in the Special Conditions. Weather delay time extensions to the contract period will be non-compensable.

**15.2.3** The Contractor shall **work seven (7) days per week, if necessary**, irrespective of inclement weather, to maintain access and the Construction Schedule, and to protect the Work under construction from the effects of Adverse Weather, all at no further cost to the County.

**15.2.4** The Contract Time has been determined with consideration given to the average climate weather conditions prevailing in the County in which the Project is located.

## **15.3 Hours of Work**

### **15.3.1 Sufficient Forces**

Contractor and Subcontractors shall continuously furnish sufficient forces to ensure the prosecution of the Work in accordance with the Construction Schedule.

#### **15.3.2 Performance During Working Hours**

Work shall be performed during regular working hours as permitted by the appropriate governmental agency except that in the event of an emergency, or when required to complete the Work in accordance with job progress, Work may be performed outside of regular working hours with the **advance written consent of the County** and approval of any required governmental agencies.

#### **15.4 Progress and Completion**

##### **15.4.1 Time of the Essence**

Time limits stated in the Contract Documents are of the essence to the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

##### **15.4.2 No Commencement Without Insurance**

The Contractor shall not commence operations on the Project or elsewhere prior to the effective date of insurance and bonds. The date of commencement of the Work shall not be changed by the effective date of such insurance. If Contractor commences Work without insurance and bonds, all Work is performed at Contractor's peril and shall not be compensable until and unless Contractor secures bonds and insurance pursuant to the terms of the Contract Documents and subject to County claim for damages.

#### **15.5 Expeditious Completion**

The Contractor shall proceed expeditiously with adequate forces and shall achieve Completion within the Contract Time.

### **16. EXTENSIONS OF TIME – LIQUIDATED DAMAGES**

#### **16.1 Liquidated Damages**

Contractor and County hereby agree that the exact amount of damages for failure to complete the Work within the time specified is extremely difficult or impossible to determine. If the Work is not completed within the time specified in the Contract Documents, it is understood that the County will suffer damage. It being impractical and unfeasible to determine the amount of actual damage, it is agreed the Contractor shall pay to County as fixed and liquidated damages, and not as a penalty, the amount set forth in the Agreement for each calendar day of delay in completion. Contractor and its Surety shall be liable for the amount thereof pursuant to Government Code Section 53069.85.

#### **16.2 Excusable Delay**

**16.2.1** Contractor shall not be charged for liquidated damages because of any delays in completion of Work which are not the fault of Contractor or its Subcontractors, including acts of God as defined in Public Contract Code Section 7105, acts of enemy, epidemics, and quarantine restrictions. Contractor shall, **within five (5) calendar days of beginning of any delay**, notify County in writing of causes of delay including documentation and facts explaining the delay. County shall review the facts and extent of any delay and shall grant extension(s) of time for completing Work when, in its

judgment, the findings of fact justify an extension. Extension(s) of time shall apply only to that portion of Work affected by delay, and shall not apply to other portions of Work not so affected. An extension of time may only be granted if Contractor has timely submitted the Construction Schedule as required herein.

**16.2.2** Contractor shall notify the County pursuant to the claims provisions in these General Conditions of any anticipated delay and its cause. Following submission of a claim, the County may determine whether the delay is to be considered avoidable or unavoidable, how long it continues, and to what extent the prosecution and completion of the Work might be delayed thereby.

**16.2.3** In the event the Contractor requests an extension of Contract Time for unavoidable delay, such request shall be submitted in accordance with the provisions in the Contract Documents governing changes in Work. When requesting time, requests must be submitted with full justification and documentation. If the Contractor fails to submit justification, it waives its right to a time extension at a later date. Such justification must be based on the official Construction Schedule as updated at the time of occurrence of the delay or execution of Work related to any changes to the Scope of Work. Any claim for delay must include the following information as support, without limitation:

**16.2.3.1** The duration of the activity relating to the changes in the Work and the resources (manpower, equipment, material, etc.) required to perform the activities within the stated duration.

**16.2.3.2** Specific logical ties to the Contract Schedule for the proposed changes and/or delay showing the activity/activities in the Construction Schedule that are affected by the change and/or delay.

**16.2.3.3** A **recovery schedule must be submitted** indicating the revised critical path.

### **16.3 No Additional Compensation for Delays Within Contractor's Control**

**16.3.1** Contractor is aware that governmental agencies, including, without limitation, the Department of General Services, **gas companies, electrical utility companies, water companies, and other agencies** may have to approve Contractor-prepared drawings or approve a proposed installation. Accordingly, Contractor shall include in its bid, time for possible review of its drawings and for reasonable **delays and damages that may be caused by such agencies**. Thus, Contractor is **not entitled to make a claim for damages or delays arising from the review** of Contractor's drawings.

**16.3.2** Contractor shall only be entitled to compensation for delay when **all** of the following conditions are met:

**16.3.2.1** The County is responsible for the delay;

**16.3.2.2** The delay is unreasonable under the circumstances involved;

**16.3.2.3** The delay was not within the contemplation of County and Contractor; and

**16.3.2.4** Contractor complies with the claims procedure of the Contract Documents.

#### **16.4 Float or Slack in the Schedule**

Float or slack is the amount of time between the early start date and the late start date, or the early finish date and the late finish date, of any of the activities in the schedule. Float or slack is not for the exclusive use of or benefit of either the County or the Contractor, but its use shall be determined solely by the County.

### **17. CHANGES IN THE WORK**

#### **17.1 No Changes Without Authorization**

**17.1.1** There shall be no change whatsoever in the Drawings, Specifications, or in the Work without an executed Change Order or a written Construction Change Directive authorized by the County as herein provided. County shall not be liable for the cost of any extra work or any substitutions, changes, additions, omissions, or deviations from the Drawings and Specifications unless the County's governing board has authorized the same and the cost thereof has been approved in writing by Change Order or Construction Change Directive. No extension of time for performance of the Work shall be allowed hereunder unless claim for such extension is made at the time changes in the Work are ordered, and such time duly adjusted in writing in the Change Order or Construction Change Directive. The provisions of the Contract Documents shall apply to all such changes, additions, and omissions with the same effect as if originally embodied in the Drawings and Specifications.

**17.1.2** Contractor shall perform immediately all work that has been authorized by a fully executed Change Order or Construction Change Directive. Contractor shall be fully responsible for any and all delays and/or expenses caused by Contractor's failure to expeditiously perform this Work.

**17.1.3** Should any Change Order result in an increase in the Contract Price, the cost of that Change Order shall be agreed to, in writing, in advance by Contractor and County and be subject to the monetary limitations set forth in Public Contract Code Section 20137. In the event that Contractor proceeds with any change in Work without a Change Order executed by the County or Construction Change Directive, Contractor waives any claim for additional compensation or time for that additional work.

**17.1.4** Contractor understands, acknowledges, and agrees that the reason for County authorization is so that County may have an opportunity to analyze the Work and decide whether the County shall proceed with the Change Order or alter the Project so that a change in Work becomes unnecessary.

#### **17.2 Engineer Authority to Order Minor Changes**

The Engineer will have authority to order minor changes in the Work not involving any adjustment in the Contract Price, or an extension of the Contract Time, or a change that is inconsistent with the intent of the Contract Documents. These changes shall be effected by written Change Order, Construction Change Directive, or by Engineer's response(s) to RFI(s).

#### **17.3 Change Orders**

**17.3.1** A Change Order is a written instrument prepared and issued by the County and/or the Engineer and signed by the County (as authorized by the County's Board

of Supervisors), the Contractor, and the Engineer, stating their agreement regarding all of the following:

- 17.3.1.1 A description of a change in the Work;
- 17.3.1.2 The amount of the adjustment in the Contract Price, if any; and
- 17.3.1.3 The extent of the adjustment in the Contract Time, if any.

#### 17.4 Construction Change Directives

17.4.1 A Construction Change Directive is a written order prepared and issued by the County, the Construction Manager, and/or the Engineer and signed by the County and the Architect, directing a change in the Work. The County may as provided by law, by Construction Change Directive and without invalidating the Contract, order changes in the Work consisting of additions, deletions, or other revisions. Any dispute as to the sum of the Construction Change Directive or timing of payment shall be resolved pursuant to the Payment and Claims and Disputes provisions herein.

17.4.2 The County may issue a Construction Change Directive in the absence of agreement on the terms of a Change Order.

#### 17.5 Force Account Directives

17.5.1 When work, for which a definite price has not been agreed upon in advance, is to be paid for on a force account basis, all direct costs necessarily incurred and paid by the Contractor for labor, material, and equipment used in the performance of that Work, shall be subject to the approval of the County and compensation will be determined as set forth herein.

17.5.2 The County will issue a Force Account Directive to proceed with the Work on a force account basis, and a not-to-exceed budget will be established by the County.

17.5.3 All requirements regarding direct cost for labor, labor burden, material, equipment, and mark-ups on direct costs for overhead and profit described in this section shall apply to Force Account Directives. However, the County will only pay for actual costs verified in the field by the County or its authorized representative(s) on a daily basis.

17.5.4 The Contractor shall be responsible for all cost related to the administration of Force Account Directive. The mark-up for overhead and profit for Contractor modifications shall be full compensation to the Contractor to administer Force Account Directive.

17.5.5 The Contractor shall notify the County or its authorized representative(s) **at least twenty-four (24) hours prior to proceeding with any of the force account work.** Furthermore, the Contractor shall notify the County **when it has consumed eighty percent (80%) of the budget** and shall not exceed the budget unless specifically authorized in writing by the County. The Contractor will not be compensated for force account work in the event that the Contractor fails to timely notify the County regarding the commencement of force account work, or exceeding the force account budget.

**17.5.6** The Contractor shall diligently proceed with the work, and on a daily basis, submit a daily force account report on a form supplied by the County **no later than 5:00 p.m. each day**. The report shall contain a detailed itemization of the daily labor, material, and equipment used on the force account work only. The names of the individuals performing the force account work shall be included in the daily force account reports. The type and model of equipment shall be identified and listed. The County will review the information contained in the reports, and sign the reports **no later than the next work day**, and return a copy of the report to the Contractor for their records. The County will not sign, nor will the Contractor receive compensation for work the County cannot verify. The Contractor will provide a **weekly force account summary** indicating the status of each Force Account Directive in terms of percent complete of the not-to-exceed budget and the estimated percent complete of the work.

**17.5.7** In the event the Contractor and the County reach a written agreement on a set cost for the work while the work is proceeding based on a Force Account Directive, the Contractor's signed daily force account reports shall be discontinued, and all previously signed reports shall be invalid.

## **17.6 Price Request**

### **17.6.1 Definition of Price Request**

A Price Request ("PR") is a written request prepared by the Engineer requesting the Contractor to submit to the County and the Engineer an estimate of the effect of a proposed change in the Work on the Contract Price and the Contract Time.

### **17.6.2 Scope of Price Request**

A Price Request shall contain adequate information, including any necessary Drawings and Specifications, to enable Contractor to provide the cost breakdowns required herein. The Contractor shall not be entitled to any additional compensation for preparing a response to a Price Request, whether ultimately accepted or not.

## **17.7 Proposed Change Order**

### **17.7.1 Definition of Proposed Change Order**

A Proposed Change Order ("PCO") is a written request prepared by the Contractor requesting that the County and the Engineer issue a Change Order based upon a proposed change to the Work.

### **17.7.2 Changes in Contract Price**

A PCO shall include breakdowns pursuant to the revisions herein to validate any change in Contract Price.

### **17.7.3 Changes in Time**

A PCO shall also include any changes in time required to complete the Project. Any additional time requested shall not be the number of days to make the proposed change, but must be based upon the impact to the Construction Schedule as defined in the Contract Documents. If Contractor fails to request a time extension in a PCO, then the Contractor is thereafter precluded from requesting time and/or claiming a delay.

### **17.7.4 Unknown and/or Unforeseen Conditions**

If Contractor submits a PCO requesting an increase in Contract Price and/or Contract Time that is based at least partially on Contractor's assertion that Contractor has encountered unknown and/or unforeseen condition(s) on the Project, then Contractor shall base the PCO on provable information that, beyond a reasonable doubt and to the County's satisfaction, demonstrates that the unknown and/or unforeseen condition(s) were actually unknown and/or unforeseen and that the condition(s) were reasonably unknown and/or unforeseen. If not, the County shall deny the PCO and the Contractor shall complete the Project without any increase in Contract Price and/or Contract Time based on that PCO.

**17.8 Format for Proposed Change**

**17.8.1** The following format shall be used as applicable by the County and the Contractor (e.g. Change Orders, PCO's) to communicate proposed additions and deductions to the Contract, supported by attached documentation. **In no case shall the Contractor's total mark-up exceed 26.5%.**



	<u>SUBCONTRACTOR PERFORMED WORK</u>	<u>AADD</u>	<u>DEDUCT</u>
a)	<u>Material</u> (attach itemized quantity and unit cost plus sales tax)		
b)	<u>Add Labor</u> (attach itemized hours and rates, fully encumbered)		
c)	<u>Add Equipment</u> (attach suppliers' invoice)		
d)	<u>Subtotal</u>		
e)	<u>Add Subcontractor's overhead and profit</u> , not to exceed ten percent (10%) of item (d)		
f)	<u>Subtotal</u>		
g)	<u>Add Contractor's overhead and profit</u> , not to exceed ten percent (10%) of Item (f)		
h)	<u>Subtotal</u>		
i)	<u>Add Bond and Insurance</u> , not to exceed one percent (1%) of Item (h)		
j)	<u>TOTAL</u>		
k)	<u>Time</u>		<u>Days</u>
	<u>CONTRACTOR PERFORMED WORK</u>	<u>ADD</u>	<u>DEDUCT</u>
a)	<u>Material</u> (attach itemized quantity and unit cost plus sales tax)		
b)	<u>Add Labor</u> (attach itemized hours and rates, fully encumbered)		
c)	<u>Add Equipment</u> (attach suppliers' invoice)		
d)	<u>Subtotal</u>		
e)	<u>Add Contractor's overhead and profit</u> , not to exceed ten percent (10%) of item (d)		
f)	<u>Subtotal</u>		
g)	<u>Add Bond and Insurance</u> , not to exceed one percent (1%) of Item (f)		
h)	<u>TOTAL</u>		
i)	<u>Time</u>		<u>Days</u>

## 17.9 Change Order Certification

**17.9.1** All Change Orders and PCOs must include the following certification by the Contractor:

**17.9.1.1** The undersigned Contractor approves the foregoing as to the changes, if any, and the Contract Price specified for each item and as to the extension of time allowed, if any, for completion of the entire Work as stated herein, and agrees to furnish all labor, materials, and service, and perform all work necessary to complete any additional work specified for the consideration stated herein. Submission of sums which have no basis in fact or which Contractor knows are false are at the sole risk of Contractor and may be a violation of the False Claims Act set forth under Government Code section 12650 et seq. It is understood that the changes herein to the Contract shall only be effective when approved by the Board of Supervisors.

**17.9.1.2** It is expressly understood that the value of the extra Work or changes expressly includes any and all of the Contractor's costs and expenses, both direct and indirect, resulting from additional time required on the Project or resulting from delay to the Project. Any costs, expenses, damages, or time extensions not included are deemed waived.

**17.10 Determination of Change Order Cost**

The amount of the increase or decrease in the Contract Price from a Change Order, if any, shall be determined by one or more of the following ways as applicable to a specific situation and at the County's discretion:

**17.10.1** County acceptance of a PCO;

**17.10.2** By unit prices contained in Contractor's original bid;

**17.10.3** By agreement between County and Contractor.

**17.11 Allowable Costs**

Allowable costs for any change order shall be limited to the following:

**17.11.1** Costs of labor, including social security, Medicare, and unemployment insurance, fringe benefits required workers' compensation insurance.

**17.11.2** Costs of first line supervision labor, including labor burden as described in paragraph 1. "First-Line Supervision" shall mean a working foreman or lead craft worker other than the project superintendent;

**17.11.3** Actual costs of the project superintendent associated with any period of compensable delay caused by issuance of the change order. In the absence of a compensable delay, all of the project superintendent's time is considered to have been paid for as part of the overhead;

**17.11.4** Actual costs of materials, including sales tax and delivery;

**17.11.5** Rental costs of machinery and equipment, exclusive of small tools, whether rented from the Contractor or others. For Contractor and Subcontractor-owned equipment, payment will be made at rental rates listed for equipment in California Department of Transportation official equipment rental rate schedule. For rental

equipment, payment will be made based on actual rental invoices. Rental rates paid shall be deemed to cover cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance and all incidentals;

**17.11.6** Overhead and Profit as specified below. "Overhead" shall include the following:

**17.11.6.1** Preparation of all paperwork related to changes in the Work, including field review, estimating and cost breakdown; coordination and supervision, both office and field, including the project superintendent; vehicles including gas and maintenance; small tools, incidentals and consumables; engineering, detailing, and revisions to shop drawings and as-built drawings; general office expense; extended and unabsorbed home office overhead; warranty, all taxes; and all other expenses not specifically described in items 17.11.1 through 17.11.5.

**17.11.6.2** The actual costs of insurance premiums required by this contract and associated with the change order work will be reimbursed by the County

**17.11.7** Upon receipt of an approved PCO/Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Construction Manager **within seven (7) calendar days of the Contractor's agreement** or disagreement with the method, if any, provided in the PCO/Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

**17.11.8** Failure to respond to and return a PCO/Change Directive to the County **within (7) days** indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

## **17.12 Deductive Change Orders**

All deductive Change Order(s) must be prepared pursuant to the provisions herein. If Contractor offers a proposed amount for a Deductive Change Order(s), Contractor shall include a **minimum of five percent (5%) total profit and overhead** to be deducted with the amount of the work of the Change Order(s). If Subcontractor work is involved, Subcontractors shall **also include a minimum of five percent (5%) profit and overhead** to be deducted with the amount of its deducted work. Any deviation from this provision shall not be allowed.

## **17.13 Discounts, Rebates, and Refunds**

For purposes of determining the cost, if any, of any change, addition, or omission to the Work hereunder, all trade discounts, rebates, refunds, and all returns from the sale of surplus materials and equipment shall accrue and be credited to the Contractor, and the Contractor shall make provisions so that such discounts, rebates, refunds, and returns may be secured, and the amount thereof shall be allowed as a reduction in the Contractor's cost in determining the actual cost of construction for purposes of any change, addition, or omission in the Work as provided herein.

## **17.14 Accounting Records**

With respect to portions of the Work performed by Change Orders and Construction Change Directives, the Contractor shall keep and maintain cost-accounting records satisfactory to the County, which shall be available to the County on the same terms as any other books and records the Contractor is required to maintain under the Contract Documents.

**17.15 Notice Required**

If the Contractor desires to make a claim for an increase in the Contract Price or any extension of the Contract Time for completion, it shall notify the County pursuant to the provisions herein. No claim shall be considered unless made in accordance with this subparagraph. Contractor shall proceed to execute the Work, even though, the adjustment may not have been agreed upon. Any change in the Contract Price or extension of the Contract Time resulting from such claim shall be authorized by a Change Order.

**17.16 Applicability to Subcontractors**

Any requirements under this Article shall be equally applicable to Change Orders, or Construction Change Directives issued to Subcontractors by the Contractor to the extent as required by the Contract Documents.

**17.17 Alteration to Change Order Language**

Contractor shall not alter Change Orders or reserve time in Change Orders. Contractor shall execute finalized Change Orders and proceed under the provisions herein with proper notice.

**17.18 Failure of Contractor to Execute Change Order**

Contractor shall be in default of the Contract if Contractor fails to execute a Change Order when the Contractor agrees with the addition and/or deletion of the Work in that Change Order.

**18. REQUEST FOR INFORMATION (RFI)**

**18.1** The Contractor shall coordinate the Work so that dimensions are verified, and clarifications that may affect the work are identified to allow for resolution without delaying the Work. The Contractor is responsible to submit a Request for Information as soon as the issue requiring clarification is identified. The Contractor shall be responsible for any delay in the construction progress due to any untimely submission of a Request for Information for A/E's review. Non-receipt of a Request for Information, or proceeding with Work pertaining to the Request for Information shall be construed as relieving the County of any Claim for added cost or extension of time.

**18.2 Reference Contract Documents**

Any Request for Information shall reference all applicable Contract Document(s), including Specification section(s), detail(s), page number(s), drawing number(s), and sheet number(s), etc. The Contractor shall make suggestions and interpretations of the issue raised by each Request for Information. A Request for Information cannot modify the Contract Price, Contract Time, or the Contract Documents.

**18.3 Contractor Responsible For Costs**

Contractor shall be responsible for any costs incurred for professional services which County may deduct from any amounts owing to the Contractor if a Request for Information requests an interpretation or decision of a matter where the information sought is equally available to the party making the request. County, at its sole discretion, shall deduct from and/or invoice Contractor for all the professional services arising herein.

## **19. PAYMENTS**

### **19.1 Contract Price**

The Contract Price is stated in the Agreement and, including authorized adjustments, is the total amount payable by the County to the Contractor for performance of the Work under the Contract Documents.

### **19.2 Applications for Progress Payments**

#### **19.2.1 Procedures for Applications for Progress Payments**

**19.2.1.1** Not before the fifth (5th) day of each calendar month during the progress of the Work, Contractor shall submit to the County an itemized Application for Payment for operations completed in accordance with the Schedule of Values. Such application shall be notarized, if required and supported by the following or each portion thereof unless waived by the County in writing:

**19.2.1.1.1** The amount paid to the date of the Application to the Contractor, to all its Subcontractors, and all others furnishing labor, material, or equipment for its Contract;

**19.2.1.1.2** The amount being requested under the Application for Payment by the Contractor on its own behalf and separately stating the amount requested on behalf of each of the Subcontractors and all others furnishing labor, material, and equipment under the Contract;

**19.2.1.1.3** The balance that will be due to each of such entities after said payment is made;

**19.2.1.1.4** A certification that the Record Drawings and annotated Specifications are current;

**19.2.1.1.5** Itemized breakdown of work done for the purpose of requesting partial payment;

**19.2.1.1.6** An updated and acceptable construction schedule in conformance with Section 10.1 above;

**19.2.1.1.7** The additions to and subtractions from the Contract Price and Contract Time;

**19.2.1.1.8** A total of the retentions held;

**19.2.1.1.9** Material invoices, evidence of equipment purchases, rentals, and other support and details of cost as the County may require from time to time;

**19.2.1.1.10** The percentage of completion of the Contractor's Work by line item;

**19.2.1.1.11** Schedule of Values updated from the preceding Application for Payment;

**19.2.1.1.12** A duly completed and **executed conditional waiver and release** upon progress payment compliant with Civil Code Section 3262 from the Contractor and each subcontractor of any tier and supplier to be paid from the current progress payment;

**19.2.1.1.13** A duly completed and **executed unconditional waiver and release** upon progress payment compliant with Civil Code Section 3262 from the Contractor and each subcontractor of any tier and supplier that was paid from the previous progress payment; and

**19.2.1.1.14** A certification by the Contractor of the following:

The Contractor warrants title to all Work performed as of the date of this payment application. The Contractor further warrants that all Work performed as of the date of this payment application is free and clear of liens, claims, security interests, or encumbrances in favor of the Contractor, Subcontractors, material and equipment suppliers, workers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment relating to the Work, except those of which the County has been informed.

**19.2.2** The Contractor shall be subject to the False Claims Act set forth under Government Code Section 12650 et seq., for information provided with any Application for Progress Payment.

**19.2.3 Prerequisites for Progress Payments**

**19.2.3.1** First Payment Request: The following items, if applicable, must be completed before the County will accept and/or process the Contractor's first payment request:

**19.2.3.1.1** Installation of the Project sign;

**19.2.3.1.2** Installation of field office;

**19.2.3.1.3** Installation of temporary facilities and fencing;

**19.2.3.1.4** Schedule of Values;

**19.2.3.1.5** Contractor's Construction Schedule in conformance with Section 10.1.1.1 above;

**19.2.3.1.6** Schedule of unit prices, if applicable;

**19.2.3.1.7** Submittal Schedule;

**19.2.3.1.8** Receipt by Engineer of all submittals due as of the date of the payment application;

- 19.2.3.1.9 Copies of necessary permits;
- 19.2.3.1.10 Copies of authorizations and licenses from governing authorities;
- 19.2.3.1.11 Initial progress report;
- 19.2.3.1.12 Surveyor qualifications;
- 19.2.3.1.13 Written acceptance of County's survey of rough grading, if applicable;
- 19.2.3.1.14 List of all Subcontractors, with names, license numbers, telephone numbers, and Scope of Work;
- 19.2.3.1.15 All bonds and insurance endorsements;
- 19.2.3.1.16 Resumes of Contractor's project manager, and if applicable, job site secretary, record documents recorder, and job site superintendent; and
- 19.2.3.1.17 Safety plan.

**19.2.3.2** Second Payment Request. The County will not process the second payment request until and unless all submittals and Shop Drawings have been accepted for review by the Engineer, and Contractor's Schedule has been accepted as in compliance with Section 10.1.1.1 above.

**19.2.3.3** No Waiver of Criteria. Any payments made to Contractor where criteria set forth herein have not been met shall not constitute a waiver of said criteria by County. Instead, such payment shall be construed as a good faith effort by County to resolve differences so Contractor may pay its Subcontractors and suppliers. Contractor agrees that failure to submit such items may constitute a breach of contract by Contractor and may subject Contractor to termination.

### **19.3 Progress Payments**

#### **19.3.1 County's Approval of Application for Payment**

**19.3.1.1** Upon receipt of an Application for Payment, the County shall act in accordance with both of the following:

**19.3.1.1.1** Each Application for Payment shall be reviewed by the County as soon as practicable after receipt for the purpose of determining that the Application for Payment is a proper Application for Payment.

**19.3.1.1.2** Any Application for Payment determined not to be a proper Application for Payment suitable for payment shall be returned to the Contractor as soon as practicable, but **not later than seven (7) calendar days, after receipt**. An Application for Payment returned pursuant to this paragraph shall be accompanied by a document setting forth in writing, including by e-mail, the reasons why the

Application for Payment is not proper. The number of days available to the County to make a payment without incurring interest pursuant to this section shall be reduced by the number of days by which the County exceeds this seven-day return requirement.

**19.3.1.1.3** An Application for Payment shall be considered properly executed if funds are available for payment of the Application for Payment, and payment is not delayed due to an audit inquiry by the financial officer of the County.

**19.3.1.2** The County's review of the Contractor's Application for Payment will be based on the County's and the Engineer's observations at the Site and the data comprising the Application for Payment that the Work has progressed to the point indicated and that, to the best of the County's and the Engineer's knowledge, information, and belief, the quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to:

**19.3.1.2.1** Observation of the Work for general conformance with the Contract Documents,

**19.3.1.2.2** Results of subsequent tests and inspections,

**19.3.1.2.3** Minor deviations from the Contract Documents correctable prior to completion, and

**19.3.1.2.4** Specific qualifications expressed by the Engineer.

**19.3.1.3** County's approval of the certified Application for Payment shall be based on Contractor complying with all requirements for a fully complete and valid certified Application for Payment.

## **19.3.2 Payments to Contractor**

**19.3.2.1** **Within thirty (30) days after approval** of the Application for Payment, Contractor shall be paid a sum equal to **ninety five percent (95%) of the value of the Work performed** (as verified by Engineer and certified by Contractor) **up to the last day of the previous month**, less the aggregate of previous payments and amount to be withheld. The value of the Work completed shall be Contractor's best estimate. No inaccuracy or error in said estimate shall operate to release the Contractor, or any Surety upon any bond, from damages arising from such Work, or from the County's right to enforce each and every provision of this Contract, and the County shall have the right subsequently to correct any error made in any estimate for payment.

**19.3.2.2** The Contractor shall not be entitled to have any payment requests processed, or be entitled to have any payment made for Work performed, so long as any lawful or proper direction given by the County concerning the Work or any portion thereof remains incomplete.



- 19.3.2.3** If the County fails to make any progress payment **within thirty (30) days after receipt** of an undisputed and properly submitted Application for Payment by the Contractor, the County shall pay interest to the Contractor equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure.

**19.3.3 No Waiver**

No payment by County hereunder shall be interpreted so as to imply that County has inspected, approved, or accepted any part of the Work. Notwithstanding any payment, the County may enforce each and every provision of this Contract. The County may correct or require correction of any error subsequent to any payment.

**19.3.4 Removal of Liens**

- 19.3.4.1** If a lien or a claim based on a stop notice of any nature should at any time be filed against the Work or any County property, by any entity that has supplied material or services at the request of the Contractor, Contractor and Contractor's Surety shall promptly, on demand by County and at Contractor's and Surety's own expense, take any and all action necessary to cause any such lien or a claim based on a stop notice to be released or discharged immediately therefrom.

- 19.3.4.2** If the Contractor fails to furnish to the County **within ten (10) calendar days after demand by the County**, satisfactory evidence that a lien or a claim based on a stop notice has been so released, discharged, or secured, the County may discharge such indebtedness and deduct the amount required therefor, together with any and all losses, costs, damages, and attorney's fees and expense incurred or suffered by County from any sum payable to Contractor under the Contract.

**19.4 Decisions to Withhold Payment**

**19.4.1 Reasons to Withhold Payment**

The County may withhold payment in whole, or in part, to the extent reasonably necessary to protect the County if, in the County's opinion, the representations to the County required herein cannot be made. The County may withhold payment, in whole, or in part, to such extent as may be necessary to protect the County from loss because of, but not limited to:

- 19.4.1.1** Defective Work not remedied within the time frames noted in Section 14 hereof of written notice to Contractor;
- 19.4.1.2** Stop Notices, or other liens served upon the County as a result of the Contract;
- 19.4.1.3** Liquidated damages assessed against the Contractor;
- 19.4.1.4** The cost of completion of the Contract, if there exists reasonable doubt that the Work can be completed for the unpaid balance of the Contract Price or by the completion date;

- 19.4.1.5 Damage to the County or other contractor(s);
- 19.4.1.6 Unsatisfactory prosecution of the Work by the Contractor;
- 19.4.1.7 Failure to store and properly secure materials;
- 19.4.1.8 Failure of the Contractor to submit, on a timely basis, proper, sufficient, and acceptable documentation required by the Contract Documents, including, without limitation, a Construction Schedule, Schedule of Submittals, Schedule of Values, Monthly Progress Schedules, Shop Drawings, Product Data and Samples, Proposed product lists, executed Change Orders, and/or properly completed Elation updates;
- 19.4.1.9 Failure of the Contractor to maintain Record Drawings;
- 19.4.1.10 Erroneous estimates by the Contractor of the value of the Work performed, or other false statements in an Application for Payment;
- 19.4.1.11 Unauthorized deviations from the Contract Documents;
- 19.4.1.12 Failure of the Contractor to prosecute the Work in a timely manner in compliance with the Construction Schedule established progress schedules, and/or completion dates;
- 19.4.1.13 Failure to properly pay prevailing wages as defined in Labor Code section 1720 et seq., and/or failure to comply with any other Labor Code requirements,
- 19.4.1.14 Failure to properly maintain or clean up the Site;
- 19.4.1.15 Payments to indemnify, defend, or hold harmless the County;
- 19.4.1.16 Any payments due to the County, including but not limited to payments for failed tests, utility changes or permits;
- 19.4.1.17 Failure to pay Subcontractor(s) or supplier(s) as required by law and by the Contract Documents;
- 19.4.1.18 Contractor is otherwise in breach, default, or in substantial violation of any provision of this Contract.

**19.4.2 Reallocation of Withheld Amounts**

- 19.4.2.1 County may, at its discretion, apply any withheld amount to pay outstanding claims or obligations as defined herein. In so doing, County shall make such payments on behalf of Contractor. If any payment is so made by County, then that amount shall be considered a payment made under Contract by County to Contractor and County shall not be liable to Contractor for any payment made in good faith. These payments may be made without prior judicial determination of claim or obligation. County will render Contractor an accounting of funds disbursed on behalf of Contractor.
- 19.4.2.2 If Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents or fails to perform any provision

thereof, County may, **after FORTY-EIGHT (48) hours written notice to the Contractor** and, without prejudice to any other remedy, make good such deficiencies. The County shall adjust the total Contract Price by reducing the amount thereof by the cost of making good such deficiencies. If County deems it inexpedient to correct Work that is damaged, defective, or not done in accordance with Contract provisions, an equitable reduction in the Contract Price (of **at least one hundred twenty-five percent (125%) of the estimated reasonable value of the nonconforming Work**) shall be made therefor.

#### **19.4.3 Payment After Cure**

When Contractor removes the grounds for declining approval, payment shall be made for amounts withheld because of them. No interest shall be paid on any retainage or amounts withheld due to the failure of the Contractor to perform in accordance with the terms and conditions of the Contract Documents.

### **19.5 Subcontractor Payments**

#### **19.5.1 Payments to Subcontractors**

**No later than seven (7) days after receipt**, or pursuant to Business and Professions Code Section 7108.5 and Public Contract Code Section 7107, the Contractor shall pay to each Subcontractor, out of the amount paid to the Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to its Sub-subcontractors in a similar manner.

#### **19.5.2 No Obligation of County for Subcontractor Payment**

The County shall have no obligation to pay or to see to the payment of, money to a Subcontractor except as may otherwise be required by law.

#### **19.5.3 Joint Checks**

County shall have the right, in its sole discretion, if necessary for the protection of the County, to issue joint checks made payable to the Contractor and Subcontractors and material or equipment suppliers. The joint check payees shall be responsible for the allocation and disbursement of funds included as part of any such joint payment. In no event shall any joint check payment be construed to create any contract between the County and a Subcontractor of any tier, any obligation from the County to such Subcontractor, or rights in such Subcontractor against the County.

## **20. COMPLETION OF THE WORK**

### **20.1 Completion**

**20.1.1** County will accept completion of the Contract and have the Notice of Completion recorded when the entire Work shall have been completed to the satisfaction of County.

**20.1.2** The Work may only be accepted as complete by action of the County Board of Supervisors.

**20.1.3** County, at its sole option, may accept completion of Contract and have the Notice of Completion recorded when the entire Work shall have been completed to the satisfaction of County, except for minor corrective items, as distinguished from incomplete items. If Contractor fails to complete all minor corrective items **within thirty (30) days after the date of the County's acceptance of completion**, County shall withhold from the final payment **one hundred fifty percent (150%) of an estimate of the amount sufficient to complete the corrective items**, as determined by County, until the item(s) are completed.

**20.1.4** At the end of the **thirty-five (35) day period**, if there are any items remaining to be corrected, **County may elect to proceed** as provided herein related to adjustments to Contract Price, and/or County's right to perform the Work of the Contractor.

## **20.2 Close-Out Procedures**

### **20.2.1 Punch List**

The Contractor shall notify the Engineer when Contractor considers the Work complete. Upon notification, Engineer will prepare a list of minor items to be completed or corrected ("Punch List"). The Contractor and/or its Subcontractors shall proceed promptly to complete and correct items on the Punch List. Failure to include an item on Punch List does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

### **20.2.2 Close-Out Requirements**

#### **20.2.2.1 Utility Connections**

Buildings shall be connected to water, gas, sewer, and electric services, complete and ready for use. Service connections shall be made, and existing services reconnected.

#### **20.2.2.2 Record Drawings**

**20.2.2.2.1** Contractor shall provide County with **one hardcopy (full size) and one electronic copy on disc** of the exact "as-built" Record Drawings of the Work upon completion of the Project as indicated in the Specifications.

**20.2.2.2.2** Contractor is liable and responsible for any and all inaccuracies in as-built Record Drawings, even if inaccuracies become evident at a future date.

**20.2.2.2.3** Upon completion of the Work and as a condition precedent to approval of final payment, Contractor shall obtain the Engineer's approval of the corrected prints and employ a competent draftsman to transfer the "as-built" information to the most current version of Autocad that is, at that time, currently utilized for plan check submission by either the County, the Construction Manager and/or the Engineer, and submit electronic

files. When completed, Contractor shall deliver corrected electronic files acceptable to County with Autocad file to the County.

- 20.2.2.2.4** Maintenance Manuals: Contractor shall prepare all operation and maintenance manuals and date as indicated in the Specifications.

### **20.3 Final Inspection**

**20.3.1** Contractor shall comply with Punch List procedures as provided herein, and maintain the presence of a Project Superintendent and Project Manager until the Punch List is complete to ensure proper and timely completion of the Punch List. Under no circumstances shall Contractor demobilize its forces prior to completion of the Punch List. Upon receipt of Contractor's written notice that all of the Punch List items have been fully completed, and the Work is ready for final inspection and acceptance, Engineer and Construction Manager will inspect the Work and shall submit to Contractor and County a final inspection report noting the Work, if any, required in order to complete in accordance with the Contract Documents. Absent unusual circumstances, this report shall consist of the Punch List items not yet satisfactorily completed.

**20.3.2** Upon Contractor's completion of all items on the Punch List and any other uncompleted portions of the Work, the Contractor shall notify the County and Engineer, who shall again inspect such Work. If the Engineer finds the Work complete and acceptable under the Contract Documents, the Engineer will notify Contractor, who shall then submit to the County its final Application for Payment.

### **20.3.3 Final Inspection Requirements**

Before calling for final inspection, Contractor shall determine that the following have been performed:

- 20.3.3.1** The Work has been completed.
- 20.3.3.2** All life-safety items are completed and in working order.
- 20.3.3.3** Mechanical and Electrical Work are complete and tested, fixtures are in place, connected, and ready for try-out.
- 20.3.3.4** Electrical circuits scheduled in panels and disconnect switches labeled.
- 20.3.3.5** Painting and special finishes complete.
- 20.3.3.6** Doors complete with hardware, cleaned of protective film, relieved of sticking or binding, and in working order.
- 20.3.3.7** Tops and bottoms of doors sealed.
- 20.3.3.8** Floors waxed and polished as specified.
- 20.3.3.9** Broken glass replaced and glass cleaned.
- 20.3.3.10** Grounds cleared of Contractor's equipment, raked clean of debris, and trash removed from Site.

- 20.3.3.11 Work cleaned, free of stains, scratches, and other foreign matter, of damaged and broken material, replaced.
- 20.3.3.12 Finished and decorative work shall have marks, dirt, and superfluous labels removed.
- 20.3.3.13 Final cleanup, as provided herein.

#### **20.4 Costs of Multiple Inspections**

**More than two (2) requests of the County to make a final inspection** shall be considered an additional service of County, Engineer, and/or Construction Manager, and all subsequent costs will be invoiced to Contractor and if funds are available, withheld from remaining payments.

#### **20.5 Partial Occupancy or Use Prior to Completion**

##### **20.5.1 County's Rights**

The County may occupy or use any completed or partially completed portion of the Work at any stage. The County and the Contractor shall agree in writing to the responsibilities assigned to each of them for payments, security, maintenance, heat, utilities, damage to the Work, insurance, the period for correction of the Work, and the commencement of warranties required by the Contract Documents. Any dispute as to responsibilities shall be resolved pursuant to the Claims and Disputes provisions herein, with the added provision that during the dispute process, the County shall have the right to occupy or use any portion of the Work that it needs or desires to use.

##### **20.5.2 Inspection Prior to Occupancy or Use**

Immediately prior to partial occupancy or use, the County, the Contractor, and the Engineer shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

##### **20.5.3 No Waiver**

Unless otherwise agreed upon, partial or entire occupancy or use of a portion or portions of the Work shall not constitute beneficial occupancy or acceptance of the Work not complying with the requirements of the Contract Documents.

### **21. FINAL PAYMENT AND RETENTION**

#### **21.1 Final Payment**

Upon receipt and approval of a valid and final Application for Payment, the Engineer will issue a final Certificate of Payment. The County shall thereupon jointly inspect the Work and either accept the Work as complete or notify the Engineer and the Contractor in writing of reasons why the Work is not complete. Upon acceptance of the Work of the Contractor as fully complete (that, absent unusual circumstances, will occur when the Punch List items have been satisfactorily completed), the County shall record a Notice of Completion with the County Recorder, and the Contractor shall, upon receipt of final payment from the County, pay the amount, due Subcontractors.

#### **21.2 Prerequisites for Final Payment**

The following conditions must be fulfilled prior to Final Payment:

**21.2.1** A full and final waiver or release of all Stop Notices in connection with the Work shall be submitted by Contractor, including a release of Stop Notice in recordable form, together with (to the extent permitted by law) a copy of the full and final release of all Stop Notice rights.

**21.2.1.1** A duly completed and executed conditional waiver and release upon final payment compliant with Civil Code section 3262 from the Contractor and each subcontractor of any tier and supplier to be paid from the current progress payment;

**21.2.1.2** A duly completed and executed unconditional waiver and release upon progress payment compliant with Civil Code section 3262 from the Contractor and each subcontractor of any tier and supplier that was paid from the previous progress payment; and

**21.2.1.3** The Contractor shall have made all corrections to the Work that are required to remedy any defects therein, to obtain compliance with the Contract Documents or any requirements of applicable codes and ordinances, or to fulfill any of the orders or directions of County required under the Contract Documents.

**21.2.2** Each Subcontractor shall have delivered to the Contractor all written guarantees, warranties, applications, and bonds required by the Contract Documents for its portion of the Work.

**21.2.3** Contractor must have completed all requirements set forth under "Close-Out Procedures," including, without limitation, an approved set of complete "as-built" Record Drawings.

**21.2.4** Engineer shall have issued its written approval that final payment can be made.

**21.2.5** The Contractor shall have delivered to the County all manuals and materials required by the Contract Documents.

**21.2.6** The Contractor shall have completed final clean up as provided herein.

### **21.3 Retention**

**21.3.1** The retention, less any amounts disputed by the County or that the County has the right to withhold pursuant to provisions herein, shall be paid:

**21.3.1.1** After approval of the County by the Engineer's Certificate of Final Approval,

**21.3.1.2** After the satisfaction of the conditions set forth herein, and

**21.3.1.3** **After thirty-five (35) days after the recording of the Notice of Completion** by County.

**21.3.2** No interest shall be paid on any retention, or on any amounts withheld due to a failure of the Contractor to perform, in accordance with the terms and

conditions of the Contract Documents, except as provided to the contrary in any Escrow Agreement between the County and the Contractor pursuant to Public Contract Code section 22300.

#### **21.4 Substitution of Securities**

The County will permit the substitution of securities in accordance with the provisions of Public Contract Code section 22300.

### **22. UNCOVERING OF WORK**

If a portion of the Work is covered without Engineer approval or not in compliance with the Contract Documents, it must, if required in writing, including by email, by the County or the Engineer, be uncovered for the Engineer's observation and be replaced at the Contractor's expense without change in the Contract Price or Contract Time.

If a portion of the Work has been covered, which the Project Inspector or the Engineer has not specifically requested to observe prior to its being covered, the County, Project Inspector, or the Engineer may request to see that Work, and it shall be uncovered by the Contractor. If that Work is in accordance with the Contract Documents, costs of uncover and replacement shall, by appropriate Change Order, be charged to the County. If that Work is not in accordance with Contract Documents, the Contractor shall pay these costs unless the condition was caused by the County or a separate contractor, in which event the County shall be responsible for payment of such costs to the Contractor.

### **23. NONCONFORMING WORK, CORRECTION OF WORK AND COUNTY'S RIGHT TO PERFORM WORK**

#### **23.1 Nonconforming Work**

**23.1.1** Contractor shall promptly remove from Premises all Work identified by County as failing to conform to the Contract Documents whether incorporated or not. Contractor shall promptly replace and re-execute its own Work to comply with the Contract Documents without additional expense to the County and shall bear the expense of making good all work of other contractors destroyed or damaged by any removal or replacement pursuant hereto and/or any delays to the County or other Contractors caused thereby.

**23.1.2** If Contractor does not remove Work that County has identified as failing to conform to the Contract Documents within a reasonable time, **not to exceed FORTY-EIGHT (48) hours**, County may remove it and may store any material at Contractor's expense. If Contractor does not pay expense(s) of that removal **within ten (10) days' time thereafter**, County may, **upon ten (10) days' written notice**, sell any material at auction or at private sale and shall deduct all costs and expenses incurred by the County and/or County may withhold those amounts from payment(s) to Contractor.

#### **23.2 Correction of Work**

##### **23.2.1 Correction of Rejected Work**

Pursuant to the notice provisions herein, the Contractor shall promptly correct the Work rejected by the County or the Engineer as failing to conform to the requirements of the Contract Documents, whether observed before or after Completion and whether or



not fabricated, installed, or completed. The Contractor shall bear costs of correcting the rejected Work, including additional testing, inspections, and compensation for the Engineer's services and expenses made necessary thereby.

### **23.2.2 Warranty Corrections**

If, **within the warranty period** specified in 00 65 36 Warranty Form, after the date of Completion of the Work or a designated portion thereof, or after the date of commencement of warranties established hereunder, or by the terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the County to do so. This **period of two (2) years shall be extended** with respect to portions of the Work first performed after Completion by the period of time between Completion and the actual performance of the Work. This obligation hereunder shall survive acceptance of the Work under the Contract and termination of the Contract. The County shall give such notice promptly after discovery of the condition.

### **23.3 County's Right to Perform Work**

**23.3.1** If the Contractor should neglect to prosecute the Work properly or fail to perform any provisions of this contract, the County, **after FORTY-EIGHT (48) hours written notice** to the Contractor, may, without prejudice to any other remedy it may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor.

**23.3.2** If it is found at any time, before or after completion of the Work, that Contractor has varied from the Drawings and/or Specifications, including, but not limited to, variation in material, quality, form, or finish, or in the amount or value of the materials and labor used, County may require at its option:

- 23.3.2.1** That all such improper Work be removed, remade or replaced, and all work disturbed by these changes be made good by Contractor at no additional cost to the County;
- 23.3.2.2** That the County deduct from any amount due Contractor the sum of money equivalent to the difference in value between the work performed and that called for by the Drawings and Specifications; or
- 23.3.2.3** That the County exercise any other remedy it may have at law or under the Contract Documents, including but not limited to the County hiring its own forces or another contractor to replace the Contractor's nonconforming Work, in which case the County shall either issue a Deductive Change Order, a Construction Change Directive or invoice the Contractor for the cost of that work. Contractor shall pay any invoices **within thirty (30) days of receipt** of same or County may withhold those amounts from payment(s) to Contractor.

## **24. TERMINATION AND SUSPENSION**

### **24.1 County's Right to Terminate Contractor for Cause**

**24.1.1** Grounds for Termination.

The County, in its sole discretion, may terminate the Contract and/or terminate the Contractor's right to perform the work of the Contract based upon the following:

- 24.1.1.1** Contractor refuses or fails to execute the Work or any separable part thereof with sufficient diligence as will ensure its completion within the time specified or any extension thereof, or
- 24.1.1.2** Contractor fails to complete said Work within the time specified or any extension thereof, or
- 24.1.1.3** Contractor persistently fails or refused to perform Work or provide material of sufficient quality as to be in compliance with Contract Documents; or
- 24.1.1.4** Contractor files a petition for relief as a debtor, or a petition is filed against the Contractor without its consent, and the petition **not dismissed within sixty (60) days**; or
- 24.1.1.5** Contractor makes a general assignment for the benefit of its creditors, or a receiver is appointed on account of its insolvency; or
- 24.1.1.6** Contractor persistently or repeatedly refuses or fails, except in cases for which extension of time is provided, to supply enough properly skilled workers or proper materials to complete the Work in the time specified; or
- 24.1.1.7** Contractor fails to make prompt payment to Subcontractors, or for material, or for labor; or
- 24.1.1.8** Contractor persistently disregards laws or ordinances, or instructions of County; or
- 24.1.1.9** Contractor fails to supply labor, including that of Subcontractors, that can work in harmony with all other elements of labor employed or to be employed on the Work; or
- 24.1.1.10** Contractor or its Subcontractor(s) is/are otherwise in breach, default, or in substantial violation of any provision of this Contract.

**24.1.2** Notification of Termination

- 24.1.2.1** Upon the occurrence of County's sole determination of any of the above conditions, County may, without prejudice to any other right or remedy, serve written notice upon Contractor and its Surety of County's termination of this Contract and/or the Contractor's right to perform the work of the Contract. This notice will contain the reasons for termination. Unless, **within three (3) days after the service of the notice**, any and all condition(s) shall cease, and any and all violation(s) shall cease, or arrangement satisfactory to County for the correction of the condition(s) and/or violation(s) be made, this Contract shall cease and terminate. Upon Determination, Contractor

shall not be entitled to receive any further payment until the entire Work is finished.

- 24.1.2.2** Upon Termination, County may immediately serve written notice of tender upon Surety whereby Surety shall have the right to take over and perform this Contract only if Surety:

**24.1.2.2.1** Within three (3) days after service upon it of the notice of tender, gives County written notice of Surety's intention to take over and perform this Contract; and

**24.1.2.2.2** Commences performance of this Contract within (three (3) days from the date of serving of its notice to County.

- 24.1.2.3** If Surety fails to notify County or begin performance as indicated herein, County may take over the Work and execute the Work to completion by any method it may deem advisable at the expense of Contractor and/or its Surety. Contractor and/or its Surety shall be liable to County for any excess cost or other damages the County incurs thereby. Time is of the essence in this Contract. If the County takes over the Work as herein provided, County may, without liability for so doing, take possession of and utilize in completing the Work such materials, appliances, plan, and other property belonging to Contractor as may be on the Site of the Work, in bonded storage, or previously paid for.

**24.1.3 Effect of Termination**

- 24.1.3.1** Contractor shall, only if ordered to do so by the County, immediately remove from the Site all or any materials and personal property belonging to Contractor that have not been incorporated in the construction of the Work, or which are not in place in the Work. The County retains the right, but not the obligation, to keep and use any materials and personal property belonging to Contractor that have not been incorporated in the construction of the Work, or which are not in place in the Work. The Contractor and its Surety shall be liable upon the performance bond for all damages caused the County by reason of the Contractor's failure to complete the Contract.

- 24.1.3.2** In the event that the County shall perform any portion of, or the whole of the Work, pursuant to the provisions of the General Conditions, the County shall not be liable nor account to the Contractor in any way for the time within which, or the manner in which, the Work is performed by the County or for any changes the County may make in the Work or for the money expended by the County in satisfying claims and/or suits and/or other obligations in connection with the Work.

- 24.1.3.3** In the event, that the Contract is terminated for any reason, **no allowances or compensation will be granted for the loss of any anticipated profit** by the Contractor.

**24.1.3.4** If the expense to the County to finish the Work exceeds the unpaid Contract Price, Contractor and Surety shall pay the difference to County **within twenty-one (21) days of County's request.**

**24.1.3.5** The County shall have the right (but shall have no obligation) to assume and/or assign to a general contractor or construction manager or other third party who is qualified and has sufficient resources to complete the Work, the rights of the Contractor under its subcontracts with any or all Subcontractors. In the event of an assumption or assignment by the County, no Subcontractor shall have any claim against the County or third party for Work performed by Subcontractor or other matters arising prior to termination of the Contract. The County or any third party, as the case may be, shall be liable only for obligations to the Subcontractor arising after assumption or assignment. Should the County so elect, the Contractor shall execute and deliver all documents and take all steps, including the legal assignment of its contractual rights, as the County may require, for the purpose of fully vesting in the County the rights and benefits of it Subcontractor under Subcontracts or other obligations or commitments. All payments due the Contractor hereunder shall be subject to a right of offset by the County for expenses and damages suffered by the County as a result of any default, acts, or omissions of the Contractor. Contractor must include this assignment provision in all of its contracts with its Subcontractors.

**24.1.3.6** The foregoing provisions are in addition to and not in limitation of any other rights or remedies available to County.

## **24.2 Termination of Contractor for Convenience**

**24.2.1** County in its sole discretion may terminate the Contract **upon three (3) days written notice** to the Contractor. Under a termination for convenience, the County retains the right to all the options available to the County if there is a termination for cause. In case of a termination for convenience, the Contractor shall have no claims against the County except:

**24.2.1.1** The actual cost of labor, materials, and services performed that is unpaid and can be documented through timesheets, invoices, receipts, or otherwise, and

**24.2.1.2** **Five percent (5%) of the total cost of work performed as of the date of termination, or five percent (5%) of the value of the Work yet to be performed, whichever is less.** This five percent (5%) amount shall be full compensation for all Contractor's and its Subcontractor(s)' mobilization and/or demobilization costs and any anticipated loss profits resulting from termination of the Contractor for convenience.

## **24.3 Emergency Termination of Public Contracts Act of 1949**

**24.3.1** This Contract is subject to termination as provided by sections 4410 and 4411 of the Government Code of the State of California, being a portion of the Emergency Termination of Public Contracts Act of 1949.

**24.3.1.1** Section 4410 of the Government Code states:

In the event a national emergency occurs, and public work, being performed by contract, is stopped, directly or indirectly, because of the freezing or diversion of materials, equipment or labor, as the result of an order or a proclamation of the President of the United States, or of an order of any federal authority, and the circumstances or conditions are such that it is impracticable within a reasonable time to proceed with a substantial portion of the work, then the public agency and the contractor may, by written agreement, terminate said contract.

**24.3.1.2** Section 4411 of the Government Code states:

Such an agreement shall include the terms and conditions of the termination of the contract and provision for the payment of compensation or money, if any, which either party shall pay to the other or any other person, under the facts and circumstances in the case.

**24.3.1.3** Compensation to the Contractor shall be determined at the sole discretion of County on the basis of the reasonable value of the Work done, including preparatory work. As an exception to the foregoing and at the County's discretion, in the case of any fully completed separate item or portion of the Work for which there is a separate previously submitted unit price or item on the accepted schedule of values, that price shall control. The County, at its sole discretion, may adopt the Contract Price as the reasonable value of the work done or any portion thereof.

## **25. CLAIMS AND DISPUTES**

### **25.1 Performance During Claim Process**

The Contractor shall continue to perform its Work under the Contract and shall not cause a delay in the Work during any dispute, claims definition, negotiation, mediation, or arbitration proceeding, except by written agreement by the County.

### **25.2 Definition of Claim**

**25.2.1** For purposes of this section, a "Claim" means a separate demand by the Contractor for:

**25.2.1.1** A time extension,

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

**25.2.1.3** Payment of money that the County disputes is owing.

### **25.3 Claim Presentations**

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

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

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

**25.3.4** The Contractor shall bind all its Subcontractors, material persons, and suppliers to the provisions of this section on mediation and arbitration and will hold the County harmless against disputes and claims by Subcontractors, material persons, or suppliers.

#### **25.4 Claim Resolution**

**25.4.1** In the event of a dispute between the parties as to performance of the Work, the interpretation of this Contract, or payment or nonpayment for Work performed or not performed, the parties shall attempt to resolve the dispute by those procedures set forth in Public Contract Code Section 9204, if applicable. Pending resolution of the dispute, if the dispute is not resolved, Contractor agrees it will neither rescind the Contract nor stop the progress of the Work but will allow determination by a court of the State of California having competent jurisdiction of the dispute, after the Project has been completed, and not before.

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

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

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

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

**25.4.3** If Contractor disputes County's written response, or if County fails to respond to a Claim issued pursuant to this Section 25 within the time prescribed, Contractor may demand in writing an informal conference to meet and confer for settlement of the issues in dispute.

**25.4.3.1** Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, County shall schedule a meet and confer conference **within thirty (30) days** for settlement of the dispute.

**25.4.4** Within ten (10) business days following the conclusion of the meet and confer conference, if the Claim or any portion of the Claim remains in dispute, the County shall provide Contractor a written statement identifying the portion of the Claim that remains in dispute and the portion that is undisputed.

**25.4.4.1** Any payment due on an undisputed portion of the Claim shall be processed and made **within sixty (60) days after the County issues its written statement.**

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

**25.4.5.1** County and Contractor shall mutually agree to a mediator **within ten (10) business days** after the disputed portion of the claim has been identified in writing.

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

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

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

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

## **26. LABOR, WAGE & HOUR, APPRENTICE, AND RELATED PROVISIONS**

### **26.1 Wage Rates, Travel, and Subsistence**

**26.1.1** Pursuant to the provisions of Article 2 (commencing with Section 1770), chapter 1, part 7, division 2, of the Labor Code of California, the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this public work is to be performed for each craft, classification or type of worker needed to execute this Contract is on file at the County's principal office, and copies will be made available to any interested party on request. Contractor shall obtain and post a copy of these wage rates at the job site.

**26.1.2** Holiday and overtime work, when permitted by law, shall be paid for at a **rate of at least one and one-half times the above-specified rate of per diem wages** unless otherwise specified. The holidays upon which those rates shall be paid need not be specified by the County but shall be all holidays recognized in the applicable collective bargaining agreement. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code.

**26.1.3** Contractor shall pay and shall cause to be paid each worker engaged in Work on the Project **not less than the general prevailing rate of per diem wages** determined by the Director of the Department of Industrial Relations ("DIR") ("Director"), regardless of any contractual relationship which may be alleged to exist between Contractor or any Subcontractor and such workers.

**26.1.4** Contractor shall pay and shall cause to be paid to each worker needed to execute the Work on the Project travel and subsistence payments, as such travel and subsistence payments are defined in the applicable Collective Bargaining Agreements filed with the Department of Industrial Relations in accordance with Labor Code Section 1773 et seq.

**26.1.5** If during the period this bid is required to remain open, the Director determines that there has been a change in any prevailing rate of per diem wages in the locality in which the Work under the Contract is to be performed, such change shall not alter the wage rates in the Notice to Bidders or the Contract subsequently awarded.

**26.1.6** Pursuant to Labor Code Section 1775, Contractor shall, as a penalty to County, forfeit the statutory amount for each calendar day, or portion thereof, for each worker paid less than the prevailing rates, determined by the County and/or the Director, for the work or craft in which that worker is employed for any public work done under Contract by Contractor or by any Subcontractor under it. The difference between such prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate, shall be paid to each worker by Contractor.

**26.1.7** Any worker employed to perform Work on the Project, which Work is not covered by any classification listed in the general prevailing wage rate of per diem wages determined by the Director, shall be paid **not less than the minimum rate of wages specified** therein for the classification which most nearly corresponds to Work to be performed by him, and such minimum wage rate shall be retroactive to time of initial employment of such person in such classification.

**26.1.8** Pursuant to Labor Code section 1773.1, per diem wages, are deemed to include employer payments for health and welfare, pension, vacation, travel



time, subsistence pay, and apprenticeship or other training programs authorized by section 3093, and similar purposes.

**26.1.9** Contractor shall post at appropriate conspicuous points on the Site of Project, a schedule showing all determined minimum wage rates and all authorized deductions if any, from unpaid wages, actually earned. In addition, Contractor shall post a sign-in log for all workers and visitors to the Site, a list of all subcontractors of any tier on the Site, and the required Equal Employment Opportunity poster(s).

**26.1.10** Contractor shall pay to persons performing labor in and about the Work provided for in the Contract an amount equal to or more than the following:

**26.1.10.1** Wage rate and fringe benefit payments and classification for that person's corresponding labor classification as required by the Department of Industrial Relations;

**26.1.10.2** Wage rate and fringe benefit payments and classification for that person's corresponding labor classification as required under the California Labor Code.

**26.1.11** If there are conflicts between the Wage rate and fringe benefit payments and classification between the Department of Industrial Relations, Contractor shall pay the higher wage rate and fringe benefits.

## **26.2 Hours of Work**

**26.2.1** As provided in Article 3 (commencing with Section 1810), chapter 1, part 7, division 2, of the Labor Code, **eight (8) hours of labor shall constitute a legal days work.** The time of service of any worker employed at any time by Contractor or by any Subcontractor on any subcontract under this Contract upon the Work or upon any part of the Work contemplated by this Contract shall be limited and restricted by Contractor to **eight (8) hours per day, and forty (40) hours during any one week**, except as hereinafter provided. Notwithstanding the provisions hereinabove set forth, Work performed by employees of Contractor in excess of eight (8) hours per day and forty (40) hours during any one week, shall be permitted upon this public work upon compensation for all hours worked **in excess of eight (8) hours per day at not less than one and one-half (1.5) times the basic rate of pay.**

**26.2.2** Contractor shall keep and shall cause each Subcontractor to keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by Contractor in connection with the Work or any part of the Work contemplated by this Contract. The record shall be kept open at all reasonable hours to the inspection of County and to the Division of Labor Standards Enforcement of the DIR.

**26.2.3** Pursuant to Labor Code Section 1813, Contractor shall as a penalty to the County forfeit the statutory amount for each worker employed in the execution of this Contract by Contractor or by 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 and forty (40) hours in any one calendar week** in violation of the provisions of Article 3 (commencing with Section 1810), chapter 1, part 7, division 2, of the Labor Code.

**26.2.4** Any Work necessary to be performed after regular working hours, or on Sundays or other holidays shall be performed without additional expense to the County.

**26.3 Payroll Records**

**26.3.1** County will use the Alameda County Contract Compliance System, including the Elation Systems, Inc. program, to monitor contract and labor compliance. Contractor shall use the Compliance System to meet County's requirements, and shall participate in training as directed by County in order to become and remain competent in the use of the Compliance System.

**26.3.2** Pursuant to the provisions of section 1776 of the Labor Code, notice is hereby given that Contractor shall prepare and provide to the County and shall cause each Subcontractor performing any portion of the Work under this Contract to prepare and provide to the County an accurate and certified payroll record ("CPR(s)"), showing the name, address, social security number, work classification, straight time, and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by the Contractor and/or each Subcontractor in connection with the Work.

**26.3.3** The CPRs enumerated hereunder shall be certified and shall be provided to the County **on a weekly basis**. The CPRs from the Contractor and each Subcontractor for each week shall be provided on or before Wednesday of the week following the week covered by the CPRs. County shall not make any payment to Contractor until:

**26.3.3.1** Contractor and/or its Subcontractor(s) provide CPRs acceptable to the County, and

**26.3.3.2** The County is given sufficient time to review and/or audit the CPRs to determine their acceptability. Any delay in Contractor and/or its Subcontractor(s) providing CPRs to the County in a timely manner will directly delay the County's review and/or audit of the CPRs and Contractor's payment.

**26.3.4** All CPRs shall be available for inspection at all reasonable hours at the principal office of Contractor on the following basis:

**26.3.4.1** A certified copy of an employee's CPR shall be made available for inspection or furnished to the employee or his/her authorized representative on request.

**26.3.4.2** CPRs shall be made available for inspection or furnished upon request to a representative of County, Division of Labor Standards Enforcement, Division of Apprenticeship Standards, and/or the Department of Industrial Relations.

**26.3.4.3** CPRs shall be made available upon request by the public for inspection or copies thereof made; provided, however, that a request by the public shall be made through either the County, Division of Apprenticeship Standards or the Division of Labor Standards Enforcement. If the requested CPRs have not been provided pursuant

to the provisions herein, the requesting party shall, prior to being provided the records reimburse the costs of preparation by Contractor, Subcontractors, and the entity through which the request was made. The public shall not be given access to the records at the principal office of Contractor.

**26.3.5** The form of certification for the CPRs shall be as follows:

I, (Name-Print), the undersigned, am the (Position in business) with the authority to act for and on behalf of (Name of business and/or Contractor), certify under penalty of perjury that the records or copies thereof submitted and consisting of (Description, number of pages) are the originals or true, full, and correct copies of the originals which depict the payroll record(s) of actual disbursements by way of cash, check, or whatever form to the individual or individual named, and (b) we have complied with the requirements of sections 1771, 1811, and 1815 for any work performed by our employees on the Project.

Date: Signature:

(Section 16401 of the California Code of Regulations)

**26.3.6** Each Contractor shall file a certified copy of the CPRs with the entity that requested the records **within ten (10) days after receipt of a written request.**

**26.3.7** Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by County, Division of Apprenticeship Standards, or Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address, and social security number. The name and address of Contractor awarded Contract or performing Contract shall not be marked or obliterated.

**26.3.8** Contractor shall inform County of the location of the records enumerated hereunder, including the street address, city, and county, and shall, **within five (5) working days**, provide a notice of change of location and address.

**26.3.9** In the event of noncompliance with the requirements of this section, Contractor shall have **ten (10) days in which to comply** subsequent to receipt of written notice specifying in what respects Contractor must comply with this section. Should noncompliance still be evident after the ten (10) day period, Contractor shall, as a penalty to County, **forfeit twenty-five dollars (\$25) for each calendar day**, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of Division of Apprenticeship Standards or Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.

**26.3.10** It shall be the responsibility of Contractor to ensure compliance with the provisions of Labor Code section 1776.

## **26.4 Apprentices**

**26.4.1** Contractor acknowledges and agrees that, if this Contract involves a dollar amount greater than or a number of working days greater than that specified in Labor Code section 1777.5, then this Contract is governed by the provisions of Labor Code

Section 1777.5. It shall be the responsibility of Contractor to ensure compliance with this Article and with Labor Code section 1777.5 for all apprenticeship occupations.

**26.4.2** Apprentices of any crafts or trades may be employed and, when required by Labor Code section 1777.5, shall be employed provided they are properly registered in full compliance with the provisions of the Labor Code.

**26.4.3** Every such apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade at which he/she is employed, and shall be employed only in the work of the craft or trade to which she/he is registered.

**26.4.4** Only apprentices, as defined in section 3077 of the Labor Code, who are in training under apprenticeship standards and written apprentice agreements under Chapter 4 (commencing at Section 3070), Division 3, of the Labor Code, are eligible to be employed. The employment and training of each apprentice shall be in accordance with the provisions of the apprenticeship standards and apprentice agreements under which he/she is training.

**26.4.5** Pursuant to Labor Code section 1777.5, if that section applies to this Contract as indicated above, Contractor and any Subcontractors employing workers in any apprentice able craft or trade in performing any Work under this Contract shall apply to the applicable joint apprenticeship committee for a certificate approving the Contractor or Subcontractor under the applicable apprenticeship standards and fixing the ratio of apprentices to journeymen employed in performing the Work.

**26.4.6** Pursuant to Labor Code section 1777.5, if that section applies to this Contract as indicated above, Contractor and any Subcontractor may be required to make contributions to the apprenticeship program.

**26.4.7** If Contractor or Subcontractor willfully fails to comply with Labor Code section 1777.5, then, upon a determination of noncompliance by the Administrator of Apprenticeship, it shall:

**26.4.7.1** Be denied the right to bid on any subsequent project **for one (1) year from the date of such determination;**

**26.4.7.2** Forfeit as a penalty to County the full amount as stated in Labor Code section 1777.7. Interpretation and enforcement of these provisions shall be in accordance with the rules and procedures of the California Apprenticeship Council and under the authority of the Chief of the Division of Apprenticeship Standards.

**26.4.8** Contractor and all Subcontractors shall comply with Labor Code section 1777.6, which section forbids certain discriminatory practices in the employment of apprentices.

**26.4.9** Contractor shall become fully acquainted with the law regarding apprentices prior to commencement of the Work. Special attention is directed to Sections 1777.5, 1777.6, and 1777.7 of the Labor Code, and title 8, California Code of Regulations, section 200 et seq. Questions may be directed to the State Division of Apprenticeship Standards, 455 Golden Gate Avenue, San Francisco, California 94102.

## **26.5 Non-Discrimination**

**26.5.1** Contractor herein agrees not to discriminate in its recruiting, hiring, promotion, demotion, or termination practices on the basis of race, religious creed, national origin, ancestry, sex, age, or physical handicap in the performance of this Contract and to comply with the provisions of the California Fair Employment and Housing Act as set forth in part 2.8 of Division 3 of the California Government Code, commencing at section 12900; the Federal Civil Rights Act of 1964, as set forth in Public Law 88-352, and all amendments thereto; Executive Order 11246, and all administrative rules and regulations found to be applicable to Contractor and Subcontractor.

**26.5.2** Special requirements for Federally Assisted Construction Contracts: During the performance of this Contract, Contractor agrees to incorporate in all subcontracts the provisions set forth in Chapter 60-1.4(b) of Title 41 published in Volume 33 No. 104 of the Federal Register dated May 28, 1968.

**26.6 Labor First Aid**

Contractor shall maintain emergency first aid treatment for Contractor's workers on the Project which complies with the Federal Occupational Safety and Health Act of 1970 (29 U.S.C. § 651 et seq.) and the California Occupational Safety and Health Act of 1973 (8 Cal. Code of Regs., §1 et seq.).

**27. MISCELLANEOUS**

**27.1 Assignment of Antitrust Actions**

**27.1.1** Section 7103.5(b) of the Public Contract Code states:

In entering into a public works contract or 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 under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under 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, made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties.

**27.1.2** Section 4552 of the Government Code states:

In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under 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, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder.

**27.1.3** Section 4553 of the Government Code states:

If an awarding body or public purchasing body receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under this chapter, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the public body any portion of the recovery,

including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the public body as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

**27.1.4** Section 4554 of the Government Code states:

Upon demand in writing by the assignor, the assignee shall, **within one year from such demand**, reassign the cause of action assigned under this part if the assignor has been or may have been injured by the violation of law for which the cause of action arose and (a) the assignee has not been injured thereby, or (b) the assignee declines to file a court action for the cause of action.

**27.1.5** Under this Article, “public purchasing body” is County and “bidder is Contractor.

**27.2 Excise Taxes**

If, under Federal Excise Tax Law, any transaction hereunder constitutes a sale on which a Federal Excise Tax is imposed, and the sale is exempt from such Federal Excise Tax because it is a sale to a State or Local Government for its exclusive use, County, upon request, will execute documents necessary to show (1) that County is a political subdivision of the State for the purposes of such exemption, and (2) that the sale is for the exclusive use of County. No Federal Excise Tax for such materials shall be included in any Contract Price.

**27.3 Taxes**

Contract Price is to include any and all applicable sales taxes or other taxes that may be due in accordance with section 7051 of the Revenue and Taxation Code; Regulation 1521 of the State Board of Equalization or any other tax code that may be applicable.

**27.4 Shipments**

All shipments must be F.O.B. destination to Site or sites, as indicated in the Contract Documents. There must be no charge for containers, packing, unpacking, drayage or insurance. The total Contract Price shall be all inclusive (including sales tax), **and no additional costs of any type will be considered.**

**END OF DOCUMENT**

## SPECIAL CONDITIONS

### 1. Mitigation Measures

Contractor shall comply with all applicable mitigation measures, if any, adopted by any public agency with respect to this Project pursuant to the California Environmental Quality Act. (Public Resources Code section 21000 et. seq.)

### 2. Substitution for Specified Items

**2.2.** Requests for substitutions after award of the Contract shall **be within THIRTY-FIVE (35) days of the date of the Notice of Award.**

**2.3.** Whenever in the Specifications any materials, process, or article is indicated or specified by grade, patent, or proprietary name, or by name of manufacturer, that Specification shall be deemed to be followed by the words "or equal." Contractor may, unless otherwise stated, offer any material, process, or article that shall be substantially equal or better in every respect to that so indicated or specified.

2.3.1. If the material, process, or article offered by Contractor is not, in the opinion of the County, substantially equal or better in every respect to that specified, then Contractor shall furnish the material, process, or article specified in the Specifications without any additional compensation or change order.

2.3.2. This provision shall not be applicable with respect to any material, product, thing or service for which County made findings and gave notice in accordance with Public Contract Code section 3400(b); therefore, Contractor shall not be entitled to request a substitution with respect to those materials, products or services.

**2.4.** A request for a substitution shall be in writing and shall include:

2.4.1. All variations of the proposed substitute from the material specified including, but not limited to, principles of operation, materials, or construction finish, thickness or gauge of materials, dimensions, weight, and tolerances;

2.4.2. Available maintenance, repair or replacement services;

2.4.3. Increases or decreases in operating, maintenance, repair, replacement, and spare parts costs;

- 2.4.4. Whether or not acceptance of the substitute will require other changes in the Work (or in work performed by the County or others under Contract with the County); and
- 2.4.5. The time impact on any part of the Work resulting directly or indirectly from acceptance of the proposed substitute.
- 2.5. No substitutions shall be made until approved, in writing, by the County. The burden of proof as to equality of any material, process, or article shall rest with Contractor. The Contractor warrants that if substitutes are approved:
  - 2.5.1. The proposed substitute is equal or superior in all respects to that specified, and that such proposed substitute is suitable and fit for the intended purpose and will perform adequately the function and achieve the results called for by the general design and the Contract Documents;
  - 2.5.2. The Contractor provides the same warranties and guarantees for the substitute that would be provided for that specified;
  - 2.5.3. The Contractor shall be fully responsible for the installation of the substitute and any changes in the Work required, either directly or indirectly, because of the acceptance of such substitute, with no increase in Contract Price or Contract Time. Incidental changes or extra component parts required to accommodate the substitute will be made by the Contractor without a change in the Contract Price or Contract Time;
  - 2.5.4. The Contractor shall be responsible for any re-design costs occasioned by County's acceptance and/or approval of any substitute; and
  - 2.5.5. The Contractor shall, in the event that a substitute is less costly than that specified, credit the County with **one hundred percent (100%) of the net difference between the substitute and the originally specified material**. In this event, the Contractor agrees to execute a deductive Change Order to reflect that credit.
- 2.6. In the event Contractor furnishes a material, process, or article more expensive than that specified, the difference in the cost of that material, process, or article so furnished shall be borne by Contractor.
- 2.7. In no event shall the County be liable for any increase in Contract Price or Contract Time due to any claimed delay in the evaluation of any proposed substitute or in the acceptance or rejection of any proposed substitute.

3. **Weather Days**



- 3.1 Delays due to adverse weather conditions will only be permitted in compliance with the provisions in the General Conditions and only if the number of days of adverse weather exceeds the following parameters and only if Contractor can verify that adverse weather caused delays exceeded the following number of days:

January	[11]	July	[0]
February	[10]	August	[0]
March	[10]	September	[1]
April	[6]	October	[4]
May	[3]	November	[7]
June	[1]	December	[10]

4. **Insurance Policy Limits.** All of Contractor's insurance shall be with insurance companies with an A.M. Best rating of no less than A: XI.

The limits of insurance shall not be less than:

<b>Commercial General Liability</b>	Each Occurrence	[\$2,000,000]
	General Aggregate	[\$2,000,000]
	Product Liability and Completed Operations	[\$1,000,000]
<b>Automobile Liability – Any Auto</b>	Combined Single Limit	[\$2,000,000]
<b>Excess Liability</b>		[\$4,000,000]
<b>Workers Compensation</b>		Statutory limits pursuant to state law
<b>Employers' Liability</b>		[\$1,000,000]
<b>Builders Risk (Course of Construction)</b>		Issued for the value of the Contract

5. **Permits, Certificates, Licenses, Fees, Approval**

- 5.1 **Payment for Permits, Certificates, Licenses, and Fees.** As required in the General Conditions, the Contractor shall secure and pay for all permits, licenses and certificates necessary for the prosecution of the Work with the exception of the following:

2.7.1. Section intentionally omitted.

2.7.2. Section intentionally omitted.

With respect to the above listed items, Contractor shall be responsible for securing such items, however, County will be responsible for payment of these charges or fees. Contractor shall notify the County of the amount due with respect to such items and to whom the amount is payable. Contractor shall provide the County with an invoice and receipt with respect to such charges or fees.

**6. Work Restrictions**

Hours of Work: Monday to Friday 7:00am to 4:00pm. Any other time requires approval in writing in advance from the County PM.

Access to Site: Parking shall be restricted to designated construction parking spaces only. Authorized vehicles shall display the appropriate parking pass.

Phasing: Not applicable.

END OF DOCUMENT

## HAZARDOUS MATERIALS PROCEDURES & REQUIREMENTS

### 1. Summary

This document includes information applicable to hazardous materials and hazard waste abatement.

### 2. Notice of Hazardous Waste or Materials Conditions

- 2.1. Contractor shall give notice in writing, including by e-mail, to the County, the Construction Manager, and the Engineer promptly, before any of the following conditions are disturbed, and **in no event later than twenty-four (24) hours after first observance**, of any:
  - 2.1.1. Material that Contractor believes may be material that is hazardous waste or hazardous material (including naturally occurring asbestos), as defined in section 25117 or 25260 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 provisions of existing law;
  - 2.1.2. Other material that may present a substantial danger to persons or property exposed thereto in connection with Work at the site.
- 2.2. Contractor's written notice shall indicate whether the hazardous waste or material was shown or indicated in the Contract Documents to be within the scope of Work, and whether the materials were brought to the site by Contractor, its Subcontractors, suppliers, or anyone else for whom Contractor is responsible. As used in this section the term "hazardous materials" shall include, without limitation, asbestos, lead, mercury, Polychlorinated biphenyl (PCB), petroleum and related hydrocarbons, and radioactive material.
- 2.3. In response to Contractor's written notice, the County shall investigate the identified conditions.
- 2.4. If the County determines that conditions do not involve hazardous materials or that no change in terms of Contract is justified, the County shall so notify Contractor in writing, stating reasons. If the County and Contractor cannot agree on whether conditions justify an adjustment in Contract Price or Contract Time, or on the extent of any adjustment, Contractor shall proceed with the Work as directed by the County.
- 2.5. If after receipt of notice from the County, Contractor does not agree to resume Work based on a reasonable belief it is unsafe, or does not agree to resume Work under special

conditions, then County may order such portion of Work that is in connection with such alleged hazardous condition or such affected area to be deleted from the Work, or performed by others, or County may invoke its rights to terminate the Contract in whole or in part. County will determine entitlement to or the amount or extent of an adjustment, if any, in Contract Price or Contract Time as a result of deleting such portion of Work, or performing the Work by others.

- 2.6. If Contractor stops Work in connection with any hazardous condition and in any area affected thereby, Contractor shall immediately redeploy its workers, equipment, and materials, as necessary, to other portions of the Work to minimize delay and disruption.

### **3. Additional Warranties and Representations**

- 3.1. Contractor represents and warrants that it, its employees, and its subcontractors and their employees, shall at all times have the required levels of familiarity with the Site and the Work, training, and ability to comply fully with all applicable law and contract requirements for safe and expeditious performance of the Work, including whatever training is or may be required regarding the activities to be performed (including, but not limited to, all training required to address adequately the actual or potential dangers of Contract performance).
- 3.2. Contractor represents and warrants that it, its employees, and its subcontractors and their employees, shall at all times have and maintain in good standing any and all certifications and licenses required by applicable federal, state, and other governmental and quasi-governmental requirements applicable to the Work.
- 3.3. Contractor represents and warrants that it has studied carefully all requirements of the Specifications regarding procedures for demolition, hazardous waste abatement, or safety practices, specified in the Contract, and prior to submitting its bid, has either (a) verified to its satisfaction that the specified procedures are adequate and sufficient to achieve the results intended by the Contract Documents, or (b) by way of approved "or equal" request or request for clarification and written Addenda, secured changes to the specified procedures sufficient to achieve the results intended by the Contract Documents. Contractor accepts the risk that any specified procedure will result in a completed Project in full compliance with the Contract Documents.

### **4. Monitoring and Testing**

- 4.1. County reserves the right, in its sole discretion, to conduct air monitoring, earth monitoring, Work monitoring, and any other tests (in addition to testing required under the agreement or applicable law), to monitor Contract requirements of safe and statutorily compliant work methods and (where applicable) safe re-entry level air standards under state and federal law upon completion of the job, and compliance of the

work with periodic and final inspection by public and quasi-public entities having jurisdiction.

- 4.2. Contractor acknowledges that County has the right to perform, or cause to be performed, various activities and tests including, but not limited to, pre-abatement, during abatement, and post-abatement air monitoring, that County shall have no obligation to perform said activities and tests, and that a portion of said activities and tests may take place prior to the completion of the Work by Contractor. In the event County elects to perform these activities and tests, Contractor shall afford County ample access to the Site and all areas of the Work as may be necessary for the performance of these activities and tests. Contractor will include the potential impact of these activities or tests by County in the Contract Price and the Scheduled Completion Date.
- 4.3. Notwithstanding County's rights granted by this paragraph, Contractor may retain its own industrial hygiene consultant at Contractor's own expense and may collect samples and may perform tests including, but not limited to, pre-abatement, during abatement, and post-abatement personal air monitoring, and County reserves the right to request documentation of all such activities and tests performed by Contractor relating to the Work and Contractor shall immediately provide that documentation upon request.

## **5. Compliance with Laws**

- 5.1. Contractor shall perform safe, expeditious, and orderly work in accordance with the best practices and the highest standards in the hazardous waste abatement, removal, and disposal industry, the applicable law, and the Contract Documents, including, but not limited to, all responsibilities relating to the preparation and return of waste shipment records, all requirements of the law, delivering of all requisite notices, and obtaining all necessary governmental and quasi-governmental approvals.
- 5.2. Contractor represents that it is familiar with and shall comply with all laws applicable to the Work or completed Work including, but not limited to, all federal, state, and local laws, statutes, standards, rules, regulations, and ordinances applicable to the Work relating to:
  - 5.2.1. The protection of the public health, welfare and environment;
  - 5.2.2. Storage, handling, or use of asbestos, PCB, lead, petroleum based products or other hazardous materials;
  - 5.2.3. The generation, processing, treatment, storage, transport, disposal, destruction, or other management of asbestos, PCB, lead, petroleum, or hazardous waste materials or other waste materials of any kind; and

- 5.2.4. The protection of environmentally sensitive areas such as wetlands and coastal areas.

## **6. Disposal**

- 6.1. Contractor has the sole responsibility for determining current waste storage, handling, transportation, and disposal regulations for the job Site and for each waste disposal facility. Contractor must comply fully at its sole cost and expense with these regulations and any applicable law. County may, but is not obligated to, require submittals with this information for it to review consistent with the Contract Documents.
- 6.2. Contractor shall develop and implement a system acceptable to County to track hazardous waste from the Site to disposal, including appropriate "Hazardous Waste Manifests" on the EPA form, so that County may track the volume of waste it put in each landfill and receive from each landfill a certificate of receipt.
- 6.3. Contractor shall provide County with the name and address of each waste disposal facility prior to any disposal, and County shall have the express right to reject any proposed disposal facility. Contractor shall not use any disposal facility to which County has objected. Contractor shall document actual disposal or destruction of waste at a designated facility by completing a disposal certificate or certificate of destruction forwarding the original to the County.

## **7. Permits**

- 7.1. Before performing any of the Work, and at such other times as may be required by applicable law, Contractor shall deliver all requisite notices and obtain the approval of all governmental and quasi-governmental authorities having jurisdiction over the Work. Contractor shall submit evidence satisfactory to County that it and any disposal facility
- 7.1.1. have obtained all required permits, approvals, and the like in a timely manner both prior to commencement of the Work and thereafter as and when required by applicable law, and
- 7.1.2. are in compliance with all such permits, approvals and the regulations.

For example, before commencing any work in connection with the Work involving asbestos-containing materials, or PCBs, or other hazardous materials subject to regulation, Contractor agrees to provide the required notice of intent to renovate or demolish to the appropriate state or federal agency having jurisdiction, by certified mail, return receipt requested, or by some other method of transmittal for which a return receipt is obtained, and to send a copy of that notice to County. Contractor shall not conduct any Work involving asbestos-containing materials or PCBs unless Contractor has first confirmed that the

appropriate agency having jurisdiction is in receipt of the required notification. All permits, licenses, and bonds that are required by governmental or quasi-governmental authorities, and all fees, deposits, tap fees, offsite easements, and asbestos and PCB disposal facilities expenses necessary for the prosecution of the Work, shall be procured and paid for by Contractor. Contractor shall give all notices and comply with the all applicable laws bearing on the conduct of the Work as drawn and specified. If Contractor observes or reasonably should have observed that Plans and Specifications and other Contract Documents are at variance therewith, it shall be responsible for promptly notifying County in writing, including by e-mail, of such fact. If Contractor performs any Work contrary to applicable laws, it shall bear all costs arising therefrom.

- 7.2. In the case of any permits or notices held in County's name or of necessity to be made in County's name, County shall cooperate with Contractor in securing the permit or giving the notice, but the Contractor shall prepare for County review and execution upon approval, all necessary applications, notices, and other materials.

## **8. Indemnification**

- 8.1. To the extent permitted by law, the indemnities and limitations of liability expressed throughout the Contract Documents apply with equal force and effect to any claims or liabilities imposed or existing by virtue of the removal, abatement, and disposal of hazardous waste. This includes, but is not limited to, liabilities connected to the selection and use of a waste disposal facility, personal injury, property damage, loss of use of property, damage to the environment or natural resources, or "disposal" and "release" of materials associated with the Work (as defined in 42 U.S.C. § 9601 et seq.).

## **9. Termination**

- 9.1. County shall have an absolute right to terminate for default immediately without notice and without an opportunity to cure should Contractor knowingly or recklessly commit a material breach of the terms of the Contract Documents, or any applicable law, on any matter involving the exposure of persons or property to hazardous waste. However, if the breach of contract exposing persons or property to hazardous waste is due solely to an ordinary, unintentional, and non-reckless failure to exercise reasonable care, then the procedures for termination for cause shall apply without modification.

**END OF DOCUMENT**

DOCUMENT 01 10 00

## **SUMMARY OF WORK**

### **PART 1 - GENERAL**

#### **1.01 RELATED DOCUMENTS AND PROVISIONS:**

All Contract Documents must be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions
- B. Special Conditions
- C. Construction Waste Management Document 01 35 13.26
- D. Section intentionally omitted
- E. General Commissioning Requirements 01 91 13

#### **1.02 SUMMARY OF WORK COVERED BY CONTRACT DOCUMENTS**

- A. The Work of this Contract may consist of the following:

Replacement of the existing copper phone/data cabling with fiber optic cabling, connections and routing to several BHCS buildings, both underground through the existing utility tunnel, in existing and new underground conduits and overhead between existing utility poles on the Fairmont Hospital campus, San Leandro.

#### **1.03 CONTRACTS**

- A. Perform the Work under a single, fixed-price Contract.
- B. Any bid item may be deleted in total or in part prior to or after award of Contract without compensation in any form or adjustment of other bid items or prices.

#### **1.04 WORK BY OTHERS**

- A. Work on the Project that will be performed and completed prior to the start of the Work of this Contract:
  - (1) Asbestos removal/abatement.
  - (2) Lead paint removal/abatement.
- B. Work on the Project that will be performed by others concurrent with the Work of this Contract:
  - (1) Section intentionally omitted.



**1.05 CODES, REGULATIONS, AND STANDARDS**

- A. The codes, regulations, and standards adopted by the state and federal agencies having jurisdiction shall govern minimum requirements for this project. Where codes, regulations, and standards conflict with the Contract Documents, these conflicts shall be brought to the immediate attention of the County and the Engineer.
- B. Codes, regulations, and standards shall be as published effective as of date of bid opening, unless otherwise specified or indicated.

**1.06 PROJECT RECORD DOCUMENTS:**

- A. Contractor shall maintain on Site one set of the following record documents; Contractor shall record actual revisions to the Work:
  - (1) Contract Drawings.
  - (2) Specifications.
  - (3) Addenda.
  - (4) Change Orders and other modifications to the Contract.
  - (5) Reviewed shop drawings, product data, and samples.
  - (6) Field test records.
  - (7) Inspection certificates.
  - (8) Manufacturer's certificates.
- B. Contractor shall store Record Documents separate from documents used for construction. Provide files, racks, and secure storage for Record Documents and samples.
- C. Contractor shall record information concurrent with construction progress.
- D. Specifications: Contractor shall legibly mark and record at each product section of the Specifications the description of the actual product(s) installed, including the following:
  - (1) Manufacturer's name and product model and number.

- (2) Product substitutions or alternates utilized.
- (3) Changes made by Addenda and Change Orders and written directives.

#### **1.07 EXAMINATION OF EXISTING CONDITIONS**

- A. The Contractor shall be held to have examined the Project Site and acquainted itself with the conditions of the Site or of the streets or roads approaching the Site.
- B. Prior to commencement of Work, Contractor shall survey the Site and existing buildings and improvements to observe existing damage and defects such as cracks, sags, broken, missing or damaged glazing, other building elements and Site improvements, and other damage.
- C. Should Contractor observe cracks, sags, and other damage to and defects of the Site and adjacent buildings, paving, and other items not indicated in the Contract Documents, Contractor shall immediately report same to the County and the Engineer.

#### **1.08 CONTRACTOR'S USE OF PREMISES**

- A. If unoccupied and only with County's prior written approval, Contractor may use the building(s) at the Project Site without limitation for its operations, storage, and office facilities for the performance of the Work. If the County chooses to beneficially occupy any building(s), Contractor must obtain the County's written approval for Contractor's use of spaces and types of operations to be performed within the building(s) while so occupied. Contractor's access to the building(s) shall be limited to the areas indicated.
- B. If the space at the Project Site is not sufficient for Contractor's operations, storage, office facilities and/or parking, Contractor shall arrange and pay for any additional facilities needed by Contractor.
- C. Contractor shall not interfere with use of or access to occupied portions of the building(s) or adjacent property.
- D. Contractor shall maintain corridors, stairs, halls, and other exit-ways of building clear and free of debris and obstructions at all times.
- E. No one other than those directly involved in the demolition and construction, or specifically designated by the County or the Engineer shall be permitted in the areas of work during demolition and construction activities.

- F. The Contractor shall install the construction security fence (if needed to store construction materials) and maintain that it will be locked when not in use. Keys to this fencing will be provided to the County.

#### 1.09 PROTECTION OF EXISTING STRUCTURES AND UTILITIES

- A. The Drawings show above-grade and below-grade structures, utility lines, and other installations that are known or believed to exist in the area of the Work. Contractor shall locate these existing installations before proceeding with excavation and other operations that could damage same; maintain them in service, where appropriate; and repair damage to them caused by the performance of the Work. Should damage occur to these existing installations, the costs of repair shall be at the Contractor's expense and made to the County's satisfaction.
- B. Contractor shall be alert to the possibility of the existence of additional structures and utilities. If Contractor encounters additional structures and utilities, Contractor will immediately report to the County for disposition of same as indicated in the General Conditions.
- C. Contract shall employ utility locating services to locate any underground utilities within the limits of work prior to the start of any excavating work. Utility locating service company shall provide a survey of existing underground utilities in the work area **stamped and signed by a Civil Engineer or Surveyor licensed in the State of California**. Contractor shall subsequently be responsible for repairs of any located underground utilities damaged by construction activities.

#### 1.10 UTILITY SHUTDOWNS AND INTERRUPTIONS

- A. Contractor shall give the County a **minimum of three (3) days written notice in advance of any need to shut off existing utility services** or to effect equipment interruptions. The County will set exact time and duration for shutdown, and will assist Contractor with shutdown. Work required to re-establish utility services shall be performed by the Contractor.
- B. Contractor shall obtain County's written approval as indicated in the General Conditions in advance of deliveries of material or equipment or other activities that may conflict with County's use of the building(s) or adjacent facilities.

#### 1.11 STRUCTURAL INTEGRITY

- A. Contractor shall be responsible for and supervise each operation and work that could affect structural integrity of various building elements, both permanent and temporary.

- B. Contractor shall include structural connections and fastenings as indicated or required for complete performance of the Work.

### **1.12 WORK SEQUENCE**

- A. Contractor shall be responsible for compliance with all requirements outlined in the hazardous materials sections of the Contract Documents.
- B. Construct Work in stages and at times to accommodate County operation requirements during the construction period; coordinate construction schedule and operations with the County.
- C. Phasing Schedule included in item 1.13 must be adhered to. Moving dates are included in the Phasing Schedule to show planned windows for relocation of building occupants. Liquidated damages may be assessed as described in the Contract Documents for failure to achieve milestone dates.
- D. This facility may be occupied during construction. In that case: County will provide contractor with schedule of uses; at the site during the construction period; Contractor is to coordinate work with the County and maintain safe access to all buildings at all times and to not disrupt ongoing uses. Contractor must comply with the following requirements:
- (1) If Contractor must shut down power to any part of the site, Contractor must provide temporary power for that section of the site.
  - (2) Scope of work includes utility and systems upgrade and replacement that may impact the entire site. Work must be coordinated so that site-wide systems remain functional at all times until new systems work is complete and tested.

### **1.13 PHASING SCHEDULE**

<b>No.</b>	<b>Milestones</b>	<b>Start</b>	<b>Complete</b>
1	Anticipated Notice To Proceed		
2	Construction		
3			
4			
5			
6			
7	Testing, connections and switch-over		
8	Final Contract Completion		

- A. The “Start” dates included in the phasing schedule indicate the date that work is to begin on the identified milestone scope of work.
- B. The “Complete” dates included in the phasing schedule indicates that the following must be complete:
  - (1) The entire scope of work for the milestone work must be complete, including all utility work up to the building and all final termination and operation of all building systems.
  - (2) Fire alarm, telephone, data, public address and all other systems final connections must be complete and systems programmed and tested so that fully functional systems are provided.
  - (3) All punch list work must be complete.
  - (4) Maintenance and Operations Manuals must be submitted to the County.
  - (5) All required testing must be complete.
  - (6) All training for all building systems must be complete.
  - (7) A **minimum of six (6) keys for each and every lock** must be provided. Where fewer keys are specified elsewhere in the Contract Documents, provide a minimum of 6 keys. All keys must be permanently **stamped with three (3) characters identification** as directed by the County.
- C. Record Documents for the scope of work of each Milestone included in the Phasing Schedule must be submitted **within one week after completion of the Milestone**. One full size hardcopy and AutoCAD files on disc to be provided at Final Contract Completion.
- D. Notice to proceed date is the anticipated date of issuance of the Notice to Proceed. If the Notice to Proceed is issued after the date indicated in the Phasing schedule, the start and completion dates of Milestone No. 1 and No. 8 will be adjusted by the number of days that the Notice to Proceed is delayed.

**PART 2 – PRODUCTS** Not Used.

**PART 3 – EXECUTION** Not Used.

END OF DOCUMENT

DOCUMENT 01 22 00

## UNIT PRICES AND ALTERNATES

### PART I – ALTERNATES

#### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions;
- B. Special Conditions;
- C. Bid Form;
- D. Instruction to Bidders.

#### 1.02 DESCRIPTION

The items of work indicated below propose modifications to, substitutions for, additions to and/or deletions from the various parts of the Work specified in other Sections of the Specifications. The acceptance or rejection of any of the alternates is strictly at the option of the County subject to County's acceptance of Contractor's stated prices contained in this Proposal.

#### 1.03 GENERAL

Where an item is omitted, or scope of Work is decreased, all Work pertaining to the item whether specifically stated or not, shall be omitted and where an item is added or modified or where scope of Work is increased, all Work pertaining to that required to render same ready for use on the Project in accordance with the intention of the Drawings and Specifications shall be included in an agreed upon price amount.

#### 1.04 BASE BID

The Base Bid includes all work required to construct the Project completely and in accordance with the Contract Documents.

#### 1.05 ALTERNATES

- A. **Add Alternate 1.** None at this time.

The above Alternate descriptions are general in nature and for reference purposes only. The Contract Documents, including, without limitation, the Drawings and Specifications, must be referred to for the complete scope of Work.

## **PART 2 - UNIT PRICING**

### **2.01 GENERAL**

Contractor shall completely state all required figures based on Unit Prices listed below. Where scope of Work is decreased, all Work pertaining to the item, whether specifically stated or not, shall be omitted and where scope of Work is increased, all work pertaining to that item required to render same ready for use on the Project in accordance with intention of Drawings and Specifications shall be included in an agreed upon price amount.

### **2.02 UNIT PRICES**

Furnish unit prices for each of the named items on a square foot, lineal foot, or per each basis, as applies. Unit prices shall include all labor, materials, services, profit, overhead, insurance, bonds, taxes, and all other incidental costs of Contractor, subcontractors, and supplier(s).

**END OF DOCUMENT**

DOCUMENT 01 26 00

**CONTRACT MODIFICATIONS**

Insert any contract modifications agreed upon in writing between Contractor and County. All contract modifications must be reviewed and approved in advance by County Counsel.

END OF DOCUMENT



DOCUMENT 01 29 00

**PAYMENT PROCEDURES**

Section intentionally omitted. See Document 01 72 13 General Conditions, Section 19.

END OF DOCUMENT

DOCUMENT 01 31 19

## PROJECT MEETINGS

### PART I – GENERAL

#### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions
- B. Special Conditions

#### 1.02 PRECONSTRUCTION CONFERENCE:

The contractor shall attend a conference at the Project Site prior to the start of construction for the purpose of determining Contractor's access to, and use of the site, verifying utilities, review construction administrative procedures, and such other items as may be pertinent to the start of construction.

#### 1.03 PROGRESS MEETINGS:

- A. County Project Manager shall schedule and hold regular weekly progress meetings after a **minimum of one week's prior written notice** of the meeting date and time to invite all Invitees as indicated below.
- B. Location: Contractor's field office.
- C. The Contractor shall notify and invite the following entities ("Invitees"):
  - (1) County Representative(s).
  - (2) Contractor.
  - (3) Contractor's Project Manager.
  - (4) Contractor's Superintendent.
  - (5) Subcontractors/suppliers, as appropriate to the agenda of the meeting.
  - (6) Inspector of record, as appropriate to the meeting agenda.
  - (7) Construction Manager, if any.

- (8) County Project Manager
  - (9) Engineer
  - (10) Others, if any and as appropriate to the agenda of the meeting.
  - (11) Others, as appropriate to the agenda of the meeting.
- D. The County's, the Engineer's, and/or an Engineer's consultants will attend at their discretion, in response to the agenda.
- E. The County representative, the Construction Manager, and/or another County Agent shall take and distribute meeting notes to attendees and other concerned parties. If exceptions are taken to anything in the meeting notes, those exceptions shall be stated in writing to the County **within five (5) working days following County's distribution of the meeting notes.**

**1.04 PRE-INSTALLATION/PERFORMANCE MEETING:**

- A. Contractor shall schedule a meeting prior to the start of each of the following portions of the Work: cutting and patching of plaster and roofing, and other weather-exposed and moisture-resistant products. Contractor shall invite all Invitees to this meeting, and others whose work may affect or be affected by the quality of the cutting and patching work.
- B. Contractor shall review in detail prior to this meeting, the manufacturer's requirements and specifications, applicable portions of the Contract Documents, Shop Drawings, and other submittals, and other related work. At this meeting, invitees shall review and resolve conflicts, incompatibilities, or inadequacies discovered or anticipated.
- C. Contractor shall review in detail Project conditions, schedule, requirements for performance, application, installation, and quality of completed Work, and protection of adjacent Work and property.
- D. Contractor shall review in detail means of protecting the completed Work during the remainder of the construction period.

**1.05 SPECIAL MEETINGS:**

Special meetings may be requested by the County. Contractor, subcontractors, material suppliers and any other members of the project team may be required to attend.

END OF DOCUMENT

DOCUMENT 01 33 00

## **SUBMITTAL PROCEDURES**

### **PART 1 - GENERAL**

#### **1.01 RELATED DOCUMENTS AND PROVISIONS:**

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Contractor's Submittals and Schedules, Drawings and Specifications;
- B. Special Conditions.

#### **1.02 SECTION INCLUDES:**

- A. Definitions:
  - (1) Shop Drawings and Product Data are as indicated in the General Conditions and include, but are not limited to, fabrication, erection, layout and setting drawings, formwork and falsework drawings, manufacturers' standard drawings, descriptive literature, catalogues, brochures, performance and test data, wiring and control diagrams. In addition, there are other drawings and descriptive data pertaining to materials, equipment, piping, duct and conduit systems, and methods of construction as may be required to show that the materials, equipment or systems and all positions conform to the requirement of the Contract Documents, including, without limitation, the Drawings.
  - (2) "Manufactured" applies to standard units usually mass-produced; "fabricated" means specifically assembled or made out of selected materials to meet design requirements. Shop Drawings shall establish the actual detail of manufactured or fabricated items, indicate proper relation to adjoining work and amplify design details of mechanical and electrical equipment in proper relation to physical spaces in the structure.
  - (3) Manufacturer's Instructions: Where any item of Work is required by the Contract Documents to be furnished, installed, or performed, at a minimum, in accordance with a specified product manufacturer's instructions, the Contractor shall procure and distribute copies of these to the County, the Engineer, County ITD representative and all other concerned parties and shall furnish, install, or perform the work, at a minimum, in accordance with those instructions.

- B. Samples, Shop Drawings, Product Data, and other items as specified, in accordance with the following requirements:
- (1) Contractor shall submit all Shop Drawings, Product Data, and Samples to the County, the Engineer, and the Construction Manager.
  - (2) Contractor shall comply with all time frames herein and in the General Conditions and, in any case, shall submit required information in sufficient time to permit proper consideration and action before ordering any materials or items represented by such Shop Drawings, Product Data, and/or Samples.
  - (3) Contractor shall comply with all time frames herein and in the General Conditions and, in any case, shall allow sufficient time so that no delay occurs due to required lead time in ordering or delivery of any item to the Site. Contractor shall be responsible for any delay in progress of Work due to its failure to observe these requirements.
  - (4) Time for completion of Work shall not be extended on account of Contractor's failure to promptly submit Shop Drawings, Product Data, and/or Samples.
  - (5) Reference numbers on Shop Drawings shall have Architectural and/or Engineering Contract Drawings reference numbers for details, sections, and "cuts" shown on Shop Drawings. These reference numbers shall be in addition to any numbering system that Contractor chooses to use or has adopted as standard.
  - (6) When the magnitude or complexity of submittal material prevents a complete review within the stated time frame, Contractor shall make this submittal in increments to avoid extended delays.
  - (7) Contractor shall certify on submittals for review that submittals conform to Contract requirements. In event of any variance, Contractor shall specifically state in transmittal and on Shop Drawings, portions vary and require approval of a substitute. Also certify that Contractor-furnished equipment can be installed in allocated space.
  - (8) Unless specified otherwise, sampling, preparation of samples, and tests shall be in accordance with the latest standard of the American Society for Testing and Materials.
  - (9) Upon demand by Engineer or County, Contractor shall submit samples of materials and/or articles for tests or examinations and consideration before Contractor incorporates same in Work. Contractor shall be solely

responsible for delays due to sample(s) not being submitted in time to allow for tests. Acceptance or rejection will be expressed in writing. Work shall be equal to approved samples in every respect. Samples that are of value after testing will remain the property of Contractor.

C. Submittal Schedule:

- (1) Contractor shall prepare its proposed submittal schedule that is coordinated with its proposed construction schedule and submit both to the County **within ten (10) days after the date of the Notice to Proceed.** Contractor's proposed schedules shall become the Project Construction Schedule and the Project Submittal Schedule after each is approved by the County.
- (2) Contractor is responsible for all lost time should the initial submittal be rejected, marked "revised and resubmit", etc.
- (3) All Submittals shall be forwarded to the County by the date indicated on the approved Submittal Schedule, unless an earlier date is necessary to maintain the Construction Schedule, in which case those Submittals shall be forwarded to the County so as not to delay the Construction Schedule.

**1.03 SHOP DRAWINGS:**

- A. Contractor shall **submit six (6) full size reproductions.** The County will review and **return two (2) reproduction to Contractor.**
- B. Before commencing installation of any Work, the Contractor shall submit and receive approval of all drawings, descriptive data, and material list(s) as required to accomplish Work.
- C. Review of Shop Drawings is regarded as a service to assist Contractor and in all cases original Contract Documents shall take precedence as outlined under General Conditions.
- D. No claim for extra time or payment shall be based on work shown on Shop Drawings unless the claim is (1) noted on Contractor's transmittal letter accompanying Shop Drawings and (2) Contractor has complied with all applicable provisions of the General Conditions, including, without limitation, provisions regarding changes and payment, and **all required written approvals.**
- E. County **shall not** review Shop Drawings for quantities of materials or number of items supplied.

- F. County's and/or Engineer's review of Shop Drawings will be general. County and/or Engineer review does not relieve Contractor of responsibility for accuracy, proper fitting, construction of Work, furnishing of materials, or Work required by Contract Documents and not indicated on Shop Drawings. Shop Drawings reviewed by County and/or Engineer is not to be construed as approving departures from Contract Documents.
- G. Review of Shop Drawings and Schedules does not relieve Contractor from responsibility for any aspect of those Drawings or Schedules that is a violation of local, County, State, or Federal laws, rules, ordinances, or rules and regulations of commissions, boards, or other authorities or utilities having jurisdiction.
- H. Before submitting Shop Drawings for review, Contractor shall check Shop Drawings of its subcontractors for accuracy, and confirm that all Work contiguous with and having bearing on other work shown on Shop Drawings is accurately drawn and in conformance with Contract Documents.
- I. Submitted drawings and details must bear **stamp of approval of Contractor:**
  - (1) Stamp and signature shall clearly certify that Contractor has checked Shop Drawings for compliance with Drawings.
  - (2) If Contractor submits a Shop Drawing without an executed stamp of approval, or whenever it is evident (despite stamp) that Drawings have not been checked, the County and/or Engineer will not consider them and will return them to the Contractor for revision and resubmission. In that event, it will be deemed that Contractor has not complied with this provision and Contractor shall bear risk of all delays to same extent as if it had not submitted any Shop Drawings or details.
- J. Submission of Shop Drawings (in either original submission or when resubmitted with correction) constitutes evidence that **Contractor has checked all information** thereon and that it accepts and is willing to perform Work as shown.
- K. Contractor shall **pay for cost of any changes** in construction due to improper checking and coordination. Contractor shall be responsible for all additional costs, including coordination. Contractor shall be responsible for costs incurred by itself, the County, the Engineer, the Construction Manager, any other Subcontractor or contractor, etc., due to improperly checked and/or coordination of submittals.
- L. Shop Drawings must clearly delineate the following information:
  - (1) Project name and address.

- (2) Engineer's name and project number.
  - (3) Shop Drawing title, number, date, and scale.
  - (4) Names of Contractor, Subcontractor(s) and fabricator.
  - (5) Working and erection dimensions.
  - (6) Arrangements and sectional views.
  - (7) Necessary details, including complete information for making connections with other Work.
  - (8) Kinds of materials and finishes.
  - (9) Descriptive names of materials and equipment, classified item numbers, and **locations at which materials or equipment are to be installed** in the Work. Contractor shall use same reference identification(s) as shown on Contract Drawings.
- M. Contractor shall prepare composite drawings and installation layouts when required to solve tight field conditions.
- (1) Shop Drawings shall consist of dimensioned plans and elevations and must give complete information, particularly as to size and location of sleeves, inserts, attachments, openings, conduits, ducts, boxes, structural interferences, etc.
  - (2) Contractor shall coordinate these composite Shop Drawings and installation layouts in the field between itself and its Subcontractor(s) for proper relationship to the Work, the work of other trades, and the field conditions. The Contractor shall **check and approve the submittal(s) before submission** for final review.

#### 1.04 PRODUCT DATA OR NON REPRODUCIBLE SUBMITTALS:

- A. Contractor shall submit manufacturer's printed literature in original form. Any fading type of reproduction will not be accepted. Contractor must submit a **minimum of six (6) each to the County**. County shall **return two (2) to the Contractor**, who shall reproduce whatever additional copies it requires for distribution.
- B. Contractor shall **submit six (6) copies of a complete list of all major items** of mechanical, plumbing, and electrical equipment and materials in accordance with the approved Submittal Schedule, except as required earlier to comply with the



approved Construction Schedule. Other items specified are to be submitted prior to commencing Work. Contractor shall submit items of like kind at one time in a neat and orderly manner. Partial lists will not be acceptable.

- C. Submittals shall include manufacturer's specifications, physical dimensions, and ratings of all equipment. Contractor shall furnish performance curves for all pumps and fans. Where printed literature describes items in addition to that item being submitted, submitted item shall be clearly marked on sheet and superfluous information shall be crossed out. If highlighting is used, Contractor shall mark all copies.
- D. Equipment submittals shall be complete and include space requirements, weight, electrical and mechanical requirements, performance data, and supplemental information that may be requested.

#### 1.05 SAMPLES:

- A. Contractor shall submit for approval Samples as required and within the time frame in the Contract Documents. Materials such as concrete, mortar, etc., which require on-site testing will be obtained from Project Site.
- B. Contractor shall **submit six (6) samples** except where greater or lesser number is specifically required by Contract Documents including, without limitation, the Specifications.
  - (1) Samples must be of sufficient size and quality to clearly illustrate functional characteristics, with integrally related parts and attachment devices.
  - (2) Samples must show full range of texture, color, and pattern.
- C. Contractor shall make all Submittals, unless it has authorized Subcontractor(s) to submit and Contractor has notified the County in writing to this effect.
- D. Samples to be shipped prepaid or hand-delivered to the County.
- E. **Contractor shall mark samples** to show name of Project, name of Contractor submitting, Contract number and segment of Work where representative Sample will be used, all applicable Specifications Sections and documents, Contract Drawing Number and detail, and ASTM or FS reference, if applicable.
- F. Contractor shall not deliver any material to Site prior to receipt of County's and/or Engineer's completed written review and approval. Contractor shall furnish materials equal in every respect to approved Samples and execute Work in conformance therewith.

- G. County's and/or Engineer's review, acceptance, and/or approval of Sample(s) will not preclude rejections of any material upon discovery of defects in same prior to final acceptance of completed Work.
- H. After a material has been approved, no change in brand or make will be permitted.
- I. Contractor shall prepare its Submittal Schedule and submit Samples of materials requiring laboratory tests to specified laboratory for **testing not less than ninety (90) days before such materials are required to be used** in Work.
- J. Samples which are rejected must be resubmitted promptly after notification of rejection and be marked "Resubmitted Sample" in addition to other information required.
- K. Field Samples and Mock-Ups are to be removed by Contractor at County's direction:
  - (1) Size: As Specified.
  - (2) Furnish catalog numbers and similar data, as requested.

**1.06 REVIEW AND RESUBMISSION REQUIREMENTS:**

- A. The County will arrange for review of Sample(s), Shop Drawing(s), Product Data, and other submittal(s) by appropriate reviewer and return to Contractor as provided below **within twenty one (21) days after receipt** or within twenty one (21) days after receipt of all related information necessary for such review, whichever is later.
- B. One (1) copy of product or materials data will be returned to Contractor with the review status.
- C. Samples to be incorporated into the Work will be returned to Contractor, together with a written notice designating the Sample with the appropriate review status and indicating errors discovered on review, if any. Other Samples will not be returned, but the same notice will be given with respect thereto, and that notice shall be considered a return of the Sample.
- D. Contractor shall revise and resubmit any Sample(s), Shop Drawing(s), Product Data, and other submittal(s) as required by the reviewer. Such resubmittals will be reviewed and returned in the same manner as original Sample(s), Shop Drawing(s), Product Data, and other submittal(s), **within fourteen (14) days after receipt** thereof or within fourteen (14) days after receipt of all related information necessary for such review.

- E. Contractor may proceed with any of the Work covered by Sample(s), Shop Drawing(s), Product Data, and other submittal(s) upon its return if designated as no exception taken, or revise as noted, provided the Contractor proceeds in accordance with the County's and/or the Engineer's notes and comments.
- F. Contractor shall not begin any of the work covered by a Sample(s), Shop Drawing(s), Product Data, and other submittal(s), designated as revise and resubmit or rejected, until a revision or correction thereof has been reviewed and returned to Contractor.
- G. Sample(s), Shop Drawing(s), Product Data, and other submittal(s) designated as revise and resubmit or rejected and requiring resubmittal, shall be revised or corrected and resubmitted to the County **no later than fourteen (14) days** or a shorter period as required to comply with the approved Construction Schedule, after its return to Contractor.
- H. Neither the review nor the lack of review of any Sample(s), Shop Drawing(s), Product Data, and other submittal(s) shall waive any of the requirements of the Contract Documents, or relieve Contractor of any obligation thereunder.
- I. County's and/or Engineer's review of Shop Drawings does not relieve the Contractor of responsibility for any errors that may exist. Contractor is responsible for the dimensions and design of adequate connections and details and for satisfactory construction of all the Work.

END OF DOCUMENT

DOCUMENT 01 41 00

## **REGULATORY REQUIREMENTS**

### **PART 1 - GENERAL**

#### **1.01 RELATED DOCUMENTS AND PROVISIONS:**

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Obtaining of Permits and Licenses and Work To Comply With All Applicable Regulations;
- B. Special Conditions;
- C. Quality Control.

#### **1.02 DESCRIPTION:**

- A. This section covers the general requirements for regulatory requirements pertaining to the Work and is supplementary to all other regulatory requirements mentioned or referenced elsewhere in the Contract Documents.

#### **1.03 REQUIREMENTS OF REGULATORY AGENCIES:**

- A. All statutes, ordinances, laws, rules, codes, regulations, standards, and the lawful orders of all public authorities having jurisdiction of the Work, are hereby incorporated into these Contract Documents as if repeated in full herein and are intended to be included in any reference to Code or Building Code, unless otherwise specified, including, without limitation, the references in the list below. Contractor shall make available at the Site copies of all the listed documents applicable to the Work as the County and/or Engineer may request, including, without limitation, applicable portions of the California Code of Regulations ("CCR").
- B. Items of deferred approval shall be clearly marked on the first sheet of the Engineer's approved Drawings.
  - (1) Building Standards Administrative Code, Part 1, Title 24, CCR
  - (2) California Building Code (CBC), Part 2, Title 24, CCR; (Uniform Building code volumes 1-3 and California Amendments).

- (3) California Electrical Code (CEC), Part 3, Title 24, CCR; (National Electrical Code and California Amendments).
- (4) California Mechanical Code (CMC), Part 4, Title 24, CCR; (Uniform Mechanical Code and California Amendments).
- (5) California Plumbing Code (CPC), Part 5, Title 24, CCR; (Uniform Plumbing Code and California Amendments).
- (6) California Fire Code (CFC), Part 9, Title 24, CCR; (Fire Plumbing Code and California Amendments).
- (7) California Referenced Standards Code, Part 12, Title 24, CCR
- (8) Title 19, CCR, Public Safety, State Fire Marshal Regulations.
- (9) Partial List of Applicable NFPA Standards:
  - (a) NFPA 13 - Automatic Sprinkler System.
  - (b) NFPA 14 - Standpipes Systems.
  - (c) NFPA 17A - Wet Chemical System
  - (d) NFPA 24 - Private Fire Mains.
  - (e) (California Amended) NFPA 72 - National Fire Alarm Codes.
  - (f) NFPA 253 - Critical Radiant Flux of Floor Covering System.
  - (g) FPA 2001 - Clean Agent Fire Extinguishing Systems.

**END OF DOCUMENT**

DOCUMENT 01 42 13

## ABBREVIATIONS AND ACRONYMS

### PART 1 – GENERAL

#### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions including without limitation, Definitions
- B. Special Conditions

#### 1.02 DOCUMENT INCLUDES:

- A. Abbreviations used throughout the Contract Documents.
- B. Reference to a technical society, organization, or body is by abbreviation, as follows:

- |     |        |   |
|-----|--------|---|
| 1.  | AA     | Aluminum Association  |
| 2.  | AAMA   | Architectural Aluminum Manufacturers Association                          |
| 3.  | AASHTO | American Association of State Highway and Transportation Officials        |
| 4.  | ABPA   | Acoustical and Board Products Association                                 |
| 5.  | ACI    | American Concrete Institute   |
| 6.  | AGA    | American Gas Association  |
| 7.  | AGC    | Associated General Contractors  |
| 8.  | AHC    | Architectural Hardware Consultant   |
| 9.  | AI     | Asphalt Institute   |
| 10. | AIA    | American Institute of Architects  |
| 11. | AIEE   | American Institute of Electrical Engineers                                |
| 12. | AISC   | American Institute of Steel Construction                                  |
| 13. | AISI   | American Iron and Steel Institute   |
| 14. | AMCA   | Air Moving and Conditioning Association                                   |
| 15. | ANSI   | American National Standards Institute                                     |
| 16. | APA    | American Plywood Association  |
| 17. | ARI    | Air Conditioning and Refrigeration Institute                              |
| 18. | ASHRAE | American Society of Heating, Refrigeration and Air Conditioning Engineers |
| 19. | ASME   | American Society of Mechanical Engineers                                  |
| 20. | ASSE   | American Society of Structural Engineers                                  |

21.	ASTM	American Society of Testing and Materials
22.	AWPB	American Wood Preservers Bureau
23.	AWPI	American Wood preservers Institute
24.	AWS	American Welding Society
25.	AWSC	American Welding Society Code
26.	AWI	Architectural Woodwork Institute
27.	AWWA	American Water Works Association
28.	BIA	Brick Institute of America
29.	CBC	California Building Code
30.	CCR	California Code of Regulations
31.	CLFMI	Chain Link Fence Manufacturers Institute
32.	CMG	California Masonry Guild
33.	CRA	California Redwood Association
34.	CRSI	Concrete Reinforcing Steel Institute
35.	CS	Commercial Standards
36.	CSI	Construction Specifications Institute
37.	CTI	Cooling Tower Institute
38.	FGMA	Flat Glass Manufacturer's Association
39.	FIA	Factory Insurance Association
40.	FM	Factory Mutual
41.	FS	Federal Specification
42.	FTI	Facing Title Institute
43.	GA	Gypsum Association
44.	ICBO	International Conference of Building Officials
45.	IEEE	Institute of Electrical and Electronic Engineers
46.	IES	Illumination Engineering Society
47.	LIA	Lead Industries Association
48.	MIA	Marble Institute of America
49.	MLMA	Metal Lath Manufacturers Association
50.	MS	Military Specifications
51.	NAAMM	National Association of Architectural Metal Manufacturers
52.	NBHA	National Builders Hardware Association
53.	NBFU	National Board of Fire Underwriters
54.	NBS	National Bureau of Standards
55.	NCMA	National Concrete Masonry Association
56.	NEC	National Electrical Code
57.	NEMA	National Electrical Manufacturers Association
58.	NFPA	National Fire Protection Association/National Forest Products Association
59.	NMWIA	National Mineral Wool Insulation Association
60.	NTMA	National Terrazzo and Mosaic Association
61.	NWMA	National Woodwork Manufacturer's Association
62.	ORS	Office of Regulatory Services (California)
63.	OSHA	Occupational Safety and Health Act

64.	PCI	Precast Concrete Institute
65.	PCA	Portland Cement Association
66.	PDCA	Painting and Decorating Contractors of America
67.	PDI	Plumbing Drainage Institute
68.	PEI	Porcelain Enamel Institute
69.	PG&E	Pacific Gas & Electric Company
70.	PS	Product Standards
71.	SDI	Steel Door Institute; Steel Deck Institute
72.	SJI	Steel Joist Institute
73.	SSPC	Steel Structures Painting Council
74.	TCA	Tile Council of America
75.	TPI	Truss Plate Institute
76.	UBC	Uniform Building Code
77.	UL	Underwriters Laboratories Code
78.	UMC	Uniform Mechanical Code
79.	USDA	United States Department of Agriculture
80.	VI	Vermiculite Institute
81.	WCLA	West Coast Lumberman's Association
82.	WCLB	West Coast Lumber Bureau
83.	WEUSER	Western Electric Utilities Service Engineering Requirements
84.	WIC	Woodwork Institute of California
85.	WPOA	Western Plumbing Officials Association

END OF DOCUMENT



DOCUMENT 01 42 16

## **DEFINITIONS AND REFERENCE STANDARDS**

### **PART 1 - GENERAL**

#### **1.01 RELATED DOCUMENTS AND PROVISION**

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions including without limitation, Definitions;
- B. Special Conditions;

#### **1.02 QUALITY ASSURANCE:**

- A. For products or workmanship specified by association, trade, or Federal Standards, Contractor shall comply with requirements of the standard, except when more rigid requirements are specified in the Contract Documents, or are required by applicable codes.
- B. Contractor shall conform to current reference standard publication date in effect on the date of bid opening.
- C. Contractor shall obtain copies of standards unless specifically required not to by the Contract Documents.
- D. Contractor shall maintain a copy of all standards at jobsite during submittals, planning, and progress of the specific Work, until final completion, unless specifically required not to by the Contract Documents.
- E. Should specified reference standards conflict with Contract Documents, Contractor shall request clarification from the County and/or the Engineer before proceeding.
- F. The contractual relationship of the parties to the Contract shall not be altered from the contractual relationship as indicated in the Contract Documents by mention or inference otherwise in any referenced document.
- G. Governing Codes shall be as shown in the Contract Documents including, without limitation, the Specifications.

**1.03 SCHEDULE OF REFERENCES:**

The following information is intended only for the general assistance of the Contractor, and the County does not represent that all of the information is current. It is the Contractor's responsibility to verify the correct information for each of the entities listed.

AA	Aluminum Association 900 19 <sup>th</sup> Street NW, Suite 300 Washington, DC 20006 <a href="http://www.aluminum.org">www.aluminum.org</a>	202/862-5100
AABC	Associated Air Balance Council 1518 K Street, NW, Suite 503 Washington, DC 20005 <a href="http://www.aabchq.com">www.aabchq.com</a>	202/737-0202
AAMA	American Architectural Manufacturers Association 1827 Walden Office Sq., Suite 104 Schaumburg, IL 60173-4268 <a href="http://www.aamanet.org">www.aamanet.org</a>	847/303-5664
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street, Suite 249 Washington, DC 20001 <a href="http://www.aashto.org">www.aashto.org</a>	202/624-5800
AATCC	American Association of Textile Chemists and Colorists P.O. Box 12215 One Davis Drive Research Triangle Park, NC 27709-2215 <a href="http://www.aatcc.org">www.aatcc.org</a>	919/549-8141
ACI	American Concrete Institute P.O. Box 9094 Farmington Hills, MI 48333-9094 <a href="http://www.aci-int.org">www.aci-int.org</a>	248/848-3700
ACPA	American Concrete Pipe Association 222 West Las Colinas Blvd., Suite 641 Irving, TX 75039-5423 <a href="http://www.concrete-pipe.org">www.concrete-pipe.org</a>	972/506-7216

ADC	Air Diffusion Council 11 South LaSalle St., Suite 1400 Chicago, IL 60603	312/201-0101
AFPA	American Forest and Paper Association 1111 19th St., NW, Suite 800 Washington, DC 20036	202/463-2700
AGA	American Gas Association 1515 Wilson Blvd. Arlington, VA 22209 <a href="http://www.aga.com">www.aga.com</a>	703/841-8400
AHA	American Hardboard Association 1210 W. Northwest Hwy Palatine, IL 60067-1897	847/934-8800
AI	Asphalt Institute Research Park Drive P.O. Box 14052 Lexington, KY 40512-4052 <a href="http://www.asphaltinstitute.org">www.asphaltinstitute.org</a>	606/288-4960
AIA	The American Institute of Architects 1735 New York Avenue, NW Washington, DC 20006-5292 <a href="http://www.aia.org">www.aia.org</a>	202/626-7300
AISC	American Institute of Steel Construction One East Wacker Drive, Suite 3100 Chicago, IL 60601-2001	800/644-2400
AITC	American Institute of Timber Construction 7012 S. Revere Pkwy., Suite 140 Englewood, CO 80112 <a href="http://www.aitc-glulam.org">www.aitc-glulam.org</a>	303/792-9559
ALCA	Associated Landscape Contractors of America 12200 Sunrise Valley Drive, Suite 150 Reston, VA 20191 <a href="http://www.alca.org">www.alca.org</a>	703/620-6363
ALI	Associated Laboratories, Inc. P.O. Box 152837 1323 Wall St.	214/565-0593

Dallas, TX 75315

ALSC	American Lumber Standards Committee P.O. Box 210 Germantown, MD 20875	301/972-1700
AMCA	Air Movement and Control Association International, Inc. 30 W. University Drive Arlington Heights, IL 60004-1893 <a href="http://www.amca.org">www.amca.org</a>	847/394-0150
ANLA	American Nursery and Landscape Association 1250 Eye Street, NW, Suite 500 Washington, DC 20005	202/789-2900
ANSI	American National Standards Institute 11 West 42nd Street, 13th Floor New York, NY 10036-8002 <a href="http://www.ansi.org">www.ansi.org</a>	212/642-4900
APA	APA-The Engineered Wood Association P.O. Box 11700 Tacoma, WA 98411-0700 <a href="http://www.apawood.org">www.apawood.org</a>	206/565-6600
APA	Architectural Precast Association P.O. Box 08669 Fort Myers, FL 33908-0669	941/454-6989
ARI	Air Conditioning and Refrigeration Institute 4301 Fairfax Drive, Suite 425 Arlington, VA 22203 <a href="http://www.ari.org">www.ari.org</a>	703/524-8800
ARMA	Asphalt Roofing Manufacturers Association Center Park 4041 Powder Mill Road, Suite 404 Calverton, MD 20705	301/231-9050
ASA	Acoustical Society of America 500 Sunnyside Blvd. Woodbury, NY 11797	516/576-2360

ASCE	American Society of Civil Engineers- World Headquarters 1801 Alexander Bell Drive Reston, VA 20190-4400 <a href="http://www.asce.org">www.asce.org</a>	800/548-2723 703/295-6000
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers 1791 Tullie Circle, NE Atlanta, GA 30329-2305 <a href="http://www.ashrae.org">www.ashrae.org</a>	800/527-4723 404/636-8400
ASLA	American Society of Landscape Architects 4401 Connecticut Ave., NW, 5th Floor Washington, DC 20008-2369 <a href="http://www.asla.org">www.asla.org</a>	202/686-2752
ASME	American Society of Mechanical Engineers 345 East 47 <sup>th</sup> Street New York, NY 10017-2392 <a href="http://www.asme.org">www.asme.org</a>	800/434-2763
ASPE	American Society of Plumbing Engineers 3617 Thousand Oaks Blvd., Suite 210 Westlake, CA 91362-3649	805/495-7120
ASQC	American Society for Quality Control 611 E. Wisconsin Avenue Milwaukee, WI 53201-3005 <a href="http://www.asqc.org">www.asqc.org</a>	800/248-1946 414/272-8575
ASSE	American Society of Sanitary Engineering 28901 Clemens Road Westlake, OH 44145 <a href="http://www.asse-plumbing.org">www.asse-plumbing.org</a>	216/835-3040
ASTM	American Society for Testing and Materials 100 Barr Harbor Drive West Conshohocken, PA 19428-2959 <a href="http://www.astm.org">www.astm.org</a>	610/832-9500

AWCI	Association of the Wall and Ceiling Industries--International 307 E. Annandale Road, Suite 200 Falls Church, VA 22042-2433 <a href="http://www.awci.org">www.awci.org</a>	703/534-8300
AWPA	American Wood-Preservers' Association 3246 Fall Creek Highway, Suite 1900 Granbury, TX 76049-7979	817/326-6300
AWS	American Welding Society 550 NW LeJeune Road Miami, FL 33126 <a href="http://www.amweld.org">www.amweld.org</a>	800/443-9373 305/443-9353
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235 <a href="http://www.awwa.org">www.awwa.org</a>	800/926-7337 303/794-7711
BHMA	Builders' Hardware Manufacturers Association 355 Lexington Avenue, 17th Floor New York, NY 10017-6603	212/661-4261
CBM	Certified Ballast Manufacturers Association 1422 Euclid Avenue, Suite 402 Cleveland, OH 44115-2094	216/241-0711
CGA	Compressed Gas Association 1725 Jefferson Davis Hwy, Suite 1004 Arlington, VA 22202-4102 <a href="http://www.cganet.com">www.cganet.com</a>	703/412-0900
CISCA	Ceilings & Interior Systems Construction Association 1500 Lincoln Hwy, Suite 202 St. Charles, IL 60174 <a href="http://www.cisca.org">www.cisca.org</a>	630/584-1919
CISPI	Cast Iron Soil Pipe Institute 5959 Shallowford Road, Suite 419 Chattanooga, TN 37421	423/892-0137

CPSC	Consumer Product Safety Commission East West Towers 4330 East-West Hwy. Bethesda, MD 20814	800/638-2772
CPPA	Corrugated Polyethylene Pipe Association 432 N. Superior Street Toledo, OH 43604	800/510-2772 419/241-2221
CRA	California Redwood Association 405 Enfrente Drive, Suite 200 Novato, CA 94949	415/382-0662
CRI	Carpet and Rug Institute 310 S. Holiday Avenue Dalton, GA 30722-2048 <a href="http://www.carpet-rug.com">www.carpet-rug.com</a>	800/882-8846 706/278-3176
CRSI	Concrete Reinforcing Steel Institute 933 N. Plum Grove Road Schaumburg, IL 60173-4758 <a href="http://www.crsi.org">www.crsi.org</a>	847/517-1200
CTI	Ceramic Tile Institute of America 12061 W. Jefferson Blvd. Culver City, CA 90230-6219	310/574-7800
DHI	Door and Hardware Institute 14170 Newbrook Drive Chantilly, VA 20151-2223 <a href="http://www.dhi.org">www.dhi.org</a>	703/222-2010
DIPRA	Ductile Iron Pipe Research Association 245 Riverchase Pkwy East, Suite O Birmingham, AL 35244	205/988-9870
DOC	Department of Commerce 14 <sup>th</sup> Street and Constitution Avenue, NW Washington, DC 20230	202/482-2000
DOT	Department of Transportation 400 Seventh Street, SW Washington, DC 20590	202/366-4000
EJMA	Expansion Joint Manufacturers Association	914/332-0040

25 N. Broadway  
Tarrytown, NY 10591-3201

EPA	Environmental Protection Agency 401 M Street, SW Washington, DC 20460	202/260-2090
FCICA	Floor Covering Installation Contractors Association P.O. Box 948 Dalton, GA 30722-0948	706/226-5488
FM	Factory Mutual 1151 Boston-Providence Turnpike P.O. Box 9102 Norwood, MA 02062-9102 <a href="http://www.factorymutual.com">www.factorymutual.com</a>	781/255-4300
FS	Federal Specifications Unit (Available from GSA) 470 East L'Enfant Plaza, SW, Suite 8100 Washington, DC 20407	202/619-8925
GA	Gypsum Association 810 First Street NE, Suite 510 Washington, DC 20002 <a href="http://www.usg.com">www.usg.com</a>	202/289-5440
GANA	Glass Association of North America 3310 SW Harrison Street Topeka, KS 66611-2279 <a href="http://www.glasswebsite.com/gana">www.glasswebsite.com/gana</a>	913/266-7013
HMA	Hardwood Manufacturers Association 400 Penn Center Blvd., Suite 530 Pittsburgh, PA 15235-5605 <a href="http://www.hardwood.org">www.hardwood.org</a>	412/828-0770
HPVA	Hardwood Plywood and Veneer Association 1825 Michael Farraday Drive P.O. Box 2789 Reston, VA 22195-0789 <a href="http://www.hpva.org">www.hpva.org</a>	703/435-2900
IEEE	Institute of Electrical and Electronic Engineers	800/678-4333



	345 E. 47 <sup>th</sup> Street New York, NY 10017-2394 <a href="http://www.ieee.org">www.ieee.org</a>	212/705-7900
IESNA	Illuminating Engineering Society of North America 120 Wall Street, 17th Floor New York, NY 10005-4001 <a href="http://www.iesna.org">www.iesna.org</a>	212/248-5000
ITS	Intertek Testing Services P.O. Box 2040607/753-6711 3933 US Route 11 Cortland, NY 13045-7902 <a href="http://www.itsglobal.com">www.itsglobal.com</a>	800/345-3851
LMA	Laminating Materials Association 116 Lawrence Street Hillsdale, NJ 07642-2730 <a href="http://www.lma.org">www.lma.org</a>	201/664-2700
MCAA	Mechanical Contractors Association of America 1385 Piccard Drive Rockville, MD 20850-4329	301/869-5800
ML/SFA	Metal Lath/Steel Framing Association (A Division of the NAAMM) 8 South Michigan Avenue, Suite 1000 Chicago, IL 60603	312/456-5590
MSS	Manufacturers Standardization Society for the Valve and Fittings Industry 127 Park Street, NE Vienna, VA 22180-4602	703/281-6613
NAA	National Arborist Association P.O. Box 1094603/673-3311 Amherst, NH 03031-1094 <a href="http://www.natlarb.com">www.natlarb.com</a>	800/733-2622
NAAMM	National Association of Architectural Metal Manufacturers 8 South Michigan Avenue, Suite 1000 Chicago, IL 60603 <a href="http://www.gss.net/naamm">www.gss.net/naamm</a>	312/782-5590

NAIMA	North American Insulation Manufacturers Association 44 Canal Center Plaza, Suite 310 Alexandria, VA 22314 <a href="http://www.naima.org">www.naima.org</a>	703/684-0084
NAPA	National Asphalt Pavement Association NAPA Building 5100 Forbes Blvd. Lanham, MD 20706-4413	301/731-4748
NCSPA	National Corrugated Steel Pipe Association 1255 23rd Street, NW, Suite 850 Washington, DC 20037 <a href="http://www.ncspa.org">www.ncspa.org</a>	202/452-1700
NEBB	National Environmental Balancing Bureau 8575 Grovemont Circle Gaithersburg, MD 20877-4121	301/977-3698
NECA	National Electrical Contractors Association 3 Bethesda Metro Center, Suite 1100 Bethesda, MD 20814-5372	301/657-3110
NEI	National Elevator Industry 185 Bridge Plaza North, Suite 310 Fort Lee, NJ 07024	201/944-3211
NEMA	National Electrical Manufacturers' Association 1300 N. 17 <sup>th</sup> Street, Suite 1847 Rosslyn, VA 22209 <a href="http://www.nema.org">www.nema.org</a>	703/841-3200
NFPA	National Fire Protection Association One Batterymarch Park P.O. Box 9101 Quincy, MA 02269-9101 <a href="http://www.nfpa.org">www.nfpa.org</a>	800/344-3555 617/770-3000
NHLA	National Hardwood Lumber Association P.O. Box 34518 Memphis, TN 38184-0518 <a href="http://www.natlhardwood.org">www.natlhardwood.org</a>	901/377-1818

NIA	National Insulation Association 99 Canal Center Plaza, Suite 222 Alexandria, VA 22314 <a href="http://www.insulation.org">www.insulation.org</a>	703/683-6422
NPA	National Particleboard Association 18928 Premiere Court Gaithersburg, MD 20879-1569 <a href="http://www.pbmdf.com">www.pbmdf.com</a>	301/670-0604
NPCA	National Paint and Coatings Association 1500 Rhode Island Avenue, NW Washington, DC 20005-5597 <a href="http://www.paint.org">www.paint.org</a>	202/462-6272
NRCA	National Roofing Contractors Association O'Hare International Center 10255 W. Higgins Road, Suite 600 Rosemont, IL 60018-5607 <a href="http://www.roofonline.org">www.roofonline.org</a>	800/323-9545
NRMCA	National Ready Mixed Concrete Association 900 Spring Street Silver Spring, MD 20910 <a href="http://www.nrmca.org">www.nrmca.org</a>	301/587-1400
NSF	NSF International P.O. Box 130140 Ann Arbor, MI 48113-0140 <a href="http://www.nsf.org">www.nsf.org</a>	313/769-8010
NUSIG	National Uniform Seismic Installation Guidelines 12 Lahoma Court Alamo, CA 94526	510/946-0135
NWWDA	National Wood Window and Door Association 1400 E. Touhy Avenue, G-54 Des Plaines, IL 60018 <a href="http://www.nwwda.org">www.nwwda.org</a>	800/223-2301
OSHA	Occupational Safety and Health Administration (U.S. Department of Labor) 200 Constitution Ave., NW Washington, DC 20210	202/219-8148

PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077-1083 <a href="http://www.portcement.org">www.portcement.org</a>	847/966-6200
PDCA	Painting and Decorating Contractors of America 3913 Old Lee Hwy, Suite 33-B Fairfax, VA 22030 <a href="http://www.pdca.com">www.pdca.com</a>	800/332-7322 703/359-0826
PDI	Plumbing and Drainage Institute 45 Bristol Drive, Suite 101 South Easton, MA 02375	800/589-8956 508/230-3516
RFCI	Resilient Floor Covering Institute 966 Hungerford Drive, Suite 12-B Rockville, MD 20805-1714	301/340-8580
RIS	Redwood Inspection Service c/o California Redwood Association 405 Enfrente Drive, Suite 200 Novato, CA 94949-7206	415/382-0662
SDI	Steel Deck Institute P.O. Box 25 Fox River Grove, IL 60012 <a href="http://www.sdi.org">www.sdi.org</a>	847/462-1930
SDI	Steel Door Institute 30200 Detroit Road Cleveland, OH 44145-1967	216/889-0010
SMA	Stucco Manufacturers Association 14006 Ventura Blvd. Sherman Oaks, CA 91403	213/789-8733
SMACNA	Sheet Metal and Air Conditioning Contractors National Association, Inc. P.O. Box 221230 Chantilly, VA 20151-1209 <a href="http://www.smacna.org">www.smacna.org</a>	703/803-2980

SPI	Society of the Plastics Industry, Inc. Spray Polyurethane Division 202/974-5200 1801 K Street, NW, Suite 600K Washington, DC 20006 <a href="http://www.socplas.org">www.socplas.org</a>	800/951-2001
SSPC	Steel Structures Painting Council 40 24th Street, 6th Floor Pittsburgh, PA 15222-4643	412/281-2331
TCA	Tile Council of America 100 Clemson Research Blvd. Anderson, SC 29625	864/646-8453
TPI	Turfgrass Producers International 1855-A Hicks Road Rolling Meadows, IL 60008	800/405-8873 847/705-9898
UL	Underwriters Laboratories, Inc. 333 Pfingston Road 847/272-8800 Northbrook, IL 60062 <a href="http://www.ul.com">www.ul.com</a>	800/704-4050
UNI	Uni-Bell PVC Pipe Association 2655 Villa Creek Drive, Suite 155 Dallas, TX 75234 <a href="http://www.members.aol.com/unibell1">www.members.aol.com/unibell1</a>	972/243-3902
USDA	U.S. Department of Agriculture 14th St. and Independence Ave., SW Washington, DC 20250	202/720-8732
WA	Wallcoverings Association 401 N. Michigan Avenue Chicago, IL 60611-4267	312/644-6610
WCLIB	West Coast Lumber Inspection Bureau P.O. Box 23145 Portland, OR 97281-3145	503/639-0651
WCMA	Window Covering Manufacturers Association 355 Lexington Ave., 17th Floor New York, NY 10017-6603	212/661-4261

WIC	Woodwork Institute of California P.O. Box 980247 West Sacramento, CA 95798-0247	916/372-9943
WLPDIA	Western Lath/Plaster/Drywall Industries Association 8635 Navajo Road San Diego, CA 92119	619/466-9070
WMMPA	Wood Moulding & Millwork Producers Association 507 First Street Woodland, CA 95695 <a href="http://www.wmmpa.com">www.wmmpa.com</a>	800/550-7889 916/661-9591
WRI	Wire Reinforcement Institute 203 Loudoun Street, SW Leesburg, VA 20175-2718	703/779-2339
WWPA	Western Wood Products Association Yeon Building 522 S.W. 5th Avenue Portland, OR 97204-2122	503/224-3930

END OF DOCUMENT

## **QUALITY ASSURANCE - MATERIALS AND EQUIPMENT**

### **PART 1 - GENERAL**

#### **1.01 RELATED DOCUMENTS AND PROVISIONS**

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Purchase of Materials and Equipment;
- B. Special Conditions;
- C. Imported Materials Certification.

#### **1.02 MATERIAL AND EQUIPMENT**

- A. Only items approved by the County and/or Engineer shall be used.
- B. Contractor shall submit lists of products and other product information in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.

#### **1.03 MATERIAL AND EQUIPMENT COLORS**

- A. The County and/or Engineer will provide a schedule of colors.
- B. No individual color selections will be made until after approval of all pertinent materials and equipment and after receipt of appropriate samples in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.
- C. Contractor shall request priority in writing for any item requiring advance ordering to maintain the approved Construction Schedule.

#### **1.04 DELIVERY, STORAGE, AND HANDLING**

- A. Contractor shall deliver manufactured materials in original packages, containers, or bundles (with seals unbroken), bearing name or identification mark of manufacturer.

- B. Contractor shall deliver fabrications in as large assemblies as practicable; where specified as shop-primed or shop-finished, package or crate as required to preserve such priming or finish intact and free from abrasion.
- C. Contractor shall store materials in such a manner as necessary to properly protect them from damage. Materials or equipment damaged by handling, weather, dirt, or from any other cause will not be accepted.
- D. Materials are not acceptable that have been warehoused for long periods of time, stored or transported in improper environment, improperly packaged, inadequately labeled, poorly protected, excessively shipped, deviated from normal distribution pattern, or reassembled.
- E. Contractor shall store material so as to cause no obstructions of sidewalks, roadways, and underground services. Contractor shall protect material and equipment furnished under Contract.
- F. Contractor may store materials on Site with prior written approval by the County, all material shall remain under Contractor's control and Contractor shall remain liable for any damage to the materials. Should the Project Site not have storage area available, the Contractor shall provide for off-site storage at no cost to County.
- G. When any room in Project is used as a shop or storeroom, the Contractor shall be responsible for any repairs, patching, or cleaning necessary due to that use. Location of storage space shall be subject to prior written approval by County.

## **PART 2 - PRODUCTS**

### **2.01 MANUFACTURERS**

- A. Manufacturers listed in various sections of Contract Documents are names of those manufacturers that are believed to be capable of supplying one or more of items specified therein.
- B. The listing of a manufacturer does not imply that every product of that manufacturer is acceptable as meeting the requirements of the Contract Documents.

### **2.02 FACILITIES AND EQUIPMENT**

- A. Contractor shall provide, install, maintain, and operate a complete and adequate facility for handling, the execution, disposal, and distribution of material and equipment as required for proper and timely performance of Work connected with Contract.



## **2.03 MATERIAL REFERENCE STANDARDS**

- A. Where material is specified solely by reference to “standard specifications” and if requested by County, Contractor shall submit for review data on actual material proposed to be incorporated into Work of Contract listing name and address of vendor, manufacturer, or producer, and trade or brand names of those materials, and data substantiating compliance with standard specifications.

## **PART 3 - EXECUTION**

### **3.01 WORKMANSHIP**

- A. Where not more specifically described in any other Contract Documents, workmanship shall conform to methods and operations of best standards and accepted practices of trade or trades involved and shall include items of fabrication, construction, or installation regularly furnished or required for completion (including finish and for successful operation, as intended).
- B. Work shall be executed by tradespersons skilled in their respective lines of Work. When completed, parts shall have been durably and substantially built and present a neat appearance.

### **3.02 COORDINATION**

- A. Contractor shall coordinate installation of Work so as to not interfere with installation of others. Adjustment or rework because of Contractor’s failure to coordinate will be at no additional cost to County.
- B. Contractor shall examine in-place work for readiness, completeness, fitness to be concealed or to receive other work, and in compliance with Contract Documents. Concealing or covering Work constitutes acceptance of additional cost which will result should in-place Work be found unsuitable for receiving other Work or otherwise deviating from the requirements of the Contract Documents.

### **3.03 COMPLETENESS**

- A. Contractor shall provide all portions of the Work, unless clearly stated otherwise, installed complete and operational with all elements, accessories, anchorages, utility connections, etc., in manner to assure well-balanced performance, in accordance with manufacturer's recommendations and by Contract Documents. For example, electric water coolers require water, electricity, and drain services; roof drains require drain system; sinks fit within countertop, etc. Terms such as "installed complete", "operable condition", "for use intended", "connected to all utilities", "terminate with proper cap", "adequately anchored", "patch and

refinish”, "to match similar”, should be assumed to apply in all cases, except where completeness of functional or operable condition is specifically stated as not required.

**3.04 APPROVED INSTALLER OR APPLICATOR**

- A. Installation by a manufacturer’s approved installer or applicator is an understood part of Specifications and only approved installer or applicator is to provide on-site Work where specified manufacturer has on-going program of approving (i.e. certifying, bonding, re-warranting) installers or applicators. Newly established relationships between a manufacturer and an installer or applicator that does not have other approved applicator work in progress or completed is not approved for this Project.

**3.05 MANUFACTURER'S RECOMMENDATIONS**

- A. All installations shall be in accordance with manufacturer's published recommendations and specific written directions of manufacturer's representative. Should Contract Documents differ from recommendations of manufacturer or directions of his representative, Contractor shall analyze differences, make recommendations to the County and the Engineer in writing, and shall not proceed until interpretation or clarification has been issued by the County and/or the Engineer.

END OF DOCUMENT

DOCUMENT 01 45 00

## **QUALITY CONTROL**

### **PART 1 - GENERAL**

#### **1.01 RELATED DOCUMENTS AND PROVISIONS:**

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Inspections and Tests, Uncovering of Work and Non-conforming of Work and Correction of Work;
- B. Special Conditions.

#### **1.02 RELATED CODES:**

- A. The Work is governed by requirements of Title 24, California Code of Regulations ("CCR"), and the Contractor shall keep a copy of these available at the job Site for ready reference during construction.

#### **1.03 OBSERVATION AND SUPERVISION:**

The County and Engineer or their appointed representatives will review the Work and the Contractor shall provide facilities and access to the Work at all times as required to facilitate this review. Administration by the Engineer and any consulting Civil Engineer will be in accordance with applicable regulations.

#### **1.04 TESTING AGENCIES:**

- A. Testing agencies and tests shall be in conformance with the General Documents.
- B. Testing and inspection in connection with earthwork shall be under the direction of the County's consulting soils engineer, if any, referred to hereinafter as the "Soils Engineer".
- C. Testing and inspection of construction materials and workmanship shall be performed by a qualified laboratory, referred to hereinafter as the "Testing Laboratory". The Testing Laboratory shall be under direction of an engineer registered in the State of California, shall conform to requirements of ASTM E329, and shall be employed by or in contract with the County.

#### **1.05 TESTS AND INSPECTIONS:**

- A. The Contractor shall be responsible for notifying the County of all required tests and inspections. Contractor shall notify the County Project Manager **forty-eight (48) hours in advance of performing any Work requiring testing or inspection.**
- B. The Contractor shall provide access to Work to be tested and furnish incidental labor, equipment, and facilities to facilitate all inspections and tests.
- C. The County will pay for first inspections and tests required by the “CCR”, and other inspections or tests that the County and/or the Engineer may direct to have made, including the following principal items:
  - (1) Tests and observations for earthwork and paving.
  - (2) Tests for concrete mix designs, including tests of trial batches.
  - (3) Tests and inspections for structural steel work.
  - (4) Field tests for framing lumber moisture content.
  - (5) Additional tests directed by the County that establish that materials and installation comply with the Contract Documents.
  - (6) Test and observation of welding and expansion anchors.
- D. The County may at its discretion, pay and back charge the Contractor for:
  - (1) Retests or re-inspections, if required, and tests or inspections required due to Contractor error or lack of required identifications of material.
  - (2) Uncovering of work in accordance with Contract Documents.
  - (3) Testing done on weekends, holidays, and overtime will be chargeable to the Contractor for the overtime portion.
  - (4) Testing done off Site.
- E. Testing and inspection reports and certifications:
  - (1) If initially received by Contractor, Contractor shall provide to each of the following a copy of the agency or laboratory report of each test or inspection or certification.
    - a. The County;

- b. The Construction Manager, if any;
- c. The Engineer;
- d. The Civil Engineer, if any;
- e. Other Engineers on the Project, as appropriate; and
- f. The Contractor.

## PART 2 - PRODUCTS

### 2.01 TYPE OF TEST AND INSPECTIONS (As Applies to the Project):

- A. Slump Test  
ASTM C 143
- B. Concrete Tests  
Testing agency shall test concrete used in the work per the following paragraphs:
  - (1) Compressive Strength:
    - a. Minimum number of tests required: **One (1) set of three (3) cylinders for each 100 cubic yards** (Sec. 2604(h) 01) of concrete or major fraction thereof, **placed in one (1) day**. See Title 24, Section 2605(g).
    - b. **Two cylinders of each set shall be tested at twenty-eight (28) days**. One (1) cylinder shall be held in reserve and tested only when directed by the Engineer or County.
    - c. Concrete shall test the **minimum ultimate compressive strength in 28 days**, as specified on the structural drawings.
    - d. In the event that the twenty-eight (28) day test falls below the minimum specified strength, the effective concrete in place shall be tested by taking cores in accordance with UBC Standard No. 26-13 and tested as required for cylinders.
    - e. In the event that the test on core specimens falls below the minimum specified strength, the concrete will be deemed defective and shall be removed and replaced upon such direction of the Engineer.
- C. Reinforcing, Steel

**D. Structural Steel Per Title 24 and as noted:**

- (1) Material: Steel per Table in Title 24, Section 2712.
- (2) Qualification of Welders (UBC Std. 27-6).
- (3) Shop fabrication (Section 2712(d). Structural steel only).
- (4) Shop and field welding (Section 2712(e)).

**END OF DOCUMENT**

## TEMPORARY FACILITIES AND CONTROLS

### PART 1 – GENERAL

#### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions
- B. Special Conditions
- C. Site Standards

#### 1.02 TEMPORARY UTILITIES:

- A. Electric Power and Lighting
  - (1) The County will furnish and pay for power during the course of the work to the extent power is available in the building(s) or on the Site. The Contractor shall be responsible for providing temporary facilities required to deliver that power service from its existing location in the building(s) or on the Site to point of intended use.
  - (2) Contractor shall verify characteristics of power available in building(s) or on the Site. Contractor shall take all actions required to make modifications where power of higher voltage or different phases of current are required. Contractor shall be fully responsible for providing that service and shall pay all costs required therefor.
  - (3) The Contractor shall furnish, wire for, install, and maintain temporary electrical lights wherever it is necessary to provide illumination for the proper performance and/or observation of the Work: a **minimum of 20 foot-candles for rough work and 50 foot-candles for finish work.**
- B. Heat and Ventilation
  - (1) Contractor shall provide temporary heat to maintain environmental conditions to facilitate progress of the Work, to meet specified minimum conditions for the installation and curing of materials, and to protect materials and finishes from damage due to improper temperature and

humidity conditions. Portable heaters shall be standard units complete with controls.

- (2) Contractor shall provide forced ventilation and dehumidification, as required, of enclosed areas for proper installation and curing of materials, to disperse humidity, and to prevent hazardous accumulations of dust, fumes, vapors, and gases.
- (3) Contractor shall pay the costs of installation, maintenance, operation, and removal of temporary heat and ventilation, including costs for fuel consumed, required for the performance of the Work.

**C. Water**

- (1) The County will furnish and pay for water during the course of the work to the extent water is then available in the building(s) or on the Site. The Contractor shall be responsible for providing temporary facilities required to deliver such utility service from its existing location in the building(s) or on the Site to point of intended use.
- (2) Contractor shall use backflow preventers on water lines at point of connection to County's water supply. Backflow preventers shall comply with requirements of Uniform Plumbing Code.
- (3) Contractor shall make potable water available for human consumption.

**D. Sanitary Facilities**

- (1) Contractor shall provide sanitary temporary facilities in no fewer numbers than required by law and such additional facilities as may be directed by the County for the use of all workers. The facilities shall be maintained in a sanitary condition at all times and shall be left at the Site until removal is directed by the County or Contractor completes all other work at the Site.
- (2) Use of toilet facilities in the Work under construction shall not be permitted except by consent of the County.

**E. Telephone Service**

- (1) Contractor shall arrange with local telephone service company for telephone service for the performance of the Work. Contractor shall, at a minimum, provide in its field office one line for telephone and one line for fax machine.



- (2) Contractor shall pay the costs for telephone and fax lines installation, maintenance, service, and removal.

**F. Fire Protection:**

- (1) Contractor shall provide and maintain fire extinguishers and other equipment for fire protection. Such equipment shall be designated for use for fire protection only and shall comply with all requirements of the California Fire, State Fire Marshall and/or its designee.
- (2) Where on-site welding and burning of steel is unavoidable, Contractor shall provide protection for adjacent surfaces.

**G. Trash Removal:**

- (1) See Document 01 74 19

**1.03 CONSTRUCTION AIDS:**

**A. Plant and Equipment:**

- (1) Contractor shall furnish, operate, and maintain a complete plant for fabricating, handling, conveying, installing, and erecting materials and equipment; and for conveyances for transporting workmen. Include elevators, hoists, debris chutes, and other equipment, tools, and appliances necessary for performance of the Work.
- (2) Contractor shall maintain plant and equipment in safe and efficient operating condition. Damages due to defective plant and equipment, and uses made thereof, shall be repaired by Contractor at no expense to the County.

- B. None of the County's tools and equipment shall be used by Contractor for the performance of the Work.

**1.04 BARRIERS AND ENCLOSURES:**

- A. Contractor shall obtain the County's written permission for locations and types of temporary barriers and enclosures, including fire-rated materials proposed for use, prior to their installation.
- B. Contractor shall provide and maintain temporary enclosures to prevent public entry and to protect persons using other buildings and portions of the Site and/or Premises, the public, and workers. Contractor shall also protect the Work and existing facilities from the elements, and adjacent construction and improvements,

persons, and trees and plants from damage and injury from demolition and construction operations.

- C. Contractor shall provide site access to existing facilities for persons using other buildings and portions of the Site, the public, and for deliveries and other services and activities.
- D. Tree and Plant Protection:
  - (1) Contractor shall preserve and protect existing trees and plants on the Premises that are not designated or required to be removed, and those adjacent to the Premises.
  - (2) Contractor shall provide barriers to a **minimum height of 4'-0" around drip line of each tree and plant**, around each group of trees and plants, as applicable, in the proximity of demolition and construction operations.
  - (3) Contractor shall not park trucks, store materials, perform Work or cross over landscaped areas. Contractor shall not dispose of paint thinners, water from cleaning, plastering or concrete operations, or other deleterious materials in landscaped areas, storm drain systems, or sewers. Plant materials damaged as a result of the performance of the Work shall, at the option of the County and at Contractor's expense, either be replaced with new plant materials equal in size to those damaged or by payment of an amount representing the value of the damaged materials as determined by the County.
  - (4) Contractor shall remove soil that has been contaminated during the performance of the Work by oil, solvents, and other materials which could be harmful to trees and plants, and replace with good soil, at Contractor's expense.
  - (5) Excavation Around Trees:
    - (a) Excavation within drip lines of trees shall be done only where absolutely necessary and with written permission from the County.
    - (b) Where trenching for utilities is required within drip lines, tunneling under and around roots shall be by hand digging and shall be approved by the County. Main lateral roots and taproots shall not be cut. **All roots 2 inches in diameter and larger shall be tunneled under and heavily wrapped with wet burlap** so as to prevent scarring or excessive drying. Smaller roots that interfere with installation of new work may be cut with prior approval by

the County. Roots must first be cut with a Vermeer, or equivalent, root cutter prior to any trenching.

- (c) Where excavation for new construction is required within drip line of trees, hand excavation shall be employed to minimize damage to root system. Roots shall be relocated in backfill areas wherever possible. If encountered immediately adjacent to location of new construction, roots shall be cut **approximately 6 inches back from new construction.**
- (d) Approved excavations shall be carefully backfilled with the excavated materials approved for backfilling. Backfill shall conform to adjacent grades without dips, sunken areas, humps, or other surface irregularities. Do not use mechanical equipment to compact backfill. Tamp carefully using hand tools, refilling and tamping until Final Acceptance as necessary to offset settlement.
- (e) Exposed roots shall not be allowed to dry out before permanent backfill is placed. Temporary earth cover shall be provided, or roots shall be wrapped with **four layers of wet, untreated burlap and temporarily supported and protected** from damage until permanently relocated and covered with backfill.
- (f) Accidentally broken roots should be sawed cleanly **3 inches behind ragged end.**

#### 1.05 SECURITY AND PARKING:

- A. The Contractor shall be responsible for project security for materials, tools, equipment, supplies, and completed and partially completed Work.
- B. Contractor is responsible for any charges associated with parking of Contractor and Contractor employee's vehicles either at County facilities or off-site. Unless otherwise stated, all parking at County facilities requires payment.

#### 1.06 TEMPORARY CONTROLS:

- A. Noise Control
  - (1) Contractor acknowledge, that adjacent facilities may remain in operation during all or a portion of the Work period, and it shall take all reasonable precautions to minimize noise as required by applicable laws and the Contract Documents.

- (2) Notice of proposed noisy operations, including without limitation, operation of pneumatic demolition tools, concrete saws, and other equipment, shall be submitted to the County a **minimum of forty-eight (48) hours in advance of their performance.**

**B. Noise and Vibration**

- (1) Equipment and impact tools shall have intake and exhaust mufflers.
- (2) Contractor shall cooperate with County to minimize and/or seize the use of noisy and vibratory equipment if that equipment becomes objectionable by its longevity.

**C. Dust and Dirt**

- (1) Contractor shall conduct demolition and construction operations to minimize the generation of dust and dirt, and prevent dust and dirt from interfering with the progress of the Work and from accumulating in the Work and adjacent areas including, without limitation, occupied facilities.
- (2) Contractor shall periodically water exterior demolition and construction areas to minimize the generation of dust and dirt.
- (3) Contractor shall ensure that all hauling equipment and trucks carrying loads of soil and debris shall have their loads sprayed with water or covered with tarpaulins, and as otherwise required by local and state ordinance.
- (4) Contractor shall prevent dust and dirt from accumulating on walks, roadways, parking areas, and planting, and from washing into sewer and storm drain lines.

**D. Water**

Contractor shall not permit surface and subsurface water, and other liquids, to accumulate in or about the vicinity of the Premises. Should accumulation develop, Contractor shall control the water or other liquid, and suitably dispose of it by means of temporary pumps, piping, drainage lines, troughs, ditches, dams, or other methods.

**E. Pollution**

- (1) No burning of refuse, debris, or other materials shall be permitted on or in the vicinity of the Premises.

- (2) Contractor shall comply with applicable regulatory requirements and anti-pollution ordinances during the conduct of the Work including, without limitation, demolition, construction, and disposal operations.

F. Lighting:

- (1) If portable lights are used after dark, all light must be located so as not to direct light into neighboring property.

**1.07 JOB SIGN(S):**

A. General:

- (1) If required, contractor shall provide and maintain a Project identification sign with the design, text, and colors designated by the County and/or the **Engineer**; locate sign as approved by the County.
- (2) Signs other than the specified Project sign and or signs required by law, for safety, or for egress, shall not be permitted, unless otherwise approved in advance by the County.

B. Materials:

- (1) Structure and Framing: Structurally sound, new or used wood or metal; wood shall be **nominal 3/4-inch exterior grade plywood**.
- (2) Sign Surface: **Minimum 3/4-inch exterior grade plywood**.
- (3) Rough Hardware: Galvanized.
- (4) Paint: Exterior quality, of type and colors selected by the County and/or the Engineer.

C. Fabrication:

- (1) Contractor shall fabricate to provide smooth, even surface for painting.
- (2) **Size: 4'-0" x 8'-0"**, unless otherwise indicated.
- (3) Contractor shall paint exposed surfaces of supports, framing, and surface material with exterior grade paint: **one coat of primer and two coats of finish paint**.
- (4) Text and Graphics: As indicated.

**1.08 PUBLICITY RELEASES:**

- A. Contractor shall not release any information, story, photograph, plan, or drawing relating information about the Project to anyone, including press and other public communications medium, including, without limitation, on website(s).

**END OF DOCUMENT**

DOCUMENT 01 62 00

## **PRODUCT OPTIONS AND SUBSTITUTIONS**

### **PART 1 - GENERAL**

#### **1.01 RELATED DOCUMENTS AND PROVISIONS**

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. Instructions to Bidders;
- B. General Conditions, including, without limitation, Substitutions For Specified Items;
- C. Special Conditions.
- D. Section intentionally omitted.

#### **1.02 SUBSTITUTIONS OF MATERIALS AND EQUIPMENT:**

- A. Catalog numbers and specific brands or trade names followed by the designation "or equal" are used in conjunction with material and equipment required by the Specifications to establish the standards of quality, utility, and appearance required. Substitutions which are equal in quality, utility, and appearance to those specified may be reviewed subject to the provisions of the General Conditions.
- B. Wherever more than one manufacturer's product is specified, the first-named product is the basis for the design used in the work and the use of alternative-named manufacturers' products or substitutes may require modifications in that design. If such alternatives are proposed by Contractor and are approved by the County and/or the Engineer, Contractor shall assume all costs required to make necessary revisions and modifications of the design resulting from the substitutions requested by the Contractor.
- C. When materials and equipment are specified by first manufacturer's name and product number, second manufacturer's name and "or approved equal," supporting data for the second product, if proposed by Contractor, shall be submitted in accordance with the requirements for substitutions.
- D. If the County and/or Engineer, in reviewing proposed substitute materials and equipment, require revisions or corrections to be made to previously accepted Shop Drawings and supplemental supporting data to be resubmitted, Contractor shall promptly do so. If any proposed substitution is judged by the County and/or

Engineer to be unacceptable, the specified material or equipment shall be provided.

- E. Samples may be required. Tests required by the County and/or Engineer for the determination of quality and utility shall be made at the expense of Contractor, with acceptance of the test procedure first given by the County.
- F. In reviewing the supporting data submitted for substitutions, the County and/or Engineer will use for purposes of comparison all the characteristics of the specified material or equipment as they appear in the manufacturer's published data even though all the characteristics may not have been particularly mentioned in the Contract Documents. **If more than two (2) submissions of supporting data are required**, the cost of reviewing the additional supporting data shall be borne by Contractor, and the **County will deduct the costs from the Contract Price.**

END OF DOCUMENT



DOCUMENT 01 65 00

## **DELIVERY, STORAGE AND HANDLING**

### **PART 1 - GENERAL**

#### **1.01 RELATED DOCUMENTS AND PROVISIONS**

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Site Access, Conditions and Requirements;
- B. Special Conditions.

#### **1.02 PRODUCTS**

- A. Products are as defined in the General Conditions.
- B. Contractor shall not use and/or reuse materials and/or equipment removed from existing Premises, except as specifically permitted by the Contract Documents.
- C. Contractor shall provide interchangeable components of the same manufacturer, for similar components.

#### **1.03 TRANSPORTATION AND HANDLING**

- A. Contractor shall transport and handle Products in accordance with manufacturer's instructions.
- B. Contractor shall promptly inspect shipments to confirm that Products comply with requirements, quantities are correct, and products are undamaged.
- C. Contractor shall provide equipment and personnel to handle Products by methods to prevent soiling, disfigurement, or damage.

#### **1.04 STORAGE AND PROTECTION**

- A. Contractor shall store and protect Products in accordance with manufacturer's instructions, with seals and labels intact and legible. Contractor shall store sensitive products in weather-tight, climate controlled enclosures.
- B. For exterior storage of fabricated Products, Contractor shall place on sloped supports, above ground.

- C. Contractor shall provide off-site storage and protection when Site does not permit on-site storage or protection.
- D. Contractor shall cover products subject to deterioration with impervious sheet covering and provide ventilation to avoid condensation.
- E. Contractor shall store loose granular materials on solid flat surfaces in a well-drained area and prevent mixing with foreign matter.
- F. Contractor shall provide equipment and personnel to store Products by methods to prevent soiling, disfigurement, or damage.
- G. Contractor shall arrange storage of Products to permit access for inspection and periodically inspect to assure Products are undamaged and are maintained under specified conditions.

**END OF DOCUMENT**

DOCUMENT 01 71 23

## **FIELD ENGINEERING**

### **PART 1 - GENERAL**

#### **1.01 RELATED DOCUMENTS AND PROVISIONS:**

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Site Investigation, and Soils Investigation Report;
- B. Special Conditions;
- C. Site-Visit Certification.

#### **1.02 REQUIREMENTS INCLUDED:**

- A. Contractor shall provide and pay for field engineering services by a California-registered engineer, required for the project, including, without limitations:
  - (1) Survey work required in execution of the Project.
  - (2) Civil or other professional engineering services specified, or required to execute Contractor's construction methods.

#### **1.03 QUALIFICATIONS OF SURVEYOR OR ENGINEERS:**

- A. Contractor shall only use a qualified licensed engineer or registered land surveyor, to whom County makes no objection.

#### **1.04 SURVEY REFERENCE POINTS:**

- A. Existing basic horizontal and vertical control points for the Project are those designated on the Drawings.
- B. Contractor shall locate and protect control points prior to starting Site Work and preserve all permanent reference points during construction. In addition Contractor shall:
  - (1) Make no changes or relocation without prior written notice to County and Engineer.

- (2) Report to County and Engineer when any reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.
- (3) Require surveyor to replace Project control points based on original survey control that may be lost or destroyed.

**1.05 RECORDS:**

- A. Contractor shall maintain a complete, accurate log of all control and survey work as it progresses.

**1.06 SUBMITTALS:**

- A. Contractor shall submit name and address of Surveyor and Professional Engineer to County and Engineer prior to its/their work on the Project.
- B. On request of County and Engineer, Contractor shall submit documentation to verify accuracy of field engineering work, at no additional cost to the County.
- C. Contractor shall submit a certificate signed by registered engineer or surveyor certifying that elevations and locations of improvements are in conformance or nonconformance with Contract Documents.

**PART 2 – PRODUCTS**

Not Used.

**PART 3 - EXECUTION**

- 3.01 Contractor is responsible for meeting all applicable codes, OSHA, safety and shoring requirements.
- 3.02 Contractor is responsible for any re-surveying required by correction of nonconforming work.

END OF DOCUMENT

DOCUMENT 01 73 29

## **CUTTING AND PATCHING**

### **1. PART 1 – GENERAL**

#### **1.01 RELATED DOCUMENTS AND PROVISIONS:**

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions;
- B. Special Conditions;
- C. Hazardous Materials Procedures and Requirements;
- D. Hazardous Materials Certification;
- E. Imported Materials Certification.

#### **1.02 CUTTING AND PATCHING:**

- A. Contractor shall be responsible for all cutting, fitting, and patching, including associated excavation and backfill, required to complete the Work or to:
  - (1) Make several parts fit together properly.
  - (2) Uncover portions of Work to provide for installation of ill-timed Work.
  - (3) Remove and replace defective Work.
  - (4) Remove and replace Work not conforming to requirements of Contract Documents.
  - (5) Remove Samples of installed Work as specified for testing.
  - (6) Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit.
  - (7) Attach new materials to existing remodeling areas, including painting (or other finishes) to match existing conditions.

- B. In addition to Contract requirements, upon written instructions from the County, Contractor shall uncover Work to provide for observations of covered Work in accordance with the Contract Documents; remove samples of installed materials for testing as directed by County; and remove Work to provide for alteration of existing Work.
- C. Contractor shall not cut or alter Work, or any part of it, in such a way that endangers or compromises the integrity of the Work, the Project, or work of others.

**1.03 SUBMITTALS:**

- A. Prior to any cutting or alterations that may affect the structural safety of Project, or work of others, and well in advance of executing such cutting or alterations, Contractor shall submit written notice to County pursuant to the applicable notice provisions of the Contract Documents, requesting consent to proceed with the cutting or alteration, including the following:
  - (1) The Work of the County or other trades.
  - (2) Structural value or integrity of any element of Project.
  - (3) Integrity or effectiveness of weather-exposed or weather-resistant elements or systems.
  - (4) Efficiency, operational life, maintenance or safety of operational elements.
  - (5) Visual qualities of sight-exposed elements.
- B. Contractor's Request shall also include:
  - (1) Identification of Project.
  - (2) Description of affected Work.
  - (3) Necessity for cutting, alteration, or excavations.
  - (4) Effects of Work on County, other trades, or structural or weatherproof integrity of Project.
  - (5) Description of proposed Work:
    - (a) Scope of cutting, patching, alteration, or excavation.

- (b) Trades that will execute Work.
- (c) Products proposed to be used.
- (d) Extent of refinishing to be done.
- (6) Alternates to cutting and patching.
- (7) Cost proposal, when applicable.
- (8) The scheduled date the Contractor intends to perform the Work and the duration of time to complete the Work.
- (9) Written permission of other trades whose Work will be affected.

**1.04 QUALITY ASSURANCE:**

- A. Contractor shall ensure that cutting, fitting, and patching shall achieve security, strength, weather protection, appearance for aesthetic match, efficiency, operational life, maintenance, safety of operational elements, and the continuity of existing fire ratings.
- B. Contractor shall ensure that cutting, fitting, and patching shall successfully duplicate undisturbed adjacent profiles, materials, textures, finishes, colors, and that materials shall match existing construction. Where there is dispute as to whether duplication is successful or has been achieved to a reasonable degree, the County's decision shall be final.

**1.05 PAYMENT FOR COSTS:**

- A. Cost caused by ill-timed or defective Work or Work not conforming to Contract Documents, including costs for additional services of the County, its consultants, including but not limited to the Construction Manager, the **Engineer**, the Project Inspector(s), Civil Engineer and Agents, will be paid by Contractor and/or deducted from the Contract by the County.
- B. County shall only pay for cost of Work if it is part of the original Contract Price or if a change has been made to the contract in compliance with the provisions of the General Conditions. Cost of Work performed upon instructions from the County, other than defective or nonconforming Work, will be paid by County on approval of written Change Order. Contractor shall provide written cost proposals prior to proceeding with cutting and patching.

**PART 2 - PRODUCTS**

**2.01 MATERIALS:**

- A. Contractor shall provide for replacement and restoration of Work removed. Contractor shall comply with the Contract Documents and with the Industry Standard(s), for the type of Work, and the Specification requirements for each specific product involved. If not specified, Contractor shall first recommend a product of a manufacturer or appropriate trade association for approval by the County.
- B. Materials to be cut and patched include those damaged by the performance of the Work.

**PART 3 – EXECUTION**

**3.01 INSPECTION:**

- A. Contractor shall inspect existing conditions of the Site and the Work, including elements subject to movement or damage during cutting and patching, excavating and backfilling. After uncovering Work, Contractor shall inspect conditions affecting installation of new products.
- B. Contractor shall report unsatisfactory or questionable conditions in writing to County as indicated in the General Conditions and shall proceed with Work as indicated in the General Conditions by County.

**3.02 PREPARATION:**

- A. Contractor shall provide shoring, bracing and supports as required to maintain structural integrity for all portions of the Project, including all requirements of the Project.
- B. Contractor shall provide devices and methods to protect other portions of Project from damage.
- C. Contractor shall, provide all necessary protection from weather and extremes of temperature and humidity for the Project, including without limitation, any work that may be exposed by cutting and patching Work. Contractor shall keep excavations free from water.

**3.03 ERECTION, INSTALLATION AND APPLICATION:**

- A. With respect to performance, Contractor shall:



- (1) Execute fitting and adjustment of products to provide finished installation to comply with and match specified tolerances and finishes.
  - (2) Execute cutting and demolition by methods that will prevent damage to other Work, and provide proper surfaces to receive installation of repairs and new Work.
  - (3) Execute cutting, demolition excavating, and backfilling by methods that will prevent damage to other Work and damage to settlement.
- B. Contractor shall employ original installer or fabricator to perform cutting and patching for:
  - (1) Weather-exposed surfaces and moisture-resistant elements such as roofing, sheet metal, sealants, waterproofing, and other trades.
  - (2) Sight-exposed finished surfaces.
- C. Contractor shall execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances, and finishes as shown or specified in the Contract Documents including, without limitation, the Drawings and Specifications.
- D. Contractor shall fit Work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces. Contractor shall conform to all Code requirements for penetrations or the Drawings and Specifications, whichever calls for a higher quality or more thorough requirement. Contractor shall maintain integrity of both rated and non-rated fire walls, ceilings, floors, etc.
- E. Contractor shall restore Work which has been cut or removed. Contractor shall install new products to provide completed Work in accordance with requirements of the Contract Documents and as required to match surrounding areas and surfaces.
- F. Contractor shall refinish all continuous surfaces to nearest intersection as necessary to match the existing finish to any new finish.

**END OF DOCUMENT**

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**SECTION 01 74 19**  
**CONSTRUCTION WASTE MANAGEMENT**

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**PART 1 – GENERAL**

1.01 SUMMARY

- A. This section specifies the requirements for the diversion of demolition (non-hazardous) and construction debris from landfill and submittal of the Waste Management Plan.
- B. Performance Requirement: Divert a minimum of 50% of construction and demolition (non-hazardous) debris from landfill. Diversion of 75% of the construction & demolition debris is the project goal.

1.03 DEFINITIONS

- A. "Conversion Rate" means the rate set forth in the standardized Conversion Rate Table approved by the County of Alameda for use in estimating the weight of materials identified in the Waste Management Plan and Waste Management Table.
- B. "Divert" means to use material for any purpose other than disposal in a landfill or transfer facility.
- C. "Good faith" shall be as defined by law.
- D. "Recycling Service" means an off-site service that provides processing of material and diversion from landfill.
- E. "Hauler" means the entity who transports construction and demolition debris to either a landfill or a recycling service.
- F. "Recycling Wizard" means an online database maintained by StopWaste.Org of approved recycling vendors that can be accessed at [www.StopWaste.Org](http://www.StopWaste.Org) or by calling 1-877-STOPWASTE.
- G. "Waste Management Plan or Plan" means a waste management plan required under this contract that is used to track and report the means of disposal of all construction debris generated on this project.
- H. "WasteTracking.com powered by Green Halo Systems" means the web based system required for use in developing a waste management plan, uploading recycling data throughout the construction process and submitting the final report demonstrating the project compliance online. More information about WasteTracking.com powered by Green Halo Systems is available by visiting them online at [www.wastetracking.com](http://www.wastetracking.com) or calling (888) 525-1301.

1.04 QUALITY ASSURANCE

- A. The Contractor shall obtain all special permits and licenses and meet all special requirements for performance and completion of the work of this section.
- B. Regulatory requirements

1. Approval of the Waste Management Plan and Waste Management Table using the WasteTracking.com powered by Green Halo Systems by the Owner's Representative is required before beginning construction or demolition.
- C. Recycling service company qualifications – Submit certification for recycling services listed in the approved Waste Management Plan that accepted waste will be diverted from landfill. Certification shall be demonstrated in one of the following ways:
  1. Recycling service is listed in the Green Halo System as an approved recycler for Alameda County projects; or
  2. Recycling service is listed within Alameda County Waste Management Authority's Recycling Wizard, a Directory of where to recycle construction and demolition debris materials, or equivalent database/listing at StopWaste.Org. A database of construction and demolition recyclers can be found at [www.StopWaste.Org](http://www.StopWaste.Org) or can be obtained by calling 1-877-STOPWASTE; or
  3. If not listed as described in items 1 and 2 above, submit certification in writing from any recycling services that verifies accepted waste will be diverted from landfill.

#### 1.05 SUBMITTALS

- A. Submit specified Waste Management Plan to indicate how waste will be diverted from landfills. Plan to include procedures and schedule for debris disposal. Submittal shall be made using WasteTracking.com powered by Green Halo Systems using the following URL: [ACGSA.WasteTracking.com](http://ACGSA.WasteTracking.com). Submittal is required **within 7 calendar days after receipt of Notice to Proceed**; and
- B. Submit written documentation from recycling services that are not listed in the WasteTracking.com powered by Green Halo Systems or the Stopwaste.Org Recycling Wizard identifying where the construction and demolition material is taken, what method or process is being used to recycle the material, and identifying applicable state and local permits held by the recycling service provider and recycling facility; and
- C. Submit completed Waste Management Plan to report on the means of disposal of waste generated from project at the following project milestones:
  1. **Fifty (50) percent progress payment**; and
  2. **One hundred (100) percent construction complete**. County approval of final Waste Management Plan is required before full release of retention.

#### 1.06 WASTE MANAGEMENT PLAN

- A. Plan Development: Using the website [ACGSA.WasteTracking.com](http://ACGSA.WasteTracking.com) develop a plan for diverting the specified percentage of construction debris from landfill. The plan shall include the following:

1. Submit **within 7-calendar days after receipt of Notice to Proceed.**
2. Propose means and methods for collecting and separating each type of debris deemed reusable or recyclable.
3. Identify the off-site recycling service and hauler of each designated debris item, who has agreed to accept and divert that item from landfill, in the proposed quantities anticipated. Schedule each item and list off-site recycling service and hauler company name, telephone number, address, and person contacted.
4. Include a "good faith" estimate of each type of construction waste that would be generated if no diversion methods were implemented. Submit with calculations based upon weight or volume of each. The following items are subject to the "good faith" estimate and diversion requirement:
  - a. Asphalt & Concrete
  - b. Brick/Masonry/Tiles
  - c. Building Materials (doors, windows, fixtures, etc.)
  - d. Cardboard and other paper products
  - e. Carpet/Carpet Padding/Foam
  - f. Ceiling Tiles (acoustic)
  - g. Drywall
  - h. Electrical Components (light fixtures, cables, etc)
  - i. Film Plastic & Styrofoam Blocks
  - j. Landscape Debris (Plant & tree trimmings)
  - k. Mechanical Debris (ducts, controls, plumbing fixtures, etc)
  - l. Scrap Metal
  - m. Unpainted Wood and Pallets
  - n. Other (painted wood & drywall, roofing, etc)
  - o. Mixed C&D (defined as a mixture of three or more materials from construction or demolition sites that will be taken to a "qualified" facility for recycling.)
  - p. Trash/garbage
5. Construction waste quantities entered in volume will be converted automatically using the defined Conversion Rate approved by Alameda County that is integrated into WasteTracking.com powered by Green Halo Systems.

**B. Plan Implementation**

1. Contractor shall do all of the following:
  - a. Retain a copy of, and upload into WasteTracking.com powered by Green Halo Systems, all weight tickets, copies of receipts and invoices and any other documentation related to the reuse, recycling, and disposal of generated waste/debris from demolition and construction activities; and
  - b. Maintain a log of each load of each category item diverted from landfill. Log in separately debris sent to a Class III landfill and materials sent to recycling facilities.
    - 1) Include in log: type of load, load weight, name of hauling service, name of recycling service or landfill, and date accepted by recycling service or by landfill.

- 2) County reserves the right to audit the log at any time. Contractor shall retain and provide to the County all weight tickets, copies of receipts and invoices and any other documentation related to the disposal or recycling of generated waste/debris from demolition and construction activities.
  - c. Units of measure: Use same units as stated in the approved plan "good faith" estimate of construction waste that would be generated if no remedial methods were implemented.
2. Material handling
  - a. Separation facilities
    - 1) Designate a specific on site area or areas to facilitate separation of materials for potential reuse, salvage, recycling, and return.
    - 2) Keep waste bins and pile areas neat and clean. Clearly mark bins for each category of waste. Do not co-mingle non-recyclable waste with materials designated for reuse or recycling.
  - b. Environmental controls during handling, storage, or transport: Do not permit designated materials to become contaminated or to contaminate site or surrounding areas.
3. Training and coordination
  - a. Provide access and training as needed to subcontractors to the online construction and demolition debris waste management tool Green Halo Systems for the purposes of input of waste management information.
  - b. Furnish copies of the Waste Management Plan to all on-site supervisors, each subcontractor, and the County.
  - c. Instruction: Provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all entities at the appropriate stages of the Project.
  - d. Meetings: Include construction waste management on the agenda of meetings. At a minimum, discuss waste management goals and issues at the following meetings:
    - 1) Pre-bid meetings.
    - 2) Pre-construction meeting.
    - 3) Regularly scheduled job-site meetings.

## **PART 2 - PRODUCTS**

### **2.01 MATERIALS, EQUIPMENT AND FACILITIES**

Furnish all materials, tools, equipment, devices, appurtenances, facilities, and services required for performing waste management of debris covered under this Section.

**PART 3 - EXECUTION**

**3.01 EXAMINATION AND PREPARATION**

- A. Set up and maintain in good standing a project account with WasteTracking.com powered by Green Halo Systems using the website [ACGSA.WasteTracking.com](https://www.acgsa.wastetracking.com) to be used exclusively for this project to develop a Waste Management Plan, upload all reuse, recycling and waste disposal data throughout the construction process and submit the final online report demonstrating project compliance.
- B. Perform as required in the approved Waste Management Plan.

**3.02 DISPOSAL OF DEBRIS**

- A. Dispose of waste, trash and debris in a safe, acceptable manner, in accordance with applicable laws and ordinances and as prescribed by authorities having jurisdiction. Burying of trash and debris on the site is prohibited.
- B. Remove demolished materials from site as work progresses. Remove debris from the site so that its presence will not delay the progress of the work.
- C. Debris shall be the property of the Contractor and shall be removed and disposed of in a legal manner off the County's property in accordance with the approved Waste Management Plan described herein. Location of recycling facility or dump and length of haul shall be the Contractor's responsibility.

**END OF DOCUMENT**

## **PROTECTING INSTALLED CONSTRUCTION**

### **PART 1 – GENERAL**

#### **1.01 RELATED DOCUMENTS AND PROVISIONS:**

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions;
- B. Special Conditions.

### **PART 2 - PRODUCTS**

#### **2.01 PRODUCTS FOR PATCHING AND EXTENDING WORK:**

- A. New Materials: As specified in the Contract Documents including, without limitation, in the Specifications, Contractor shall match existing products, conditions, and work for patching and extending work.
- B. Type and Quality of Existing Products: Contractor shall determine by inspection, by testing products where necessary, by referring to existing conditions and to the Work as a standard.

### **PART 3 - EXECUTION**

#### **3.01 EXAMINATION:**

- A. Contractor shall verify that demolition is complete and that areas are ready for installation of new Work.
- B. By beginning restoration Work, Contractor acknowledges and accepts the existing conditions.

#### **3.02 PREPARATION:**

- A. Contractor shall cut, move, or remove items as necessary for access to alterations and renovation Work. Contractor shall replace and restore these at completion.
- B. Contractor shall remove unsuitable material not as salvage unless otherwise indicated in the Contract Documents. Unsuitable material may include, without

limitation, rotted wood, corroded metals, and deteriorated masonry and concrete. Contractor shall replace materials as specified for finished Work.

- C. Contractor shall remove debris and abandoned items from all areas of the Site and from concealed spaces.
- D. Contractor shall prepare surface and remove surface finishes to provide for proper installation of new Work and finishes.
- E. Contractor shall close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity. Contractor shall insulate ductwork and piping to prevent condensation in exposed areas. Contractor shall insulate building cavities for thermal and/or acoustical protection, as detailed.

### **3.03 INSTALLATION:**

- A. Contractor shall coordinate Work of all alternations and renovations to expedite completion and to accommodate County occupancy.
- B. Designated Areas and Finishes: Contractor shall complete all installations in all respects, including operational, mechanical and electrical work.
- C. Contractor shall remove, cut, and patch Work in a manner to minimize damage and to provide a means of restoring Products and finishes to original or specified condition.
- D. Contractor shall refinish visible existing surfaces to remain in renovated rooms and spaces, to specified condition for each material, with a neat transition to adjacent finishes.
- E. Contractor shall install products as specified in the Contract Documents, including without limitation, the Specifications.

### **3.04 TRANSITIONS:**

- A. Where new Work abuts or aligns with existing, Contractor shall perform a smooth and even transition. Patched Work must match existing adjacent work in texture and appearance.
- B. When finished surfaces are cut so that a smooth transition with new Work is not possible, Contractor shall terminate existing surface along a straight line at a natural line of division and make a recommendation for resolution to the County and the Engineer for review and approval.

### **3.05 ADJUSTMENTS:**



- A. Where removal of partitions or walls results in adjacent spaces becoming one, Contractor shall rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.
- B. Where a change of plane of 1/4 inch or more occurs, Contractor shall submit a recommendation for providing a smooth transition to the County and the **Engineer** for review and approval.
- C. Contractor shall trim existing doors as necessary to clear new floor finish and refinish trim as required.
- D. Contractor shall fit Work at penetrations of surfaces.

**3.06 REPAIR OF DAMAGED SURFACES:**

- A. Contractor shall patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.
- B. Contractor shall repair substrate prior to patching finish.

**3.07 CULTIVATED AREAS AND OTHER SURFACE IMPROVEMENTS:**

- A. Cultivated or planted areas and other surface improvements which are damaged by actions of the Contractor shall be restored by Contractor to their original condition or better, where indicated.
- B. Contractor shall protect and replace, if damaged, all existing guard posts, barricades, and fences.
- C. Contractor shall give special attention to avoid damaging or killing trees, bushes and/or shrubs on the Premises and/or identified the Contract Documents, including without limitation, the Drawings.

**3.08 FINISHES:**

- A. Contractor shall finish surfaces as specified in the Contract Documents, including without limitations, the provisions of all Divisions of the Specifications.
- B. Contractor shall finish patches to produce uniform finish and texture over entire area. When finish cannot be matched, Contractor shall refinish entire surface to nearest intersections.

**3.09 CLEANING:**

- A. Contractor shall continually clean the Site and the Premises as indicated in the Contract Documents, including without limitation, the provisions in the General Conditions and the Specifications regarding cleaning.

**END OF DOCUMENT**

**SECTION 01 77 00**

**CONTRACT CLOSEOUT**

**PART 1 - GENERAL**

**1.01 RELATED DOCUMENTS AND PROVISIONS**

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Completion of Work;
- B. Special Conditions;
- C. Construction Facilities and Temporary Controls.

**1.02 CLOSEOUT PROCEDURES**

Contractor shall comply with all closeout provisions as indicated in the General Conditions.

**1.03 FINAL CLEANING**

- A. Contractor shall execute final cleaning prior to final inspection.
- B. Contractor shall clean interior and exterior glass and surfaces exposed to view; remove temporary labels, tape, stains, and foreign substances, polish transparent and glossy surfaces, wax and polish new vinyl floor surfaces, vacuum carpeted and soft surfaces.
- C. Contractor shall clean equipment and fixtures to a sanitary condition.
- D. Contractor shall replace filters of operating equipment.
- E. Contractor shall clean debris from roofs, gutters, down spouts, and drainage systems.
- F. Contractor shall clean Site, sweep paved areas, and rake clean landscaped surfaces.
- G. Contractor shall remove waste and surplus materials, rubbish, and construction facilities from the Site.

**1.04 ADJUSTING**

- A. Contractor shall adjust operating products and equipment to ensure smooth and unhindered operation.
- B. Record Documents and Shop Drawings: Contractor shall legibly mark each item to record actual construction, including:
  - (1) Measured depths of foundations in relation to finish floor datum.
  - (2) Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
  - (3) Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
  - (4) Field changes of dimension and detail.
  - (5) Details not on original Contract Drawings.
  - (6) Changes made by modification(s).
  - (7) References to related Shop Drawings and modifications.
- C. County will provide one set of full size drawings to Contractor upon request.
- D. Contractor shall submit all required documents to County and/or **Engineer** prior to or with its final Application for Payment.

**1.06 INSTRUCTION OF COUNTY PERSONNEL:**

- A. Before final inspection, at agreed upon times, Contractor shall instruct County's designated personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. For equipment requiring seasonal operation, Contractor shall perform instructions for other seasons within six months.
- C. Contractor shall use operation and maintenance manuals as basis for instruction. Contractor shall review contents of manual with personnel in detail to explain all aspects of operation and maintenance.
- D. Contractor shall prepare and insert additional data in Operation and Maintenance Manual when need for such data becomes apparent during instruction.

- E. Contractor shall use operation and maintenance manuals as basis for instruction. Contractor shall review contents of manual with personnel in detail to explain all aspects of operation and maintenance.

**1.07 SPARE PARTS AND MAINTENANCE MATERIALS:**

- A. Contractor shall provide products, spare parts, maintenance, and extra materials in quantities specified in the Specifications and in Manufacturer's recommendations.
- B. Contractor shall provide County all required Operation and Maintenance Data.

**PART 2 – PRODUCTS**

Not used.

**PART 3 – EXECUTION**

Not used.

END OF DOCUMENT

DOCUMENT 01 78 23

## OPERATION AND MAINTENANCE INSTRUCTIONS

### PART 1 – GENERAL

#### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Completion of the Work;
- B. Special Conditions.

#### 1.02 QUALITY ASSURANCE:

- A. Contractor shall prepare instructions and data by personnel experienced in maintenance and operation of described products.

#### 1.03 FORMAT:

- A. Contractor shall prepare data in the form of an instructional manual entitled “OPERATIONS AND MAINTENANCE MANUAL & INSTRUCTIONS” (“Manual”).
- B. Binders: Contractor shall use commercial quality, **8-1/2 by 11 inch, three-side rings, with durable plastic covers; two inch maximum ring size**. When multiple binders are used, Contractor shall correlate data into related consistent groupings.
- C. Cover: Contractor shall identify each binder with typed or printed title "OPERATION AND MAINTENANCE MANUAL & INSTRUCTIONS"; and shall list title of Project and identify subject matter of contents.
- D. Contractor shall arrange content by systems process flow under section numbers and sequence of Table of Contents of the Contract Documents.
- E. Contractor shall provide tabbed fly leaf for each separate product and system, with typed description of product and major component parts of equipment.
- F. Text: The content shall include Manufacturer's printed data, or typewritten data on 24 pound paper.

- G. Drawings: Contractor shall provide with reinforced punched binder tab and shall bind in with text; folding larger drawings to size of text pages.

#### 1.04 CONTENTS, EACH VOLUME:

- A. Table of Contents: Contractor shall provide title of Project; names, addresses, and telephone numbers of the Engineer, any civil engineer, sub-consultants, Subcontractor(s), and Contractor with name of responsible parties; and schedule of products and systems, indexed to content of the volume.
- B. For Each Product or System: Contractor shall list names, addresses, and telephone numbers of Subcontractor(s) and suppliers, including local source of supplies and replacement parts.
- C. Product Data: Contractor shall mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- D. Drawings: Contractor shall supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Contractor shall **not use Project Record Documents as maintenance drawings**.
- E. Text: The Contractor shall include any and all information as required to supplement product data. Contractor shall provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.
- F. Warranties and Bonds: Contractor shall bind in one copy of each.

#### 1.05 MANUAL FOR MATERIALS AND FINISHES:

- A. Building Products, Applied Materials, and Finishes: Contractor shall include product data, with catalog number, size, composition, and color and texture designations. Contractor shall provide information for re-ordering custom manufactured products.
- B. Instructions for Care and Maintenance: Contractor shall include Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
- C. Moisture Protection and Weather Exposed Products: Contractor shall include product data listing applicable reference standards, chemical composition, and details of installation. Contractor shall provide recommendations for inspections, maintenance, and repair.

- D. Additional Requirements: Contractor shall include all additional requirements as specified in the Specifications.
- E. Contractor shall provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

**1.06 MANUAL FOR EQUIPMENT AND SYSTEMS:**

- A. Each Item of Equipment and Each System: Contractor shall include description of unit or system, and component parts and identify function, normal operating characteristics, and limiting conditions. Contractor shall include performance curves, with engineering data and tests, and complete nomenclature, and commercial number of replaceable parts.
- B. Panelboard Circuit Directories: Contractor shall provide electrical service characteristics, controls, and communications.
- C. Contractor shall include color coded wiring diagrams as installed.
- D. Operating Procedures: Contractor shall include start-up, break-in, and routine normal operating instructions and sequences. Contractor shall include regulation, control, stopping, shut-down, and emergency instructions. Contractor shall include summer, winter, and any special operating instructions.
- E. Maintenance Requirements: Contractor shall include routine procedures and guide for trouble-shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- F. Contractor shall provide servicing and lubrication schedule, and list of lubricants required.
- G. Contractor shall include manufacturer's printed operation and maintenance instructions.
- H. Contractor shall include sequence of operation by controls manufacturer.
- I. Contractor shall provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- J. Contractor shall provide control diagrams by controls manufacturer as installed.
- K. Contractor shall provide Contractor's coordination drawings, with color coded piping diagrams as installed.



- L. Contractor shall provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- M. Contractor shall provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- N. Additional Requirements: Contractor shall include all additional requirements as specified in Specification(s).
- O. Contractor shall provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

**1.08 SUBMITTAL:**

- A. Contractor shall submit to the County for review **two (2) copies of preliminary draft** or proposed formats and outlines of the contents of the Manual **within thirty (30) days of Contractor's start of Work.**
- B. For equipment, or component parts of equipment put into service during construction and to be operated by County, Contractor shall submit draft content for that portion of the Manual **within ten (10) days after acceptance of that equipment or component.**
- C. Contractor shall **submit two (2) copies of a complete Manual in final form prior to final Application for Payment.** Copy will be returned with Engineer comments. Contractor must revise the content of the Manual as required by County prior to County's approval of Contractor's final Application for Payment.
- D. Contractor must **submit two (2) copies of revised Manual in final form within ten (10) days after final inspection.**

END OF DOCUMENT

DOCUMENT 01 78 36

## WARRANTIES

### PART 1 - GENERAL

#### 1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Warranty/Guarantee Information;
- B. Special Conditions.

#### 1.02 FORMAT

- A. Binders: Contractor shall use commercial quality, **8-1/2 by 11 inch, three-side rings, with durable plastic covers; two inch maximum ring size.**
- B. Cover: Contractor shall identify each binder with typed or printed title "WARRANTIES" and shall list title of Project.
- C. Table of Contents: Contractor shall provide title of Project; name, address, and telephone number of Contractor and equipment supplier, and name of responsible principal. Contractor shall identify each item with the number and title of the specific Specification, document, provision, or section in which the name of the product or work item is specified.
- D. Contractor shall separate each warranty with index tab sheets keyed to the Table of Contents listing, providing full information and using separate typed sheets as necessary. Contractor shall list each applicable and/or responsible subcontractor(s), supplier(s), and/or manufacturer(s), with name, address, and telephone number of each responsible principal(s).

#### 1.03 PREPARATION:

- A. Contractor shall obtain warranties, executed in duplicate by each applicable and/or responsible subcontractor(s), supplier(s), and manufacturer(s), **within ten (10) days after completion of the applicable item or work.** Except for items put into use with County's permission, Contractor shall leave date of beginning of time of warranty until the date of completion is determined.

- B. Contractor shall verify that documents are in proper form, contain full information, and are notarized, when required.
- C. Contractor shall co-execute submittals when required.
- D. Contractor shall retain warranties until time specified for submittal.

**1.04 TIME OF SUBMITTALS:**

- A. For equipment or component parts of equipment put into service during construction with County's permission, Contractor shall submit a draft warranty for that equipment or component **within ten (10) days after acceptance of that equipment or component.**
- B. Contractor shall submit for County approval all warranties and related documents **within ten (10) days after date of completion.** Contractor must revise the warranties as required by the County prior to County's approval of Contractor's final Application for Payment.
- C. For items of work delayed beyond date of completion, provide updated submittal **within ten days after acceptance, listing the date of acceptance as start of warranty period.**

END OF DOCUMENT

DOCUMENT 01 78 39

## PROJECT RECORD DOCUMENTS

### PART 1 - GENERAL

#### 1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Documents on Work;
- B. Special Conditions.

### PART 2 - RECORD DRAWINGS

#### 2.01 GENERAL:

- A. As indicated in the Contract Documents, the County will provide Contractor with one set of full size plans of the original Contract Drawings.
- B. Contractor shall maintain at each Project Site **one set of marked-up prints** and each month, or as otherwise agreed, shall transfer all changes and information to those marked-up prints. Contractor shall submit to the Project County **one set of full size prints of the Project Record Drawings ("As-Built")** showing all changes incorporated into the Work since the preceding monthly submittal. The Record Drawings shall be available at the Project Site. The Contractor shall submit **one set of full size prints and electronic files on disk(s) at the conclusion of the Project** following review of the prints.
- C. Label and date each Record Drawing "RECORD DOCUMENT" in legibly printed letters.
- D. All deviations in construction, including but not limited to pipe and conduit locations and deviations caused by without limitation Change Orders, Construction Claim Directives, RFI's, and Addenda, shall be accurately and legibly recorded by Contractor.
- E. Locations and changes shall be done by Contractor in a neat and legible manner and, where applicable, indicated by drawing a "cloud" around the changed or additional information.

#### 2.02 RECORD DRAWING INFORMATION:

- A. Contractor shall record the following information:
- (1) Locations of Work buried under or outside each building, including, without limitation, all utilities, plumbing and electrical lines, and conduits.
  - (2) Actual numbering of each electrical circuit.
  - (3) Locations of significant Work concealed inside each building whose general locations are changed from those shown on the Contract Drawings.
  - (4) Locations of all items, not necessarily concealed, which vary from the Contract Documents.
  - (5) Installed location of all cathodic protection anodes.
  - (6) Deviations from the sizes, locations, and other features of installations shown in the Contract Documents.
  - (7) Locations of underground work, points of connection with existing utilities, changes in direction, valves, manholes, catch basins, capped stub-outs, invert elevations, etc.
  - (8) Sufficient information to locate Work concealed in each building with reasonable ease and accuracy. In some instances, this may be by dimension, in others, it may be in relation to the spaces in the building near which it was installed.
- B. Contractor shall provide additional drawings as necessary for clarification.
- C. Contractor shall provide full size record drawings, made from final Shop Drawings marked "No Exceptions Taken" or "Approved as Noted."

### **PART 3 - RECORD SPECIFICATIONS**

#### **3.01 GENERAL:**

- A. Contractor shall mark each section legibly to record manufacturer, trade name, catalog number, and supplier of each Product and item of equipment actually installed.

### **PART 4 - MAINTENANCE OF RECORD DOCUMENTS**

#### **4.01 GENERAL**

- A. Contractor shall store Record Documents apart from documents used for construction:
  - (1) Provide files and racks for storage of Record Documents.
  - (2) Maintain Record Documents in a clean, dry, legible condition and in good order.
- B. Do not use Record Documents for construction purposes.

END OF DOCUMENT

DOCUMENT 01 91 13

## GENERAL COMMISSIONING REQUIREMENTS

### PART 1 - GENERAL

#### 1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- B. OPR and BoD documentation prepared by Owner and Engineer contains requirements that apply to this Section.

#### 1.02 SUMMARY

- A. This Section includes general requirements that apply to implementation of commissioning without regard to systems, subsystems, and equipment being commissioned.
- B. Related Sections include the following:
  - 1. References in Division 1 sections for specific requirements for commissioning systems.

#### 1.2 DEFINITIONS

- A. BoD: Basis of Design.
- B. CxA: Commissioning Authority.
- C. OPR: Owner's Project Requirements.
- D. Systems, Subsystems, and Equipment: Where these terms are used together or separately, they shall mean "as-built" systems, subsystems, and equipment.
- E. TAB: Testing, Adjusting, and Balancing.

#### 1.3 COMMISSIONING TEAM

- A. Members Appointed by Contractor(s): Individuals, each having authority to act on behalf of the entity he or she represents, explicitly organized to implement the commissioning process through coordinated actions. The commissioning team shall consist of, but not be limited to, representatives of **[each]** Contractor, including Project superintendent and subcontractors, installers, suppliers, and specialists deemed appropriate by the CxA.

**B. Members Appointed by Owner:**

1. CxA: The designated person, company, or entity that plans, schedules, and coordinates the commissioning team to implement the commissioning process. Owner may engage the CxA under a separate contract.
2. Representatives of the facility user and operation and maintenance personnel.
3. Engineer and engineering design professionals.

**1.4 OWNER'S RESPONSIBILITIES**

- A. Provide the OPR documentation to the Contractor for use in developing the commissioning plan; systems manual; operation and maintenance training plan; and testing plans and checklists.
- B. Assign operation and maintenance personnel and schedule them to participate in commissioning team activities including, but not limited to, the following:
  1. Coordination meetings.
  2. Training in operation and maintenance of systems, subsystems, and equipment.
  3. Testing meetings.
  4. Demonstration of operation of systems, subsystems, and equipment.
- C. Provide utility services required for the commissioning process.
- D. Provide the BoD documents, prepared by Engineer approved by Owner, to the Contractor for use in developing the commissioning plan, systems manual, and operation and maintenance training plan.

**1.5 CONTRACTOR'S RESPONSIBILITIES**

- A. Provide utility services required for the commissioning process.
- B. Contractor shall assign representatives with expertise and authority to act on behalf of the Contractor and schedule them to participate in and perform commissioning team activities including, but not limited to, the following:
  1. Participate in construction-phase coordination meetings.
  2. Participate in maintenance orientation and inspection.
  3. Participate in operation and maintenance training sessions.
  4. Participate in final review at acceptance meeting.
  5. Certify that Work is complete and systems are operational according to the Contract Documents, including calibration of instrumentation and controls.
  6. Evaluate performance deficiencies identified in test reports and, in collaboration with entity responsible for system and equipment installation, recommend corrective action.
  7. Provide for County review and approval of final commissioning documentation.



- C. Subcontractors shall assign representatives with expertise and authority to act on behalf of subcontractors and schedule them to participate in and perform commissioning team activities including, but not limited to, the following:
  - 1. Participate in design- and construction-phase coordination meetings.
  - 2. Participate in maintenance orientation and inspection.
  - 3. Participate in procedures meeting for testing.
  - 4. Participate in final review at acceptance meeting.
  - 5. Provide schedule for operation and maintenance data submittals, equipment startup, and testing for incorporation into the commissioning plan. Update schedule **on a weekly basis throughout the construction period.**
  - 6. Provide information to the County for developing construction-phase commissioning plan.
  - 7. Participate in training sessions for Owner's operation and maintenance personnel.
  - 8. Provide updated Project Record Documents to the County **on a daily basis.**
  - 9. Gather and submit operation and maintenance data for systems, subsystems, and equipment to the County, as specified in Division 1 Section "Operation and Maintenance Data".
  - 10. Provide technicians who are familiar with the construction and operation of installed systems and who shall develop specific test procedures and participate in testing of installed systems, subsystems, and equipment.

1.6 Section intentionally omitted.

#### 1.7 COMMISSIONING DOCUMENTATION

- A. Index of Commissioning Documents: Contractor shall prepare an index to include storage location of each document.
- B. OPR: A written document, prepared by Owner, which details the functional requirements of Project and expectations of how it will be used and operated. This document includes Project and design goals, measurable performance criteria, budgets, schedules, success criteria, and supporting information.
- C. BoD Document: A document, prepared by Engineer, that records concepts, calculations, decisions, and product selections used to meet the OPR and to satisfy applicable regulatory requirements, standards, and guidelines. The document includes both narrative descriptions and lists of individual items that support the design process.
- D. Commissioning Plan: A document, prepared by Contractor, that outlines the schedule, allocation of resources, and documentation requirements of the commissioning process, and shall include, but is not limited to the following:
  - 1. Plan for delivery and review of submittals, systems manuals, and other documents and reports. Identification of the relationship of these documents to other functions and a detailed description of submittals that are required to support the

- commissioning processes. Submittal dates shall include the latest date approved submittals must be received without adversely affecting commissioning plan.
  2. Description of the organization, layout, and content of commissioning documentation (including systems manual) and a detailed description of documents to be provided along with identification of responsible parties.
  3. Identification of systems and equipment to be commissioned.
  4. Description of schedules for testing procedures along with identification of parties involved in performing and verifying tests.
  5. Identification of items that must be completed before the next operation can proceed.
  6. Description of responsibilities of commissioning team members.
  7. Description of observations to be made.
  8. Description of requirements for operation and maintenance training, including required training materials.
  9. Description of expected performance for systems, subsystems, equipment, and controls.
  10. Schedule for commissioning activities with specific dates coordinated with overall construction schedule.
  11. Identification of installed systems, subsystems, and equipment, including design changes that occurred during the construction phase.
  12. Process and schedule for documenting changes on a continuous basis to appear in Project Record Documents.
  13. Process and schedule for completing prestart and startup checklists for systems, subsystems, and equipment to be verified and tested.
  14. Step-by-step procedures for testing systems, subsystems, and equipment with descriptions for methods of verifying relevant data, recording the results obtained, and listing parties involved in performing and verifying tests.
- E. Test Checklists: Contractor, with assistance of Engineer, shall develop test checklists for each system, subsystem, or equipment including interfaces and interlocks, and include a separate entry, with space for comments, for each item to be tested. Prepare separate checklists for each mode of operation and provide space to indicate whether the mode under test responded as required. Provide space for testing personnel to sign off on each checklist. Specific checklist content requirements are specified in Division 1 sections. Each checklist, regardless of system, subsystem, or equipment being tested, shall include, but not be limited to, the following:
1. Name and identification code of tested item.
  2. Test number.
  3. Time and date of test.
  4. Indication of whether the record is for a first test or retest following correction of a problem or issue.
  5. Dated signatures of the person performing test and of the witness, if applicable.
  6. Individuals present for test.
  7. Deficiencies.
  8. Issue number, if any, generated as the result of test.

- F. Certificate of Readiness: Certificate of Readiness shall be signed by Contractor, Subcontractor(s), and Installer(s) certifying that systems, subsystems, equipment, and associated controls are ready for testing. Completed test checklists signed by the responsible parties shall accompany this certificate.
- G. Test and Inspection Reports: Contractor shall record test data, observations, and measurements on test checklists. Photographs, forms, and other means appropriate for the application shall be included with data. Contractor shall compile test and inspection reports and test and inspection certificates and include them in systems manual and commissioning report.
- H. Corrective Action Documents: Contractor shall document corrective action taken for systems and equipment that fail tests. Include required modifications to systems and equipment and revisions to test procedures, if any. Retest systems and equipment requiring corrective action and document retest results.
- I. Issues Log: Contractor shall prepare and maintain an issues log that describes design, installation, and performance issues that are at variance with the OPR, BoD, and Contract Documents. Identify and track issues as they are encountered, documenting the status of unresolved and resolved issues.
  - 1. Creating an Issues Log Entry:
    - a. Identify the issue with unique numeric or alphanumeric identifier by which the issue may be tracked.
    - b. Assign a descriptive title of the issue.
    - c. Identify date and time of the issue.
    - d. Identify test number of test being performed at the time of the observation, if applicable, for cross-reference.
    - e. Identify system, subsystem, and equipment to which the issue applies.
    - f. Identify location of system, subsystem, and equipment.
    - g. Include information that may be helpful in diagnosing or evaluating the issue.
    - h. Note recommended corrective action.
    - i. Identify commissioning team member responsible for corrective action.
    - j. Identify expected date of correction.
    - k. Identify person documenting the issue.
  - 2. Documenting Issue Resolution:
    - a. Log date correction is completed or the issue is resolved.
    - b. Describe corrective action or resolution taken. Include description of diagnostic steps taken to determine root cause of the issue, if any.
    - c. Identify changes to the OPR, BoD, or Contract Documents that may require action.
    - d. State that correction was completed and system, subsystem, and equipment is ready for retest, if applicable.

- e. Identify person(s) who corrected or resolved the issue.
  - f. Identify person(s) documenting the issue resolution.
- 3. Issues Log Report: On a periodic basis, but not less than for each commissioning team meeting, Contractor shall prepare a written narrative for review of outstanding issues and a status update of the issues log. As a minimum, Contractor shall include the following information in the issues log and expand it in the narrative:
  - a. Issue number and title.
  - b. Date of the identification of the issue.
  - c. Name of the commissioning team member assigned responsibility for resolution.
  - d. Expected date of correction.
- J. Commissioning Report: Contractor shall document results of the commissioning process including unresolved issues and performance of systems, subsystems, and equipment. The commissioning report shall indicate whether systems, subsystems, and equipment have been completed and are performing according to the OPR, BoD, and Contract Documents. The commissioning report shall include, but is not limited to, the following:
  - 1. Lists and explanations of substitutions; compromises; variances in the OPR, BoD, and Contract Documents; record of conditions; and, if appropriate, recommendations for resolution. This report shall be used to evaluate systems, subsystems, and equipment and shall serve as a future reference document during Owner occupancy and operation. It shall describe components and performance that exceed requirements of the OPR, BoD, and Contract Documents and those that do not meet requirements of the OPR, BoD, and Contract Documents. It may also include a recommendation for accepting or rejecting systems, subsystems, and equipment.
  - 2. OPR and BoD documentation.
  - 3. Commissioning plan.
  - 4. Testing plans and reports.
  - 5. Corrective modification documentation.
  - 6. Issues log.
  - 7. Completed test checklists.
  - 8. Listing of off-season test(s) not performed and a schedule for their completion.
- K. Systems Manual: Contractor shall gather required information and compile systems manual. Systems manual shall include, but is not limited to, the following:
  - 1. OPR and BoD, including system narratives, schematics, and changes made throughout the Project.
  - 2. Project Record Documents as specified in Division 1 Section "Project Record Documents".
  - 3. Final commissioning plan.

4. Commissioning report.
5. Operation and maintenance data as specified in Division 1 Section "Operation and Maintenance Data".

## 1.8 SUBMITTALS

- A. Commissioning Plan Pre-final Submittal: Contractor shall **submit two hard copies of pre-final Commissioning Plan**. Deliver one copy to the Owner, and one to Engineer. Present submittal in sufficient detail to evaluate data collection and arrangement process. **One copy, with review comments, will be returned to the Contractor** for preparation of the final construction-phase commissioning plan.
- B. Commissioning Plan Final Submittal: Contractor shall **submit two hard copies and two sets of electronically formatted information of Final Commissioning Report**. Deliver one hard copy and one set of discs to Owner, and one copy to Engineer. The final submittal must address previous review comments. The final submittal shall include a copy of the pre-final submittal review comments along with a response to each item.
- C. Test Checklists and Report Forms: Contractor shall submit sample checklists and forms to Contractor's quality-control manager and subcontractors for review and comment. **Submit two copies of each checklist and report form.**
- D. Certificates of Readiness: Contractor shall submit Certificates of Readiness.
- E. Test and Inspection Reports: Contractor shall submit test and inspection reports.
- F. Corrective Action Documents: Contractor shall submit corrective action documents.
- G. Pre-final Commissioning Report Submittal: Contractor shall **submit two hard copies of the pre-final commissioning report**. Include a copy of the preliminary submittal review comments along with Engineer's response to each item. Contractor shall deliver **one copy to Owner and one copy to Engineer**. One copy, with review comments, will be returned to the Contractor for preparation of final submittal.
- H. Final Commissioning Report Submittal: Contractor shall **submit two hard copies and two] sets of electronically formatted information of the Final Commissioning Report**. Contractor shall deliver one hard copy and one set of discs to Owner, and one copy to Engineer. The final submittal must address previous review comments and shall include a copy of the pre-final submittal review comments along with a response to each item.

## 1.9 QUALITY ASSURANCE

- A. Instructor Qualifications: Factory-authorized service representatives, experienced in training, operation, and maintenance procedures for installed systems, subsystems, and equipment.

- B. Test Equipment Calibration: Comply with test equipment manufacturer's calibration procedures and intervals. Recalibrate test instruments immediately whenever instruments have been repaired following damage or dropping. Affix calibration tags to test instruments. Instruments shall have been **calibrated within six months prior to use.**

#### 1.10 COORDINATION

- A. Coordinating Meetings: Contractor shall **conduct monthly coordination meetings of the commissioning team** to review progress on the commissioning plan, to discuss scheduling conflicts, and to discuss upcoming commissioning process activities.
- B. Pretesting Meetings: Contractor shall conduct pretest meetings of the commissioning team to review startup reports, pretest inspection results, testing procedures, testing personnel and instrumentation requirements, and manufacturers' authorized service representative services for each system, subsystem, equipment, and component to be tested.
- C. Testing Coordination: Contractor shall coordinate sequence of testing activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
  - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- D. Manufacturers' Field Services: Contractor shall coordinate services of manufacturers' field services.

#### PART 2 - PRODUCTS

Not Used

#### PART 3 - EXECUTION

##### 3.1 OPERATION AND MAINTENANCE TRAINING REQUIREMENTS

- A. Training Preparation Conference: Before operation and maintenance training, Contractor shall convene a training preparation conference to include Owner's operation and maintenance personnel and subcontractors. In addition to requirements specified in Division 1 Section "Demonstration and Training", perform the following:
  - 1. Review the OPR and BoD.
  - 2. Review installed systems, subsystems, and equipment.
  - 3. Review instructor qualifications.
  - 4. Review instructional methods and procedures.
  - 5. Review training module outlines and contents.
  - 6. Review course materials (including operation and maintenance manuals).
  - 7. Inspect and discuss locations and other facilities required for instruction.

8. Review and finalize training schedule and verify availability of educational materials, instructors, audiovisual equipment, and facilities needed to avoid delays.
  9. For instruction that must occur outside, review weather and forecasted weather conditions and procedures to follow if conditions are unfavorable.
- B. Training Modules: Develop an instruction program that includes individual training modules for each system, subsystem, and equipment as specified in Division 1 Section "Demonstration and Training".

END OF DOCUMENT

**SECTION 27 00 00**

**COMMUNICATIONS BASIC REQUIREMENTS**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

- A. Work included in 27 00 00, Communications Basic Requirements applies to Division 27, Communications work to provide materials, labor, tools, permits, incidentals, and other services to provide and make ready for Owner's use of communications systems for proposed project.
- B. Contract Documents include, but are not limited to, Specifications including Division 00, Procurement and Contracting Requirements and Division 01, General Requirements, Drawings, Addenda, Owner/Engineer Agreement, and Owner/Contractor Agreement. Confirm requirements before commencement of work.
- C. Definitions:
  - (1) Provide: To furnish and install, complete and ready for intended use.
  - (2) Furnish: Supply and deliver to project site, ready for unpacking, assembly and installation.
  - (3) Install: Includes unloading, unpacking, assembling, erecting, installation, applying, finishing, protecting, cleaning and similar operations at project site as required to complete items of work furnished.
  - (4) Approved or Approved Equivalent: To possess the same performance qualities and characteristics and fulfill the utilitarian function without any decrease in quality, durability or longevity. For equipment/products defined by the Contractor as "equivalent," substitution requests must be submitted to Engineer for consideration, in accordance with Division 01, General Requirements, and approved by the Engineer prior to submitting bids for substituted items.
  - (5) Authority Having Jurisdiction (AHJ): Indicates reviewing authorities, including local fire marshal, Owner's insurance underwriter, Owner's representative, and other reviewing entity whose approval is required to obtain systems acceptance.
  - (6) Entrance Facility (EF): Area or location that contains entrance point (demarcation) cable and associated equipment for telecommunication services entering the building.
  - (7) Equipment Room (ER): Area or location that contains backbone cabling associated with interbuilding cable or cable that connects buildings together in a campus environment. ERs may contain Main Cross-Connects, Intermediate Cross-Connects, Horizontal Cross-Connects, and Telecommunication Rooms.



- (8) Main Cross-Connect (MC): Area or location that contains telecommunications equipment for connecting backbone cable to/from Intermediate Cross-Connects and Horizontal Cross-Connects. Active telecommunications equipment will often be contained in this area to serve as the telecommunications hub or headend. Backbone cable from Local Exchange Carrier's point of demarcation will connect to building backbone cable or active telecommunications equipment at this location.
- (9) Intermediate Cross-Connect (IC): Area or location that contains telecommunications equipment for connecting backbone cable from the MC to backbone cable distributing to one or many Horizontal Cross-Connects. This location may contain active telecommunications equipment.
- (10) Horizontal Cross-Connect (HC): Area or location that contains telecommunications equipment, cable terminations and cross-connect wiring. HC is the recognized connection point between backbone and horizontal pathway facilities.
- (11) Telecommunications Room (TR): Area or location containing telecommunications equipment, cable terminations and cross-connect wiring. Three applications serviced by TRs are horizontal cable connections, backbone system interconnection and entrance facilities. The TR provides facilities (space, power, grounding, etc.) for housing telecommunications equipment. TR may contain a MC, IC or HC and a demarcation point or an interbuilding entrance facility.
- (12) Interbuilding Cable: Backbone cable associated with connecting buildings together in a multibuilding or campus environment.
- (13) Intrabuilding Cable: Backbone cable associated with connecting Entrance Facility, Equipment Rooms, Main Cross-Connects, Intermediate Cross-Connects, Horizontal Cross-Connects, and Telecommunication Rooms together on single floor or multifloor building.

## **1.02 RELATED SECTIONS**

- A. Contents of Section applies to Division 27, Communications Contract Documents.
- B. Related Work:
  - (1) Additional conditions apply to this Division including, but not limited to:
    - a. Specifications including Division 00, Procurement and Contracting Requirements and Division 01, General Requirements.
    - b. Drawings
    - c. Addenda
    - d. Owner/Engineer Agreement
    - e. Owner/Contractor Agreement
    - f. Codes, Standards, Public Ordinances and Permits

### **1.03 REFERENCES AND STANDARDS**

- A. References and Standards per Division 00, Procurement and Contracting Requirements and Division 01, General Requirements, individual Division 27, Communications Sections and those listed in this Section.
- B. Codes to include latest adopted editions, including current amendments, supplements and local jurisdiction requirements in effect as of the date of the Contract Documents, of/from:
  - (1) State of California:
    - a. CBC - California Building Code
    - b. CEC - California Electrical Code
    - c. CEC T24 - California Energy Code Title 24
    - d. CFC - California Fire Code
    - e. CMC - California Mechanical Code
    - f. CPC - California Plumbing Code
    - g. CSFM - California State Fire Marshal
- C. Reference standards and guidelines include but are not limited to the latest adopted editions from:
  - (1) ABA - Architectural Barriers Act
  - (2) ADA - Americans with Disabilities Act
  - (3) ANSI - American National Standards Institute
  - (4) ANSI/TIA-568-C.0 - Generic Telecommunications Cabling for Customer Premises
  - (5) ANSI/TIA-568-C.1 - Commercial Building Telecommunications Cabling Standard
  - (6) ANSI/TIA-568-C.2 - Balanced Twisted-Pair Telecommunications Cabling and Components Standard
  - (7) ANSI/TIA-568-C.3 - Optical Fiber Cabling Components Standard. Commercial Building Telecommunicating Cabling Standard
  - (8) ANSI/TIA-569-B - Commercial Building Standard for Telecommunications Pathways and Spaces
  - (9) ANSI/TIA-570-B - Residential Telecommunications Infrastructure
  - (10) ANSI/TIA-942 - Telecommunications Infrastructure Standard for Data Centers
  - (11) ANSI/TIA/EIA-606-A - Administration Standard for Commercial Telecommunications Infrastructure
  - (12) ANSI-J-STD-607-A - Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications
  - (13) APWA - American Public Works Association
  - (14) ASCE - American Society of Civil Engineers
  - (15) ASHRAE Guideline 0, the Commissioning Process
  - (16) ASTM - ASTM International
  - (17) BICSI - Building Industry Consulting Service International

- (18) BICSI TDMM - Telecommunications Distribution Methods Manual
  - (19) BICSI ESSDRM - Electronic Safety & Security Design Reference Manual
  - (20) BICSI AVDRM - AV Design Reference Manual
  - (21) CFR - Code of Federal Regulations
  - (22) EIA - Electronic Industries Association
  - (23) EPA - Environmental Protection Agency
  - (24) ETL - Electrical Testing Laboratories
  - (25) FCC - Federal Communications Division
  - (26) FM - FM Global
  - (27) IBC - International Building Code
  - (28) IEC - International Electrotechnical Commission
  - (29) IEEE - Institute of Electrical and Electronics Engineers
  - (30) ISO - International Organization for Standardization
  - (31) MSS - Manufacturers Standardization Society
  - (32) NEC - National Electric Code
  - (33) NEMA - National Electrical Manufacturers Association
  - (34) OSHA - Occupational Safety and Health Administration
  - (35) TIA - Telecommunications Industry Association
  - (36) UL - Underwriters Laboratories Inc.
- D. See Division 27, Communications individual Sections for additional references.
- E. Where code requirements are at variance with Contract Documents, meet code requirements as a minimum requirement and include costs necessary to meet these in Contract. Machinery and equipment are to comply with OSHA requirements, as currently revised and interpreted for equipment manufacturer requirements. Install equipment provided per manufacturer recommendations.
- F. Whenever this Specification calls for material, workmanship, arrangement or construction of higher quality and/or capacity than that required by governing codes, higher quality and/or capacity take precedence.

#### **1.04 SUBMITTALS**

- A. See Division 01, General Requirements for Submittal Procedures.
- B. Provide drawings in format and software release equal to the design documents. Drawings to be the same sheet size and scale as the Contract Documents.
- C. In addition:
- (1) "No Exception Taken" constitutes that review is for general conformance with the design concept expressed in the Contract Documents for the limited purpose of checking for conformance with information given. Any action is subject to the requirements of the Contract Documents. Contractor is responsible for the dimensions and quantity and will confirm and correlate at the job site, fabrication processes and techniques of

- construction, coordination of the work with that of all other trades, and the satisfactory performance of the work.
- (2) Provide product submittals and shop drawings in electronic format only. Electronic format must be submitted via zip file via e-mail. For electronic format, provide one zip file per specification division containing a separate file for each Specification Section. Individual submittals sent piecemeal in a per Specification Section method will be returned without review or comment. Copy Engineer on all transmissions/submissions.
  - (3) Product Data: Provide manufacturer's descriptive literature for products specified in Division 27, Communications Sections.
  - (4) Identify/mark each submittal in detail. Note what differences, if any, exist between the submitted item and the specified item. Failure to identify the differences will be considered cause for disapproval. If differences are not identified and/or not discovered during the submittal review process, Contractor remains responsible for providing equipment and materials that meet the specifications and Drawings.
    - a. Label submittal to match numbering/references as shown in Contract Documents. Highlight and label applicable information to individual equipment or cross out/remove extraneous data not applicable to submitted model. Clearly note options and accessories to be provided, including field installed items. Highlight connections by/to other trades.
    - b. Include technical data, installation instructions and dimensioned drawings for products, fixtures, equipment and devices installed, furnished or provided. Reference individual Division 27, Communications specification Sections for specific items required in product data submittal outside of these requirements.
    - c. See Division 27, Communications individual Sections for additional submittal requirements outside of these requirements.
  - (5) Maximum of two reviews of complete submittal package. Arrange for additional reviews and/or early review of long-lead items; Bear costs of additional reviews at Engineer's hourly rates. Incomplete submittal packages/submittals will be returned to contractor without review.
  - (6) Resubmission Requirements: Make corrections or changes in submittals as required, and in consideration of Engineer's comments. Identify Engineer's comments and provide an individual response to each of the Engineer's comments. Cloud changes in the submittals and further identify changes which are in response to Engineer's comments.
  - (7) Structural/Seismic: Provide weights, dimensions, mounting requirements and like information required for mounting, seismic bracing, and support. Indicate manufacturer's installation and support requirements to meet ASCE 7-10 requirements for non-structural components.
  - (8) Trade Coordination: Include physical characteristics, electrical characteristics, device layout plans, wiring diagrams, and connections as required per Division 27, Communications Coordination Documents. For

- equipment with electrical connections, furnish copy of approved submittal for inclusion in Division 26, Electrical submittals.
- (9) Make provisions for openings in building for admittance of equipment prior to start of construction or ordering of equipment.
  - (10) Substitutions and Variation from Basis of Design:
    - a. The Basis of Design designated product establishes the qualities and characteristics for the evaluation of any comparable products by other listed acceptable manufacturers if included in this Specification or included in an approved Substitution Request as judged by the Design Professional.
    - b. If substitutions and/or equivalent equipment/products are being proposed, it is the responsibility of parties concerned, involved in, and furnishing the substitute and/or equivalent equipment to verify and compare the characteristics and requirements of that furnished to that specified and/or shown. If greater capacity and/or more materials and/or more labor is required for the rough-in, circuitry or connections than for the item specified and provided for, then provide compensation for additional charges required for the proper rough-in, circuitry and connections for the equipment being furnished. No additional charges above the Base Bid, including resulting charges for work performed under other Divisions, will be allowed for such revisions. Coordinate with the requirements of "Submittals." For any product marked "or approved equivalent," a substitution request must be submitted to Engineer for approval prior to purchase, delivery or installation.
  - (11) Shop Drawings:
    - a. Provide coordinated Shop Drawings which include physical characteristics of all systems, device layout plans, and control wiring diagrams. Reference individual Division 27, Communications specification Sections for additional requirements for Shop Drawings outside of these requirements.
    - b. Provide Shop Drawings indicating access panel locations, size and elevation for approval prior to installation.
  - (12) Samples: Provide samples when requested by individual Sections.
  - (13) Resubmission Requirements:
    - a. Make any corrections or change in submittals when required. Provide submittals as specified. The engineer will not be required to edit and/or interpret the Contractor's submittals. Changes made for the resubmittal will be indicated in a cover letter with reference to page(s) changed and will reference response to comment. Indicate changes for the resubmittal in a cover letter with reference to page(s) changed and reference response to comment. Cloud changes in the submittals.
    - b. Resubmit for review until review indicates no exception taken, or "make corrections as noted."

- c. When submitting Drawings for Engineers re-review, clearly indicate changes on Drawings and "cloud" any revisions. Submit a list describing each change.
- (14) Operation and Maintenance Manuals, Owners Instructions:
  - a. Submit, at one time, electronic files (PDF format) on CD/DVD of manufacturer's operation and maintenance instruction manuals and parts lists for equipment or items requiring servicing. Submit data when work is substantially complete and in same order format as submittals. Include name and location of source parts and service for each piece of equipment.
    - 1) Include copy of approved submittal data along with submittal review letters received from Engineer. Data to clearly indicate installed equipment model numbers. Delete or cross out data pertaining to other equipment not specific to this project.
    - 2) Include copy of manufacturer's standard Operations and Maintenance for equipment. At front of each tab, provide routine maintenance documentation for scheduled equipment. Include manufacturer's recommended maintenance schedule and highlight maintenance required to maintain warranty. Furnish list of routine maintenance parts, including part numbers, sizes, quantities, relevant to each piece of equipment: batteries, lamp lenses, speakers and filters.
    - 3) Include Warranty per Division 00, Procurement and Contracting Requirements and Division 01, General Requirements, Section 27 00 00, Communications Basic Requirements and individual Sections.
    - 4) Include product certificates of warranties and guarantees.
    - 5) Include copy of complete parts list for equipment. Include available exploded views of assemblies and subassemblies.
    - 6) Include copy of burn-in and test reports specific to each piece of equipment.
    - 7) Include copy of software/appliance programming.
    - 8) Include commissioning reports.
    - 9) Engineer will return incomplete documentation without review. Engineer will provide one set of review comments in Submittal Review format. Contractor must arrange for additional reviews; Contractor to bear costs for additional reviews at Engineer's hourly rates.
  - b. Thoroughly instruct Owner in proper operation of equipment and systems. Where noted in individual Sections, training will include classroom instruction with applicable training aids and systems demonstrations. Submit copy of material used for Owner instruction. Field instruction per Section 27 00 00,

- Communications Basic Requirements Article titled "Demonstration."
- c. Copies of certificates of code authority inspections, acceptance, code required acceptance tests, letter of conformance and other special guarantees, certificates of warranties, specified elsewhere or indicated on Drawings.
- (15) Record Drawings:
- a. Maintain at site at least one set of drawings for recording "as-constructed" conditions. Indicate on Drawings changes to original documents by referencing revision document, and include buried elements, location of conduit, and location of concealed communication items. Include items changed by field orders, supplemental instructions, and constructed conditions.
  - b. Record Drawings are to include equipment and fixture/connection schedules that accurately reflect "as constructed or installed" for project.
  - c. At completion of project, input changes to original project on CAD Drawings and make one set of black-line Drawings created from CAD Files in version/release equal to Contract Drawings. Submit CAD disk and Drawings upon substantial completion.
  - d. Invert elevations and dimensioned locations for incoming utilities and site raceways below grade extending to 5-feet outside building line.
  - e. See Division 27, Communications individual Sections for additional items to include in Record Drawings.

## **1.05 QUALITY ASSURANCE**

- A. Regulatory Requirements: Work and materials installed to conform with all local, state, federal and other applicable laws and regulation.
- B. Drawings are intended to be diagrammatic and reflect the Basis of Design manufacturer's equipment. They are not intended to show every item in its exact dimensions, or details of equipment or proposed systems layout. Verify actual dimensions of systems (i.e., conduit) and equipment proposed to assure that systems and equipment will fit in available space. Contractor is responsible for design and construction costs incurred for equipment other than Basis of Design, including, but not limited to, architectural, structural, electrical, HVAC, fire sprinkler, and plumbing systems.
- C. Manufacturer's Instructions: Follow manufacturer's written instructions. If in conflict with Contract Documents, obtain clarification. Notify Engineer, in writing, before starting work.
- D. Items shown on Drawings are not necessarily included in Specifications or vice versa. Confirm requirements in all Contract Documents.

- E. Provide products that are UL listed.
- F. Contractor Qualifications:
  - (1) Minimum of five years experience in the design, installation, testing and maintenance of communications systems.
  - (2) Must employ at least one full time BICSI certified Registered Communications Distribution Designer (RCDD) who is involved in reviewing work performed by contractor on this project.
  - (3) Maintain a local service facility which stocks spare devices and/or components for servicing systems.
  - (4) Have performed successful installation and maintenance of at least three projects similar in scope and size. Be able to provide project references for these three projects, including scope of Work, project type, Owner/user contact name and telephone number.
  - (5) The contractor selected for this project must be certified by the manufacturer of the approved products and utilize these components for completion of work.

#### **1.06 WARRANTY**

- A. Provide written warranty covering the work for a period of one year from date of Substantial Completion in accordance with Division 00, Procurement and Contracting Requirements and Division 01, General Requirements, Section 27 00 00, Communications Basic Requirements and individual Division 27, Communications Sections.
- B. Sections under this Division can require additional and/or extended warranties that apply beyond basic warranty under Division 01, General Requirements and the General Conditions. Confirm requirements in all Contract Documents.

#### **1.07 COORDINATION DOCUMENTS**

- A. Advise Architect in event a conflict occurs in location or connection of equipment. Bear costs resulting from failure to properly coordinate installation or failure to advise Architect of conflict.
- B. Verify in field exact size, location, invert, and clearances regarding existing material, equipment and apparatus, and advise Architect of discrepancies between that indicated on Drawings and that existing in field prior to installation related thereto.
- C. Submit final Coordination Drawings with changes as Record Drawings at completion of project.



## **PART 2 - PRODUCTS**

### **2.01 MANUFACTURERS**

- A. Provide like items from one manufacturer, including but not limited to jacks, patch panels, equipment connection cords and wall plates.

### **2.02 MATERIALS**

- A. Base contract upon furnishing materials as specified. Materials, equipment, and fixtures used for construction are to be new, latest products as listed in manufacturer's printed catalog data and are to be UL approved or have adequate approval or be acceptable by State, County, and City authorities. Equipment/fixture supplier is responsible for obtaining state, county, and city acceptance on equipment/fixture not UL approved or not listed for installation.
- B. Articles, fixtures, and equipment of a kind to be standard product of one manufacturer.
- C. Names and manufacturer's names denote character and quality of equipment desired and are not to be construed as limiting competition.
- D. Hazardous Materials:
  - (1) Comply with local, State of California, and Federal regulations relating to hazardous materials.
  - (2) Comply with Division 00, Procurement and Contracting Requirements and Division 01, General Requirements for this project relating to hazardous materials.
  - (3) Do not use any materials containing a hazardous substance. If hazardous materials are encountered, do not disturb; immediately notify Owner and Engineer. Hazardous materials will be removed by Owner under separate contract.

## **PART 3 - EXECUTION**

### **3.01 ACCESSIBILITY AND INSTALLATION**

- A. Confirm Accessibility and Installation requirements in Division 00, Procurement and Contracting Requirements, Division 01, General Requirements, Section 27 00 00, Communications Basic Requirements and individual Division 27, Communications Sections.
- B. Install equipment requiring access (i.e., amplifiers, taps, zone controllers, volume controls, and storage devices) so that they may be serviced, reset, replaced or recalibrated by service people with normal service tools and equipment. Do not install equipment in obvious passageways, doorways, scuttles or crawlspaces which would impede or block intended usage.

- C. Install equipment and products complete as directed by manufacturer's installation instructions. Obtain installation instructions from manufacturer prior to rough-in of equipment and examine instructions thoroughly. When requirements of installation instructions conflict with Contract Documents, request clarification from Engineer prior to proceeding with installation. This includes proper installation methods, sequencing and coordination with other trades and disciplines.
- D. Earthwork:
  - (1) Confirm Earthwork requirements in Contract Documents. In absence of specific requirements, comply with individual Division 27, Communications Sections and the following:
    - a. Perform excavation, dewatering, shoring, bedding, and backfill required for installation of work in this Division in accordance with related earthwork divisions. Contact utilities and locate existing utilities prior to excavation. Repair any work damaged during excavation or backfilling.
    - b. Excavation: Do not excavate under footings, foundation bases, or retaining walls.
    - c. Provide protection of underground systems. Review the project Geotechnical Report for references to corrosive or deleterious soils which will reduce the performance or service life of underground systems materials.
- E. Firestopping:
  - (1) Confirm Firestopping requirements in Division 07, Thermal and Moisture Protection. In absence of specific requirements, comply with individual Division 27, Communications Sections and the following:
    - a. Coordinate location and protection level of fire and/or smoke rated walls, ceilings, and floors. When these assemblies are penetrated, seal around piping, ductwork and equipment with approved firestopping material. Install firestopping material complete as directed by manufacturer's installation instructions. Meet requirements of ASTM E814, Standard Test Method for Fire Tests of Through-Penetration Fire Stops.
- F. Plenums:
  - (1) In plenums, provide plenum rated materials that meet the requirements to be installed in plenums. Immediately notify Engineer of discrepancy.

### **3.02 REVIEW AND OBSERVATION**

- A. Confirm Review and Observation requirements in Division 00, Procurement and Contracting Requirements and Division 01, General Requirements, Section 27 00 00, Communications Basic Requirements and individual Division 27, Communications Sections.

- B. Notify Engineer, in writing, at following stages of construction so that they may, at their option, visit site for review and construction observation:
  - (1) Underground conduit installation prior to backfilling.
  - (2) Prior to ceiling cover/installation.
  - (3) When main systems, or portions of, are being tested and ready for inspection by AHJ.
- C. Final Punch: Costs incurred by additional trips required due to incomplete systems will be the responsibility of the Contractor.

### **3.03 CONTINUITY OF SERVICE**

- A. Confirm requirements in Division 00, Procurement and Contracting Requirements and Division 01, General Requirements. In absence of specific requirements, comply with individual Division 27, Communications Sections and the following:
  - (1) During remodeling or addition to existing structures, or addition of a structure to existing structure, while existing structure is occupied, current services to remain intact until new construction, facilities or equipment is installed.
  - (2) Prior to changing over to new service, verify that every item is thoroughly prepared. Install new wiring to point of connection.
  - (3) Coordinate transfer time to new service with Owner. If required, perform transfer during off peak hours. Once changeover is started, pursue to its completion to keep interference to a minimum.
    - a. If overtime is necessary, there will be no allowance made by Owner for extra expense for such overtime or shift work.
  - (4) Organize work to minimize duration of power interruption.

### **3.04 CUTTING AND PATCHING**

- A. Confirm Cutting and Patching Requirements in Division 00, Procurement and Contracting Requirements and Division 01, General Requirements. In absence of specific requirements, comply with individual Division 27, Communications Sections and the following:
  - (1) Proposed floor cutting/core drilling/sleeve locations to be approved by Project Structural Engineer. Submit proposed locations to Project Structural Engineer. Where slabs are of post tension construction, perform x-ray scan of proposed penetration locations and submit scan results including proposed penetration locations to Project Structural Engineer for approval. Where slabs are of waffle type construction, show column cap extent and cell locations relative to proposed penetration(s).
  - (2) Cutting, patching and repairing for work specified in this Division including plastering, masonry work, concrete work, carpentry work, and painting included under this Section will be performed by skilled

craftsmen of each respective trade in conformance with appropriate Division of Work.

- (3) Additional openings required in building construction to be made by drilling or cutting. Use of jack hammer is specifically prohibited. Patch openings in and through concrete and masonry with grout.
- (4) Restore new or existing work that is cut and/or damaged to original condition. Patch and repair specifically where existing items have been removed. This includes repairing and painting walls, ceilings, etc. where existing conduit and devices are removed as part of this project. Where alterations disturb lawns, paving, and walks, surfaces to be repaired, refinished and left in condition matching existing prior to commencement of work.
- (5) Additional work required by lack of proper coordination will be provided at no additional cost to the Owner.

### **3.05 EQUIPMENT SELECTION AND SERVICEABILITY**

- A. Replace or reposition equipment which is too large or located incorrectly to permit servicing, at no additional cost to Owner.

### **3.06 DELIVERY, STORAGE AND HANDLING**

- A. Confirm requirements in Division 00, Procurement and Contracting Requirements and Division 01, General Requirements. In absence of specific requirements, comply with individual Division 27, Communications Sections and the following:
  - (1) Handle materials delivered to project site with care to avoid damage. Store materials on site inside building or protected from weather, dirt and construction dust. Insulation and lining that becomes wet from improper storage and handling to be replaced before installation. Products and/or materials that become damaged due to water, dirt and/or dust as a result of improper storage to be replaced before installation.
  - (2) Protect all equipment and conduit to avoid damage. Close conduit openings with caps or plugs. Keep motors and bearings in watertight and dustproof covers during entire course of installation.

### **3.07 DEMONSTRATION**

- A. Confirm Demonstration requirements in Division 00, Procurement and Contracting Requirements and Division 01, General Requirements, Section 27 00 00, Communications Basic Requirements and individual Division 27, Communications Sections.
- B. Upon completion of work and adjustment of equipment and test systems, demonstrate to Owner's Representative and Engineer that equipment furnished and installed or connected under provisions of these Specifications functions in manner required. Provide field instruction to Owner's Maintenance Staff as

specified in Division 01, General Requirements, Section 27 00 00, Communications Basic Requirements and individual Division 27, Communications Sections.

- C. Manufacturer's Field Services: Furnish services of a qualified person at time approved by Owner, to instruct maintenance personnel, correct defects or deficiencies, and demonstrate to satisfaction of Owner that entire system is operating in satisfactory manner and complies with requirements of other trades that may be required to complete work. Complete instruction and demonstration prior to final job site observations.
- D. Training and Demonstration per Section 01 91 13, General Commissioning Requirements.

### **3.08 CLEANING**

- A. Confirm Cleaning requirements in Division 00, Procurement and Contracting Requirements, Division 01, General Requirements, Section 27 00 00, Communications Basic Requirements and individual Division 27, Communications Sections.
- B. Upon completion of installation, thoroughly clean exposed portions of equipment, removing temporary labels and traces of foreign substances. Throughout work, remove construction debris and surplus materials accumulated during work.

### **3.09 INSTALLATION**

- A. Confirm Installation requirements in Division 00, Procurement and Contracting Requirements and Division 01, General Requirements, Section 27 00 00, Communications Basic Requirements and individual Division 27, Communications Sections.
- B. Install equipment and devices in accordance with manufacturer's installation instructions, plumb and level and firmly secured to mounting surfaces. Maintain manufacturer's recommended clearances.
- C. Start up equipment, in accordance with manufacturer's start-up instructions, and in presence of manufacturer's representative. Test operation and demonstrate compliance with requirements. Replace damaged or malfunctioning equipment.
- D. Provide miscellaneous supports/metals required for installation of equipment.

### **3.10 PAINTING**

- A. Confirm Painting requirements in Division 01, General Requirements and Division 09, Finishes. In absence of specific requirements, comply with individual Division 27, Communications Sections and the following:

- (1) Ferrous Metal: After completion of communications work, thoroughly clean and paint exposed supports constructed of ferrous metal surfaces in telecommunications rooms, i.e., hangers, hanger rods, equipment stands, with one coat of black asphalt varnish for exterior or black enamel for interior, suitable for hot surfaces.
- (2) In a telecommunications room, on roof or other exposed areas, equipment not painted with enamel to receive two coats of primer and one coat of rustproof enamel, colors as selected by Engineer.
- (3) See individual equipment Specifications for other painting.
- (4) Structural Steel: Repair damage to structural steel finishes or finishes of other materials damaged by cutting, welding or patching to match original.
- (5) Conduit: Clean, primer coat and paint interior conduit exposed in finished areas with two coats paint suitable for metallic surfaces. Color selected by Engineer.
- (6) Covers: Covers such as manholes, vaults and the like will be furnished with finishes which resist corrosion and rust.

### **3.11 ACCEPTANCE**

- A. Confirm requirements in Division 00, Procurement and Contracting Requirements and Division 01, General Requirements. In absence of specific requirements, comply with individual Division 27, Communications Sections and the following:
  - (1) System cannot be considered for acceptance until work is completed and demonstrated to Engineer that installation is in strict compliance with Specifications, Drawings and manufacturer's installation instructions, particularly in reference to following:
    - a. Testing Reports
    - b. Cleaning
    - c. Operation and Maintenance Manuals
    - d. Training of Operating Personnel
    - e. Record Drawings
    - f. Warranty and Guaranty Certificates, including extended manufacturer's warranties.
    - g. Start-up/test Documents and Commissioning Reports

### **3.12 FIELD QUALITY CONTROL**

- A. Confirm Field Quality Control requirements in Division 00, Procurement and Contracting Requirements and Division 01, General Requirements, Section 27 00 00, Communications Basic Requirements and individual Division 27, Communications Sections.
- B. Tests:
  - (1) Conduct tests of equipment and systems to demonstrate compliance with requirements specified. Reference individual Specification Sections for

required tests. Document tests and include in Operation and Maintenance Manuals.

- (2) During site evaluations by Engineer, provide appropriate personnel with tools to remove and replace trims, covers, and devices so that proper evaluation of installation can be performed.

### **3.13 LETTER OF CONFORMANCE**

- A. Provide Letter of Conformance, copies of manufacturers' warranties and extended warranties with a statement that Communications items were installed in accordance with manufacturer's recommendations, UL listings and FM Global approvals. Include Letter of Conformance, copies of manufacturers' warranties and extended warranties in Operation and Maintenance Manuals.

END OF DOCUMENT

**SECTION 27 05 28**

**PATHWAYS FOR COMMUNICATIONS SYSTEMS**

**PART 1 - GENERAL**

**1.01 SUMMARY**

- A. Work Included:
  - (1) Raceway
  - (2) Rigid Metal Conduit and Fittings
  - (3) Conduit Accessories
  - (4) Penetration Sealing Systems
  - (5) Pull Boxes
  - (6) Innerduct
  - (7) Innerduct Fittings
  - (8) PVC Conduit
- B. This Section specifies the requirements to provide communications conduit raceways, boxes, cable trays, innerduct and fittings.

**1.02 RELATED SECTIONS**

- A. Contents of Division 27, Communications and Division 01, General Requirements apply to this Section.

**1.03 REFERENCES AND STANDARDS**

- A. References and Standards as required by Section 27 00 00, Communications Basic Requirements and Division 01, General Requirements.

**1.04 SUBMITTALS**

- A. Submittals as required by Section 27 00 00, Communications Basic Requirements and Division 01, General Requirements.
- B. In addition, provide:
  - (1) Plan drawings showing completions and as-built corrections which indicate type, size, placement, routing and/or length for raceway and cable tray components; e.g., manholes, handholes, conduit, boxes, enclosures, etc.

**1.05 QUALITY ASSURANCE**

- A. Quality assurance as required by Section 27 00 00, Communications Basic Requirements and Division 01, General Requirements.



**1.06 WARRANTY**

- A. Warranty of materials and workmanship as required by Section 27 00 00, Communications Basic Requirements and Division 01, General Requirements.

**1.07 DEFINITIONS**

- A. Cabinet: A freestanding floor-mounted modular enclosure designed to house and protect rack-mounted electronic equipment.
- B. Conduit: Round raceway.
- C. Conduit Body: Separate portion of a conduit or tubing system that provides access through removable cover(s) to the interior of the system at a junction of two or more sections of the system or at a terminal point of the system.
- D. Pull Box Enclosure: Box with a cover installed in one or more runs of raceway to facilitate pulling conductors through the raceway system. There are no openings in the cover.
- E. Raceway: Enclosed channel designed expressly for holding wires or cables. Metal or insulating material and the term includes conduit, tubing, wireways, underfloor raceways and surface raceways; does not include cable tray.
- F. Surface Raceway: Surface-mounted metal channel or plastic duct with snap-in removable covers for housing and protecting electrical wires and cables. Raceway and fittings are designed so sections can be electrically and mechanically coupled together without subjecting cables to abrasion.

**PART 2 - PRODUCTS**

**2.01 MANUFACTURERS**

- A. Raceway:
  - (1) Koppers Bitumastic
  - (2) Scotchwrap
  - (3) Or approved equivalent.
- B. Rigid Metal Conduit and Fittings:
  - (1) Sealing Fittings:
    - a. Crouse-Hinds
    - b. Or approved equivalent.
- C. Conduit Accessories:
  - (1) Duct Spacers:
    - a. Carlon
    - b. Allied Tube and Conduit

- c. Or approved equivalent.
  - (2) Expansion/Deflection Fittings:
    - a. Appleton
    - b. Emerson
    - c. Or approved equivalent.
  - (3) Pulltape:
    - a. George-Ingraham
    - b. Greenlee
    - c. Or approved equivalent.
  - (4) Duct Plugs:
    - a. Carlon
    - b. Vikimatic
    - c. Or approved equivalent.
- D. Penetration Sealing Systems:
  - (1) SEMCO
  - (2) Or approved equivalent.
- E. Pull Boxes:
  - (1) Hoffman
  - (2) Oldcastle (concrete)
  - (3) Or approved equivalent.
- F. Innerduct:
  - (1) Carlon
  - (2) Maxcell
  - (3) Or approved equivalent.
- G. Innerduct Fittings:
  - (1) Carlon
  - (2) Or approved equivalent.
- H. PVC Conduit:
  - (1) JM Eagle
  - (2) AFC Cable Systems
  - (3) International Metal Hose
  - (4) Or approved equivalent.

## **2.02 RACEWAYS**

- A. Raceways: Labeled and/or listed as acceptable to the AHJ as suitable for the use intended.
- B. Table 1: Product Identification:

Product Designation	Product Type
RGS	Rigid Galvanized Steel
CRS	PVC Externally Coated RGS
EMT	Galvanized Steel Tubing
PVC	Polyvinylchloride Conduit
LMC	Liquidtight Metal Conduit
LNC	Liquidtight Nonmetal Conduit

- C. The product identification codes used for the Communications Raceways and Boxes in Part 2, Products, are summarized in Table 1.
- D. Bitumastic material or plastic tape.

### 2.03 RIGID METAL CONDUIT AND FITTINGS

- A. Conduit:
- (1) Type RGS: Rigid galvanized steel.
  - (2) Type CRS: PVC externally coated conduit; rigid steel conduit with external PVC coating and internal galvanized surface.
- B. Fittings and Conduit Bodies: In-line straight-through, threaded, galvanized steel fittings and Type C conduit bodies only; do not use bends or tees, e.g., Lbs.
- (1) Bonding and Grounding Locknuts and Wedges: Malleable iron with set screws and lug screws.
  - (2) Insulated Bushing: Malleable iron with integral insulated throat, rated for 150C.
  - (3) Bonding and Grounding Bushing: Malleable iron with integral insulated throat, rated for 150C, with solderless lugs or lug screws.
  - (4) Sealing Fittings: Threaded type conduit seal fittings and sealing compound suitable for hazardous location installations in accordance with NEC:
    - a. Crouse-Hind retrofit sealing fitting EYSR.
    - b. Crouse-Hind CHICO A sealing compound.

### 2.04 CONDUIT ACCESSORIES

- A. Duct Spacers:
- (1) Nonmetallic base and intermediate duct spacers with locking keyways designed specifically for use with nonmetallic conduit; e.g., Carlon SNAP-LOC duct spacers for 4-inch diameter conduit with 1-1/2-inch separation.
  - (2) Base Spacer: S288NHN.
  - (3) Intermediate Spacer: S289NHN.
- B. Expansion/Deflection Fittings: Similar to Crouse-Hinds XD expansion/deflection coupling or Appleton DF Series deflection and expansion coupling.

- C. Pulltape: Measuring and pulling tape constructed of synthetic fiber with plastic jacket, printed with accurate sequential footage marks; e.g., George-Ingraham 1/2-inch tape 9216-JK.
- D. Duct Plugs:
  - (1) Aboveground Conduit Openings: Tapered PVC plugs with tab for pulltape; e.g., Carlon 4-inch PVC plugs with pull tab, P258NT.
  - (2) Underground or Underslab Conduit Openings: Removable screwtight compression type duct plugs with wing-nut and corrosion resistant hardware; e.g. Vikimatic 4-inch, Part Number 40D402U. Use appropriate part number according to duct size.

## **2.05 PENETRATION SEALING SYSTEMS**

- A. Firestopping: Provide fire barrier penetration sealing materials as specified in Division 07, Firestopping Section.
- B. Duct Water Seal: Products suitable for closing underground and entrance duct openings, where innerduct or cable is installed, to prevent entry of gases, liquids, or rodents into the structure; e.g., SEMCO PR 851.

## **2.06 PULL BOXES**

- A. Construction: NEMA Standard No. 250. Type 1 galvanized steel enclosures designed for use as junction boxes and pull boxes with flat screw-applied covers, with or without knockouts and gray enamel finish.

## **2.07 INNERDUCT**

- A. Outdoor Innerduct: 1-inch inside diameter corrugated, ribbed, or smooth walled, semi rigid PVC or heavy-wall polyethylene tubing.
- B. Indoor Innerduct: 1-inch inside diameter corrugated, ribbed, or smooth walled, semi rigid nonflammable PVC tubing, which meets UL94V-O vertical flame test for general applications.
- C. Plenum-Listed Indoor Innerduct: 1-inch inside diameter corrugated walled innerduct for use in plenum air handling spaces.
- D. Outdoor plenum-rated two-cell fabric innerduct with pull string. Maxcell or approved equivalent.

## **2.08 INNERDUCT FITTINGS**

- A. Couplings: Metallic or nonmetallic quick-connect, reverse threaded and Schedule 40 couplings for connecting sections of installed innerduct.

- B. Conduit Plugs: Compression-type conduit plugs with locking nuts for sealing and securing the outside walls of one or more innerduct ends to the inside wall of 4-inch inside diameter conduits, e.g.:
  - (1) Four 1-inch innerduct configuration.
  - (2) Three 1-1/4-inch innerduct configuration.
- C. Innerduct Plugs: 1-inch compression-type innerduct plugs for sealing innerducts, with wing nut for hand tightening and eyebolt for securing pulltape.
- D. Innerduct Caps: Removable push-in caps for plugging 1-inch innerduct.

## **2.09 PVC CONDUIT**

- A. 1-inch to 4-inch polyvinylchloride conduit.

## **PART 3 - EXECUTION**

### **3.01 GENERAL INSTALLATION REQUIREMENTS:**

- A. Workmanship:
  - (1) Provide, condition, apply, install, connect and test manufactured products, materials, equipment and components in accordance with the manufacturer's specifications and printed instructions.
  - (2) The installation of system components to be carried out under the direction of qualified personnel. Appearance to be considered as important as mechanical and electrical efficiency. Workmanship to meet or exceed industry standards.
  - (3) Place support for raceways, cable trays, backboards, equipment racks and cabinets.
- B. Protection During Construction: Protect products from the effects of moisture, corrosion and physical damage during construction. Except during installation activity in a section, keep openings in conduit, tubing and wireway capped with manufactured seals during construction.
- C. Concrete Sleeves: Conduits routed perpendicular through floors, walls, or other concrete structures to pass through cast-in-place conduit sleeve openings wherever possible, or appropriate size holes to be bored to accommodate the installation of conduit sleeves. The size and location of the holes to not impair the structure's integrity.
  - (1) Concrete Boring: Bore a hole in the concrete with a diameter of 1/2 to 1-inch larger than the conduit sleeve to be installed. Grout around the conduit sleeve and finish to match existing surroundings.
  - (2) Conduits that rise vertically through a slab to be stubbed 6-inches above the floor and capped pending future use.

- D. Drywall/Gypsum Board Sleeves: Install insulating throat bushings on both ends of conduit sleeves placed in fire-rated walls using drywall construction.
- E. Where conduit enters a structure through a concrete roof or membrane waterproofed wall or floor:
  - (1) Provide a watertight seal.
  - (2) With Concrete Encasement: Install watertight entrance seal device on the accessible side.
  - (3) Securely anchor malleable iron body of watertight entrance seal device into construction with one or more integral flanges.
  - (4) Secure membrane waterproofing to watertight entrance seal device in a permanent, watertight manner.
- F. Provide continuous sleeving through walls, floors and ceilings separating each telecom outlet from its respective MER/TR room, using sleeve conduit size as required per Standards. Restore penetrations through rated assemblies to original fire rating per NFPA and local codes.
- G. Locate sleeves as shown on Drawings. Where sleeves are not shown on Drawings, install sleeves above suspended ceilings and locate to minimize length of pathway for future cable from telecom outlet to MER/TR rooms.
- H. Where sleeves are routed between rooms with floating ceilings, extend conduits horizontally 2-feet over edge of floating ceiling to avoid exposed cabling from being seen at floor level.
- I. Make floor penetrations no more than 4-inches from wall. Install conduit stubs to extend 4-inches from floor base. Cap conduits for protection.
- J. Provide removable heat-expanding pillows at fire barrier penetrations as specified in Firestopping section and described as Firestop Material Type 7 (indicated as FSM-7).
- K. Grounding: Provide ground connections and bonding continuity between raceway and wire basket runway sections, boxes, enclosures, cabinets and fittings as required per code and industry standard.
- L. Provide plenum rated products, components and accessories for installation in plenums.

### **3.02 RACEWAYS**

- A. Reference 3.01, General Installation Requirements.
- B. Install per manufacturer's written instructions and recommendations.
- C. Raceway Identification Banding:

- (1) Degrease and clean surfaces to receive tape labels.
- (2) Exposed conduits and wireway, including raceways above lay-in or accessible ceilings, together with associated pull boxes to be banded at intervals of not over 10-feet and at direction changes. Two-band identification to be different contrasting colors as follows:

<b>Raceway Use</b>	<b>Color</b>
Grounding	Green
Telecom/datacom	Yellow
CCTV	White
Building monitoring and security	Grey

### **3.03 RIGID METAL CONDUIT AND FITTINGS**

- A. Reference 3.01, General Installation Requirements.
- B. Install per manufacturer's written instructions and recommendations.
- C. Conduit Type:
  - (1) Install the following types of circular communications raceway in the locations listed unless otherwise indicated on the Drawings.
    - a. Exterior, Exposed Including Roof: Rigid steel conduit.
- D. Conduit Bends and Sweeps:
  - (1) Make changes in direction of communications conduit runs with sweeps of the longest possible radius.
  - (2) Make sweeps in parallel or banked runs of conduits, 2-inches and larger in diameter, from the same center or centerline so that sweeps are parallel and of neat appearance.
  - (3) Field-Made Bends and Sweeps:
    - a. Use an acceptable hickey or conduit-bending machine.
    - b. Do not heat metal raceways to facilitate bending.
    - c. Before installing 4-inch field-made sweeps in duct banks, pull a 3-1/2-inch diameter by 12-inch long mandrel through duct sections to verify circularity and sweep radius.
  - (4) The angular sum of the bends between pull points and/or pull boxes to not exceed 180 degrees.
  - (5) Minimum Inside Bend Radius for Communications Conduit Bends, Sweeps, Boxes and Fittings:
    - a. One-inch conduit, 11-inches
    - b. Two-inch conduit, 21-inches
    - c. Three-inch conduit, 36-inches
    - d. Four-inch conduit, 48-inches
    - e. Other sizes, 10 times the inside diameter of the conduit.

- (6) Do not install boxes, bends, elbows, tees, conduit bodies and other conduit fittings, which do not provide for the minimum inside cable bend radius specified in paragraph E above.
  - a. Conduit Bodies: In-line straight-through Type C conduit fittings can be used as pull boxes for conduit up to a maximum of 2-inches ID. Other conduit fittings, which include direction changes such as E, L, LB, LR, LL, LRT, TA, TB and X, are not allowed.
  - b. Refer design or installation conflicts with these requirements to the Engineer.
- E. Aboveground Conduit Installation:
  - (1) Support conduit installed in aboveground interior and exterior locations at a maximum of 7-feet on center.
  - (2) Group conduit in parallel runs where practical and use conduit rack constructed of steel channel with conduit straps or clamps.
  - (3) Securely attach aboveground conduit under the provisions of this Section.
  - (4) Only conduit servicing elevator equipment can be installed through elevator shafts or equipment rooms. These conduits may only enter the room and go directly to the equipment being supplied.
  - (5) Keep power wiring independent of communication system wiring.
  - (6) Arrange conduit to maintain headroom and present neat appearance.
  - (7) Do not install conduits on surface of building exterior, across roof, on top of parapet walls, or across floors, unless otherwise noted on drawings.
  - (8) Exposed conduits are permitted only in the following areas:
    - a. Mechanical rooms, electrical rooms or spaces where walls, ceilings and floors will not be covered with finished material.
    - b. Existing walls that are concrete or block construction.
    - c. Where specifically noted on drawings.
    - d. Route exposed conduit parallel and perpendicular to walls, tight to finished surfaces and neatly offset into boxes.
  - (9) Do not install conduits or other electrical equipment in obvious passages, doorways, scuttles or crawl spaces which would impede or block area passage's intended usage.
  - (10) Keep conduits a minimum of 12-inches away from steam or hot water radiant heating lines (at or above 104 degrees F) or 3-inches away from waste or water lines.
  - (11) Run exposed and concealed conduits parallel or perpendicular to walls, structural members, or intersections of vertical planes to provide a neat appearance. Follow surface contours as much as possible.
  - (12) No section of conduit located within buildings to exceed 100-feet in length between pull points and/or pull boxes.
  - (13) Expansion/Deflection Joints:
    - a. Where indicated on the Drawings, provide specific purpose expansion/deflection fittings for conduit crossing building



- expansion/deflection joints in structures or concrete slabs.  
Expansion fittings to have copper bonding jumper.
- b. For PVC conduit, provide expansion/deflection joints for 25 degrees F maximum temperature variation. Install in accordance with manufacturer's written instructions.
- c. For rigid steel conduit located in exterior areas, provide expansion/deflection joints for maximum site temperature variation, installed in accordance with manufacturer's written instructions.
- (14) Provide each conduit passing from a nonhazardous or noncorrosive area to a hazardous area and each conduit entering an enclosure within a hazardous area with a sealing fitting in accordance with NEC Article 500. The sealing fitting is to be UL listed and to be filled with approved sealing compound of the same manufacture.
- (15) Hubs, Bushings and Insulating Sleeves:
  - a. Interior Box and Cabinet Connections: Install insulating throat connectors wherever conduit terminates in boxes or cabinets. In addition, install bonding type locknuts at metallic conduit terminations.
  - b. Wet and Hazardous Box and Cabinet Connections: Use watertight threaded conduit sealing hubs with insulated throat and bonding type locknuts for fastening rigid steel conduit to cast or sheet metal pull boxes.
  - c. Exposed Conduit Terminations: Cap exposed steel communication conduit ends with bushings or smooth collars to protect cable sheath.
- F. Pulltape and Duct Plugs:
  - (1) Following conduit installation, install pulltape (muletape) with preprinted foot markers in each empty conduit containing a bend or over 10-feet in length, except sleeves and nipples. Tie the pulltapes securely at each end.
  - (2) Immediately after pulltape installation, install removable manufactured plugs in empty conduit and wireway openings. For underground conduit openings, use screwtight, removable, watertight and dust-tight duct plugs.
  - (3) Verify lengths at the time of installation and provide as-built documentation.

### **3.04 CONDUIT ACCESSORIES**

- A. Reference 3.01, General Installation Requirements.
- B. Install per manufacturer's written instructions and recommendations.
- C. Duct Spacers: Install per manufacturer's recommendation.
- D. Expansion/Deflection Fittings: Install per manufacturer's recommendation.

- E. Pulltape: Install per manufacturer's recommendation.
- F. Duct Plugs: Install per manufacturer's recommendation.

### **3.05 PENETRATION SEALING SYSTEMS**

- A. Reference 3.01, General Installation Requirements.
- B. Install per manufacturer's written instructions and recommendations.
- C. Seal conduit entering structures at the first box or outlet to prevent the entrance of gases, liquids, or rodents into the structure.
  - (1) Empty Conduits: Removable screwtight duct plugs.
  - (2) Innerduct Installed: Suitable duct water seal between conduit and innerduct. Manufactured seals in empty innerduct.
  - (3) Cable Installed: Suitable duct water seal between conduit and cable, or between innerduct and cable.

### **3.06 PULL BOXES**

- A. Reference 3.01, General Installation Requirements.
- B. Install per manufacturer's written instructions and recommendations.
- C. In-Ground: Size and install per manufacturer's recommendations.
- D. Aboveground: Size and install per manufacturer's recommendations.

### **3.07 INNERDUCT**

- A. Reference 3.01, General Installation Requirements.
- B. Install per manufacturer's written instructions and recommendations.
- C. Innerduct Type:
  - (1) Underslab and Underground Conduit Installation: Outdoor innerduct.
  - (2) Aboveground, Exterior and Interior Conduit Installations: Indoor innerduct.
  - (3) Interior Exposed Locations Including Cable Tray Installations:
    - a. Nonplenum Areas: Indoor innerduct.
    - b. Plenum Areas: Plenum-listed innerduct.
- D. Pull innerduct through conduit and wireways, or place innerduct in cable trays using continuous unspliced lengths of innerduct between pull boxes and/or section termination points as indicated on the Drawings.
- E. Cut innerduct square. Deburr cut ends.

- F. Bring innerduct to the shoulder of fittings and couplings and fasten securely.
- G. Wipe innerduct and fittings clean and dry before joining. Apply full, even coat of cement to entire area that will be inserted into fitting. Let joint cure for 20 minutes minimum.
- H. Provide suitable innerduct slack in pull boxes and at turns to ensure that there is no kinking or binding of the tubing or cable.
- I. Make changes in direction of communications innerduct runs with sweeps of the longest possible radius and at least 10 times the inside diameter of the innerduct.
- J. During innerduct pulling, avoid excessive tension which can damage the innerduct. Inspect innerduct following placement and replace damaged sections.
- K. Indoor Conduit Installation:
  - (1) Arrange innerduct neatly, cut to proper length and remove surplus. Provide trained and bundled innerduct pigtails extending at least 18-inches beyond exposed conduit openings.
  - (2) At locations where the ends of innerduct sections appear in a pull box, join the pulltape and then splice innerduct sections together using couplers which do not reduce the inside diameter of the innerduct.
- L. Cable Tray Installation: Tie wrap or Velcro innerduct to one side of vertical ladder rack every 2-feet minimum and to one side of horizontal ladder-type cable tray every 5-feet minimum.
- M. Following installation, visually inspect innerduct, remove burrs at openings and, if necessary, clean innerduct interior.
- N. Innerduct Pull Tape and Duct Plug Installation:
  - (1) Following innerduct installation, install pulltape (muletape) with preprinted foot markers in innerduct sections. Tie the pulltape securely at each end.
  - (2) Verify lengths at the time of installation and provide as-built documentation.
  - (3) Following innerduct and pulltape installation, cap or plug innerduct with manufactured seals to prevent moisture or foreign matter from entering until cable installation starts. Seal duct openings in underground or underslab innerduct sections immediately after installation using screwtight, removable, watertight and dust-tight duct plugs.

### **3.08 INNERDUCT FITTINGS**

- A. Reference 3.01, General Installation Requirements.
- B. Install per manufacturer's written instructions and recommendations.

- C. Wipe fittings clean and dry before joining. Apply full, even coat of cement to entire area that will be inserted into the fitting. Allow joints/assembly to cure for 20 minutes, minimum.
- D. Install per manufacturer's recommendations.

**3.09 PVC CONDUIT**

- A. Reference 3.01, General Installation Requirements.
- B. Install per manufacturer's instructions and recommendations.

END OF DOCUMENT

**SECTION 27 13 00**

**COMMUNICATIONS BACKBONE CABLING**

**PART 1 - GENERAL**

**1.01 SUMMARY**

- A. Work included:
  - (1) Fiber Optic Backbone Cable
  - (2) Fiber Optic Termination Hardware
  - (3) Fiber Patch Cords

**1.02 RELATED SECTIONS**

- A. Contents of Division 27, Communications and Division 01, General Requirements apply to this Section.

**1.03 REFERENCES AND STANDARDS**

- A. References and Standards as required by Section 27 00 00, Communications Basic Requirements and Division 01, General Requirements.
- B. In addition, meet the following:
  - (1) NFPA 780, Standards for Installation of Lightning Protection Systems.

**1.04 SUBMITTALS**

- A. Submittals as required by Section 27 00 00, Communications Basic Requirements and Division 01, General Requirements.
- B. In addition, provide:
  - (1) Shop Drawings that include, but are not limited to, the following: Telecommunication Room layout, Telecommunication Room wall elevations, equipment rack elevations, cable routing, cable connecting diagrams, termination pin outs, supporting hardware details, block diagrams, riser diagrams and cable pathways. Work may not begin until shop drawings are approved. Note: Intent of submitting shop drawings is for contractors to display a conceptual understanding of the issued Engineer drawings. Do not submit Engineer Drawings on your title block.
  - (2) Procedures for cable labeling and identification, long term documentation methods and numbering scheme in accordance with ANSI/TIA/EIA- 606-A.
  - (3) A copy of certified installer certificates and warranty certificates for products proposed.

**1.05 QUALITY ASSURANCE**

- A. Quality assurance as required by Section 27 00 00, Communications Basic Requirements and Division 01, General Requirements.
- B. Manufacturers to have a recognized certified installer program in place for system components proposed. Cable will be approved with manufacturer system installed.

**1.06 WARRANTY**

- A. Warranty of materials and workmanship as required by Section 27 00 00, Communications Basic Requirements and Division 01, General Requirements.
- B. In addition, provide:
  - (1) Labor, materials and documentation according to selected manufacturer requirements necessary to ensure that the Owner will be furnished with an Extended Product Warranty and Application Assurance of a minimum of 20 years in length. The Application Assurance Warranty will cover the failure of the wiring system to support current or future applications that are designed for the link/channel specifications of ANSI/TIA/EIA-568-C. These applications include, but are not limited to, 10BASE-T, 100BASE-T, 1000BASE-T, 10GBASE-T and 155 Mb/s ATM.
  - (2) Provide a warranty on the physical installation.
  - (3) Furnish necessary documentation required by the manufacturer immediately following 100 percent testing of cables.
  - (4) Administer the warranty process with the responsible manufacturer's representative. Provide warranty directly to the Owner from the manufacturer. Ensure that the manufacturer provides the Owner with the appropriate warranty certification within 90 calendar days of the final project completion.

**1.07 SYSTEM DESCRIPTION**

- A. Provide a standards-based cable system to serve backbone communication systems requirements as specified in these specifications and shown on Drawings. Closely follow ANSI/TIA/EIA, IEEE and ISO standards which apply to backbone communication systems.
- B. Install interbuilding (OSP) backbone cables from EF to ERs through duct and tunnel raceway systems as shown on Drawings.

**PART 2 - PRODUCTS**

**2.01 MANUFACTURERS**

- A. Fiber Optic Backbone Cable:

- (1) CommScope Systimax or Uniprise
  - (2) Corning - fiber optic only
  - (3) Leviton
  - (4) Ortronics/Superior Essex
  - (5) Or approved equivalent.
- B. Fiber Optic Termination Hardware:
- (1) CommScope Systimax or Uniprise
  - (2) Corning - fiber optic only
  - (3) Leviton
  - (4) Ortronics/Superior Essex
  - (5) Or approved equivalent.
- C. Fiber Patch Cords:
- (1) CommScope Systimax or Uniprise
  - (2) Corning - fiber optic only
  - (3) Leviton
  - (4) Ortronics/Superior Essex
  - (5) Or approved equivalent.

## **2.02 FIBER OPTIC BACKBONE CABLE**

- A. Interbuilding Singlemode: 24 strand, 8.3 micron, high performance low water peak loose tube cable with maximum attenuation of 0.35 dB/km at 1310 nm and 0.25 dB/km at 1550 nm.

## **2.03 FIBER OPTIC TERMINATION HARDWARE**

- A. High Density Fiber Termination Shelf:
- (1) 3.5-inch high shelf designed for mounting in 19-inch equipment racks and capable of accepting 6 adapter panels. The shelf will contain built-in slack management and be accessible from the front or rear with locking doors.
    - a. 19-inch rack mount, 13-inches deep.
    - b. 19-inch rack mount, 19-inches deep.
  - (2) Fiber Adapter Panels:
    - a. Adapter panel for high density termination shelf with 6 LC multimode phosphor-bronze alignment sleeves.
- B. Singlemode LC Connector:
- (1) Ceramic tip LC style capable of being terminated on 8.3/125 fiber with 900 micron buffer.

## **2.04 FIBER PATCH CORDS**

- A. Singlemode Fiber Optic Jumpers:

- (1) Factory terminated double ended, two strand singlemode cordage with LC connectors on each end, length as defined by the Owner.

### **PART 3 - EXECUTION**

#### **3.01 GENERAL INSTALLATION REQUIREMENTS**

- A. Miscellaneous Hardware: Provide supporting hardware, cable ties, labels, underground vault racking, bullet bonds, gel blocking kits, pull rope and other miscellaneous hardware for a complete and operable system.
- B. Provide like items from one manufacturer, such as jacks, patch panels, equipment connection cords and wall plates.
- C. Communications Backbone Cabling includes cables, jacks, patch panels, connecting blocks and patch cords, as well as the necessary support systems, such as cable managers, tie wraps and D-rings.
- D. Furnish and install materials necessary for a complete and working system.
- E. Contractor must be a Certified Installer for selected manufacturer prior to, during and through completion of the system installation and must be able to provide the manufacturer's extended warranty.
- F. Perform work in a neat and workmanlike manner.
- G. Firestopping: Install all firestop systems in accordance with manufacturer's recommendations. Firestop systems to be completely installed and available for inspection by local inspection authorities prior to cable system acceptance.
- H. Install cable after interior of building has been physically protected from the weather and mechanical work likely to damage cabling has been completed.
- I. Before installing cabling, ensure cable pathways are completely and thoroughly cleaned:
  - (1) Inspect conduit, wireway, cable trays and innerduct systems prior to installation.
  - (2) Swab any additional enclosed raceway and innerduct systems.
- J. Provide protection for exposed cables where subject to damage. Provide abrasion protection for any cable or wire bundles, which pass through holes or across edges of sheet metal.
- K. Install cable ties and other cable management clamps via hand so they fit snugly. Do not over tighten or use mechanical tools which could compress, crimp, or otherwise change the physical characteristics of the cable jacket or distort the



placement of twisted-pair components. Replace any cable exhibiting stresses due to over tightening of cable management devices.

- L. Where possible, route cables in overhead cable trays and inside wire management systems attached to the equipment cabinets and racks. Use Velcro ties or ducts to restrain cabling installed outside of wire management systems on racks or in cabinets.
- M. Limit cable raceway fill to less than the TIA/EIA-569-B maximum fill for the particular raceway type.
- N. If a J-hook or trapeze system is used to support cable bundles, support cables at a maximum of 48 to 60-inch intervals. Cables are prohibited to rest on acoustic ceiling grids or panels.
- O. Cable sizes are shown on Drawings. Verify as a minimum, two cable pairs are provided for each telephone user outlet. Install specified fiber optic cable between TRs as shown on drawings.
- P. Install cable above fire-sprinkler systems and ensure the cable does not attach to the system or any ancillary equipment or hardware. Install cable system and support hardware so it does not obscure any valves, fire alarm conduit, boxes, or other control devices.
- Q. Do not attach cables to ceiling grid or lighting fixture wires. Where support for cable is required, install appropriate carriers to support the cabling.
- R. Any cable damaged or exceeding recommended installation parameters during installation will be replaced by the contractor prior to final acceptance at no cost to the Owner.
- S. Provide the following minimum separation distances between pathways for copper communications cables and power wiring of 480 volts or less:
  - (1) Open or Nonmetal Communications Pathways:
    - a. 12-inches from electric motors, fluorescent light fixtures and unshielded power lines carrying up to 3 kVA.
    - b. 36-inches from electrical equipment and unshielded power lines carrying more than 5 kVA.
    - c. 48-inches from large electrical motors or transformers.
  - (2) Grounded Metal Conduit Communications Pathways:
    - a. 2-1/2-inches from electrical equipment and unshielded power lines carrying up to 2 kVA.
    - b. 6-inches from electrical equipment and unshielded power lines carrying from 2 kVA to 5 kVA.
    - c. 12-inches from electrical equipment and unshielded power lines carrying more than 5 kVA.

- d. 3-inches from power lines enclosed in a grounded metal conduit (or equivalent shielding) carrying from 2 kVA to 5 kVA.
  - e. 6-inches from power lines enclosed in a grounded metal conduit (or equivalent shielding) carrying more than 5 kVA.
- T. Determine requirements for plenum rated cable and devices. When doubt exists, seek prior determination in writing by AHJ.
- U. Seal conduits entering from outside the building and install listed firestop material in conduits and sleeves to satisfy NEC and local codes.
- V. Testing Procedures:
  - (1) Test cables and termination hardware for defects in installation and to verify cabling system performance under installed conditions according to the requirements of ANSI/TIA/EIA-568-C. Verify pairs of each installed cable prior to system acceptance. Repair or replace any defect in the cabling system installation including but not limited to cable, connectors, feed through couplers, patch panels and connector blocks in order to ensure 100 percent useable conductors in cables installed.
  - (2) Test cables in accordance with this document, the ANSI/TIA/EIA standards, the manufacturer's procedures and best industry practice. If any of these are in conflict, bring any discrepancies to the attention of the project team for clarification and resolution.
  - (3) Follow the Standards requirements established in ANSI/TIA/EIA-568-C.
  - (4) Perform testing with a Level IV tester The basic tests required are:
    - a. Wire Map
    - b. Length
    - c. Attenuation
    - d. NEXT (Near end crosstalk)
    - e. Return Loss
    - f. ELFEXT Loss
    - g. Propagation Delay
    - h. Delay skew
    - i. PSNEXT (Power sum near-end crosstalk loss)
    - j. PSELFEXT (Power sum equal level far-end crosstalk loss)
  - (5) Provide test results in electronic format, with the following minimum information per cable:
    - a. Circuit ID
    - b. Test result, "Pass" or "Fail"
    - c. Date and Time of test
    - d. Project Name
  - (6) Fiber Test Documentation: Provide electronic CD disk and hard copy test reports from ANSI/TIA/EIA-526-14A Method B Standards. Calculate a "Loss Budget" for each cable length based on cable length and connectors. Provide as a minimum, OTDR test results in the form of a printed

waveform and text table for both 850 nm and 1300 nm for multimode fiber and 1350 nm and 1510 nm for singlemode fiber. Test fibers and connector systems for end-to-end attenuation. Provide a power meter test on fiber optic strands at both wavelengths A to B, B to A and OSPL (OSPL is as defined as  $L_a + L_b$ ). Include the results of unsatisfactory tests, with an explanation of how the problem was corrected. Clearly label connector and fiber loss on test waveforms.

- (7) Provide an electronic copy of the test results, in the native tester software format, to the Engineer along with the printed test results.
- (8) Provide a fully functional version of the tester software for use by the Engineer in reviewing the test results.

### **3.02 FIBER OPTIC BACKBONE CABLE**

- A. Install per manufacturer's instructions and recommendations.
- B. Reference 3.01, General Installation Requirements.
- C. Place fiber optic cable so as to maintain the minimum cable bend radius limits specified by the manufacturer or ten times the cable diameter, whichever is larger.
- D. Place fiber optic cable runs in innerduct. Use care when handling fiber optic cable. Carefully monitor pulling tension so as not to exceed the limits specified by the manufacturer.
- E. Terminate fiber optic cable in rack-mounted fiber optic termination units at each end using standard LC style bulkhead connectors.
- F. Splicing of fiber optic cable is prohibited.
- G. Labeling:
  - (1) Label cables using a machine printed label at each end of the cable at approximately 6-inches of the termination point. Do not use handwritten labels.
  - (2) Labels to denote to and from with room names and numbers.
  - (3) Provide the final cable ID matrix to the Owner one week prior to cable installation.
  - (4) Note labeling information on the As-Built Drawings.

### **3.03 FIBER OPTIC TERMINATION HARDWARE**

- A. Install per manufacturer's instructions and recommendations.
- B. Reference 3.01, General Installation Requirements.
- C. Neatly coil fiber slack within the fiber space tray or enclosure.

- D. Individually attach each cable to its respective fiber enclosure by mechanical means. Securely attach the cable strength member to the cable strain-relief bracket in the enclosure.
- E. Strip each fiber bundle upon entering the splice tray and the individual fibers routed in the splice tray.
- F. Splice no more than 12 strands of fiber in each tray.
- G. Install all spare strands into spare splice trays.
- H. Clearly label each cable at the entrance to the enclosure. Cables labeled within the bundle will not be accepted.

### **3.04 FIBER PATCH CORDS**

- A. Install per manufacturer's instructions and recommendations.
- B. Reference 3.01, General Installation Requirements.
- C. Provide sufficient duplex fiber optic patch cords at each fiber termination point to cross-connect one-half the number and type of fibers terminated there, Assume a minimum of two duplex fiber optic jumpers per termination point for a 6-strand optical fiber. Provide lengths for a neat appearance not to exceed 15-feet. Coordinate connector requirements with Owner or Owner's Representative.
- D. Field terminated patch cords are not allowed.

**END OF DOCUMENT**