

City of San Diego

CONTRACTOR'S NAME: SOLPAC Construction, Inc.
ADDRESS: 2424 Congress Street, San Diego, CA 92110
TELEPHONE NO.: 619-296-6247 **FAX NO.:** 619-296-4314
CITY CONTACT: Angelica Gil, **Contract Specialist, Email:** AngelicaG@sandiego.gov
Phone No. (619) 533-3622
M. Garcia-Quilico / A. Jaro / LJI

BIDDING DOCUMENTS



FOR

CALIFORNIA TOWER SEISMIC RETROFIT

BID NO.: K-19-1560-DBB-3
SAP NO. (WBS/IO/CC): L-12003.2
CLIENT DEPARTMENT: 1714
COUNCIL DISTRICT: 3
PROJECT TYPE: BT
FEDERAL AID PROJECT NO.: CAL OES PROJECT ID# 073-66000

THIS CONTRACT WILL BE SUBJECT TO THE FOLLOWING:

- FEDERAL EQUAL OPPORTUNITY CONTRACTING REQUIREMENTS.
- PREVAILING WAGE RATES: STATE FEDERAL
- APPRENTICESHIP
- THIS IS A FEMA/CAL OES FUNDED CONTRACT THROUGH THE CAL OES GOVERNOR'S OFFICE OF EMERGENCY SERVICES.

BID DUE DATE:

2:00 PM

OCTOBER 9, 2018

CITY OF SAN DIEGO

PUBLIC WORKS CONTRACTS

525 B STREET, SUITE 750, MS 908A

SAN DIEGO, CA 92101

ENGINEER OF WORK

The engineering Specifications and Special Provisions contained herein have been prepared by or under the direction of the following Registered Engineer:

Anthony B. Court

8-24-2018

Seal:



1) Registered Engineer

Date

George Salim F. Fetha

8-24-2018

Seal:



2) For City Engineer

Date

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NOTICE INVITING BIDS

1. **SUMMARY OF WORK:** This is the City of San Diego's (City) solicitation process to acquire Construction services for **California Tower Seismic Retrofit**. For additional information refer to Attachment A.
2. **FULL AND OPEN COMPETITION:** This contract is open to full competition and may be bid on by Contractors who are on the City's current Prequalified Contractors' List. For information regarding the Contractors Prequalified list visit the City's web site: <http://www.sandiego.gov>.
3. **ESTIMATED CONSTRUCTION COST:** The City's estimated construction cost for this project is **\$2,620,000**.
4. **BID DUE DATE AND TIME ARE: October 9, 2018 at 2:00 PM.**
5. **PREVAILING WAGE RATES APPLY TO THIS CONTRACT:** Refer to Attachment D.
6. **LICENSE REQUIREMENT:** The City has determined that the following licensing classification(s) are required for this contract: **B**
7. **SUBCONTRACTING PARTICIPATION PERCENTAGES:** Subcontracting participation percentages apply to this contract.
 - 7.1. The City affirms that in any contract entered into pursuant to this advertisement, DBE firms will be afforded full opportunity to submit Bids in response to this invitation.
 - 7.2. This Federally assisted project includes subcontracting participation percentages for DBE participation. DBE goal commitments and Good Faith Efforts (GFE) shall be made prior to bidding. DBE commitments and GFE made after the Bid opening will not be considered for the Award of Contract.
 - 7.3. This project is subject to the federal equal opportunity regulations and the following requirements. The City reserves the right to audit the Contractor's compliance with the federal requirements set forth below.
 - 7.4. Following are federally subcontracting participation percentages for this contract. For the purpose of achieving the subcontractor participation percentage, Additive or Deductive, and Type II Allowance Bid Items will not be included in the calculation.

7.5. Federal Emergency Management Agency,:

- 1. Small Disadvantaged Business (SDB): 5%
- 2. Women-Owned Small Business (WoSB): 5%
- 3. HUBZone Small Business (HubZone): 3%
- 4. Service Disabled Veteran-owned Small Business (SDVoSB): 3%

7.6. Bid may be **declared non-responsive** if the Bidder fails any of the following conditions:

- 1. Submission of GFE documentation, as specified in the Special Provisions.
- 2. Bidder's submission of Good Faith Effort documentation, saved in searchable Portable Document Format (PDF) and stored on Compact Disc (CD) or Digital Video Disc (DVD), demonstrating the Bidder made a good faith effort to outreach to and include DBE Subcontractors shall be submitted within **4 Working Days** of the Bid opening.

8. PRE-BID SITE VISIT: All those wishing to submit a bid **MUST** visit the Work Site with the Engineer. The purpose of the Site visit is to acquaint Bidders with the Site conditions. To request a sign language or oral interpreter for this visit, call the Public Works Contracts at (619) 533-3450 at least 5 Working Days prior to the meeting to ensure availability. The Pre-Bid Site Visit is scheduled as follows:

Time: September 19, 2018
Date: 1:30 PM
Location: 1350 El Prado, San Diego, CA 92101

9. AWARD PROCESS:

- 9.1.** The Award of this contract is contingent upon the Contractor's compliance with all conditions of Award as stated within these documents and within the Notice of Intent to Award.
- 9.2.** Upon acceptance of bids and determination of the apparent low bidder, the City will prepare the contract documents for execution within approximately 21 days of the date of the bid opening. The City will then award the contract upon receipt of properly signed Contract, bonds, and insurance documents.
- 9.3.** This contract will be deemed executed and effective only upon the signing of the Contract by the Mayor or his designee and approval as to form by the City Attorney's Office.

- 9.4. The low Bid will be determined by Base Bid alone plus all Alternates.
- 9.5. Once the low bid has been determined, the City may, at its sole discretion, award the contract for the Base Bid alone plus one or more alternates.

10. SUBMISSION OF QUESTIONS:

- 10.1. The Director (or Designee) of the Public Works Department is the officer responsible for opening, examining, and evaluating the competitive Bids submitted to the City for the acquisition, construction and completion of any public improvement except when otherwise set forth in these documents. Any questions related to this solicitation shall be submitted to:

Public Works Contracts
525 B Street, Suite 750, MS 908A
San Diego, California, 92101
Attention: Angelica Gil

OR:

AngelicaG@sandiego.gov

- 10.2. Questions received less than 14 days prior to the date for opening of Bids may not be considered.
- 10.3. Questions or clarifications deemed by the City to be material shall be answered via issuance of an addendum and posted to the City's online bidding service.
- 10.4. Only questions answered by formal written addenda shall be binding. Oral and other interpretations or clarifications shall be without legal effect. It is the Bidder's responsibility to be informed of any addenda that have been issued and to include all such information in its Bid.

11. ADDITIVE/DEDUCTIVE ALTERNATES:

- 11.1. The additive/deductive alternates have been established to allow the City to compare the cost of specific portions of the Work with the Project's budget and enable the City to make a decision whether to incorporate these portions prior to award. The award will be established as described in the Bid. The City reserves the right to award the Contract for the Base Bid only or for the Base Bid plus one or more Alternates.

INSTRUCTIONS TO BIDDERS

1. PREQUALIFICATION OF CONTRACTORS:

- 1.1. Contractors submitting a Bid must be pre-qualified for the total amount proposed, including all alternate items, prior to the date of submittal. Bids from contractors who have not been pre-qualified as applicable and Bids that exceed the maximum dollar amount at which contractors are pre-qualified may be deemed **non-responsive** and ineligible for award.
- 1.2. The completed application must be submitted online no later than 2 weeks prior to the bid opening.
- 1.3. **Joint Venture Bidders:** For projects with an engineer's estimate of \$30,000,000 or greater, Joint Ventures submitting bids may be deemed responsive and eligible for award if the cumulative maximum bidding capacity of the individual Joint Venture entities is equal to or greater than the total amount proposed. Each of the entities of the Joint Venture must have been previously prequalified at a minimum of \$15,000,000. The Joint Venture designated as the Apparent Low Bidder shall provide evidence of its corporate existence and furnish good and approved bonds in the name of the Joint Venture within 14 Calendar Days of receipt by the Bidder of a form of contract for execution.
- 1.4. Complete information and links to the on-line prequalification application are available at:

<http://www.sandiego.gov/cip/bidopps/prequalification.shtml>
- 1.5. Due to the City's responsibility to protect the confidentiality of the contractors' information, City staff will not be able to provide information regarding contractors' prequalification status over the telephone. Contractors may access real-time information about their prequalification status via their vendor profile on [PlanetBids™](#).

2. ELECTRONIC FORMAT RECEIPT AND OPENING OF BIDS: Bids will be received in electronic format (eBids) EXCLUSIVELY at the City of San Diego's electronic bidding (eBidding) site, at: <http://www.sandiego.gov/cip/bidopps/index.shtml> and are due by the date, and time shown on the cover of this solicitation.

- 2.1. **BIDDERS MUST BE PRE-REGISTERED** with the City's bidding system and possess a system-assigned Digital ID in order to submit and electronic bid.
- 2.2. The City's bidding system will automatically track information submitted to the site including IP addresses, browsers being used and the URLs from which information was submitted. In addition, the City's bidding system will keep a history of every login instance including the time of login, and other information about the user's

computer configuration such as the operating system, browser type, version, and more. Because of these security features, Contractors who disable their browsers' cookies will not be able to log in and use the City's bidding system.

- 2.3.** The City's electronic bidding system is responsible for bid tabulations. Upon the bidder's or proposer's entry of their bid, the system will ensure that all required fields are entered. **The system will not accept a bid for which any required information is missing.** This includes all necessary pricing, subcontractor listing(s) and any other essential documentation and supporting materials and forms requested or contained in these solicitation documents.
- 2.4. BIDS REMAIN SEALED UNTIL BID DEADLINE.** eBids are transmitted into the City's bidding system via hypertext transfer protocol secure (https) mechanism using SSL 128-256 bit security certificates issued from Verisign/Thawte which encrypts data being transferred from client to server. Bids submitted prior to the "Bid Due Date and Time" are not available for review by anyone other than the submitter who has until the "Bid Due Date and Time" to change, rescind or retrieve its proposal should it desire to do so.
- 2.5. BIDS MUST BE SUBMITTED BY BID DUE DATE AND TIME.** Once the bid deadline is reached, no further submissions are accepted into the system. Once the Bid Due Date and Time has lapsed, bidders, proposers, the general public, and City staff are able to immediately see the results on line. City staff may then begin reviewing the submissions for responsiveness, EOCP compliance and other issues. The City may require any Bidder to furnish statement of experience, financial responsibility, technical ability, equipment, and references.
- 2.6. RECAPITULATION OF THE WORK.** Bids shall not contain any recapitulation of the Work. Conditional Bids may be rejected as being non-responsive. Alternative proposals will not be considered unless called for.
- 2.7. BIDS MAY BE WITHDRAWN** by the Bidder only up to the bid due date and time.

 - 2.7.1. Important Note:** Submission of the electronic bid into the system may not be instantaneous. Due to the speed and capabilities of the user's internet service provider (ISP), bandwidth, computer hardware and other variables, it may take time for the bidder's submission to upload and be received by the City's eBidding system. It is the bidder's sole responsibility to ensure their bids are received on time by the City's eBidding system. The City of San Diego is not responsible for bids that do not arrive by the required date and time.
- 2.8. ACCESSIBILITY AND AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE:** To request a copy of this solicitation in an alternative format, contact the Public Works Contract Specialist listed on the cover of this solicitation at least five (5) working days prior to the Bid/Proposal due date to ensure availability.

3. **ELECTRONIC BID SUBMISSIONS CARRY FULL FORCE AND EFFECT**

- 3.1. The bidder, by submitting its electronic bid, acknowledges that doing so carries the same force and full legal effect as a paper submission with a longhand (wet) signature.
- 3.2. By submitting an electronic bid, the bidder certifies that the bidder has thoroughly examined and understands the entire Contract Documents (which consist of the plans and specifications, drawings, forms, affidavits and the solicitation documents), and that by submitting the eBid as its bid proposal, the bidder acknowledges, agrees to and is bound by the entire Contract Documents, including any addenda issued thereto, and incorporated by reference in the Contract Documents.
- 3.3. The Bidder, by submitting its electronic bid, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certification, forms and affidavits submitted as part of this bid are true and correct.
- 3.4. The Bidder agrees to the construction of the project as described in Attachment "A-Scope of Work" for the City of San Diego, in accordance with the requirements set forth herein for the electronically submitted prices. The Bidder guarantees the Contract Price for a period of 120 days from the date of Bid opening. The duration of the Contract Price guarantee shall be extended by the number of days required for the City to obtain all items necessary to fulfill all conditions precedent.

4. **BIDS ARE PUBLIC RECORDS:** Upon receipt by the City, Bids shall become public records subject to public disclosure. It is the responsibility of the respondent to clearly identify any confidential, proprietary, trade secret or otherwise legally privileged information contained within the Bid. General references to sections of the California Public Records Act (PRA) will not suffice. If the Contractor does not provide applicable case law that clearly establishes that the requested information is exempt from the disclosure requirements of the PRA, the City shall be free to release the information when required in accordance with the PRA, pursuant to any other applicable law, or by order of any court or government agency, and the Contractor will hold the City harmless for release of this information.

5. **CONTRACTOR REGISTRATION AND ELECTRONIC REPORTING SYSTEM:**

- 5.1. **Prior** to the Award of the Contract or Task Order, you and your Subcontractors and Suppliers must register with the City's web-based vendor registration and bid management system. For additional information go to:

<http://www.sandiego.gov/purchasing/bids-contracts/vendorreg.shtml>.
- 5.2. The City may not award the contract until registration of all subcontractors and suppliers is complete. In the event this requirement is not met within the time frame specified in the Notice of Intent to Award letter, the City reserves the right to rescind the Notice of Award / Intent to Award and to make the award to the next responsive and responsible bidder / proposer.

6. **JOINT VENTURE CONTRACTORS:** Provide a copy of the Joint Venture agreement and the Joint Venture license to the City within 14 Calendar Days after receiving the Contract forms.
7. **PREVAILING WAGE RATES WILL APPLY:** Refer to Attachment D.
8. **SUBCONTRACTING PARTICIPATION PERCENTAGES:** Subcontracting participation percentages apply to this contract. Refer to Attachment E.
9. **INSURANCE REQUIREMENTS:**
 - 9.1. All certificates of insurance and endorsements required by the contract are to be provided upon issuance of the City's Notice of Intent to Award letter.
 - 9.2. Refer to sections 7-3, "LIABILITY INSURANCE", and 7-4, "WORKERS' COMPENSATION INSURANCE" of the Supplementary Special Provisions (SSP) for the insurance requirements which must be met.
10. **REFERENCE STANDARDS:** Except as otherwise noted or specified, the Work shall be completed in accordance with the following standards:

Title	Edition	Document Number
Standard Specifications for Public Works Construction ("The GREENBOOK") http://www.greenbookspecs.org/	2015	PWPI070116-01
City of San Diego Standard Specifications for Public Works Construction ("The WHITEBOOK")* https://www.sandiego.gov/publicworks/edocref/greenbook	2015	PWPI070116-02
City of San Diego Standard Drawings* https://www.sandiego.gov/publicworks/edocref/standarddraw	2016	PWPI070116-03
Citywide Computer Aided Design and Drafting (CADD) Standards https://www.sandiego.gov/publicworks/edocref/drawings	2016	PWPI092816-04
California Department of Transportation (CALTRANS) Standard Specifications – http://www.dot.ca.gov/des/oe/construction-contract-standards.html	2015	PWPI092816-05
CALTRANS Standard Plans http://www.dot.ca.gov/des/oe/construction-contract-standards.html	2015	PWPI092816-06
California Manual on Uniform Traffic Control Devices Revision 1 (CA MUTCD Rev 1) - http://www.dot.ca.gov/trafficops/camutcd/	2014	PWPI092816-07
NOTE: *Available online under Engineering Documents and References at: http://www.sandiego.gov/publicworks/edocref/index.shtml		

11. **CITY'S RESPONSES AND ADDENDA:** The City, at its discretion, may respond to any or all questions submitted in writing via the City's eBidding web site in the **form of an addendum**. No other responses to questions, oral or written shall be of any force or effect with respect to this solicitation. The changes to the Contract Documents through addenda are made effective as though originally issued with the Bid. The Bidders shall acknowledge the receipt of Addenda at the time of bid submission.
12. **CITY'S RIGHTS RESERVED:** The City reserves the right to cancel the Notice Inviting Bids at any time, and further reserves the right to reject submitted Bids, without giving any reason for such action, at its sole discretion and without liability. Costs incurred by the Bidder(s) as a result of preparing Bids under the Notice Inviting Bids shall be the sole responsibility of each bidder. The Notice Inviting Bids creates or imposes no obligation upon the City to enter a contract.
13. **CONTRACT PRICING:** This solicitation is for a Lump Sum contract with Unit Price provisions as set forth herein. The Bidder agrees to perform construction services for the City of San Diego in accordance with these contract documents for the prices listed below. The Bidder further agrees to guarantee the Contract Price for a period of 120 days from the date of Bid opening. The duration of the Contract Price guarantee may be extended, by mutual consent of the parties, by the number of days required for the City to obtain all items necessary to fulfill all contractual conditions.
14. **SUBCONTRACTOR INFORMATION:**
 - 14.1. **LISTING OF SUBCONTRACTORS.** In accordance with the requirements provided in the "Subletting and Subcontracting Fair Practices Act" of the California Public Contract Code, the Bidder shall provide the **NAME** and **ADDRESS** of each Subcontractor who will perform work, labor, render services or who specially fabricates and installs a portion [type] of the work or improvement, in an amount in excess of 0.5% of the Contractor's total Bid. The Bidder shall also state within the description, whether the subcontractor is a **CONSTRUCTOR, CONSULTANT** or **SUPPLIER**. The Bidder shall state the **DIR REGISTRATION NUMBER** for all subcontractors and shall further state within the description, the **PORTION** of the work which will be performed by each subcontractor under this Contract. The Contractor shall list only one Subcontractor for each portion of the Work. The **DOLLAR VALUE** of the total Bid to be performed shall be stated for all subcontractors listed. Failure to comply with this requirement may result in the Bid being rejected as **non-responsive** and ineligible for award. The Bidder's attention is directed to the Special Provisions - General; Paragraph 2-3, "Subcontracts", which stipulates the percent of the Work to be performed with the Bidders' own forces. The Bidder shall list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, SDB, WoSB, HUBZone, and SDVOSB Subcontractors for which Bidders are seeking recognition towards achieving any mandatory, voluntary (or both) subcontracting participation goals.

Additionally, pursuant to California Senate Bill 96 and in accordance with the requirements of Labor Code sections 1771.1 and 1725.5, by submitting a bid or proposal to the City, Contractor is certifying that he or she has verified that all subcontractors used on this public work project are registered with the California Department of Industrial Relations (DIR). **The Bidder shall provide the name, address, license number, DIR registration number of any Subcontractor - regardless of tier** - who will perform work, labor, render services or specially fabricate and install a portion [type] of the work or improvement pursuant to the contract.

14.2. LISTING OF SUPPLIERS. Any Bidder seeking the recognition of Suppliers of equipment, materials, or supplies obtained from third party Suppliers towards achieving any mandatory or voluntary (or both) subcontracting participation goals shall provide, at a minimum, the **NAME, LOCATION (CITY), DIR REGISTRATION NUMBER** and the **DOLLAR VALUE** of each supplier. The Bidder will be credited up to 60% of the amount to be paid to the Suppliers for materials and supplies unless vendor manufactures or substantially alters materials and supplies, in which case, 100% will be credited. The Bidder is to indicate within the description whether the listed firm is a supplier or manufacturer. If no indication is provided, the listed firm will be credited at 60% of the listed dollar value for purposes of calculating the Subcontractor Participation Percentage.

14.3. LISTING OF SUBCONTRACTORS OR SUPPLIERS FOR ALTERNATES. For subcontractors or suppliers to be used on additive or deductive alternate items, in addition to the above requirements, bidder shall further note "ALTERNATE" and alternate item number within the description.

15. SUBMITTAL OF "OR EQUAL" ITEMS: See Section 4-1.6, "Trade Names or Equals" in The WHITEBOOK and as amended in the SSP.

16. AWARD:

16.1. The Award of this contract is contingent upon the Contractor's compliance with all conditions precedent to Award.

16.2. Upon acceptance of a Bid, the City will prepare contract documents for execution within approximately 21 days of the date of the Bid opening and award the Contract approximately within 7 days of receipt of properly executed Contract, bonds, and insurance documents.

16.3. This contract will be deemed executed and effective only upon the signing of the Contract by the Mayor or his designee and approval as to form the City Attorney's Office.

17. SUBCONTRACT LIMITATIONS: The Bidder's attention is directed to Standard Specifications for Public Works Construction, Section 2-3, "SUBCONTRACTS" in The GREENBOOK and as amended in the SSP which requires the Contractor to self-perform not less than the specified amount. Failure to comply with this requirement shall render the bid **non-responsive** and ineligible for award.

- 18. AVAILABILITY OF PLANS AND SPECIFICATIONS:** Contract Documents may be obtained by visiting the City's website: <http://www.sandiego.gov/cip/>. Plans and Specifications for this contract are also available for review in the office of the City Clerk or Public Works Contracts.
- 19. ONLY ONE BID PER CONTRACTOR SHALL BE ACCEPTED:** No person, firm, or corporation shall be allowed to make, file, or be interested in more than one (1) Bid for the same work unless alternate Bids are called for. A person, firm or corporation who has submitted a sub-proposal to a Bidder, or who has quoted prices on materials to a Bidder, is not hereby disqualified from submitting a sub-proposal or quoting prices to other Bidders or from submitting a Bid in its own behalf. Any Bidder who submits more than one bid will result in the rejection of all bids submitted.
- 20. SAN DIEGO BUSINESS TAX CERTIFICATE:** The Contractor and Subcontractors, not already having a City of San Diego Business Tax Certificate for the work contemplated shall secure the appropriate certificate from the City Treasurer, Civic Center Plaza, First floor and submit to the Contract Specialist upon request or as specified in the Contract Documents. Tax Identification numbers for both the Bidder and the listed Subcontractors must be submitted on the City provided forms within these documents.
- 21. BIDDER'S GUARANTEE OF GOOD FAITH (BID SECURITY) FOR DESIGN-BID-BUILD CONTRACTS:**
- 21.1.** For bids \$250,000 and above, bidders shall submit Bid Security at bid time. Bid Security shall be in one of the following forms: a cashier's check, or a properly certified check upon some responsible bank; or an approved corporate surety bond payable to the City of San Diego for an amount of not less than 10% of the total bid amount.
- 21.2.** This check or bond, and the monies represented thereby, will be held by the City as a guarantee that the Bidder, if awarded the contract, will in good faith enter into the contract and furnish the required final performance and payment bonds.
- 21.3.** The Bidder agrees that in the event of the Bidder's failure to execute this contract and provide the required final bonds, the money represented by the cashier's or certified check will remain the property of the City; and the Surety agrees that it will pay to the City the damages, not exceeding the sum of 10% of the amount of the Bid, that the City may suffer as a result of such failure.
- 21.4.** At the time of bid submission, bidders must upload and submit an electronic PDF copy of the aforementioned bid security. Whether in the form of a cashier's check, a properly certified check or an approved corporate surety bond payable to the City of San Diego, the bid security must be uploaded to the City's eBidding system. Within twenty-four (24) hours after the bid due date and time, the first five (5) apparent low bidders must provide the City with the original bid security.

- 21.5.** Failure to submit the electronic version of the bid security at the time of bid submission AND failure to provide the original within twenty-four (24) hours may cause the bid to be rejected and deemed **non-responsive**.

22. AWARD OF CONTRACT OR REJECTION OF BIDS:

- 22.1.** This contract may be awarded to the lowest responsible and reliable Bidder.
- 22.2.** Bidders shall complete ALL eBid forms as required by this solicitation. Incomplete eBids will not be accepted.
- 22.3.** The City reserves the right to reject any or all Bids, to waive any informality or technicality in Bids received, and to waive any requirements of these specifications as to bidding procedure.
- 22.4.** Bidders will not be released on account of their errors of judgment. Bidders may be released only upon receipt by the City within 3 Working Days of the bid opening, written notice from the Bidder which shows proof of honest, credible, clerical error of a material nature, free from fraud or fraudulent intent; and of evidence that reasonable care was observed in the preparation of the Bid.
- 22.5.** A bidder who is not selected for contract award may protest the award of a contract to another bidder by submitting a written protest in accordance with the San Diego Municipal Code.
- 22.6.** The City of San Diego will not discriminate in the award of contracts with regard to race, religion creed, color, national origin, ancestry, physical handicap, marital status, sex or age.
- 22.7.** Each Bid package properly signed as required by these specifications shall constitute a firm offer which may be accepted by the City within the time specified herein.
- 22.8.** The City reserves the right to evaluate all Bids and determine the lowest Bidder on the basis of the base bid and any proposed alternates or options as detailed herein.

23. BID RESULTS:

- 23.1.** The availability of the bids on the City's eBidding system shall constitute the public announcement of the apparent low bidder. In the event that the apparent low bidder is subsequently deemed non-responsive or non-responsible, a notation of such will be made on the eBidding system. The new ranking and apparent low bidder will be adjusted accordingly.
- 23.2.** To obtain the bid results, view the results on the City's web site, or request the results by U.S. mail and provide a self-addressed, stamped envelope. If requesting by mail, be sure to reference the bid name and number. The bid tabulations will be mailed to you upon their completion. The results will not be given over the telephone.

24. THE CONTRACT:

- 24.1.** The Bidder to whom award is made shall execute a written contract with the City of San Diego and furnish good and approved bonds and insurance certificates specified by the City within 14 days after receipt by Bidder of a form of contract for execution unless an extension of time is granted to the Bidder in writing.
- 24.2.** If the Bidder takes longer than 14 days to fulfill these requirements, then the additional time taken shall be added to the Bid guarantee. The Contract shall be made in the form adopted by the City, which includes the provision that no claim or suit whatsoever shall be made or brought by Contractor against any officer, agent, or employee of the City for or on account of anything done or omitted to be done in connection with this contract, nor shall any such officer, agent, or employee be liable hereunder.
- 24.3.** If the Bidder to whom the award is made fails to enter into the contract as herein provided, the award may be annulled and the Bidder's Guarantee of Good Faith will be subject to forfeiture. An award may be made to the next lowest responsible and reliable Bidder who shall fulfill every stipulation embraced herein as if it were the party to whom the first award was made.
- 24.4.** Pursuant to the San Diego City Charter section 94, the City may only award a public works contract to the lowest responsible and reliable Bidder. The City will require the Apparent Low Bidder to (i) submit information to determine the Bidder's responsibility and reliability, (ii) execute the Contract in form provided by the City, and (iii) furnish good and approved bonds and insurance certificates specified by the City within 14 Days, unless otherwise approved by the City, in writing after the Bidder receives notification from the City, designating the Bidder as the Apparent Low Bidder and formally requesting the above mentioned items.
- 24.5.** The award of the Contract is contingent upon the satisfactory completion of the above-mentioned items and becomes effective upon the signing of the Contract by the Mayor or designee and approval as to form by the City Attorney's Office. If the Apparent Low Bidder does not execute the Contract or submit required documents and information, the City may award the Contract to the next lowest responsible and reliable Bidder who shall fulfill every condition precedent to award. A corporation designated as the Apparent Low Bidder shall furnish evidence of its corporate existence and evidence that the officer signing the Contract and bond for the corporation is duly authorized to do so.

- 25. EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE OF WORK:** The Bidder shall examine carefully the Project Site, the Plans and Specifications, other materials as described in the Special Provisions, Section 2-7, and the proposal forms (e.g., Bidding Documents). The submission of a Bid shall be conclusive evidence that the Bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and scope of Work, the quantities of materials to be furnished, and as to the requirements of the Bidding Documents Proposal, Plans, and Specifications.

26. CITY STANDARD PROVISIONS: This contract is subject to the following standard provisions. See The WHITEBOOK for details.

26.1. The City of San Diego Resolution No. R-277952 adopted on May 20, 1991 for a Drug-Free Workplace.

26.2. The City of San Diego Resolution No. R-282153 adopted on June 14, 1993 related to the Americans with Disabilities Act.

26.3. The City of San Diego Municipal Code §22.3004 for Contractor Standards.

26.4. The City of San Diego's Labor Compliance Program and the State of California Labor Code §§1771.5(b) and 1776.

26.5. Sections 1777.5, 1777.6, and 1777.7 of the State of California Labor Code concerning the employment of apprentices by contractors and subcontractors performing public works contracts.

26.6. The City's Equal Benefits Ordinance (EBO), Chapter 2, Article 2, Division 43 of The San Diego Municipal Code (SDMC).

26.7. The City's Information Security Policy (ISP) as defined in the City's Administrative Regulation 90.63.

27. PRE-AWARD ACTIVITIES:

27.1. The contractor selected by the City to execute a contract for this Work shall submit the required documentation as specified in the herein and in the Notice of Award. Failure to provide the information as specified may result in the Bid being rejected as **non-responsive**.

27.2. The decision that bid is non-responsive for failure to provide the information required within the time specified shall be at the sole discretion of the City.

PERFORMANCE BOND, LABOR AND MATERIALMEN'S BOND

FAITHFUL PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND:

SOLPAC Construction, Inc., a corporation, as principal, and
Liberty Mutual Insurance Company, a corporation authorized to do
business in the State of California, as Surety, hereby obligate themselves, their successors and assigns,
jointly and severally, to The City of San Diego a municipal corporation in the sum of
Four Million Seven Hundred Ten Thousand Five Hundred Dollars and Zero Cents (\$4,710,500.00)
for the faithful performance of the annexed contract, and in the sum of **Four Million Seven Hundred
Ten Thousand Five Hundred Dollars and Zero Cents (\$4,710,500.00)** for the benefit of laborers and
materialmen designated below.

Conditions:

If the Principal shall faithfully perform the annexed contract with the City of San Diego,
California, then the obligation herein with respect to a faithful performance shall be void; otherwise it
shall remain in full force.

If the Principal shall promptly pay all persons, firms and corporations furnishing materials for
or performing labor in the execution of this contract, and shall pay all amounts due under the
California Unemployment Insurance Act then the obligation herein with respect to laborers and
materialmen shall be void; otherwise it shall remain in full force.

The obligation herein with respect to laborers and materialmen shall inure to the benefit of
all persons, firms and corporations entitled to file claims under the provisions of Article 2. Claimants,
(ii) public works of improvement commencing with Civil Code Section 9100 of the Civil Code of the
State of California.

Changes in the terms of the annexed contract or specifications accompanying same or
referred to therein shall not affect the Surety's obligation on this bond, and the Surety hereby waives
notice of same.

PERFORMANCE BOND, LABOR AND MATERIALMEN'S BOND (continued)

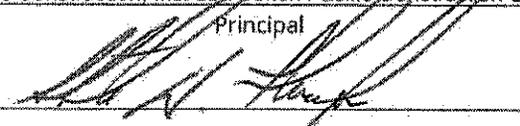
The Surety shall pay reasonable attorney's fees should suit be brought to enforce the provisions of this bond.

Dated December 4, 2018

Approved as to Form

Solpac Construction, Inc. dba Soltek Pacific Construction Company

Principal

By 

Stephen W. Thompson, CEO

Printed Name of Person Signing for Principal

Mara W. Elliott, City Attorney

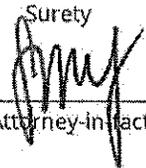
By 

Deputy City Attorney

1/22/19

Liberty Mutual Insurance Company

Surety

By 

Attorney-in-fact Sarah Myers

Approved:

790 The City Drive South, Suite 200

Local Address of Surety

By 

Stephen Samara

Principal Contract Specialist
Public Works Department

Orange, CA 92868

Local Address (City, State) of Surety

(714) 634-5712

Local Telephone No. of Surety

Premium \$ 33,896.00

Bond No. 24233697

Premium is for Contract Term and Subject to
Adjustment Based on Final Contract Price

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT Civil Code § 1189

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

STATE OF CALIFORNIA

County of San Diego

On DEC 04 2018 before me, Lilia De Loera, Notary Public,
Date Insert Name of Notary exactly as it appears on the official seal

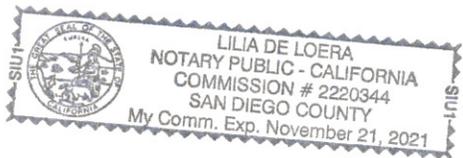
personally appeared Sarah Myers
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(~~is~~) whose name(~~is~~) is/~~is~~ subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~it~~ executed the same in ~~his~~/her/~~their~~ authorized capacity(~~ies~~), and that by ~~his~~/her/~~their~~ signature(~~s~~) on the instrument the person(~~is~~), or the entity upon behalf of which the person(~~is~~) acted, executed the instrument.

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

Witness my hand and official seal.

Signature [Signature]
Signature of Notary Public Lilia De Loera



Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of the form to another document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

- Individual
- Corporate Officer — Title(s): _____
- Partner Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____



Signer is Representing:
Surety Company

Signer's Name: _____

- Individual
- Corporate Officer — Title(s): _____
- Partner Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____



Signer is Representing:



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8197174

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Janice Martin, Lawrence F. McMahon, Sarah Myers

all of the city of San Diego state of CA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 23rd day of October, 2018.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company
By: David M. Carey, Assistant Secretary

State of PENNSYLVANIA ss
County of MONTGOMERY

On this 23rd day of October, 2018 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Teresa Pastella, Notary Public
Upper Merion Twp., Montgomery County
My Commission Expires March 28, 2021
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 4th day of December, 2018.



By: Renee C. Llewellyn
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

CALIFORNIA CERTIFICATE OF ACKNOWLEDGMENT

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

State of California)

County of San Diego)

On December 13, 2018 before me, Ana A. Aispuro-Rebelin,
(here insert name and title of the officer)

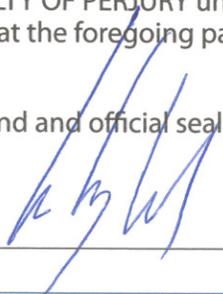
personally appeared Stephen W. Thompson

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

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

WITNESS my hand and official seal.

Signature _____



(Seal)

Optional Information

Although the information in this section is not required by law, it could prevent fraudulent removal and reattachment of this acknowledgment to an unauthorized document and may prove useful to persons relying on the attached document.

Description of Attached Document

The preceding Certificate of Acknowledgment is attached to a document titled/for the purpose of Performance Bond

containing 2 pages, and dated 12/4/18

The signer(s) capacity or authority is/are as:

- Individual(s)
- Attorney-in-Fact
- Corporate Officer(s) CFO Title(s)

- Guardian/Conservator
- Partner - Limited/General
- Trustee(s)
- Other: _____

representing: _____
Name(s) of Person(s) or Entity(ies) Signer is Representing

Additional Information

Method of Signer Identification

Proved to me on the basis of satisfactory evidence:
 form(s) of identification credible witness(es)

Notarial event is detailed in notary journal on:
Page # _____ Entry # _____

Notary contact: _____

Other

- Additional Signer(s) Signer(s) Thumbprint(s)
- _____

ATTACHMENTS

ATTACHMENT A
SCOPE OF WORK

SCOPE OF WORK

1. SCOPE OF WORK:

A. The project consists of seismic retrofit of the California Tower which includes upgrade of the steel bracing at the upper three levels of the tower, installation of post-tensioning rods at the upper two levels, addition of concrete or shotcrete shear walls at the lower 6 levels of the tower, limited upgrade of the existing wall footings and installation of drag bars between the tower and the building. The work will also include selected demolition of existing walls to access the areas of work, replacement or repair of affected existing elements, finishes, waterproofing systems, utilities and services, and protection of existing historically significant features and fabric.

B. Additive Alternate A:

Construction and installation of Post-Tensioning rods at Level 9 and 10 of the California Tower.

1.1. The Work shall be performed in accordance with:

1.1.1. The Notice Inviting Bids, and Plans numbered **33996-1-D** through **33996-24-D**, inclusive.

2. LOCATION OF WORK: The location of the Work is as follows:

1350 El Prado, San Diego, CA 92101. See Appendix E, Location Map

3. CONTRACT TIME: The Contract Time for completion of the Work shall be **176 Working Days**.

ATTACHMENT B
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ATTACHMENT C
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ATTACHMENT D
FEMA/CAL OES FUNDING AGENCY PROVISIONS

FUNDING AGENCY PROVISIONS

IN THE EVENT THAT THESE REQUIREMENTS CONFLICT WITH THE CITY'S GENERAL EOC REQUIREMENTS, THE FUNDING AGENCY'S REQUIREMENTS WILL CONTROL.

1. NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246).

1.1. The goal and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, as follows:

	<u>Goal</u>
1. Minority Participation:	16.9%
2. Female Participation:	6.9%

1.2. These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs Work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the Work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both federally involved and non-federally involved Work.

1.3. The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals.

1.4. The hours of minority and female employment and training shall be substantially uniform throughout the length of the Contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the Contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

1.5. The Contractor shall provide written notification to the Director the Office of Federal Contract Compliance Programs within 10 Working Days of award of any Subcontract in excess of \$10,000 at any tier for Work under the Contract resulting from this solicitation. The notification shall list the name, address and telephone number of the Subcontractor; employer identification number of the Subcontractor; estimated dollar amount of the Subcontract; estimated starting and completion dates of the Subcontract; and the geographical area in which the subcontract is to be performed. The "covered area" is the City of San Diego.

2. EQUAL OPPORTUNITY CLAUSES:

2.1. The following equal opportunity clauses are incorporated by reference herein:

1. The equal opportunity clause located 41 CFR 60-1.4(a), which specifies the obligations imposed under Executive Order 11246.
2. The equal opportunity clause located at 41 CFR 60-741.5, which contains the obligations imposed by Section 503 of the Rehabilitation Act of 1973.
3. The "Equal Opportunity Clause" (Resolution No. 765092) filed on December 4, 1978, in the Office of the City Clerk, San Diego, California and incorporated in the "Standard Federal Employment Opportunity Construction Contract Specifications (Executive Order 11246 - Document No. 769023, filed September 11, 1984, in the Office of the City Clerk, San Diego, California) is applicable to all non-exempt City construction contracts and subcontracts of \$2,000 or more.
4. Age Discrimination Act of 1975, Pub. L. 94-135.
5. Title VI of the Civil Rights Act of 1964, Pub. L. 88-352.
6. Section 13 of the Federal Water Pollution Control Acts Amendments of 1972, Pub. L. 92-5200 (the Clean Water Act).
7. Section 504 of the Rehabilitation Act of 1973, Pub. L. 93-112 (Executive Orders 11914 and 11250).
8. Women's Minority Business Enterprises, Executive Orders 11625, 12138 and 12432.
9. Section 129 of the Small Business Administration Reauthorization and Amendment Act of 1988, Pub. L. 100-590.

3. STANDARD FEDERAL EQUAL EMPLOYMENT SPECIFICATIONS:

3.1. The Contractor is required to comply with the 16 "Standard Federal Equal Employment Specifications" located at 41 CFR 60-4.3 for federal and federally-assisted construction contracts in excess of \$10,000, set forth below.

3.2. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative actions steps at least as extensive as the following:

1. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign 2 or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

2. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
3. Maintain a current file of the names, addresses and telephone numbers of each minority and female walk-in applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
4. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
5. Develop on-the-job training opportunities, participate in training programs for the area, or both which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under C.1. above.
6. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreements; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
7. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignments, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as superintendents, foreman, etc., prior to the initiation of Work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and dispositions of the subject matter.
8. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

9. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
10. Encourage present minority and female employees to recruit other minority persons and women and where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.
11. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
12. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
13. Ensure that seniority practices, job classifications, work assignments and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
14. Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
15. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
16. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

4. VIOLATION OR BREACH OF REQUIREMENTS:

- 4.1. If at any time during the course of the Contract there is a violation of the Affirmative Action or Equal Employment Opportunity requirements by the Contractor, or the Subcontractors, the City will notify the Contractor of the breach. The City may withhold any further progress payments to the Contractor until the City is satisfied that the Contractor and Subcontractors are in full compliance with these requirements.

5. MONTHLY EMPLOYMENT UTILIZATION REPORTS:

- 5.1. Refer to GENERAL EQUAL OPPORTUNITY CONTRACTING PROGRAM REQUIREMENTS, CONSTRUCTION CONTRACTOR REQUIREMENTS in The WHITEBOOK and the following:
 1. Federal and Non-Federal Work in San Diego County. Submit an updated list only if work is complete or new contracts have been awarded during the span of this project.

6. RECORDS OF PAYMENTS TO DBEs:

- 6.1.** The Contractor shall maintain records and documents of payments to DBEs for 5 years following the NOC. These records shall be made available for inspection upon request by any authorized representative of the City, funding agency, or both. The reporting requirement shall be extended to any certified DBE Subcontractor.

7. FEDERAL WAGE REQUIREMENTS FOR FEDERALLY FUNDED PROJECTS:

- 7.1.** The successful Bidder's work shall be required to comply with Executive Order 11246, entitled "Equal Employment Opportunity," as amended by Executive Order 11375, and as supplemented in Department of Labor regulations (41 CFR chapter 60).
- 7.2.** This Executive Order pertains to Equal Employment Opportunity regulations and contains significant changes to the regulations including new goals and timetables for women in construction and revised goals and time-tables for minorities in construction.
- 7.3.** Minimum wage rates for this project have been predetermined by the Secretary of Labor and are set forth in the Decision of the Secretary and bound into the specifications book. Should there be any difference between the state or federal wage rates, including health and welfare funds for any given craft, mechanic, or similar classifications needed to execute the Work, it shall be mandatory upon the Contractor or subcontractor to pay the higher of the two rates.
- 7.4.** The minimum wage rate to be paid by the Contractor and the Subcontractors shall be in accordance with the Federal Labor Standards Provisions (see pages 11 through 35 below) and Federal Wage Rates (see Wage Rates below) and General Prevailing Wage Determination made by the State of California, Director of Industrial Relations pursuant to California Labor Code Part 7, Chapter 1, Article 2, Sections 1770, 1773 and 1773.1, whichever is higher.
- 7.5.** A Contractor having 50 or more employees and its Subcontractors having 50 or more employees and who may be awarded a contract of \$50,000 or more will be required to maintain an affirmative action program, the standards for which are contained in the specifications.
- 7.6.** To be eligible for award, each Bidder shall comply with the affirmative action requirements which are contained in the specifications.
- 7.7.** Women will be afforded equal opportunity in all areas of employment. However, the employment of women shall not diminish the standards of requirements for the employment of minorities.

- 8. PREVAILING WAGE RATES:** Pursuant to San Diego Municipal Code section 22.3019, construction, alteration, demolition, repair and maintenance work performed under this Contract is subject to State prevailing wage laws. For construction work performed under this Contract cumulatively exceeding \$25,000 and for alteration, demolition, repair and maintenance work performed under this Contract cumulatively exceeding \$15,000, the Contractor and its subcontractors shall comply with State prevailing wage laws including, but not limited to, the requirements listed below.

- 8.1. Compliance with Prevailing Wage Requirements.** Pursuant to sections 1720 through 1861 of the California Labor Code, the Contractor and its subcontractors shall ensure that all workers who perform work under this Contract are paid not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations (DIR). This includes work performed during the design and preconstruction phases of construction including, but not limited to, inspection and land surveying work.
- 8.1.1.** Copies of such prevailing rate of per diem wages are on file at the City and are available for inspection to any interested party on request. Copies of the prevailing rate of per diem wages also may be found at <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>. Contractor and its subcontractors shall post a copy of the prevailing rate of per diem wages determination at each job site and shall make them available to any interested party upon request.
- 8.1.2.** The wage rates determined by the DIR refer to expiration dates. If the published wage rate does not refer to a predetermined wage rate to be paid after the expiration date, then the published rate of wage shall be in effect for the life of this Contract. If the published wage rate refers to a predetermined wage rate to become effective upon expiration of the published wage rate and the predetermined wage rate is on file with the DIR, such predetermined wage rate shall become effective on the date following the expiration date and shall apply to this Contract in the same manner as if it had been published in said publication. If the predetermined wage rate refers to one or more additional expiration dates with additional predetermined wage rates, which expiration dates occur during the life of this Contract, each successive predetermined wage rate shall apply to this Contract on the date following the expiration date of the previous wage rate. If the last of such predetermined wage rates expires during the life of this Contract, such wage rate shall apply to the balance of the Contract.
- 8.2. Penalties for Violations.** Contractor and its subcontractors shall comply with California Labor Code section 1775 in the event a worker is paid less than the prevailing wage rate for the work or craft in which the worker is employed. This shall be in addition to any other applicable penalties allowed under Labor Code sections 1720-1861.
- 8.3. Payroll Records.** Contractor and its subcontractors shall comply with California Labor Code section 1776, which generally requires keeping accurate payroll records, verifying and certifying payroll records, and making them available for inspection. Contractor shall require its subcontractors to also comply with section 1776. Contractor and its subcontractors shall submit weekly certified payroll records online via the City's web-based Labor Compliance Program. Contractor is responsible for ensuring its subcontractors submit certified payroll records to the City.
- 8.3.1.** Contractor and their subcontractors shall furnish records specified in Labor Code section 1776 directly to the Labor Commissioner in the manner required by Labor Code section 1771.4.

- 8.4. Apprentices.** Contractor and its subcontractors shall comply with California Labor Code sections 1777.5, 1777.6 and 1777.7 concerning the employment and wages of apprentices. Contractor is held responsible for the compliance of their subcontractors with sections 1777.5, 1777.6 and 1777.7.
- 8.5. Working Hours.** Contractor and their subcontractors shall comply with California Labor Code sections 1810 through 1815, including but not limited to: (i) restrict working hours on public works contracts to eight hours a day and forty hours a week, unless all hours worked in excess of 8 hours per day are compensated at not less than 1½ times the basic rate of pay; and (ii) specify penalties to be imposed on design professionals and subcontractors of \$25 per worker per day for each day the worker works more than 8 hours per day and 40 hours per week in violation of California Labor Code sections 1810 through 1815.
- 8.6. Required Provisions for Subcontracts.** Contractor shall include at a minimum a copy of the following provisions in any contract they enter into with a subcontractor: California Labor Code sections 1771, 1771.1, 1775, 1776, 1777.5, 1810, 1813, 1815, 1860 and 1861.
- 8.7. Labor Code Section 1861 Certification.** Contractor in accordance with California Labor Code section 3700 is required to secure the payment of compensation of its employees and by signing this Contract, Contractor certifies that "I am aware of the provisions of Section 3700 of the California 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."
- 8.8. Labor Compliance Program.** The City has its own Labor Compliance Program authorized in August 2011 by the DIR. The City will withhold contract payments when payroll records are delinquent or deemed inadequate by the City or other governmental entity, or it has been established after an investigation by the City or other governmental entity that underpayment(s) have occurred. For questions or assistance, please contact the City of San Diego's Equal Opportunity Contracting Department at 619-236-6000.
- 8.9. Contractor and Subcontractor Registration Requirements.** This project is subject to compliance monitoring and enforcement by the DIR. A contractor or subcontractor shall not be qualified to bid on, be listed in a bid or proposal, subject to the requirements of section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, unless currently registered and qualified to perform public work pursuant to Labor Code section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.
- 8.9.1.** A Contractor's inadvertent error in listing a subcontractor who is not registered pursuant to Labor Code section 1725.5 in response to a solicitation shall not be grounds for filing a bid protest or grounds for considering the bid non-responsive provided that any of the following apply: (1) the subcontractor is registered prior to

bid opening; (2) within twenty-four hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in Labor Code section 1725.5; or (3) the subcontractor is replaced by another registered subcontractor pursuant to Public Contract Code section 4107.

8.9.2. By submitting a bid or proposal to the City, Contractor is certifying that he or she has verified that all subcontractors used on this public work project are registered with the DIR in compliance with Labor Code sections 1771.1 and 1725.5, and Contractor shall provide proof of registration for themselves and all listed subcontractors to the to the City at the time of bid or proposal due date or upon request.

8.10 Stop Order. For Contractor or its subcontractors engaging in the performance of any public work contract without having been registered in violation of Labor Code sections 1725.5 or 1771.1, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered contractor or unregistered subcontractor(s) on ALL public works until the unregistered contractor or unregistered subcontractor(s) is registered. Failure to observe a stop order is a misdemeanor.

8.11 List of all Subcontractors. The Contractor shall provide the list of subcontractors (regardless of tier), along with their DIR registration numbers, utilized on this Contract prior to any work being performed; and the Contractor shall provide a complete list of all subcontractors with each invoice. Additionally, Contractor shall provide the City with a complete list of all subcontractors (regardless of tier) utilized on this contract within ten working days of the completion of the contract, along with their DIR registration numbers. The City shall withhold final payment to Construction Management Professional until at least thirty (30) days after this information is provided to the City.

8.12 Exemption for Small Projects. There are limited exemptions for installation, alteration, demolition, or repair work done on projects of \$25,000 or less. The Contractor shall still comply with Labor Code sections 1720 et. seq. The only recognized exemptions are listed below:

8.12.1 Registration. The Contractor will not be required to register with the DIR for small projects. (Labor Code section 1777.1)

8.12.2 Certified Payroll Records. The records required in Labor Code section 1776 shall be required to be kept and submitted to the City of San Diego, but will not be required to be submitted online with the DIR directly. The Contractor will need to keep those records for at least three years following the completion of the Contract. (Labor Code section 1771.4).

8.12.3 List of all Subcontractors. The Contractor shall not be required to hire only registered subcontractors and is exempt from submitting the list of all subcontractors that is required in section 8.11 above. (Labor Code section 1773.3).

9. **WAGE RATES:** This contract shall be subject to the following Davis-Bacon Wage Decisions:

GENERAL DECISION NUMBER: CA180001 08/24/2018 CA1

SUPERSEDED GENERAL DECISION NUMBER: CA20170001

STATE: CALIFORNIA

CONSTRUCTION TYPES: BUILDING, HEAVY (HEAVY AND DREDGING),
HIGHWAY AND RESIDENTIAL

COUNTY: SAN DIEGO COUNTY IN CALIFORNIA.

BUILDING CONSTRUCTION PROJECTS; DREDGING PROJECTS (DOES NOT INCLUDE HOPPER DREDGE WORK); HEAVY CONSTRUCTION PROJECTS (DOES NOT INCLUDE WATER WELL DRILLING); HIGHWAY CONSTRUCTION PROJECTS; RESIDENTIAL CONSTRUCTION PROJECTS (CONSISTING OF SINGLE FAMILY HOMES AND APARTMENTS UP TO AND INCLUDING 4 STORIES)

NOTE: UNDER EXECUTIVE ORDER (EO) 13658, AN HOURLY MINIMUM WAGE OF \$10.35 FOR CALENDAR YEAR 2018 APPLIES TO ALL CONTRACTS SUBJECT TO THE DAVIS-BACON ACT FOR WHICH THE CONTRACT IS AWARDED (AND ANY SOLICITATION WAS ISSUED) ON OR AFTER JANUARY 1, 2015. IF THIS CONTRACT IS COVERED BY THE EO, THE CONTRACTOR MUST PAY ALL WORKERS IN ANY CLASSIFICATION LISTED ON THIS WAGE DETERMINATION AT LEAST \$10.35 PER HOUR (OR THE APPLICABLE WAGE RATE LISTED ON THIS WAGE DETERMINATION, IF IT IS HIGHER) FOR ALL HOURS SPENT PERFORMING ON THE CONTRACT IN CALENDAR YEAR 2018. THE EO MINIMUM WAGE RATE WILL BE ADJUSTED ANNUALLY. PLEASE NOTE THAT THIS EO APPLIES TO THE ABOVE-MENTIONED TYPES OF CONTRACTS ENTERED INTO BY THE FEDERAL GOVERNMENT THAT ARE SUBJECT TO THE DAVIS-BACON ACT ITSELF, BUT IT DOES NOT APPLY TO CONTRACTS SUBJECT ONLY TO THE DAVIS-BACON RELATED ACTS, INCLUDING THOSE SET FORTH AT 29 CFR 5.1(A)(2)-(60). ADDITIONAL INFORMATION ON CONTRACTOR REQUIREMENTS AND WORKER PROTECTIONS UNDER THE EO IS AVAILABLE AT WWW.DOL.GOV/WHD/GOVCONTRACTS.

MODIFICATION NUMBER	PUBLICATION DATE
0	01/05/2018
1	01/12/2018
2	01/19/2018
3	02/09/2018
4	03/02/2018
5	05/04/2018
6	06/29/2018
7	07/06/2018
8	07/13/2018
9	07/20/2018
10	08/17/2018
11	08/24/2018
12	08/31/2018

ASBE0005-002 07/03/2017

	RATES	FRINGES
ASBESTOS WORKERS/INSULATOR (INCLUDES THE APPLICATION OF ALL INSULATING MATERIALS, PROTECTIVE COVERINGS, COATINGS, AND FINISHES TO ALL TYPES OF MECHANICAL SYSTEMS).....	\$ 39.72	20.81
FIRE STOP TECHNICIAN (APPLICATION OF FIRESTOPPING MATERIALS FOR WALL OPENINGS AND PENETRATIONS IN WALLS, FLOORS, CEILINGS AND CURTAIN WALLS).....	\$ 26.96	17.81

ASBE0005-004 07/03/2017

	RATES	FRINGES
ASBESTOS REMOVAL WORKER/HAZARDOUS MATERIAL HANDLER (INCLUDES PREPARATION, WETTING, STRIPPING, REMOVAL, SCRAPPING, VACUUMING, BAGGING AND DISPOSING OF ALL INSULATION MATERIALS FROM MECHANICAL SYSTEMS, WHETHER THEY CONTAIN ASBESTOS OR NOT)....	\$ 19.26	11.27

BOIL0092-003 03/01/2018

	RATES	FRINGES
BOILERMAKER.....	\$ 44.07	33.52

BRCA0004-008 11/01/2017

	RATES	FRINGES
BRICKLAYER; MARBLE SETTER.....	\$ 37.46	16.69

BRCA0018-004 07/01/2017

	RATES	FRINGES
MARBLE FINISHER.....	\$ 30.93	12.95
TILE FINISHER.....	\$ 25.98	11.23
TILE LAYER.....	\$ 37.76	16.37

BRCA0018-010 09/01/2017

	RATES	FRINGES
TERRAZZO FINISHER.....	\$ 29.75	12.91
TERRAZZO WORKER/SETTER.....	\$ 36.75	13.82

CARP0409-002 07/01/2016

	RATES	FRINGES
DIVER		
(1) WET.....	\$ 712.48	17.03
(2) STANDBY.....	\$ 356.24	17.03
(3) TENDER.....	\$ 348.24	17.03
(4) ASSISTANT TENDER.....	\$ 324.24	17.03

AMOUNTS IN "RATES" COLUMN ARE PER DAY

CARP0409-008 08/01/2010

	RATES	FRINGES
MODULAR FURNITURE INSTALLER.....	\$ 17.00	7.41

CARP0547-001 07/01/2016

	RATES	FRINGES
CARPENTER		
(1) BRIDGE.....	\$ 40.33	17.03
(2) COMMERCIAL BUILDING....	\$ 35.10	17.03
(3) HEAVY & HIGHWAY.....	\$ 40.20	17.03
(4) RESIDENTIAL CARPENTER..	\$ 28.08	17.03
(5) RESIDENTIAL		
INSULATION INSTALLER.....	\$ 18.00	8.16
MILLWRIGHT.....	\$ 46.70	17.03
PILEDRIVERMAN.....	\$ 40.33	17.03

CARP0547-002 07/01/2017

	RATES	FRINGES
DRYWALL		
(1) WORK ON WOOD FRAMED CONSTRUCTION OF SINGLE FAMILY RESIDENCES, APARTMENTS OR CONDOMINIUMS UNDER FOUR STORIES		
DRYWALL INSTALLER/LATHER...	\$ 22.95	18.85
DRYWALL STOCKER/SCRAPPER...	\$ 12.50	12.27
(2) ALL OTHER WORK		
DRYWALL INSTALLER/LATHER...	\$ 32.00	17.63
DRYWALL STOCKER/SCRAPPER...	\$ 12.50	12.27

ELEC0569-001 06/04/2018

	RATES	FRINGES
ELECTRICIANS (TUNNEL WORK)		
CABLE SPLICER.....	\$ 50.81	3%+13.63
ELECTRICIAN.....	\$ 50.06	3%+13.63
ELECTRICIANS: (ALL OTHER WORK, INCLUDING 4 STORIES RESIDENTIAL)		
CABLE SPLICER.....	\$ 45.25	3%+13.63
ELECTRICIAN.....	\$ 44.50	3%+13.63

ELEC0569-004 06/04/2018

	RATES	FRINGES
ELECTRICIAN (SOUND & COMMUNICATIONS SOUND TECHNICIAN).....		
	\$ 31.75	3%+11.78
SCOPE OF WORK ASSEMBLY, INSTALLATION, OPERATION, SERVICE AND MAINTENANCE OF COMPONENTS OR SYSTEMS AS USED IN CLOSED CIRCUIT TELEVISION, AMPLIFIED MASTER TELEVISION DISTRIBUTION, CATV ON PRIVATE PROPERTY, INTERCOMMUNICATION, BURGLAR ALARM, FIRE ALARM, LIFE SUPPORT AND ALL SECURITY ALARMS, PRIVATE AND PUBLIC TELEPHONE AND RELATED TELEPHONE INTERCONNECT, PUBLIC ADDRESS, PAGING, AUDIO, LANGUAGE, ELECTRONIC, BACKGROUND MUSIC SYSTEM LESS THAN LINE VOLTAGE OR ANY SYSTEM ACCEPTABLE FOR CLASS TWO WIRING FOR PRIVATE, COMMERCIAL, OR INDUSTRIAL USE FURNISHED BY LEASED WIRE, FREQUENCY MODULATION OR OTHER RECORDING DEVICES, ELECTRICAL APPARATUS BY MEANS OF WHICH ELECTRICITY IS APPLIED TO THE AMPLIFICATION, TRANSMISSION, TRANSFERENCE, RECORDING OR REPRODUCTION OF VOICE, MUSIC, SOUND, IMPULSES AND VIDEO. EXCLUDED FROM THIS SCOPE OF WORK - TRANSMISSION, SERVICE AND MAINTENANCE OF BACKGROUND MUSIC. ALL OF THE ABOVE SHALL INCLUDE THE INSTALLATION AND TRANSMISSION OVER FIBER OPTICS.		

ELEC0569-005 06/04/2018

	RATES	FRINGES
SOUND & COMMUNICATIONS		
SOUND TECHNICIAN.....	\$ 31.75	3%+11.78
SCOPE OF WORK ASSEMBLY, INSTALLATION, OPERATION, SERVICE AND MAINTENANCE OF COMPONENTS OR SYSTEMS AS USED IN CLOSED CIRCUIT TELEVISION, AMPLIFIED MASTER TELEVISION DISTRIBUTION, CATV ON PRIVATE PROPERTY, INTERCOMMUNICATION, BURGLAR ALARM, FIRE ALARM, LIFE SUPPORT AND ALL SECURITY ALARMS, PRIVATE AND PUBLIC TELEPHONE AND RELATED TELEPHONE INTERCONNECT, PUBLIC ADDRESS, PAGING, AUDIO, LANGUAGE, ELECTRONIC, BACKGROUND MUSIC SYSTEM LESS THAN LINE VOLTAGE OR ANY SYSTEM ACCEPTABLE FOR CLASS TWO WIRING FOR PRIVATE, COMMERCIAL, OR INDUSTRIAL USE FURNISHED BY LEASED WIRE, FREQUENCY MODULATION OR OTHER RECORDING DEVICES, ELECTRICAL APPARATUS BY MEANS OF WHICH		

ELECTRICITY IS APPLIED TO THE AMPLIFICATION, TRANSMISSION, TRANSFERENCE, RECORDING OR REPRODUCTION OF VOICE, MUSIC, SOUND, IMPULSES AND VIDEO. EXCLUDED FROM THIS SCOPE OF WORK - TRANSMISSION, SERVICE AND MAINTENANCE OF BACKGROUND MUSIC. ALL OF THE ABOVE SHALL INCLUDE THE INSTALLATION AND TRANSMISSION OVER FIBER OPTICS.

SOUND TECHNICIAN: TERMINATING, OPERATING AND PERFORMING FINAL CHECK-OUT

 ELEC0569-006 02/27/2017

WORK ON STREET LIGHTING; TRAFFIC SIGNALS; AND UNDERGROUND SYSTEMS AND/OR ESTABLISHED EASEMENTS OUTSIDE OF BUILDINGS

	RATES	FRINGES
TRAFFIC SIGNAL, STREET LIGHT AND UNDERGROUND WORK		
UTILITY TECHNICIAN #1.....	\$ 30.48	3%+7.70
UTILITY TECHNICIAN #2.....	\$ 25.45	3%+7.70

STREET LIGHT & TRAFFIC SIGNAL WORK:

UTILITY TECHNICIAN #1: INSTALLATION OF STREET LIGHTS AND TRAFFIC SIGNALS, INCLUDING ELECTRICAL CIRCUITRY, PROGRAMMABLE CONTROLLER, PEDESTAL-MOUNTED ELECTRICAL METER ENCLOSURES AND LAYING OF PRE-ASSEMBLED CABLE IN DUCTS. THE LAYOUT OF ELECTRICAL SYSTEMS AND COMMUNICATION INSTALLATION INCLUDING PROPER POSITION OF TRENCH DEPTHS, AND RADIUS AT DUCT BANKS, LOCATION FOR MANHOLES, STREET LIGHTS AND TRAFFIC SIGNALS.

UTILITY TECHNICIAN #2: DISTRIBUTION OF MATERIAL AT JOBSITE, INSTALLATION OF UNDERGROUND DUCTS FOR ELECTRICAL, TELEPHONE, CABLE TV LAND COMMUNICATION SYSTEMS. THE SETTING, LEVELING, GROUNDING AND RACKING OF PRECAST MANHOLES, HANDHOLES AND TRANSFORMER PADS.

 ELEC0569-008 06/04/2018

	RATES	FRINGES
ELECTRICIAN (RESIDENTIAL, 1-3 STORIES).....	\$ 33.38	3%+6.61

ELEC1245-001 06/01/2018

	RATES	FRINGES
LINE CONSTRUCTION		
(1) LINEMAN; CABLE SPLICER..	\$ 56.79	17.91
(2) EQUIPMENT SPECIALIST (OPERATES CRAWLER TRACTORS, COMMERCIAL MOTOR VEHICLES, BACKHOES, TRENCHERS, CRANES (50 TONS AND BELOW), OVERHEAD & UNDERGROUND DISTRIBUTION LINE EQUIPMENT).....	\$ 45.36	16.74
(3) GROUNDMAN.....	\$ 34.68	16.36
(4) POWDERMAN.....	\$ 49.55	3%+17.65

HOLIDAYS: NEW YEAR'S DAY, M.L. KING DAY, MEMORIAL DAY,
INDEPENDENCE DAY, LABOR DAY, VETERANS DAY, THANKSGIVING DAY
AND DAY AFTER THANKSGIVING, CHRISTMAS DAY

ELEV0018-001 01/01/2018

	RATES	FRINGES
ELEVATOR MECHANIC.....	\$ 53.85	32.645

FOOTNOTE:

PAID VACATION: EMPLOYER CONTRIBUTES 8% OF REGULAR HOURLY
RATE AS VACATION PAY CREDIT FOR EMPLOYEES WITH MORE THAN 5
YEARS OF SERVICE, AND 6% FOR 6 MONTHS TO 5 YEARS OF SERVICE.
PAID HOLIDAYS: NEW YEARS DAY, MEMORIAL DAY, INDEPENDENCE DAY,
LABOR DAY, VETERANS DAY, THANKSGIVING DAY, FRIDAY AFTER
THANKSGIVING, AND CHRISTMAS DAY.

ENGI0012-003 07/01/2018

	RATES	FRINGES
OPERATOR: POWER EQUIPMENT (ALL OTHER WORK)		
GROUP 1.....	\$ 45.30	25.25
GROUP 2.....	\$ 46.08	25.25
GROUP 3.....	\$ 46.37	25.25
GROUP 4.....	\$ 47.86	25.25
GROUP 5.....	\$ 48.96	25.25
GROUP 6.....	\$ 48.08	25.25
GROUP 8.....	\$ 48.19	25.25
GROUP 9.....	\$ 49.29	25.25
GROUP 10.....	\$ 48.31	25.25
GROUP 11.....	\$ 49.41	25.25
GROUP 12.....	\$ 48.48	25.25
GROUP 13.....	\$ 48.58	25.25

GROUP 14.....	\$ 48.61	25.25
GROUP 15.....	\$ 48.69	25.25
GROUP 16.....	\$ 48.81	25.25
GROUP 17.....	\$ 48.98	25.25
GROUP 18.....	\$ 49.08	25.25
GROUP 19.....	\$ 49.19	25.25
GROUP 20.....	\$ 49.31	25.25
GROUP 21.....	\$ 49.48	25.25
GROUP 22.....	\$ 49.58	25.25
GROUP 23.....	\$ 49.69	25.25
GROUP 24.....	\$ 49.81	25.25
GROUP 25.....	\$ 49.98	25.25

OPERATOR: POWER EQUIPMENT
(CRANES, PILEDIVING &
HOISTING)

GROUP 1.....	\$ 46.65	25.25
GROUP 2.....	\$ 47.43	25.25
GROUP 3.....	\$ 47.72	25.25
GROUP 4.....	\$ 47.86	25.25
GROUP 5.....	\$ 48.08	25.25
GROUP 6.....	\$ 48.19	25.25
GROUP 7.....	\$ 48.31	25.25
GROUP 8.....	\$ 48.48	25.25
GROUP 9.....	\$ 48.65	25.25
GROUP 10.....	\$ 49.65	25.25
GROUP 11.....	\$ 50.65	25.25
GROUP 12.....	\$ 51.65	25.25
GROUP 13.....	\$ 52.65	25.25

OPERATOR: POWER EQUIPMENT
(TUNNEL WORK)

GROUP 1.....	\$ 47.15	25.25
GROUP 2.....	\$ 47.93	25.25
GROUP 3.....	\$ 48.22	25.25
GROUP 4.....	\$ 48.39	25.25
GROUP 5.....	\$ 48.58	25.25
GROUP 6.....	\$ 48.69	25.25
GROUP 7.....	\$ 48.81	25.25

PREMIUM PAY:

\$3.75 PER HOUR SHALL BE PAID ON ALL POWER EQUIPMENT OPERATOR WORK ON THE FOLLOWNG MILITARY BASES: CHINA LAKE NAVAL RESERVE, VANDENBERG AFB, POINT ARGUELLO, SEELY NAVAL BASE, FORT IRWIN, NEBO ANNEX MARINE BASE, MARINE CORP LOGISTICS BASE YERMO, EDWARDS AFB, 29 PALMS MARINE BASE AND CAMP PENDLETON

WORKERS REQUIRED TO SUIT UP AND WORK IN A HAZARDOUS MATERIAL ENVIRONMENT: \$2.00 PER HOUR ADDITIONAL. COMBINATION MIXER AND COMPRESSOR OPERATOR ON GUNITITE WORK SHALL BE CLASSIFIED AS A CONCRETE MOBILE MIXER OPERATOR.

SEE ZONE DEFINITIONS AFTER CLASSIFICATIONS

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: BARGEMAN; BRAKEMAN; COMPRESSOR OPERATOR; DITCH WITCH, WITH SEAT OR SIMILAR TYPE EQUIPMENT; ELEVATOR OPERATOR-INSIDE; ENGINEER OILER; FORKLIFT OPERATOR (INCLUDES LOED, LULL OR SIMILAR TYPES UNDER 5 TONS; GENERATOR OPERATOR; GENERATOR, PUMP OR COMPRESSOR PLANT OPERATOR; PUMP OPERATOR; SIGNALMAN; SWITCHMAN

GROUP 2: ASPHALT-RUBBER PLANT OPERATOR (NURSE TANK OPERATOR); CONCRETE MIXER OPERATOR-SKIP TYPE; CONVEYOR OPERATOR; FIREMAN; FORKLIFT OPERATOR (INCLUDES LOED, LULL OR SIMILAR TYPES OVER 5 TONS; HYDROSTATIC PUMP OPERATOR; OILER CRUSHER (ASPHALT OR CONCRETE PLANT); PETROMAT LAYDOWN MACHINE; PJU SIDE DUM JACK; SCREENING AND CONVEYOR MACHINE OPERATOR (OR SIMILAR TYPES); SKIPLOADER (WHEEL TYPE UP TO 3/4 YD. WITHOUT ATTACHMENT); TAR POT FIREMAN; TEMPORARY HEATING PLANT OPERATOR; TRENCHING MACHINE OILER

GROUP 3: ASPHALT-RUBBER BLEND OPERATOR; BOBCAT OR SIMILAR TYPE (SKID STEER); EQUIPMENT GREASER (RACK); FORD FERGUSON (WITH DRAGTYPE ATTACHMENTS); HELICOPTER RADIOMAN (GROUND); STATIONARY PIPE WRAPPING AND CLEANING MACHINE OPERATOR

GROUP 4: ASPHALT PLANT FIREMAN; BACKHOE OPERATOR (MINI-MAX OR SIMILAR TYPE); BORING MACHINE OPERATOR; BOXMAN OR MIXERMAN (ASPHALT OR CONCRETE); CHIP SPREADING MACHINE OPERATOR; CONCRETE CLEANING DECONTAMINATION MACHINE OPERATOR; CONCRETE PUMP OPERATOR (SMALL PORTABLE); DRILLING MACHINE OPERATOR, SMALL AUGER TYPES (TEXOMA SUPER ECONOMATIC OR SIMILAR TYPES - HUGHES 100 OR 200 OR SIMILAR TYPES - DRILLING DEPTH OF 30' MAXIMUM); EQUIPMENT GREASER (GREASE TRUCK); GUARD RAIL POST DRIVER OPERATOR; HIGHLINE CABLEWAY SIGNALMAN; HYDRA-HAMMER-AERO STOMPER; MICRO TUNNELING (ABOVE GROUND TUNNEL); POWER CONCRETE CURING MACHINE OPERATOR; POWER CONCRETE SAW OPERATOR; POWER-DRIVEN JUMBO FORM SETTER OPERATOR; POWER SWEEPER OPERATOR; ROCK WHEEL SAW/TRENCHER; ROLLER OPERATOR (COMPACTING); SCREED OPERATOR (ASPHALT OR CONCRETE); TRENCHING MACHINE OPERATOR (UP TO 6 FT.); VACUUM OR MUCH TRUCK

GROUP 5: EQUIPMENT GREASER (GREASE TRUCK/MULTI SHIFT).

GROUP 6: ARTICULATING MATERIAL HAULER; ASPHALT PLANT ENGINEER; BATCH PLANT OPERATOR; BIT SHARPENER; CONCRETE JOINT MACHINE OPERATOR (CANAL AND SIMILAR TYPE); CONCRETE PLANER OPERATOR; DANDY DIGGER; DECK ENGINE OPERATOR; DERRICKMAN (OILFIELD TYPE); DRILLING MACHINE OPERATOR, BUCKET OR AUGER TYPES (CALWELD 100 BUCKET OR SIMILAR TYPES - WATSON 1000 AUGER OR SIMILAR TYPES - TEXOMA 330, 500 OR 600 AUGER OR SIMILAR TYPES - DRILLING DEPTH OF 45' MAXIMUM); DRILLING MACHINE OPERATOR; HYDROGRAPHIC SEEDER MACHINE OPERATOR (STRAW, PULP OR SEED), JACKSON TRACK MAINTAINER, OR SIMILAR TYPE; KALAMAZOO SWITCH TAMPER, OR SIMILAR TYPE; MACHINE TOOL OPERATOR; MAGINNIS INTERNAL FULL SLAB VIBRATOR, MECHANICAL BERM, CURB OR GUTTER (CONCRETE OR ASPHALT); MECHANICAL FINISHER OPERATOR (CONCRETE,

CLARY-JOHNSON-BIDWELL OR SIMILAR); MICRO TUNNEL SYSTEM (BELOW GROUND); PAVEMENT BREAKER OPERATOR (TRUCK MOUNTED); ROAD OIL MIXING MACHINE OPERATOR; ROLLER OPERATOR (ASPHALT OR FINISH), RUBBER-TIRED EARTH MOVING EQUIPMENT (SINGLE ENGINE, UP TO AND INCLUDING 25 YDS. STRUCK); SELF-PROPELLED TAR PIPELINING MACHINE OPERATOR; SKIPLOADER OPERATOR (CRAWLER AND WHEEL TYPE, OVER 3/4 YD. AND UP TO AND INCLUDING 1-1/2 YDS.); SLIP FORM PUMP OPERATOR (POWER DRIVEN HYDRAULIC LIFTING DEVICE FOR CONCRETE FORMS); TRACTOR OPERATOR-BULLDOZER, TAMPER-SCRAPER (SINGLE ENGINE, UP TO 100 H.P. FLYWHEEL AND SIMILAR TYPES, UP TO AND INCLUDING D-5 AND SIMILAR TYPES); TUGGER HOIST OPERATOR (1 DRUM); ULTRA HIGH PRESSURE WATERJET CUTTING TOOL SYSTEM OPERATOR; VACUUM BLASTING MACHINE OPERATOR

GROUP 8: ASPHALT OR CONCRETE SPREADING OPERATOR (TAMPING OR FINISHING); ASPHALT PAVING MACHINE OPERATOR (BARBER GREENE OR SIMILAR TYPE); ASPHALT-RUBBER DISTRIBUTION OPERATOR; BACKHOE OPERATOR (UP TO AND INCLUDING 3/4 YD.), SMALL FORD, CASE OR SIMILAR; CAST-IN-PLACE PIPE LAYING MACHINE OPERATOR; COMBINATION MIXER AND COMPRESSOR OPERATOR (GUNITED WORK); COMPACTOR OPERATOR (SELF-PROPELLED); CONCRETE MIXER OPERATOR (PAVING); CRUSHING PLANT OPERATOR; DRILL DOCTOR; DRILLING MACHINE OPERATOR, BUCKET OR AUGER TYPES (CALWELD 150 BUCKET OR SIMILAR TYPES - WATSON 1500, 2000 2500 AUGER OR SIMILAR TYPES - TEXOMA 700, 800 AUGER OR SIMILAR TYPES - DRILLING DEPTH OF 60' MAXIMUM); ELEVATING GRADER OPERATOR; GRADE CHECKER; GRADALL OPERATOR; GROUTING MACHINE OPERATOR; HEAVY-DUTY REPAIRMAN; HEAVY EQUIPMENT ROBOTICS OPERATOR; KALAMAZOO BALLISTE REGULATOR OR SIMILAR TYPE; KOLMAN BELT LOADER AND SIMILAR TYPE; LE TOURNEAU BLOB COMPACTOR OR SIMILAR TYPE; LOADER OPERATOR (ATHEY, EUCLID, SIERRA AND SIMILAR TYPES); MOBARK CHIPPER OR SIMILAR; OZZIE PADDER OR SIMILAR TYPES; P.C. SLOT SAW; PNEUMATIC CONCRETE PLACING MACHINE OPERATOR (HACKLEY-PRESSWELL OR SIMILAR TYPE); PUMPCRETE GUN OPERATOR; ROCK DRILL OR SIMILAR TYPES; ROTARY DRILL OPERATOR (EXCLUDING CAISSON TYPE); RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR (SINGLE ENGINE, CATERPILLAR, EUCLID, ATHEY WAGON AND SIMILAR TYPES WITH ANY AND ALL ATTACHMENTS OVER 25 YDS. UP TO AND INCLUDING 50 CU. YDS. STRUCK); RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR (MULTIPLE ENGINE UP TO AND INCLUDING 25 YDS. STRUCK); RUBBER-TIRED SCRAPER OPERATOR (SELF-LOADING PADDLE WHEEL TYPE-JOHN DEERE, 1040 AND SIMILAR SINGLE UNIT); SELF-PROPELLED CURB AND GUTTER MACHINE OPERATOR; SHUTTLE BUGGY; SKIPLOADER OPERATOR (CRAWLER AND WHEEL TYPE OVER 1-1/2 YDS. UP TO AND INCLUDING 6-1/2 YDS.); SOIL REMEDIATION PLANT OPERATOR; SURFACE HEATERS AND PLANER OPERATOR; TRACTOR COMPRESSOR DRILL COMBINATION OPERATOR; TRACTOR OPERATOR (ANY TYPE LARGER THAN D-5 - 100 FLYWHEEL H.P. AND OVER, OR SIMILAR-BULLDOZER, TAMPER, SCRAPER AND PUSH TRACTOR SINGLE ENGINE); TRACTOR OPERATOR (BOOM ATTACHMENTS), TRAVELING PIPE WRAPPING, CLEANING AND BENDING MACHINE OPERATOR; TRENCHING MACHINE OPERATOR (OVER 6 FT. DEPTH CAPACITY, MANUFACTURER'S RATING); TRENCHING MACHINE WITH ROAD MINER

ATTACHMENT (OVER 6 FT DEPTH CAPACITY): ULTRA HIGH PRESSURE WATERJET CUTTING TOOL SYSTEM MECHANIC; WATER PULL (COMPACTION) OPERATOR

GROUP 9: HEAVY DUTY REPAIRMAN

GROUP 10: DRILLING MACHINE OPERATOR, BUCKET OR AUGER TYPES (CALWELD 200 B BUCKET OR SIMILAR TYPES-WATSON 3000 OR 5000 AUGER OR SIMILAR TYPES-TEXOMA 900 AUGER OR SIMILAR TYPES-DRILLING DEPTH OF 105' MAXIMUM); DUAL DRUM MIXER, DYNAMIC COMPACTOR LDC350 (OR SIMILAR TYPES); MONORAIL LOCOMOTIVE OPERATOR (DIESEL, GAS OR ELECTRIC); MOTOR PATROL-BLADE OPERATOR (SINGLE ENGINE); MULTIPLE ENGINE TRACTOR OPERATOR (EUCLID AND SIMILAR TYPE-EXCEPT QUAD 9 CAT.); RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR (SINGLE ENGINE, OVER 50 YDS. STRUCK); PNEUMATIC PIPE RAMMING TOOL AND SIMILAR TYPES; PRESTRESSED WRAPPING MACHINE OPERATOR; RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR (SINGLE ENGINE, OVER 50 YDS. STRUCK); RUBBER TIRED EARTH MOVING EQUIPMENT OPERATOR (MULTIPLE ENGINE, EUCLID, CATERPILLAR AND SIMILAR OVER 25 YDS. AND UP TO 50 YDS. STRUCK), TOWER CRANE REPAIRMAN; TRACTOR LOADER OPERATOR (CRAWLER AND WHEEL TYPE OVER 6-1/2 YDS.); WOODS MIXER OPERATOR (AND SIMILAR PUGMILL EQUIPMENT)

GROUP 11: HEAVY DUTY REPAIRMAN - WELDER COMBINATION, WELDER - CERTIFIED.

GROUP 12: AUTO GRADER OPERATOR; AUTOMATIC SLIP FORM OPERATOR; DRILLING MACHINE OPERATOR, BUCKET OR AUGER TYPES (CALWELD, AUGER 200 CA OR SIMILAR TYPES - WATSON, AUGER 6000 OR SIMILAR TYPES - HUGHES SUPER DUTY, AUGER 200 OR SIMILAR TYPES - DRILLING DEPTH OF 175' MAXIMUM); HOE RAM OR SIMILAR WITH COMPRESSOR; MASS EXCAVATOR OPERATOR LESS THAN 750 CU. YARDS; MECHANICAL FINISHING MACHINE OPERATOR; MOBILE FORM TRAVELER OPERATOR; MOTOR PATROL OPERATOR (MULTI-ENGINE); PIPE MOBILE MACHINE OPERATOR; RUBBER-TIRED EARTH- MOVING EQUIPMENT OPERATOR (MULTIPLE ENGINE, EUCLID, CATERPILLAR AND SIMILAR TYPE, OVER 50 CU. YDS. STRUCK); RUBBER-TIRED SELF- LOADING SCRAPER OPERATOR (PADDLE-WHEEL-AUGER TYPE SELF-LOADING - TWO (2) OR MORE UNITS)

GROUP 13: RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR OPERATING EQUIPMENT WITH PUSH-PULL SYSTEM (SINGLE ENGINE, UP TO AND INCLUDING 25 YDS. STRUCK)

GROUP 14: CANAL LINER OPERATOR; CANAL TRIMMER OPERATOR; REMOTE- CONTROL EARTH-MOVING EQUIPMENT OPERATOR (OPERATING A SECOND PIECE OF EQUIPMENT: \$1.00 PER HOUR ADDITIONAL); WHEEL EXCAVATOR OPERATOR (OVER 750 CU. YDS.)

GROUP 15: RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR, OPERATING EQUIPMENT WITH PUSH-PULL SYSTEM (SINGLE ENGINE, CATERPILLAR, EUCLID, ATHEY WAGON AND SIMILAR TYPES WITH ANY AND ALL ATTACHMENTS OVER 25 YDS. AND UP TO AND INCLUDING 50

YDS. STRUCK); RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR, OPERATING EQUIPMENT WITH PUSH-PULL SYSTEM (MULTIPLE ENGINE-UP TO AND INCLUDING 25 YDS. STRUCK)

GROUP 16: RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR, OPERATING EQUIPMENT WITH PUSH-PULL SYSTEM (SINGLE ENGINE, OVER 50 YDS. STRUCK); RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR, OPERATING EQUIPMENT WITH PUSH-PULL SYSTEM (MULTIPLE ENGINE, EUCLID, CATERPILLAR AND SIMILAR, OVER 25 YDS. AND UP TO 50 YDS. STRUCK)

GROUP 17: RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR, OPERATING EQUIPMENT WITH PUSH-PULL SYSTEM (MULTIPLE ENGINE, EUCLID, CATERPILLAR AND SIMILAR, OVER 50 CU. YDS. STRUCK); TANDEM TRACTOR OPERATOR (OPERATING CRAWLER TYPE TRACTORS IN TANDEM - QUAD 9 AND SIMILAR TYPE)

GROUP 18: RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR, OPERATING IN TANDEM (SCRAPERS, BELLY DUMPS AND SIMILAR TYPES IN ANY COMBINATION, EXCLUDING COMPACTION UNITS - SINGLE ENGINE, UP TO AND INCLUDING 25 YDS. STRUCK)

GROUP 19: ROTEX CONCRETE BELT OPERATOR (OR SIMILAR TYPES); RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR, OPERATING IN TANDEM (SCRAPERS, BELLY DUMPS AND SIMILAR TYPES IN ANY COMBINATION, EXCLUDING COMPACTION UNITS - SINGLE ENGINE, CATERPILLAR, EUCLID, ATHEY WAGON AND SIMILAR TYPES WITH ANY AND ALL ATTACHMENTS OVER 25 YDS. AND UP TO AND INCLUDING 50 CU. YDS. STRUCK); RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR, OPERATING IN TANDEM (SCRAPERS, BELLY DUMPS AND SIMILAR TYPES IN ANY COMBINATION, EXCLUDING COMPACTION UNITS - MULTIPLE ENGINE, UP TO AND INCLUDING 25 YDS. STRUCK)

GROUP 20: RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR, OPERATING IN TANDEM (SCRAPERS, BELLY DUMPS AND SIMILAR TYPES IN ANY COMBINATION, EXCLUDING COMPACTION UNITS - SINGLE ENGINE, OVER 50 YDS. STRUCK); RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR, OPERATING IN TANDEM (SCRAPERS, BELLY DUMPS, AND SIMILAR TYPES IN ANY COMBINATION, EXCLUDING COMPACTION UNITS - MULTIPLE ENGINE, EUCLID, CATERPILLAR AND SIMILAR, OVER 25 YDS. AND UP TO 50 YDS. STRUCK)

GROUP 21: RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR, OPERATING IN TANDEM (SCRAPERS, BELLY DUMPS AND SIMILAR TYPES IN ANY COMBINATION, EXCLUDING COMPACTION UNITS - MULTIPLE ENGINE, EUCLID, CATERPILLAR AND SIMILAR TYPE, OVER 50 CU. YDS. STRUCK)

GROUP 22: RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR, OPERATING EQUIPMENT WITH THE TANDEM PUSH-PULL SYSTEM (SINGLE ENGINE, UP TO AND INCLUDING 25 YDS. STRUCK)

GROUP 23: RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR, OPERATING EQUIPMENT WITH THE TANDEM PUSH-PULL SYSTEM

(SINGLE ENGINE, CATERPILLAR, EUCLID, ATHEY WAGON AND SIMILAR TYPES WITH ANY AND ALL ATTACHMENTS OVER 25 YDS. AND UP TO AND INCLUDING 50 YDS. STRUCK); RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR, OPERATING WITH THE TANDEM PUSH-PULL SYSTEM (MULTIPLE ENGINE, UP TO AND INCLUDING 25 YDS. STRUCK)

GROUP 24: RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR, OPERATING EQUIPMENT WITH THE TANDEM PUSH-PULL SYSTEM (SINGLE ENGINE, OVER 50 YDS. STRUCK); RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR, OPERATING EQUIPMENT WITH THE TANDEM PUSH-PULL SYSTEM (MULTIPLE ENGINE, EUCLID, CATERPILLAR AND SIMILAR, OVER 25 YDS. AND UP TO 50 YDS. STRUCK)

GROUP 25: CONCRETE PUMP OPERATOR-TRUCK MOUNTED; RUBBER-TIRED EARTH-MOVING EQUIPMENT OPERATOR, OPERATING EQUIPMENT WITH THE TANDEM PUSH-PULL SYSTEM (MULTIPLE ENGINE, EUCLID, CATERPILLAR AND SIMILAR TYPE, OVER 50 CU. YDS. STRUCK)

CRANES, PILEDIVING AND HOISTING EQUIPMENT CLASSIFICATIONS

GROUP 1: ENGINEER OILER; FORK LIFT OPERATOR (INCLUDES LOED, LULL OR SIMILAR TYPES)

GROUP 2: TRUCK CRANE OILER

GROUP 3: A-FRAME OR WINCH TRUCK OPERATOR; ROSS CARRIER OPERATOR (JOBSITE)

GROUP 4: BRIDGE-TYPE UNLOADER AND TURNTABLE OPERATOR; HELICOPTER HOIST OPERATOR

GROUP 5: HYDRAULIC BOOM TRUCK; STINGER CRANE (AUSTIN-WESTERN OR SIMILAR TYPE); TUGGER HOIST OPERATOR (1 DRUM)

GROUP 6: BRIDGE CRANE OPERATOR; CRETOR CRANE OPERATOR; HOIST OPERATOR (CHICAGO BOOM AND SIMILAR TYPE); LIFT MOBILE OPERATOR; LIFT SLAB MACHINE OPERATOR (VAGTBORG AND SIMILAR TYPES); MATERIAL HOIST AND/OR MANLIFT OPERATOR; POLAR GANTRY CRANE OPERATOR; SELF CLIMBING SCAFFOLD (OR SIMILAR TYPE); SHOVEL, BACKHOE, DRAGLINE, CLAMSHELL OPERATOR (OVER 3/4 YD. AND UP TO 5 CU. YDS. MRC); TUGGER HOIST OPERATOR

GROUP 7: PEDESTAL CRANE OPERATOR; SHOVEL, BACKHOE, DRAGLINE, CLAMSHELL OPERATOR (OVER 5 CU. YDS. MRC); TOWER CRANE REPAIR; TUGGER HOIST OPERATOR (3 DRUM)

GROUP 8: CRANE OPERATOR (UP TO AND INCLUDING 25 TON CAPACITY); CRAWLER TRANSPORTER OPERATOR; DERRICK BARGE OPERATOR (UP TO AND INCLUDING 25 TON CAPACITY); HOIST OPERATOR, STIFF LEGS, GUY DERRICK OR SIMILAR TYPE (UP TO AND INCLUDING 25 TON CAPACITY); SHOVEL, BACKHOE, DRAGLINE, CLAMSHELL OPERATOR (OVER 7 CU. YDS., M.R.C.)

GROUP 9: CRANE OPERATOR (OVER 25 TONS AND UP TO AND INCLUDING 50 TONS MRC); DERRICK BARGE OPERATOR (OVER 25 TONS UP TO AND INCLUDING 50 TONS MRC); HIGHLINE CABLEWAY OPERATOR; HOIST OPERATOR, STIFF LEGS, GUY DERRICK OR SIMILAR TYPE (OVER 25 TONS UP TO AND INCLUDING 50 TONS MRC); K-CRANE OPERATOR; POLAR CRANE OPERATOR; SELF ERECTING TOWER CRANE OPERATOR MAXIMUM LIFTING CAPACITY TEN TONS

GROUP 10: CRANE OPERATOR (OVER 50 TONS AND UP TO AND INCLUDING 100 TONS MRC); DERRICK BARGE OPERATOR (OVER 50 TONS UP TO AND INCLUDING 100 TONS MRC); HOIST OPERATOR, STIFF LEGS, GUY DERRICK OR SIMILAR TYPE (OVER 50 TONS UP TO AND INCLUDING 100 TONS MRC), MOBILE TOWER CRANE OPERATOR (OVER 50 TONS, UP TO AND INCLUDING 100 TONS M.R.C.); TOWER CRANE OPERATOR AND TOWER GANTRY

GROUP 11: CRANE OPERATOR (OVER 100 TONS AND UP TO AND INCLUDING 200 TONS MRC); DERRICK BARGE OPERATOR (OVER 100 TONS UP TO AND INCLUDING 200 TONS MRC); HOIST OPERATOR, STIFF LEGS, GUY DERRICK OR SIMILAR TYPE (OVER 100 TONS UP TO AND INCLUDING 200 TONS MRC); MOBILE TOWER CRANE OPERATOR (OVER 100 TONS UP TO AND INCLUDING 200 TONS MRC)

GROUP 12: CRANE OPERATOR (OVER 200 TONS UP TO AND INCLUDING 300 TONS MRC); DERRICK BARGE OPERATOR (OVER 200 TONS UP TO AND INCLUDING 300 TONS MRC); HOIST OPERATOR, STIFF LEGS, GUY DERRICK OR SIMILAR TYPE (OVER 200 TONS, UP TO AND INCLUDING 300 TONS MRC); MOBILE TOWER CRANE OPERATOR (OVER 200 TONS, UP TO AND INCLUDING 300 TONS MRC)

GROUP 13: CRANE OPERATOR (OVER 300 TONS); DERRICK BARGE OPERATOR (OVER 300 TONS); HELICOPTER PILOT; HOIST OPERATOR, STIFF LEGS, GUY DERRICK OR SIMILAR TYPE (OVER 300 TONS); MOBILE TOWER CRANE OPERATOR (OVER 300 TONS)

TUNNEL CLASSIFICATIONS

GROUP 1: SKIPLOADER (WHEEL TYPE UP TO 3/4 YD. WITHOUT ATTACHMENT)

GROUP 2: POWER-DRIVEN JUMBO FORM SETTER OPERATOR

GROUP 3: DINKEY LOCOMOTIVE OR MOTORPERSON (UP TO AND INCLUDING 10 TONS)

GROUP 4: BIT SHARPENER; EQUIPMENT GREASER (GREASE TRUCK); SLIP FORM PUMP OPERATOR (POWER-DRIVEN HYDRAULIC LIFTING DEVICE FOR CONCRETE FORMS); TUGGER HOIST OPERATOR (1 DRUM); TUNNEL LOCOMOTIVE OPERATOR (OVER 10 AND UP TO AND INCLUDING 30 TONS)

GROUP 5: BACKHOE OPERATOR (UP TO AND INCLUDING 3/4 YD.); SMALL FORD, CASE OR SIMILAR; DRILL DOCTOR; GROUTING MACHINE OPERATOR; HEADING SHIELD OPERATOR; HEAVY-DUTY REPAIRPERSON; LOADER OPERATOR (ATHEY, EUCLID, SIERRA AND SIMILAR TYPES);

MUCKING MACHINE OPERATOR (1/4 YD., RUBBER-TIRED, RAIL OR TRACK TYPE); PNEUMATIC CONCRETE PLACING MACHINE OPERATOR (HACKLEY-PRESSWELL OR SIMILAR TYPE); PNEUMATIC HEADING SHIELD (TUNNEL); PUMPCRETE GUN OPERATOR; TRACTOR COMPRESSOR DRILL COMBINATION OPERATOR; TUGGER HOIST OPERATOR (2 DRUM); TUNNEL LOCOMOTIVE OPERATOR (OVER 30 TONS)

GROUP 6: HEAVY DUTY REPAIRMAN

GROUP 7: TUNNEL MOLE BORING MACHINE OPERATOR

ENGINEERS ZONES

\$1.00 ADDITIONAL PER HOUR FOR ALL OF IMPERIAL COUNTY AND THE PORTIONS OF KERN, RIVERSIDE & SAN BERNARDINO COUNTIES AS DEFINED BELOW:

THAT AREA WITHIN THE FOLLOWING BOUNDARY: BEGIN IN SAN BERNARDINO COUNTY, APPROXIMATELY 3 MILES NE OF THE INTERSECTION OF I-15 AND THE CALIFORNIA STATE LINE AT THAT POINT WHICH IS THE NW CORNER OF SECTION 1, T17N, R14E, SAN BERNARDINO MERIDIAN. CONTINUE W IN A STRAIGHT LINE TO THAT POINT WHICH IS THE SW CORNER OF THE NORTHWEST QUARTER OF SECTION 6, T27S, R42E, MT. DIABLO MERIDIAN. CONTINUE NORTH TO THE INTERSECTION WITH THE INYO COUNTY BOUNDARY AT THAT POINT WHICH IS THE NE CORNER OF THE WESTERN HALF OF THE NORTHERN QUARTER OF SECTION 6, T25S, R42E, MDM. CONTINUE W ALONG THE INYO AND SAN BERNARDINO COUNTY BOUNDARY UNTIL THE INTERSECTION WITH KERN COUNTY, AS THAT POINT WHICH IS THE SE CORNER OF SECTION 34, T24S, R40E, MDM. CONTINUE W ALONG THE INYO AND KERN COUNTY BOUNDARY UNTIL THE INTERSECTION WITH TULARE COUNTY, AT THAT POINT WHICH IS THE SW CORNER OF THE SE QUARTER OF SECTION 32, T24S, R37E, MDM. CONTINUE W ALONG THE KERN AND TULARE COUNTY BOUNDARY, UNTIL THAT POINT WHICH IS THE NW CORNER OF T25S, R32E, MDM. CONTINUE S FOLLOWING R32E LINES TO THE NW CORNER OF T31S, R32E, MDM. CONTINUE W TO THE NW CORNER OF T31S, R31E, MDM. CONTINUE S TO THE SW CORNER OF T32S, R31E, MDM. CONTINUE W TO SW CORNER OF SE QUARTER OF SECTION 34, T32S, R30E, MDM. CONTINUE S TO SW CORNER OF T11N, R17W, SBM. CONTINUE E ALONG SOUTH BOUNDARY OF T11N, SBM TO SW CORNER OF T11N, R7W, SBM. CONTINUE S TO SW CORNER OF T9N, R7W, SBM. CONTINUE E ALONG SOUTH BOUNDARY OF T9N, SBM TO SW CORNER OF T9N, R1E, SBM. CONTINUE S ALONG WEST BOUNDARY OF R1E, SBM TO RIVERSIDE COUNTY LINE AT THE SW CORNER OF T1S, R1E, SBM. CONTINUE E ALONG SOUTH BOUNDARY OF T1S, SBM (RIVERSIDE COUNTY LINE) TO SW CORNER OF T1S, R10E, SBM. CONTINUE S ALONG WEST BOUNDARY OF R10E, SBM TO IMPERIAL COUNTY LINE AT THE SW CORNER OF T8S, R10E, SBM. CONTINUE W ALONG IMPERIAL AND RIVERSIDE COUNTY LINE TO NW CORNER OF T9S, R9E, SBM. CONTINUE S ALONG THE BOUNDARY BETWEEN IMPERIAL AND SAN DIEGO COUNTIES, ALONG THE WEST EDGE OF R9E, SBM TO THE SOUTH BOUNDARY OF IMPERIAL COUNTY/CALIFORNIA STATE LINE. FOLLOW THE CALIFORNIA STATE LINE WEST TO ARIZONA STATE LINE, THEN NORTH TO NEVADA STATE LINE, THEN CONTINUING NW BACK TO START AT THE POINT WHICH IS THE NW CORNER OF SECTION 1, T17N, R14E, SBM

\$1.00 ADDITIONAL PER HOUR FOR PORTIONS OF SAN LUIS OBISPO, KERN, SANTA BARBARA & VENTURA AS DEFINED BELOW:

THAT AREA WITHIN THE FOLLOWING BOUNDARY: BEGIN APPROXIMATELY 5 MILES NORTH OF THE COMMUNITY OF CHOLAME, ON THE MONTEREY COUNTY AND SAN LUIS OBISPO COUNTY BOUNDARY AT THE NW CORNER OF T25S, R16E, MT. DIABLO MERIDIAN. CONTINUE SOUTH ALONG THE WEST SIDE OF R16E TO THE SW CORNER OF T30S, R16E, MDM. CONTINUE E TO SW CORNER OF T30S, R17E, MDM. CONTINUE S TO SW CORNER OF T31S, R17E, MDM. CONTINUE E TO SW CORNER OF T31S, R18E, MDM. CONTINUE S ALONG WEST SIDE OF R18E, MDM AS IT CROSSES INTO SAN BERNARDINO MERIDIAN NUMBERING AREA AND BECOMES R30W. FOLLOW THE WEST SIDE OF R30W, SBM TO THE SW CORNER OF T9N, R30W, SBM. CONTINUE E ALONG THE SOUTH EDGE OF T9N, SBM TO THE SANTA BARBARA COUNTY AND VENTURA COUNTY BOUNDARY AT THAT POINT WHICH IS THE SW CORNER OF SECTION 34. T9N, R24W, SBM, CONTINUE S ALONG THE VENTURA COUNTY LINE TO THAT POINT WHICH IS THE SW CORNER OF THE SE QUARTER OF SECTION 32, T7N, R24W, SBM. CONTINUE E ALONG THE SOUTH EDGE OF T7N, SBM TO THE SE CORNER TO T7N, R21W, SBM. CONTINUE N ALONG EAST SIDE OF R21W, SBM TO VENTURA COUNTY AND KERN COUNTY BOUNDARY AT THE NE CORNER OF T8N, R21W. CONTINUE W ALONG THE VENTURA COUNTY AND KERN COUNTY BOUNDARY TO THE SE CORNER OF T9N, R21W. CONTINUE NORTH ALONG THE EAST EDGE OF R21W, SBM TO THE NE CORNER OF T12N, R21W, SBM. CONTINUE WEST ALONG THE NORTH EDGE OF T12N, SBM TO THE SE CORNER OF T32S, R21E, MDM. [T12N SBM IS A THINK STRIP BETWEEN T11N SBM AND T32S MDM]. CONTINUE NORTH ALONG THE EAST SIDE OF R21E, MDM TO THE KINGS COUNTY AND KERN COUNTY BORDER AT THE NE CORNER OF T25S, R21E, MDM, CONTINUE WEST ALONG THE KINGS COUNTY AND KERN COUNTY BOUNDARY UNTIL THE INTERSECTION OF SAN LUIS OBISPO COUNTY. CONTINUE WEST ALONG THE KINGS COUNTY AND SAN LUIS OBISPO COUNTY BOUNDARY UNTIL THE INTERSECTION WITH MONTEREY COUNTY. CONTINUE WEST ALONG THE MONTEREY COUNTY AND SAN LUIS OBISPO COUNTY BOUNDARY TO THE BEGINNING POINT AT THE NW CORNER OF T25S, R16E, MDM.

\$2.00 ADDITIONAL PER HOUR FOR INYO AND MONO COUNTIES AND THE NORTHERN PORTION OF SAN BERNARDINO COUNTY AS DEFINED BELOW:

THAT AREA WITHIN THE FOLLOWING BOUNDARY: BEGIN AT THE INTERSECTION OF THE NORTHERN BOUNDARY OF MONO COUNTY AND THE CALIFORNIA STATE LINE AT THE POINT WHICH IS THE CENTER OF SECTION 17, T10N, R22E, MT. DIABLO MERIDIAN. CONTINUE S THEN SE ALONG THE ENTIRE WESTERN BOUNDARY OF MONO COUNTY, UNTIL IT REACHES INYO COUNTY AT THE POINT WHICH IS THE NE CORNER OF THE WESTERN HALF OF THE NW QUARTER OF SECTION 2, T8S, R29E, MDM. CONTINUE SSE ALONG THE ENTIRE WESTERN BOUNDARY OF INYO COUNTY, UNTIL THE INTERSECTION WITH KERN COUNTY AT THE POINT WHICH IS THE SW CORNER OF THE SE 1/4 OF SECTION 32, T24S, R37E, MDM. CONTINUE E ALONG THE INYO AND KERN COUNTY BOUNDARY UNTIL THE INTERSECTION WITH SAN BERNARDINO COUNTY AT THAT POINT WHICH IS THE SE CORNER OF SECTION 34, T24S, R40E, MDM. CONTINUE E ALONG THE INYO AND SAN BERNARDINO COUNTY BOUNDARY UNTIL THE POINT

WHICH IS THE NE CORNER OF THE WESTERN HALF OF THE NW QUARTER OF SECTION 6, T25S, R42E, MDM. CONTINUE S TO THAT POINT WHICH IS THE SW CORNER OF THE NW QUARTER OF SECTION 6, T27S, R42E, MDM. CONTINUE E IN A STRAIGHT LINE TO THE CALIFORNIA AND NEVADA STATE BORDER AT THE POINT WHICH IS THE NW CORNER OF SECTION 1, T17N, R14E, SAN BERNARDINO MERIDIAN. THEN CONTINUE NW ALONG THE STATE LINE TO THE STARTING POINT, WHICH IS THE CENTER OF SECTION 18, T10N, R22E, MDM.

REMAINING AREA NOT DEFINED ABOVE RECIEVES BASE RATE

 ENGI0012-004 08/01/2015

	RATES	FRINGES
OPERATOR: POWER EQUIPMENT (DREDGING)		
(1) LEVERMAN.....	\$ 49.50	23.60
(2) DREDGE DOZER.....	\$ 43.53	23.60
(3) DECKMATE.....	\$ 43.42	23.60
(4) WINCH OPERATOR (STERN WINCH ON DREDGE).....	\$ 42.87	23.60
(5) FIREMAN-OILER, DECKHAND, BARGEMAN, LEVEEHAND.....	\$ 42.33	23.60
(6) BARGE MATE.....	\$ 42.94	23.60

 * IRON0377-002 07/01/2018

	RATES	FRINGES
IRONWORKERS:		
FENCE ERECTOR.....	\$ 31.08	21.41
ORNAMENTAL, REINFORCING AND STRUCTURAL.....	\$ 37.50	30.05

PREMIUM PAY:

\$6.00 ADDITIONAL PER HOUR AT THE FOLLOWING LOCATIONS:

CHINA LAKE NAVAL TEST STATION, CHOCOLATE MOUNTAINS NAVAL RESERVE-NILAND, EDWARDS AFB, FORT IRWIN MILITARY STATION, FORT IRWIN TRAINING CENTER-GOLDSTONE, SAN CLEMENTE ISLAND, SAN NICHOLAS ISLAND, SUSANVILLE FEDERAL PRISON, 29 PALMS - MARINE CORPS, U.S. MARINE BASE - BARSTOW, U.S. NAVAL AIR FACILITY - SEALEY, VANDENBERG AFB

\$4.00 ADDITIONAL PER HOUR AT THE FOLLOWING LOCATIONS:

ARMY DEFENSE LANGUAGE INSTITUTE - MONTEREY, FALLON AIR BASE, NAVAL POST GRADUATE SCHOOL - MONTEREY, YERMO MARINE CORPS LOGISTICS CENTER

\$2.00 ADDITIONAL PER HOUR AT THE FOLLOWING LOCATIONS:

PORT HUENEME, PORT MUGU, U.S. COAST GUARD STATION - TWO ROCK

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	RATES	FRINGES
LABORER (BUILDING AND ALL OTHER RESIDENTIAL CONSTRUCTION)		
GROUP 1.....	\$ 31.31	19.29
GROUP 2.....	\$ 31.99	19.29
GROUP 3.....	\$ 32.70	19.29
GROUP 4.....	\$ 33.50	19.29
GROUP 5.....	\$ 35.43	19.29
LABORER (RESIDENTIAL CONSTRUCTION - SEE DEFINITION BELOW)		
(1) LABORER.....	\$ 27.32	18.11
(2) CLEANUP, LANDSCAPE, FENCING (CHAIN LINK & WOOD).....	\$ 26.03	18.11

RESIDENTIAL DEFINITION: WOOD OR METAL FRAME CONSTRUCTION OF SINGLE FAMILY RESIDENCES, APARTMENTS AND CONDOMINUMS - EXCLUDING (A) PROJECTS THAT EXCEED THREE STORIES OVER A GARAGE LEVEL, (B) ANY UTILITY WORK SUCH AS TELEPHONE, GAS, WATER, SEWER AND OTHER UTILITIES AND (C) ANY FINE GRADING WORK, UTILITY WORK OR PAVING WORK IN THE FUTURE STREET AND PUBLIC RIGHT-OF-WAY; BUT INCLUDING ALL ROUGH GRADING WORK AT THE JOB SITE BEHIND THE EXISTING RIGHT OF WAY

LABORER CLASSIFICATIONS

GROUP 1: CLEANING AND HANDLING OF PANEL FORMS; CONCRETE SCREEDING FOR ROUGHT STRIKE-OFF; CONCRETE, WATER CURING; DEMOLITION LABORER; FLAGMAN; GAS, OIL AND/OR WATER PIPELINE LABORER; GENERAL LABORER; GENERAL CLEAN-UP LABORER; LANDSCAPE LABORER; JETTING LABORER; TEMPORARY WATER AND AIR LINES LABORER; MATERIAL HOSEMAN (WALLS, SLABS, FLOORS AND DECKS); PLUGGING, FILLING OF SHEE-BOLT HOLES; DRY PACKING OF CONCRETE; RAILROAD MAINTENANCE, REPAIR TRACKMAN AND ROAD BEDS, STREETCAR AND RAILROAD CONSTRUCTION TRAC LABORERS; SLIP FORM RAISERS; SLURRY SEAL CREWS (MIXER OPERATOR, APPLICATOR OPERATOR, SQUEEGEE MAN, SHUTTLE MAN, TOP MAN), FILLING OF CRACKS BY ANY METHOD ON ANY SURFACE; TARMAN AND MORTAR MAN; TOOL CRIB OR TOOL HOUSE LABORER; WINDOW CLEANER; WIRE MESH PULING-ALL CONCRETE POURING OPERATIONS

GROUP 2: ASPHALT SHOVELER; CEMENT DUMPER (ON 1 YARD OR LARGER MIXER AND HANDLING BULK CEMENT); CESSPOOL DIGGER AND INSTALLER; CHUCKTENDER; CHUTE MAN, POURING CONCRETE, THE

HANDLING OF THE CUTE FROM READY MIX TRUCKS, SUCH AS WALLS, SLABS, DECKS, FLOORS, FOUNDATIONS, FOOTINGS, CURBS, GUTTERS AND SIDEWALKS; CONCRETE CURER-IMPERVIOUS MEMBRANE AND FORM OILER; CUTTING TORCH OPERATOR (DEMOLITON); GUINEA CHASER; HEADBOARD MAN-ASPHLT; LABORER, PACKING ROD STEEL AND PANS; MEMBRANE VAPOR BARRIER INSTALLER; POWER BROOM SWEEPERS (SMALL); RIIPRAP, STONEPAVER, PLACING STONE OR WET SACKED CONCRETE; ROTO SCRAPER AND TILLER; TANK SEALER AND CLEANER; TREE CLIMBER, FALLER, CHAIN SAW OPERATOR, PITTSBURGH CHIPPER AND SIMILAR TYPE BRUSH SHREDDERS; UNDERGROUND LABORERS, INCLUDING CAISSON BELLOWER

GROUP 3: BUGGYMOBILE; CONCRETE CUTTING TORCH; CONCRETE CUTTING TORCH; CONCRETE PILE CUTTER; DRILLER, JACKHAMMER, 2 1/2 FEET DRILL STEEL OR LONGER; DRI PAK-IT MACHINE; HIGH SEALER (INCLUDING DRILLING OF SAME); HYDRO SEEDER AND SIMILAR TYPE; IMPACT WRENCH, MULT-PLATE; KETTLEMEN, POTMEN AND MEAN APPLYING ASPHALT, LAY-KOLD, CREOSOTE, LINE CAUSTIC AND SIMILAR TYPE MATERIALS (APPLYING MEANS APPLYING, DIPPING, BRUSHING OR HANDLING OF SUCH MATERIALS FOR PIPE WRAPPING AND WATERPROOFING); OPERATORS OF PNEUMATIC, GAS, ELECTRIC TOOLS, VIBRATING MACHINES, PAVEMENT BREAKERS, AIR BLASTING, COME-ALONG, AND SIMILAR MECHANICAL TOOLS NOT SEPARATELY CLASSIFIED HEREIN; PIPELAYERS BACK UP MAN COATING, GROUTING, MAKING OF JOINTS, SEALING, CAULKING, DIAPERING AND INCLUDING RUBBER GASKET JOINTS, POINTING AND ANY AND ALL OTHER SERVICES; ROTARY SCARIFIER OR MULTIPLE HEAD CONCRETE CHIPPING SCAARIFIER; STEEL HEADER BOARD MAN AND GUIDELINE SETTER; TAMPERS, BARKO, WACKER AND SIMILAR TYPE; TRENCHING MACHINE, HANDPROPELLED

GROUP 4: ASPHALT RAKER, LUTERMAN, IRONER, APSHALT DUMPMAN AND ASPHALT SPREADER BOXES (ALL TYPES); CONCRETE CORE CUTTER (WALLS, FLOORS OR CEILINGS), GRINDER OR SANDER; CONCRETE SAW MAN; CUTTING WALLS OR FLAT WORK, SCORING OLD OR NEW CONCRETE; CRIBBER, SHORER, LAGGING, SHEETING AND TRENCH BRACING, HAND-GUIDED LAGGING HAMMER; LASER BEAM IN CONNECTION WITH LABORER'S WORK; OVERSIZE CONCRETE VIBRATOR OPERATOR 70 POUNDS AND OVER; PIPELAYER PERFORMING ALL SERVICES IN THE LAYING, INSTALLATION AND ALL FORMS OF CONNECTION OF PIPE FROM THE POINT OF RECEIVING PIPE IN THE DITCH UNTIL COMPLETION OF OEPARATION, INCLUDING ANY AND ALL FORMS OF TUBULAR MATERIAL, WHETHER PIPE, METALLIC OR NON-METALLIC, CONDUIT, AND ANY OTHER STATIONARY TYPE OF TUBULAR DEVICE USED FOR THE CONVEYING OF ANY SUBSTANCE OR ELEMENT, WHETHER WATER, SEWAGE, SOLID, GAS, AIR OR OTHER PRODUCT WHATSOEVER AND WITHOUT REGARD TO THE NATURE OF MATERIAL FROM WHICH THE TUBULAR MATERIAL IS FABRICATED; NO JOINT PIPE AND STRIPPING OF SAME; PREFABRICATED MANHOLE INSTALLER; SANDBLASTER (NOZZLEMAN), PORTA SHOT-BLAST, WATER BLASTING

GROUP 5: BLASTERS POWDERMAN-ALL WORK OF LOADING HOLES, PLACING AND BLASTING OF ALL PWDER AND EXPLOSIVES OF WHATEVER TYPE, REGARDLESS OF METHOD USED FOR SUCH LOADING

AND PLACING; DRILLER-ALL POWER DRILLS, EXCLUDING JACKHAMMER, WHETHER CORE, DIAMOND, WAGON, TRACK, MULTIPLE UNIT, AND ANY AND ALL OTHER TYPES OF MECHANICAL DRILLS WITHOUT REGARD TO THE FORM OF MOTIVE POWER.

LABO0089-002 11/01/2017

	RATES	FRINGES
LABORER (MASON TENDER).....	\$ 30.00	16.47

LABO0089-004 07/01/2017

HEAVY AND HIGHWAY CONSTRUCTION

	RATES	FRINGES
LABORERS:		
GROUP 1.....	\$ 31.63	18.58
GROUP 2.....	\$ 32.09	18.58
GROUP 3.....	\$ 32.50	18.58
GROUP 4.....	\$ 33.34	18.58
GROUP 5.....	\$ 37.46	18.58

LABORER CLASSIFICATIONS

GROUP 1: LABORER: GENERAL OR CONSTRUCTION LABORER, LANDSCAPE LABORER. ASPHALT RUBBER MATERIAL LOADER. BORING MACHINE TENDER (OUTSIDE), CARPENTER LABORER (CLEANING, HANDLING, OILING & BLOWING OF PANEL FORMS AND LUMBER), CONCRETE LABORER, CONCRETE SCREEDING FOR ROUGH STRIKE-OFF, CONCRETE WATER CURING. CONCRETE CURB & GUTTER LABORER, CERTIFIED CONFINED SPACE LABORER, DEMOLITION LABORER & CLEANING OF BRICK AND LUMBER, EXPANSION JOINT CAULKING; ENVIRONMENTAL REMEDIATION, MONITORING WELL, TOXIC WASTE AND GEOTECHNICAL DRILL TENDER, FINE GRADER, FIRE WATCHER, LIMBERS, BRUSH LOADER, PILERS AND DEBRIS HANDLERS. FLAGMAN. GAS OIL AND WATER PIPELINE LABORER. MATERIAL HOSEMAN (SLABS, WALLS, FLOORS, DECKS); PLUGGING, FILLING OF SHEE BOLT HOLES; DRY PACKING OF CONCRETE AND PATCHING; POST HOLER DIGGER (MANUAL); RAILROAD MAINTENANCE, REPAIR TRACKMAN, ROAD BEDS; RIGGING & SIGNALING; SCALER, SLIP-FORM RAISERS, FILLING CRACKS ON ANY SURFACE, TOOL CRIB OR TOOL HOUSE LABORER, TRAFFIC CONTROL (SIGNS, BARRIERS, BARRICADES, DELINEATOR, CONES ETC.), WINDOW CLEANER

GROUP 2: ASPHALT ABATEMENT; BUGGYMOBILE; CEMENT DUMPER (ON 1 YD. OR LARGER MIXERS AND HANDLING BULK CEMENT); CONCRETE CURER, IMPERVIOUS MEMBRANE AND FORM OILER; CHUTE MAN, POURING CONCRETE; CONCRETE CUTTING TORCH; CONCRETE PILE CUTTER; DRILLER/JACKHAMMER, WITH DRILL STEEL 2 1/2 FEET OR LONGER; DRY PAK-IT MACHINE; FENCE ERECTOR; PIPELINE WRAPPER, GAS, OIL, WATER, POT TENDER & FORM MAN; GROUT MAN; INSTALLATION OF ALL ASPHALT OVERLAY FABRIC AND MATERIALS

USED FOR REINFORCING ASPHALT; IRRIGATION LABORER;
KETTLEMAN-POTMAN HOT MOP, INCLUDES APPLYING ASPHALT,
LAY-KLOLD, CREOSOTE, LIME CAUSTIC AND SIMILAR TYHPES OF
MATERIALS (DIPPING, BRUSHING, HANDLING) AND WATERPROOFING;
MEMBRANE VAPOR BARRIER INSTALLER; PIPELAYER BACKUP MAN
(COATING, GROUTING, MAKING OF JOINTS, SEALING CAULKIING,
DIAPERING INCLUDING RUBBER BASKET JOINTS, POINTING);
ROTARY SCARIFIER, MULTIPLE HEAD CONCRETE CHIPPER; ROCK
SLINGER; ROTO SCRAPER & TILLER; SANDBLASTER POT TENDER;
SEPTIC TANK DIGGER/INSTALLER; TAMPER/WACKER OPERATOR; TANK
SCALER & CLEANER; TAR MAN & MORTAR MAN; TREE
CLIMBER/FALLER, CHAINB SAW OPERATOR, PITTSBURGH CHIPPER &
SIMILAR TYPE BRUSH SHREDDERS.

GROUP 3: ASPHALT, INSTALLATION OF ALL FRABRICS; BUGGY MOBILE
MAN, BUSHING HAMMER; COMPACTOR (ALL TYPES), CONCRETE CURER
- IMPERVIOUS MEMBRANE, FORM OILER, CONCRETE CUTTING TORCH,
CONCRETE PILE CUTTER,DRILLER/JACKHAMMER WITH DRILL STEEL 2
1/2 FT OR LONGER, DRY PAK-IT MACHINE, FENCE ERECTOR
INCLUDING MANUAL POST HOLE DIGGING, GAS OIL OR WATER
PIPELINE WRAPPER - 6 FT PIPE AND OVER, GURADRAIL ERECTOR,
HYDRO SEEDER, IMPACT WRENCH MAN (MULTI PLATE),
KETTLEMAN-POTMAN HOT MOP INCLUDES APPLYING ASPHALT,
LAY-KOLD, CREOSOTE, LIME CAUSTIC AND SIMILAR TYPES OF
MATERIALS (DIPPING, BRUSHING OR HANDLING) AND
WATERPROOFING. LASER BEAM IN CONNECTION WITH LABORER WORK.
HIGH SCALER, OPERATORS OF PNEUMATIC GAS OR ELECTRIC TOOLS,
VIBRATING MACHINES, PAVEMENT BREAKERS, AIR BLASTING,
COME-ALONGS AND SIMILAR MECHANICAL TOOLS, REMOTE-CONTROLLED
ROBOTIC TOOLS IN CONNECTION WITH LABORERS WORK. PIPELAYER
BACKUP MAN (COATING, GROUTING,M MAKEING OF JOINTS, SEALING,
CAULKING, DIAPERING INCLUDING RUBBER GASKET JOINTS,
POINTING AND OTHER SERVICES). POWER POST HOLE DIGGER,
ROTARY SCARIFIER (MULTIPLE HEAD CONCRETE CHIPPER
SCARIFIER), ROCK SLINGER, SHOT BLAST EQUIPMENT (8 TO 48
INCHES), STEEL HEADERBOARD MAN AND GUIDELINE SETTER,
TAMPER/WACKER OPERATOR AND SIMILAR TYPES, TRENCHING MACHINE
HAND PROPELLED.

GROUP 4: ANY WORKER EXPOSED TO RAW SEWAGE. ASPHALT RAKER,
LUTEMAN, ASPHALT DUMPMAN, ASPHALT SPREADER BOXES, CONCRETE
CORE CUTTER, CONCRETE SAW MAN, CRIBBER, SHORER, HEAD ROCK
SLINGER. INSTALLATION OF SUBSURFACE INSTRUMENTATION,
MONITORING WELLS OR POINTS, REMEDIATION SYSTEM INSTALLER;
LABORER, ASPHALT-RUBBER DISTRIBUTOR BOOTMAN; OVERSIZE
CONCRETE VIBRATOR OPERATORS, 70 POUNDS OR OVER. PIPELAYER,
PRFEFABRICATED MANHOLE INSTALLER, SANDBLAST NOZZLEMAN
(WATER BALSTING-PORTA SHOT BLAST), TRAFFIC LANE CLOSURE.

GROUP 5: BLASTERS POWDERMAN-ALL WORK OF LOADING HOLES,
PLACING AND BLASTING OF ALL POWDER AND EXPLOSIVES OF
WHATEVER TYPE, REGARDLESS OF METHOD USED FOR SUCH LOADING
AND PLACING; HORIZONTAL DIRECTIONAL DRILLER, BORING SYSTEM,
ELECTRONIC TRAKING, DRILLER: ALL POWER DRILLS EXCLUDING
JACKHAMMER, WHETHER CORE, DIAMOND, WAGON, TRACK, MULTIPLE

UNIT, AND ALL OTHER TYPES OF MECHANICAL DRILLS WITHOUT REGARD TO FORM OF MOTIVE POWER. ENVIRONMENTAL REMEDIATION, MONITORING WELL, TOXIC WASTE AND GEOTECHNICAL DRILLER, TOXIC WASTE REMOVAL. WELDING IN CONNECTION WITH LABORER'S WORK.

 LABO0300-005 01/01/2018

	RATES	FRINGES
ASBESTOS REMOVAL LABORER.....	\$ 33.19	17.78

SCOPE OF WORK: INCLUDES SITE MOBILIZATION, INITIAL SITE CLEANUP, SITE PREPARATION, REMOVAL OF ASBESTOS-CONTAINING MATERIAL AND TOXIC WASTE, ENCAPSULATION, ENCLOSURE AND DISPOSAL OF ASBESTOS- CONTAINING MATERIALS AND TOXIC WASTE BY HAND OR WITH EQUIPMENT OR MACHINERY; SCAFFOLDING, FABRICATION OF TEMPORARY WOODEN BARRIERS AND ASSEMBLY OF DECONTAMINATION STATIONS.

 LABO0345-001 07/01/2018

	RATES	FRINGES
LABORER (GUNITE)		
GROUP 1.....	\$ 42.18	18.27
GROUP 2.....	\$ 41.23	18.27
GROUP 3.....	\$ 37.69	18.27

FOOTNOTE: GUNITE PREMIUM PAY: WORKERS WORKING FROM A BOSN'N'S CHAIR OR SUSPENDED FROM A ROPE OR CABLE SHALL RECEIVE 40 CENTS PER HOUR ABOVE THE FOREGOING APPLICABLE CLASSIFICATION RATES. WORKERS DOING GUNITE AND/OR SHOTCRETE WORK IN A TUNNEL SHALL RECEIVE 35 CENTS PER HOUR ABOVE THE FOREGOING APPLICABLE CLASSIFICATION RATES, PAID ON A PORTAL-TO-PORTAL BASIS. ANY WORK PERFORMED ON, IN OR ABOVE ANY SMOKE STACK, SILO, STORAGE ELEVATOR OR SIMILAR TYPE OF STRUCTURE, WHEN SUCH STRUCTURE IS IN EXCESS OF 75'-0" ABOVE BASE LEVEL AND WHICH WORK MUST BE PERFORMED IN WHOLE OR IN PART MORE THAN 75'-0" ABOVE BASE LEVEL, THAT WORK PERFORMED ABOVE THE 75'-0" LEVEL SHALL BE COMPENSATED FOR AT 35 CENTS PER HOUR ABOVE THE APPLICABLE CLASSIFICATION WAGE RATE.

GUNITE LABORER CLASSIFICATIONS

GROUP 1: RODMEN, NOZZLEMEN

GROUP 2: GUNMEN

GROUP 3: REBOUNDMEN

	RATES	FRINGES
LABORERS: (HORIZONTAL DIRECTIONAL DRILLING)		
(1) DRILLING CREW LABORER...	\$ 35.70	14.03
(2) VEHICLE OPERATOR/HAULER.	\$ 35.87	14.03
(3) HORIZONTAL DIRECTIONAL DRILL OPERATOR.....	\$ 37.72	14.03
(4) ELECTRONIC TRACKING LOCATOR.....	\$ 39.72	14.03
LABORERS: (STRIPING/SLURRY SEAL)		
GROUP 1.....	\$ 35.86	16.21
GROUP 2.....	\$ 37.16	16.21
GROUP 3.....	\$ 39.17	16.21
GROUP 4.....	\$ 40.91	16.21

LABORERS - STRIPING CLASSIFICATIONS

GROUP 1: PROTECTIVE COATING, PAVEMENT SEALING, INCLUDING REPAIR AND FILLING OF CRACKS BY ANY METHOD ON ANY SURFACE IN PARKING LOTS, GAME COURTS AND PLAYGROUNDS; CARSTOPS; OPERATION OF ALL RELATED MACHINERY AND EQUIPMENT; EQUIPMENT REPAIR TECHNICIAN

GROUP 2: TRAFFIC SURFACE ABRASIVE BLASTER; POT TENDER - REMOVAL OF ALL TRAFFIC LINES AND MARKINGS BY ANY METHOD (SANDBLASTING, WATERBLASTING, GRINDING, ETC.) AND PREPARATION OF SURFACE FOR COATINGS. TRAFFIC CONTROL PERSON: CONTROLLING AND DIRECTING TRAFFIC THROUGH BOTH CONVENTIONAL AND MOVING LANE CLOSURES; OPERATION OF ALL RELATED MACHINERY AND EQUIPMENT

GROUP 3: TRAFFIC DELINEATING DEVICE APPLICATOR: LAYOUT AND APPLICATION OF PAVEMENT MARKERS, DELINEATING SIGNS, RUMBLE AND TRAFFIC BARS, ADHESIVES, GUIDE MARKERS, OTHER TRAFFIC DELINEATING DEVICES INCLUDING TRAFFIC CONTROL. THIS CATEGORY INCLUDES ALL TRAFFIC RELATED SURFACE PREPARATION (SANDBLASTING, WATERBLASTING, GRINDING) AS PART OF THE APPLICATION PROCESS. TRAFFIC PROTECTIVE DELINEATING SYSTEM INSTALLER: REMOVES, RELOCATES, INSTALLS, PERMANENTLY AFFIXED ROADSIDE AND PARKING DELINEATION BARRICADES, FENCING, CABLE ANCHOR, GUARD RAIL, REFERENCE SIGNS, MONUMENT MARKERS; OPERATION OF ALL RELATED MACHINERY AND EQUIPMENT; POWER BROOM SWEEPER

GROUP 4: STRIPER: LAYOUT AND APPLICATION OF TRAFFIC STRIPES AND MARKINGS; HOT THERMO PLASTIC; TAPE TRAFFIC STRIPES AND MARKINGS, INCLUDING TRAFFIC CONTROL; OPERATION OF ALL RELATED MACHINERY AND EQUIPMENT

LABO1414-003 08/08/2018

	RATES	FRINGES
LABORER		
PLASTER CLEAN-UP LABORER....	\$ 33.82	19.40
PLASTER TENDER.....	\$ 36.37	19.40

WORK ON A SWING STAGE SCAFFOLD: \$1.00 PER HOUR ADDITIONAL.

WORK AT MILITARY BASES - \$3.00 ADDITIONAL PER HOUR:
CORONADO NAVAL AMPHIBIOUS BASE, FORT IRWIN, MARINE CORPS AIR
STATION-29 PALMS, IMPERIAL BEACH NAVAL AIR STATION, MARINE
CORPS LOGISTICS SUPPLY BASE, MARINE CORPS PICKLE MEADOWS,
MOUNTAIN WARFARE TRAINING CENTER, NAVAL AIR
FACILITY-SEELEY, NORTH ISLAND NAVAL AIR STATION, VANDENBERG
AFB.

PAIN0036-001 07/01/2018

	RATES	FRINGES
PAINTERS: (INCLUDING LEAD ABATEMENT)		
(1) REPAINT (EXCLUDES SAN DIEGO COUNTY).....	\$ 27.59	14.92
(2) ALL OTHER WORK.....	\$ 31.12	15.04

REPAINT OF ANY PREVIOUSLY PAINTED STRUCTURE. EXCEPTIONS:
WORK INVOLVING THE AEROSPACE INDUSTRY, BREWERIES,
COMMERCIAL RECREATIONAL FACILITIES, HOTELS WHICH OPERATE
COMMERCIAL ESTABLISHMENTS AS PART OF HOTEL SERVICE, AND
SPORTS FACILITIES.

PAIN0036-010 10/01/2017

	RATES	FRINGES
DRYWALL FINISHER/TAPER		
(1) BUILDING & HEAVY CONSTRUCTION.....	\$ 30.24	16.95
(2) RESIDENTIAL CONSTRUCTION (WOOD FRAME APARTMENTS, SINGLE FAMILY HOMES AND MULTI-DUPLEXES UP TO AND INCLUDING FOUR STORIES).....	\$ 23.50	15.96

PAIN0036-012 10/01/2017

	RATES	FRINGES
GLAZIER.....	\$ 42.55	18.57

PAIN0036-019 01/01/2018

	RATES	FRINGES
SOFT FLOOR LAYER.....	\$ 30.02	13.68

PLAS0200-005 08/02/2017

	RATES	FRINGES
PLASTERER.....	\$ 41.26	14.46

NORTH ISLAND NAVAL AIR STATION, COLORADO NAVAL AMPHIBIOUS
BASE, IMPERIAL BEACH NAVAL AIR STATION: \$3.00 ADDITIONAL
PER HOUR.

PLAS0500-001 07/01/2018

	RATES	FRINGES
CEMENT MASON/CONCRETE FINISHER		
GROUP 1.....	\$ 26.34	21.12
GROUP 2.....	\$ 27.99	21.12
GROUP 3.....	\$ 30.07	21.12

CEMENT MASONS - WORK INSIDE THE BUILDING LINE, MEETING THE
FOLLOWING CRITERIA:

GROUP 1: RESIDENTIAL WOOD FRAME PROJECT OF ANY SIZE; WORK
CLASSIFIED AS TYPE III, IV OR TYPE V CONSTRUCTION;
INTERIOR TENANT IMPROVEMENT WORK REGARDLESS THE SIZE OF THE
PROJECT; ANY WOOD FRAME PROJECT OF FOUR STORIES OR LESS.

GROUP 2: WORK CLASSIFIED AS TYPE I AND II CONSTRUCTION

GROUP 3: ALL OTHER WORK

PLUM0016-006 07/01/2016

	RATES	FRINGES
PLUMBER, PIPEFITTER, STEAMFITTER		
CAMP PENDLETON.....	\$ 51.69	21.41
PLUMBER AND PIPEFITTER ALL OTHER WORK EXCEPT WORK ON NEW ADDITIONS AND REMODELING OF BARS, RESTAURANT, STORES AND COMMERCIAL BUILDINGS NOT TO EXCEED 5,000 SQ. FT. OF FLOOR SPACE AND WORK ON STRIP MALLS, LIGHT		

COMMERCIAL, TENANT IMPROVEMENT AND REMODEL WORK.....	\$ 47.19	21.41
WORK ONLY ON NEW ADDITIONS AND REMODELING OF COMMERCIAL BUILDINGS, BARS, RESTAURANTS, AND STORES NOT TO EXCEED 5,000 SQ. FT. OF FLOOR SPACE.....		
	\$ 45.73	20.43
WORK ONLY ON STRIP MALLS, LIGHT COMMERCIAL, TENANT IMPROVEMENT AND REMODEL WORK.....		
	\$ 35.69	18.76

PLUM0016-011 07/01/2017

	RATES	FRINGES
PLUMBER/PIPEFITTER RESIDENTIAL.....	\$ 39.91	17.53

PLUM0078-001 07/01/2016

	RATES	FRINGES
PLUMBER LANDSCAPE/IRRIGATION FITTER..	\$ 44.16	25.19
SEWER & STORM DRAIN WORK....	\$ 44.16	25.19

* ROOF0045-001 07/01/2018

	RATES	FRINGES
ROOFER.....	\$ 31.00	8.62

SFCA0669-001 04/01/2017

	RATES	FRINGES
SPRINKLER FITTER.....	\$ 39.17	15.84

SHEE0206-001 07/01/2017

	RATES	FRINGES
SHEET METAL WORKER CAMP PENDLETON.....	\$ 38.88	26.52
EXCEPT CAMP PENDLETON.....	\$ 36.88	26.52
SHEET METAL TECHNICIAN.....	\$ 27.70	8.43

SHEET METAL TECHNICIAN - SCOPE:
A. EXISTING RESIDENTIAL BUILDINGS, BOTH SINGLE AND
MULTI-FAMILY, WHERE EACH UNIT IS HEATED AND/OR COOLED BY A
SEPARATE SYSTEM B. NEW SINGLE FAMILY RESIDENTIAL BUILDINGS
INCLUDING TRACTS. C. NEW MULTI-FAMILY RESIDENTIAL BUILDINGS,

NOT EXCEEDING FIVE STORIES OF LIVING SPACE IN HEIGHT, PROVIDED EACH UNIT IS HEATED OR COOLED BY A SEPARATE SYSTEM. HOTELS AND MOTELS ARE EXCLUDED. D. LIGHT COMMERCIAL WORK: ANY SHEET METAL, HEATING AND AIR CONDITIONING WORK PERFORMED ON A PROJECT WHERE THE TOTAL CONSTRUCTION COST, EXCLUDING LAND, IS UNDER \$1,000,000 E. TENANT IMPROVEMENT WORK: ANY WORK NECESSARY TO FINISH INTERIOR SPACES TO CONFORM TO THE OCCUPANTS OF COMMERCIAL BUILDINGS, AFTER COMPLETION OF THE BUILDING SHELL

 TEAM0166-001 07/03/2017

	RATES	FRINGES
TRUCK DRIVERS:		
GROUP 1.....	\$ 15.90	34.69
GROUP 2.....	\$ 23.49	34.69
GROUP 3.....	\$ 23.69	34.69
GROUP 4.....	\$ 23.89	34.69
GROUP 5.....	\$ 24.09	34.69
GROUP 6.....	\$ 24.59	34.69
GROUP 7.....	\$ 26.09	34.69

FOOTNOTE: HAZMAT PAY: WORK ON A HAZMAT JOB, WHERE HAZMAT CERTIFICATION IS REQUIRED, SHALL BE PAID, IN ADDITION TO THE CLASSIFICATION WORKING IN, AS FOLLOWS: LEVELS A, B AND C - +\$1.00 PER HOUR. WORKERS SHALL BE PAID HAZMAT PAY IN INCREMENTS OF FOUR (4) AND EIGHT (8) HOURS.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: FUEL MAN, SWAMPER

GROUP 2: 2-AXLE DUMP TRUCK, 2-AXLE FLAT BED, CONCRETE PUMPING TRUCK, INDUSTRIAL LIFT TRUCK, MOTORIZED TRAFFIC CONTROL, PICKUP TRUCK ON JOBSITE

GROUP 3: 2-AXLE WATER TRUCK, 3-AXLE DUMP TRUCK, 3-AXLE FLAT BED, EROSION CONTROL NOZZLEMAN, DUMP CRETE TRUCK UNDER 6.5 YD, FORKLIFT 15,000 LBS AND OVER, PRELL TRUCK, PIPELINE WORK TRUCK DRIVER, ROAD OIL SPREADER, CEMENT DISTRIBUTOR OR SLURRY DRIVER, BOOTMAN, ROSS CARRIER

GROUP 4: OFF-ROAD DUMP TRUCK UNDER 35 TONS 4-AXLES BUT LESS THAN 7-AXLES, LOW-BED TRUCK & TRAILER, TRANSIT MIX TRUCKS UNDER 8 YD, 3-AXLE WATER TRUCK, EROSION CONTROL DRIVER, GROUT MIXER TRUCK, DUMP CRETE 6.5YD AND OVER, DUMPSTER TRUCKS, DW 10, DW 20 AND OVER, FUEL TRUCK AND DYNAMITE, TRUCK GREASER, TRUCK MOUNTED MOBILE SWEEPER 2-AXLE WINCH TRUCK

GROUP 5: OFF-ROAD DUMP TRUCK 35 TONS AND OVER, 7-AXLES OR MORE, TRANSIT MIX TRUCKS 8 YD AND OVER, A-FRAME TRUCK,

SWEDISH CRANES

GROUP 6: OFF-ROAD SPECIAL EQUIPMENT (INCLUDING BUT NOT LIMITED TO WATER PULL TANKERS, ATHEY WAGONS, DJB, B70 WUCLIDS OR LIKE EQUIPMENT)

GROUP 7: REPAIRMAN

WELDERS - RECEIVE RATE PRESCRIBED FOR CRAFT PERFORMING OPERATION TO WHICH WELDING IS INCIDENTAL.

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NOTE: EXECUTIVE ORDER (EO) 13706, ESTABLISHING PAID SICK LEAVE FOR FEDERAL CONTRACTORS APPLIES TO ALL CONTRACTS SUBJECT TO THE DAVIS-BACON ACT FOR WHICH THE CONTRACT IS AWARDED (AND ANY SOLICITATION WAS ISSUED) ON OR AFTER JANUARY 1, 2017. IF THIS CONTRACT IS COVERED BY THE EO, THE CONTRACTOR MUST PROVIDE EMPLOYEES WITH 1 HOUR OF PAID SICK LEAVE FOR EVERY 30 HOURS THEY WORK, UP TO 56 HOURS OF PAID SICK LEAVE EACH YEAR. EMPLOYEES MUST BE PERMITTED TO USE PAID SICK LEAVE FOR THEIR OWN ILLNESS, INJURY OR OTHER HEALTH-RELATED NEEDS, INCLUDING PREVENTIVE CARE; TO ASSIST A FAMILY MEMBER (OR PERSON WHO IS LIKE FAMILY TO THE EMPLOYEE) WHO IS ILL, INJURED, OR HAS OTHER HEALTH-RELATED NEEDS, INCLUDING PREVENTIVE CARE; OR FOR REASONS RESULTING FROM, OR TO ASSIST A FAMILY MEMBER (OR PERSON WHO IS LIKE FAMILY TO THE EMPLOYEE) WHO IS A VICTIM OF, DOMESTIC VIOLENCE, SEXUAL ASSAULT, OR STALKING. ADDITIONAL INFORMATION ON CONTRACTOR REQUIREMENTS AND WORKER PROTECTIONS UNDER THE EO IS AVAILABLE AT WWW.DOL.GOV/WHG/GOVCONTRACTS.

UNLISTED CLASSIFICATIONS NEEDED FOR WORK NOT INCLUDED WITHIN THE SCOPE OF THE CLASSIFICATIONS LISTED MAY BE ADDED AFTER AWARD ONLY AS PROVIDED IN THE LABOR STANDARDS CONTRACT CLAUSES (29CFR 5.5 (A) (1) (II)).

THE BODY OF EACH WAGE DETERMINATION LISTS THE CLASSIFICATION AND WAGE RATES THAT HAVE BEEN FOUND TO BE PREVAILING FOR THE CITED TYPE(S) OF CONSTRUCTION IN THE AREA COVERED BY THE WAGE DETERMINATION. THE CLASSIFICATIONS ARE LISTED IN ALPHABETICAL ORDER OF "IDENTIFIERS" THAT INDICATE WHETHER THE PARTICULAR RATE IS A UNION RATE (CURRENT UNION NEGOTIATED RATE FOR LOCAL), A SURVEY RATE (WEIGHTED AVERAGE RATE) OR A UNION AVERAGE RATE (WEIGHTED UNION AVERAGE RATE).

UNION RATE IDENTIFIERS

A FOUR LETTER CLASSIFICATION ABBREVIATION IDENTIFIER ENCLOSED IN DOTTED LINES BEGINNING WITH CHARACTERS OTHER THAN "SU" OR

"UAVG" DENOTES THAT THE UNION CLASSIFICATION AND RATE WERE PREVAILING FOR THAT CLASSIFICATION IN THE SURVEY. EXAMPLE: PLUM0198-005 07/01/2014. PLUM IS AN ABBREVIATION IDENTIFIER OF THE UNION WHICH PREVAILED IN THE SURVEY FOR THIS CLASSIFICATION, WHICH IN THIS EXAMPLE WOULD BE PLUMBERS. 0198 INDICATES THE LOCAL UNION NUMBER OR DISTRICT COUNCIL NUMBER WHERE APPLICABLE, I.E., PLUMBERS LOCAL 0198. THE NEXT NUMBER, 005 IN THE EXAMPLE, IS AN INTERNAL NUMBER USED IN PROCESSING THE WAGE DETERMINATION. 07/01/2014 IS THE EFFECTIVE DATE OF THE MOST CURRENT NEGOTIATED RATE, WHICH IN THIS EXAMPLE IS JULY 1, 2014.

UNION PREVAILING WAGE RATES ARE UPDATED TO REFLECT ALL RATE CHANGES IN THE COLLECTIVE BARGAINING AGREEMENT (CBA) GOVERNING THIS CLASSIFICATION AND RATE.

SURVEY RATE IDENTIFIERS

CLASSIFICATIONS LISTED UNDER THE "SU" IDENTIFIER INDICATE THAT NO ONE RATE PREVAILED FOR THIS CLASSIFICATION IN THE SURVEY AND THE PUBLISHED RATE IS DERIVED BY COMPUTING A WEIGHTED AVERAGE RATE BASED ON ALL THE RATES REPORTED IN THE SURVEY FOR THAT CLASSIFICATION. AS THIS WEIGHTED AVERAGE RATE INCLUDES ALL RATES REPORTED IN THE SURVEY, IT MAY INCLUDE BOTH UNION AND NON-UNION RATES. EXAMPLE: SULA2012-007 5/13/2014. SU INDICATES THE RATES ARE SURVEY RATES BASED ON A WEIGHTED AVERAGE CALCULATION OF RATES AND ARE NOT MAJORITY RATES. LA INDICATES THE STATE OF LOUISIANA. 2012 IS THE YEAR OF SURVEY ON WHICH THESE CLASSIFICATIONS AND RATES ARE BASED. THE NEXT NUMBER, 007 IN THE EXAMPLE, IS AN INTERNAL NUMBER USED IN PRODUCING THE WAGE DETERMINATION. 5/13/2014 INDICATES THE SURVEY COMPLETION DATE FOR THE CLASSIFICATIONS AND RATES UNDER THAT IDENTIFIER.

SURVEY WAGE RATES ARE NOT UPDATED AND REMAIN IN EFFECT UNTIL A NEW SURVEY IS CONDUCTED.

UNION AVERAGE RATE IDENTIFIERS

CLASSIFICATION(S) LISTED UNDER THE UAVG IDENTIFIER INDICATE THAT NO SINGLE MAJORITY RATE PREVAILED FOR THOSE CLASSIFICATIONS; HOWEVER, 100% OF THE DATA REPORTED FOR THE CLASSIFICATIONS WAS UNION DATA. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG INDICATES THAT THE RATE IS A WEIGHTED UNION AVERAGE RATE. OH INDICATES THE STATE. THE NEXT NUMBER, 0010 IN THE EXAMPLE, IS AN INTERNAL NUMBER USED IN PRODUCING THE WAGE DETERMINATION. 08/29/2014 INDICATES THE SURVEY COMPLETION DATE FOR THE CLASSIFICATIONS AND RATES UNDER THAT IDENTIFIER.

A UAVG RATE WILL BE UPDATED ONCE A YEAR, USUALLY IN JANUARY OF EACH YEAR, TO REFLECT A WEIGHTED AVERAGE OF THE CURRENT NEGOTIATED/CBA RATE OF THE UNION LOCALS FROM WHICH THE RATE IS BASED.

WAGE DETERMINATION APPEALS PROCESS

1.) HAS THERE BEEN AN INITIAL DECISION IN THE MATTER? THIS CAN BE:

- * AN EXISTING PUBLISHED WAGE DETERMINATION
- * A SURVEY UNDERLYING A WAGE DETERMINATION
- * A WAGE AND HOUR DIVISION LETTER SETTING FORTH A POSITION ON A WAGE DETERMINATION MATTER
- * A CONFORMANCE (ADDITIONAL CLASSIFICATION AND RATE) RULING

ON SURVEY RELATED MATTERS, INITIAL CONTACT, INCLUDING REQUESTS FOR SUMMARIES OF SURVEYS, SHOULD BE WITH THE WAGE AND HOUR REGIONAL OFFICE FOR THE AREA IN WHICH THE SURVEY WAS CONDUCTED BECAUSE THOSE REGIONAL OFFICES HAVE RESPONSIBILITY FOR THE DAVIS-BACON SURVEY PROGRAM. IF THE RESPONSE FROM THIS INITIAL CONTACT IS NOT SATISFACTORY, THEN THE PROCESS DESCRIBED IN 2.) AND 3.) SHOULD BE FOLLOWED.

WITH REGARD TO ANY OTHER MATTER NOT YET RIPE FOR THE FORMAL PROCESS DESCRIBED HERE, INITIAL CONTACT SHOULD BE WITH THE BRANCH OF CONSTRUCTION WAGE DETERMINATIONS. WRITE TO:

BRANCH OF CONSTRUCTION WAGE DETERMINATIONS
WAGE AND HOUR DIVISION
U.S. DEPARTMENT OF LABOR
200 CONSTITUTION AVENUE, N.W.
WASHINGTON, DC 20210

2.) IF THE ANSWER TO THE QUESTION IN 1.) IS YES, THEN AN INTERESTED PARTY (THOSE AFFECTED BY THE ACTION) CAN REQUEST REVIEW AND RECONSIDERATION FROM THE WAGE AND HOUR ADMINISTRATOR (SEE 29 CFR PART 1.8 AND 29 CFR PART 7). WRITE TO:

WAGE AND HOUR ADMINISTRATOR
U.S. DEPARTMENT OF LABOR
200 CONSTITUTION AVENUE, N.W.
WASHINGTON, DC 20210

THE REQUEST SHOULD BE ACCOMPANIED BY A FULL STATEMENT OF THE INTERESTED PARTY'S POSITION AND BY ANY INFORMATION (WAGE PAYMENT DATA, PROJECT DESCRIPTION, AREA PRACTICE MATERIAL, ETC.) THAT THE REQUESTOR CONSIDERS RELEVANT TO THE ISSUE.

3.) IF THE DECISION OF THE ADMINISTRATOR IS NOT FAVORABLE, AN INTERESTED PARTY MAY APPEAL DIRECTLY TO THE ADMINISTRATIVE REVIEW BOARD (FORMERLY THE WAGE APPEALS BOARD). WRITE TO:

ADMINISTRATIVE REVIEW BOARD
U.S. DEPARTMENT OF LABOR
200 CONSTITUTION AVENUE, N.W.
WASHINGTON, DC 20210

4.) ALL DECISIONS BY THE ADMINISTRATIVE REVIEW BOARD ARE FINAL.

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END OF GENERAL DECISION

10. FEDERAL LABOR STANDARDS PROVISIONS :

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

SECTION A.

1. Minimum Wages.

- (i) All laborers and mechanics employed or working upon the site of the work, (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project) will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section I(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

- (ii) (a) Any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The Federal Agency or its designee shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding.

The Federal Agency or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development

of the project), all or part of the wages required by the contract, the Federal Agency or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records.

- (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section I(b)(2)(B) of the Davis-bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section I(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- (ii) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Federal Agency or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to the Federal Agency or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired.

Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at

<http://www.dol.gov/esa/whd/forms/wh347instr.htm>

or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the Federal Agency or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to the Federal Agency, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to

require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or, owner).

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

- (1)** That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;
- (2)** That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;
- (3)** That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b) of this section.

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

- (iii)** The contractor or subcontractor shall make the records required under subparagraph A.3.(i) of this section available for inspection, copying, or transcription by authorized representatives of the Federal Agency or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, Federal agency or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

- (i) Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of

apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination.

Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (iii) **Equal employment opportunity.** The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. **Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract
6. **Subcontracts.** The contractor or subcontractor will insert in any subcontracts the clauses contained in 29 CFR 5.59(a)(1) through (10 and such other clauses as the Federal Agency may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
7. **Contract termination; debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
8. **Compliance with Davis-Bacon and Related Act Requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.
9. **Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
10. **Certification of Eligibility.**
 - (i) By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
 - (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1)..
 - (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

SECTION B. The provisions of this paragraph b are applicable where the amount of the prime contract exceeds \$100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

1. Contract Work Hours and Safety Standards Act.

- (i) **Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

- (ii) Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in subparagraph (b)(1) of this section, the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (b)(1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in subparagraph (b)(1) of this section.
- (iii) Withholding for unpaid wages and liquidated damages.** The Federal Agency or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (b)(2) of this section.
- (iv) Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (b)(1) through (4) of this section.

SECTION C. In addition to the clauses contained in SECTION B, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in Sec. 5.1, the Agency Head shall cause or require the contracting officer to insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Agency Head shall cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

11. AGENCY SPECIFIC PROVISIONS:

Note: Failure to comply with these specifications e.g., taking the specified steps prior to Bid opening, and to submit the forms with the Bid will lead to the Bid being declared **non-responsive** and, therefore, shall be rejected.

11.1. FEMA/OES Requirements:

11.1.1. The Contractor shall take all necessary affirmative steps listed in 44 CFR 13.36(e)(2)(i) through (vi) to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible.

11.1.2. Affirmative GFE steps shall include:

1. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
2. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
3. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises;
4. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises;
5. Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce.
6. Requiring the Subcontractors, if subcontracts are to be let, to take the affirmative steps listed in this section.

11.1.3 The City will only accept certifications for the fair share goals determined by the Federal Emergency Management Agency (FEMA), Cal OES-Governor's Office of Emergency Services (OES) from the U.S. Small Business Administration (SBA) and the U.S. Department of Commerce Minority Business Development Agency (MBDA). Failure to solicit subcontractors from these agencies and to advertise for the required certifications will result in a bid deemed non-compliant with the affirmative steps and therefore will be deemed **non-responsive**. See "Small and Disadvantaged Business Potential Resources Centers" Section in a later part these specifications. Include a completed copy of the form AA61, "List of Work Made Available" with the GFE documentation.

12. SMALL AND DISADVANTAGED BUSINESS POTENTIAL RESOURCES CENTERS:

12.1. Utilization of US Small Business Administration (SBA) and Minority Business Development Agency (MBDA) resources is required at no cost. These agencies offer several services, including internet access to databases of DBEs.

- 12.2. For additional assistance, the recipient or contractor may telephone the local offices of both agencies in their area (SBA Minority Enterprise Development Offices and DOC MBDA Regional Centers). The internet web sites also include names, addresses, and phone or fax numbers of local SBA and MBDA centers. Do not write to these sources.
- 12.3. The Contractor shall provide documentation that the local SBA/MBDA offices or web sites were notified of the contracting bid opportunity at least 15 Working Days prior to Bid opening and solicitation to small and minority firms and women’s business enterprise contractors at least 10 Working Days prior to Bid opening. Documentation shall not only include the efforts to contact the information resources and list the Contract opportunity, but also the solicitation posted and responses to the bid requested.
- 12.4. Include qualified small and minority firms and women’s business enterprises on solicitation lists and record the information on Form AA63. Solicitation shall be as broad as possible.
- 12.5. If small and minority firms and women’s business enterprise sources are not located, explain why and describe the efforts made.
- 12.6. The Contractor shall send invitations to at least 10 (or all, if less than 10) small and minority firms and women’s business enterprises for each item of work identified. The invitations shall adequately specify the items for which bids are requested. The record of “good faith” efforts shall indicate a real desire for a positive response, such as a certified mail receipt, fax transmittal, or a documented telephone conversation.
- 12.7. A regular letter or an unanswered telephone call is not an adequate “good faith” effort. A list of all sub-bidders, including the bidders not selected and non-certified Subcontractors, and bid amount for each item of the Work shall be submitted on Form AA62. If a low bid was not accepted, an explanation shall be provided.
- 12.8 Federal Agencies (must be contacted and solicitations posted on their websites):

Name and Address	Web Site
U.S. Small Business Administration	
455 Market Street, Suite 600	Dynamic Small Business Search: http://dsbs.sba.gov/dsbs/search/dsp_dsbs.cfm ¹
San Francisco, CA 94105	Bid Notification: https://eweb1.sba.gov/subnet/common/dsp_login.cfm ²
RE: Minority Enterprise Development Offices	
U.S. Department of Commerce	
Minority Business Development Agency	http://www.mbda.gov ³
555 Montgomery Street	
San Francisco, CA 94111	RE: Business Development Centers

- 12.9 State Agencies (must be contacted):

Name and Address	Web Site
California Department of Transportation	
(CALTRANS) Business Enterprise Program ⁴	

1820 Alhambra Blvd.	
Sacramento, CA 95816	DBE Database: www.dot.ca.gov/hq/bep/find_certified.htm
CA Public Utilities Commission (CPUC)⁵	
505 Van Ness Avenue	<u>Directory:</u> https://sch.thesupplierclearinghouse.com/FrontEnd/SearchCertifiedDirectory.asp
San Francisco, CA 94102-3298	

Notes:

1. The Contractor shall use the SBA's Dynamic Business Search database to search for potential subcontractors, suppliers, and/or manufacturers. Bidder **must** provide a copy of all search records for items of work made available with GFE documentation.
2. Contractor shall use SUB-Net to post subcontracting opportunities. Contractor shall post Subcontractor opportunities at least 15 Working Days prior to bid opening. Small businesses can review this web site to identify opportunities in their areas of expertise. The web site is designed primarily as a place for large businesses to post solicitations and notices. Bidder **must** provide copy of the Display Solicitation Record identifying the date solicitation notice was posted with GFE documentation.
3. Contractor **may** use MBDA web portal to post subcontracting opportunities. If utilized, the Contractor shall post subcontractor opportunities at least 15 Working Days prior to Bid opening. Small businesses can review this web site to identify opportunities in their areas of expertise. The web site is designed primarily as a place for large businesses to post solicitations and notices. Provide copy of the Offer Overview with the GFE documentation.
4. Based on the federal DBE program, CALTRANS maintains a database and provides directories of minority and woman-owned firms. Bidder **must** provide a copy of all search records for items of work made available with GFE documentation.
5. CPUC maintains a database of DBE-owned business enterprises and serves to inform the public. Bidder **must** provide a copy of all search records for items of work made available with GFE documentation.

13. GOOD FAITH EFFORT DOCUMENTATION SUBMITTALS:

- 13.1. The affirmative GFE steps documentation shall be submitted **within 4 Working Days of the Bid Opening**. If this documentation is not submitted when due, the City will declare the Bid **non-responsive** and reject it.

13.2. The required documentation shall be submitted and logged in at the following address:

CITY OF SAN DIEGO
PUBLIC WORKS CONTRACTS
525 B Street, Suite 750, MS 908A
SAN DIEGO, CA 92101

SUBJECT: AFFIRMATIVE GOOD FAITH EFFORT DOCUMENTATION

BID NO.K-19-1560-DBB-3

13.3. The Contractor shall maintain the records documenting compliance with requirements including documentation of its GFE and data relied upon in formulating its fair share objectives.

14. FORMS:

14.1. The Contractor shall demonstrate that efforts were made to attract small and minority firms and women's business enterprises on this contract. The Contractor and Subcontractors shall take the steps listed in these specifications to assure that small and minority firms and women's business enterprises are used whenever possible as sources of supplies, construction, equipment, or services. In addition to the specified GFE documentation, the Bidder shall submit the following forms.

14.1.1. E-BIDDING FORMS - The following forms shall be completed and submitted within **4 Working Days of the Bid opening**. Failure to include any of the forms shall cause the Bid to be deemed **non-responsive**.

1. Form AA61 List of Work Made Available
2. Form AA62 Summary of Bids Received
3. Form AA63 Good Faith Effort List of Subcontractors Solicited

**2 CFR APPENDIX II TO PART 200 – CONTRACT PROVISIONS FOR NON-FEDERAL ENTITY
CONTRACTS UNDER FEDERAL AWARDS**

Pt. 200, App. II

early notification about the requirements allows the potential applicant to decide not to apply or to take needed actions before receiving the Federal award. The announcement need not include all of the terms and conditions of the Federal award, but may refer to a document (with information about how to obtain it) or Internet site where applicants can see the terms and conditions. If this funding opportunity will lead to Federal awards with some special terms and conditions that differ from the Federal awarding agency's usual (sometimes called "general") terms and conditions, this section should highlight those special terms and conditions. Doing so will alert applicants that have received Federal awards from the Federal awarding agency previously and might not otherwise expect different terms and conditions. For the same reason, the announcement should inform potential applicants about special requirements that could apply to particular Federal awards after the review of applications and other information, based on the particular circumstances of the effort to be supported (e.g., if human subjects were to be involved or if some situations may justify special terms on intellectual property, data sharing or security requirements).

3. *Reporting—Required.* This section must include general information about the type (e.g., financial or performance), frequency, and means of submission (paper or electronic) of post-Federal award reporting requirements. Highlight any special reporting requirements for Federal awards under this funding opportunity that differ (e.g., by report type, frequency, form/format, or circumstances for use) from what the Federal awarding agency's Federal awards usually require.

G. FEDERAL AWARDING AGENCY CONTACT(S)—REQUIRED

The announcement must give potential applicants a point(s) of contact for answering questions or helping with problems while the funding opportunity is open. The intent of this requirement is to be as helpful as possible to potential applicants, so the Federal awarding agency should consider approaches such as giving:

- i. Points of contact who may be reached in multiple ways (e.g., by telephone, FAX, and/or email, as well as regular mail).
- ii. A fax or email address that multiple people access, so that someone will respond even if others are unexpectedly absent during critical periods.
- iii. Different contacts for distinct kinds of help (e.g., one for questions of programmatic content and a second for administrative questions).

2 CFR Ch. II (1–1–14 Edition)

H. OTHER INFORMATION—OPTIONAL

This section may include any additional information that will assist a potential applicant. For example, the section might:

- i. Indicate whether this is a new program or a one-time initiative.
- ii. Mention related programs or other upcoming or ongoing Federal awarding agency funding opportunities for similar activities.
- iii. Include current Internet addresses for Federal awarding agency Web sites that may be useful to an applicant in understanding the program.
- iv. Alert applicants to the need to identify proprietary information and inform them about the way the Federal awarding agency will handle it.
- v. Include certain routine notices to applicants (e.g., that the Federal government is not obligated to make any Federal award as a result of the announcement or that only grants officers can bind the Federal government to the expenditure of funds).

APPENDIX II TO PART 200—CONTRACT PROVISIONS FOR NON-FEDERAL ENTITY CONTRACTS UNDER FEDERAL AWARDS

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

(A) Contracts for more than the simplified acquisition threshold currently set at \$150,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

(B) All contracts in excess of \$10,000 must address termination for cause and for convenience by the non-Federal entity including the manner by which it will be effected and the basis for settlement.

(C) Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

(D) Davis-Bacon Act, as amended (40 U.S.C. 3141–3148). When required by Federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141–3144, and 3146–3148) as supplemented by Department of Labor regulations (29 CFR Part 5, “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland “Anti-Kickback” Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

(E) Contract Work Hours and Safety Standards Act (40 U.S.C. 3701–3708). Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or

materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

(F) Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of “funding agreement” under 37 CFR § 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

(G) Clean Air Act (42 U.S.C. 7401–7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251–1387), as amended—Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401–7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251–1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

(H) Mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6201).

(I) Debarment and Suspension (Executive Orders 12549 and 12689)—A contract award (see 2 CFR 180.220) must not be made to parties listed on the governmentwide Excluded Parties List System in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1986 Comp., p. 189) and 12689 (3 CFR Part 1989 Comp., p. 235), “Debarment and Suspension.” The Excluded Parties List System in SAM contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

(J) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Contractors that apply or bid for an award of \$100,000 or more must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any

other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

(K) See §200.322 Procurement of recovered materials.

APPENDIX III TO PART 200—INDIRECT (F&A) COSTS IDENTIFICATION AND ASSIGNMENT, AND RATE DETERMINATION FOR INSTITUTIONS OF HIGHER EDUCATION (IHES)

A. GENERAL

This appendix provides criteria for identifying and computing indirect (or indirect (F&A)) rates at IHES (institutions). Indirect (F&A) costs are those that are incurred for common or joint objectives and therefore cannot be identified readily and specifically with a particular sponsored project, an instructional activity, or any other institutional activity. See subsection B.1, Definition of Facilities and Administration, for a discussion of the components of indirect (F&A) costs.

1. Major Functions of an Institution

Refers to instruction, organized research, other sponsored activities and other institutional activities as defined in this section:

a. *Instruction* means the teaching and training activities of an institution. Except for research training as provided in subsection b, this term includes all teaching and training activities, whether they are offered for credits toward a degree or certificate or on a non-credit basis, and whether they are offered through regular academic departments or separate divisions, such as a summer school division or an extension division. Also considered part of this major function are departmental research, and, where agreed to, university research.

(1) *Sponsored instruction and training* means specific instructional or training activity established by grant, contract, or cooperative agreement. For purposes of the cost principles, this activity may be considered a major function even though an institution's accounting treatment may include it in the instruction function.

(2) *Departmental research* means research, development and scholarly activities that are not organized research and, consequently, are not separately budgeted and accounted for. Departmental research, for purposes of this document, is not considered as a major function, but as a part of the instruction function of the institution.

b. *Organized research* means all research and development activities of an institution that are separately budgeted and accounted for. It includes:

(1) *Sponsored research* means all research and development activities that are sponsored by Federal and non-Federal agencies and organizations. This term includes activities involving the training of individuals in research techniques (commonly called research training) where such activities utilize the same facilities as other research and development activities and where such activities are not included in the instruction function.

(2) *University research* means all research and development activities that are separately budgeted and accounted for by the institution under an internal application of institutional funds. University research, for purposes of this document, must be combined with sponsored research under the function of organized research.

c. *Other sponsored activities* means programs and projects financed by Federal and non-Federal agencies and organizations which involve the performance of work other than instruction and organized research. Examples of such programs and projects are health service projects and community service programs. However, when any of these activities are undertaken by the institution without outside support, they may be classified as other institutional activities.

d. *Other institutional activities* means all activities of an institution except for instruction, departmental research, organized research, and other sponsored activities, as defined in this section; indirect (F&A) cost activities identified in this Appendix paragraph B, Identification and assignment of indirect (F&A) costs; and specialized services facilities described in §200.468 Specialized service facilities of this Part.

Examples of other institutional activities include operation of residence halls, dining halls, hospitals and clinics, student unions, intercollegiate athletics, bookstores, faculty housing, student apartments, guest houses, chapels, theaters, public museums, and other similar auxiliary enterprises. This definition also includes any other categories of activities, costs of which are "unallowable" to Federal awards, unless otherwise indicated in an award.

2. Criteria for Distribution

a. *Base period*. A base period for distribution of indirect (F&A) costs is the period during which the costs are incurred. The base period normally should coincide with the fiscal year established by the institution, but in any event the base period should be so selected as to avoid inequities in the distribution of costs.

b. *Need for cost groupings*. The overall objective of the indirect (F&A) cost allocation process is to distribute the indirect (F&A) costs described in Section B, Identification and assignment of indirect (F&A) costs, to

FUNDING AGENCY PROVISIONS

FORMS

LIST OF WORK MADE AVAILABLE

List items of the Work the Bidder made available to DBE firms. Identify those items of the Work the Bidder might otherwise perform with its own forces and those items that have been broken down into economically feasible units to facilitate DBE participation. For each item listed, show the dollar amount and percentage of the Base Bid. The Bidder must demonstrate that enough work to meet the goal was made available to DBE firms.

ITEM OF WORK MADE AVAILABLE	NAICS CODE	BIDDER NORMALLY PERFORMS ITEM (Y/N)	ITEM BROKEN DOWN TO FACILITATE PARTICIPATION (Y/N)	AMOUNT	PERCENTAGE OF BASE BID

ATTACHMENT E
SUPPLEMENTARY SPECIAL PROVISIONS

SUPPLEMENTARY SPECIAL PROVISIONS

The following Supplementary Special Provisions (SSP) modifies the following documents:

1. The **2015 Edition** of the Standard Specifications for Public Works Construction (The "GREENBOOK").
2. The **2015 Edition** of the City of San Diego Standard Specifications for Public Works Construction (The "WHITEBOOK"), including the following:
 - a) General Provisions (A) for all Contracts.

SECTION 1 – TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS

1-2 Terms and Definitions. To the Whitebook, Item 54, DELETE in its entirety and SUBSTITUTE with the following:

54. **Normal Working Hours** shall be **7:00 AM to 5:00 PM**, Monday through Friday, inclusive. Saturdays, Sundays and City Holidays are excluded.

Official San Diego Museum of Man (SDMoM) hours of operations are as follows:

Monday to Thursday: 10:00am – 5:00pm

Friday to Sunday: 10:00am – 7:00pm

SECTION 2 - SCOPE AND CONTROL OF WORK

2-3.2 Self Performance. To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. The self performance percentage requirement will be waived for Prime Contractors meeting the Class B License requirement of this Contract.

2-5.4.2 Asset Specific Red-lines. To the "WHITEBOOK", ADD the following:

1. **Fiber Optic and WIFI Device Red-lines.** Fiber Optic and WIFI Device Red-lines shall clearly record by dimension from 2 known fixed points and by depth of underground facilities all deviations, modifications, and changes in the Work. Records, deviations, modifications, and changes on the day the Work is performed shall reflect the actual Work location and shall be marked in red at the scale of the Plan sheet on which they are recorded. Red-lines shall show the equipment locations and associated information for the following:

- a) Locations and depths of underground utilities.
- b) Revisions to the routing of piping and conduits.

- c) Actual equipment locations.
- d) Pull Boxes.
- e) Electrical Meter, including meter address.
- f) Items abandoned in place.

2-9.1 Permanent Survey Markers. To the "WHITEBOOK", item 3, DELETE in its entirety and SUBSTITUTE with the following:

- 3. You shall submit to the Engineer a minimum of 7 Days prior to the start of the Work a list of controlling survey monuments which may be disturbed. CMFS (or the private owner for Permit Work) shall perform the following:
 - a) Set survey points outside the affected Work area that reference and locate each controlling survey monument that may be disturbed.
 - b) File a Corner Record or Record of Survey with the County Surveyor after setting the survey points to be used for re-establishment of the disturbed controlling survey monuments.
 - c) File a Corner Record or Record of Survey with the County Surveyor after re-establishment of the disturbed controlling survey monuments.

2-10 AUTHORITY OF THE BOARD AND THE ENGINEER. To the "GREENBOOK", Paragraph (2), DELETE in its entirety and SUBSTITUTE with the following:

The decision of the Engineer is final and binding on all questions relating to: quantities; acceptability of material, equipment, or work; execution, progress or sequence of work; requests for information (RFI), and interpretation of the Plans, Specifications, or other Contract Documents. This shall be precedent to any payment under the Contract. The Engineer shall be the single point of contact and shall be included in all communications.

2-14.3 Coordination. To the "WHITEBOOK", ADD the following:

- 2. Other adjacent City projects are scheduled for construction for the same time period in the vicinity of Balboa Park in El Prado. See **Appendix F** for the approximate location. Coordinate the Work with the adjacent projects as listed below:
 - a) Balboa Park Plaza de Panama, Project Manager – Jess Arcillas, (619) 533-4625
 - b) Plaza de Panama Gas Replacement Project, SDG&E Point of Contact – Joseph Dator, (619) 517-8085

2-15 TECHNICAL STUDIES AND DATA. To the "WHITEBOOK", ADD the following:

3. In preparation of the Contract Documents, the designer has relied upon the following reports of explorations and tests at the Work Site:
 - a) Geotechnical Engineering Investigation Report dated August 10, 2009 and reconfirmed in December 15, 2016 by Bureau Veritas North America, Inc.
 - b) Lead Containing Materials Abatement Specification by the Environmental Services dated December 8, 2016.
4. The reports listed above are available for review by contacting the Contract Specialist or visiting:

<https://filecloud.sandiego.gov/url/3idy7ayezhc2uk7k>

2-16 CONTRACTOR REGISTRATION AND ELECTRONIC REPORTING SYSTEM. To the "WHITEBOOK", item 1, DELETE in its entirety.

SECTION 3 – CHANGES IN WORK

3-3.2.3 Markup. To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. Work paid under Allowance Bid items for permits, governmental fees, or direct payments specified in the Contract Documents shall not be subject to any markups.
2. The allowance for overhead and profit shall not exceed the values listed in the table below:

Component	Overhead	Profit
Labor	10%	10%
Material	10%	5%
Equipment	10%	5%

3. Markups for materials shall be applied to the actual cost of the material before applying the sales tax.
4. When a Subcontractor is performing Extra Work, the allowance for overhead and profit shall be applied to the labor, materials, and equipment costs of the Subcontractor as follows:

- a) Regardless of the number of Subcontractor tasks for Extra Work, you may only apply 10% for the first \$50,000 of the Subcontractor's portion of accumulated total cost.
- b) If the accumulated costs of single or subsequent tasks exceed the \$50,000 threshold, you shall instead only apply 5% to any amounts in excess of the \$50,000.
- c) You shall not apply 10% to any costs after the first \$50,000 of accumulated total costs from performing Extra Work.
- d) Regardless of the number of hierarchical tiers of Subcontractors, you may only markup a Subcontractor's Work once.

3-5.1 **Claims.** To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

**ADD:
3-5.1**

Claims.

1. A Claim is a written demand by you that seeks an adjustment in the Contract Price, Contract Time, or other relief associated with a dispute arising under or relating to the Contract, including a breach of any provision thereof. A voucher, invoice, or other routine request for payment is not a Claim.
2. A Claim shall conform to these specifications and may be considered after the City has previously denied a request by you for a Change Order seeking the demanded relief.
3. You shall submit a Claim to the Engineer if a dispute occurs that arises from or relates to the Contract. The Claim shall seek all relief to which you assert you are entitled as a result of the event(s) giving rise to the dispute. Your failure to process a Claim in accordance with these specifications shall constitute a waiver of all relief associated with the dispute. Claims are subject to 6-11, "Right to Audit".
4. You shall continue to perform the Services and Work and shall maintain the Schedule during any dispute proceedings. The Engineer will continue to make payments for undisputed Services and Work.
5. The City's Claims process specified herein shall not relieve you of your statutory obligations to present claims prior to any action under the California Government Code.

3-5.1.1 **Initiation of Claim.**

1. You shall promptly, but no later than 30 Days after the event(s) giving rise to the Claim, deliver the Claim to the Engineer.

2. You shall not process a Claim unless the Engineer has previously denied a request by you for a Change Order that sought the relief to be pursued in the claim.

3-5.1.1.1 Claim Certification Submittal.

1. If your Claim seeks an increase in the Contract Price, the Contract Time, or both, submit with the Claim an affidavit certifying the following:
 - a) The Claim is made in good faith and covers all costs and delays to which you are entitled as a result of the event(s) giving rise to the Claim.
 - b) The amount claimed accurately reflects the adjustments in the Contract Price, the Contract Time, or both to which you believe you are entitled.
 - c) All supporting costs and pricing data are current, accurate, and complete to the best of your knowledge. The cost breakdown per item of Work shall be supplied.
 - d) You shall ensure that the affidavit is executed by an official who has the authority to legally bind you.

3-5.1.2 Initial Determination.

1. The Engineer will respond in writing to your Claim within 30 Days of receipt of the Claim.

3-5.1.3 Settlement Meeting.

1. If you disagree with the Initial Determination, you shall request a Settlement Meeting within 30 Days. Upon receipt of this request, the Engineer will schedule the Settlement Meeting within 15 Working Days.

3-5.1.4 City's Final Determination.

1. If a settle agreement is not reached, the City shall make a written Final Determination within 10 Working Days after the Settlement Meeting.
2. If you disagree with the City's Final Determination, notify the Engineer in writing of your objection within 15 Working Days after receipt of the written determination and file a "Request for Mediation" in accordance with 3-5.2, "Dispute Resolution Process".
3. Failure to give notice of objection within the 15 Working Days period shall waive your right to pursue the Claim.

3-5.1.5 Mandatory Assistance.

1. If a third party dispute, litigation, or both arises out of or relates in any way to the Services provided under the Contract, upon the City's request, you shall agree to assist in resolving the dispute or litigation. Your assistance includes, but is not limited to the following:
 - a) Providing professional consultations.

- b) Attending mediations, arbitrations, depositions, trials, or any event related to the dispute resolution and litigation.

3-5.1.5.1 Compensation for Mandatory Assistance.

1. The City will reimburse you for reasonable fees and expenses incurred by you for any required assistance rendered in accordance with 3-5.1.5, "Mandatory Assistance" as Extra Work.
2. The Engineer will determine whether these fees and expenses were necessary due to your conduct or failure to act.
3. If the Engineer determines that the basis of the dispute or litigation in which these fees and expenses were incurred were the result of your conduct or your failure to act in part or in whole, you shall reimburse the City for any payments made for these fees and expenses.
4. Reimbursement may be through any legal means necessary, including the City's withholding of your payment.

3-5.2.3 Selection of Mediator. To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. A single mediator, knowledgeable in construction aspects and acceptable to both parties, shall be used to mediate the dispute.
2. To initiate mediation, the initiating party shall serve a Request for Mediation at the American Arbitration Association (AAA) on the opposing party.
3. If AAA is used, the initiating party shall concurrently file with AAA a "Request for Mediation" along with the appropriate fees, a copy of requested mediators marked in preference order, and a preference for available dates.
4. If AAA is selected to coordinate the mediation (Administrator), within 10 Working Days from the receipt of the initiating party's Request for Mediation, the opposing party shall file the following:
 - a) A copy of the list of the preferred mediators listed in preference order after striking any mediators to which they have any objection.
 - b) A preference for available dates.
 - c) Appropriate fees.
5. If the parties cannot agree on a mediator, then each party shall select a mediator and those mediators shall select the neutral third party to mediate the matter.

3-5.3 Forum of Litigation. To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. It is the express intention that all legal actions and proceedings related to the Contract or Agreement with the City or to any rights or any relationship between the parties arising therefrom shall be solely and exclusively initiated and maintained in courts of the State of California for the County of San Diego.

**ADD:
3-5.4**

Pre-judgment Interest.

1. The parties stipulate that if a judgment is entered against a party for breaching this Contract, the pre-judgment interest shall be two percent (2%) per annum.

SECTION 4 - CONTROL OF MATERIALS

4-1.2 Protection of Work and Materials. To the "WHITEBOOK", ADD the following:

2. The following items within the California Tower are to be removed and reinstalled, or protected in place, as specified in the plans numbered 33996-1-D through 33996-24-D, inclusive:
 - a) Various first floor items including electrical equipment, mop sink, existing utilities (wiring, piping etc.), ceiling lighting fixtures and handrails.
 - b) Rain Serpent mural at first to second floor stairway.
 - c) Second floor items including Rain Serpent mural, utilities and fixtures, handrails
 - d) Third floor items including carillon equipment, security equipment, electrical equipment, conduit and wiring, fire alarm equipment, glass donor plaques on all stair risers.
 1. For carillon and any related equipment, the contractor shall coordinate with the City Parks & Recreation department to allow the department's specialized subcontractor to protect and/or relocate the equipment prior to the start of work in the California Tower.
 - e) Fourth floor items including the items inside the storage room
 - f) 5th through 7th floor items including donor plaques, electrical equipment, exit signage.
 - g) 10th floor carillon speakers.
 - h) An interior protection separation wall shall be installed to separate the San Diego Museum of Man (SDMoM – tenants/leaseholder) from the area of construction on the 1st and 2nd floor, to minimize the impact on the SDMoM, to protect the exhibits from dust and air pollution, minimize noise, and prevent unauthorized access.

4-1.3.3 Inspection of Items Not Locally Produced. To the "WHITEBOOK", DELETE in its entirety.

ADD:

4-1.3.3 Inspection of Items Not Locally Produced. To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. When you intend to purchase materials, fabricated products, or equipment from sources located more than 200 miles (321.9 km) outside the geographical limits of the City, City Lab staff or a qualified inspection agency approved by the Engineer, shall be engaged at your expense to inspect the materials, equipment, or process.
2. This approval shall be obtained before producing any material or equipment. City Lab staff or inspector shall evaluate the materials for conformance with the requirements of the Plans and Specifications. You shall forward reports required by the Engineer. No materials or equipment shall be shipped nor shall any processing, fabrication or treatment of such materials be done without proper inspection by City Lab staff or the approved agent. Approval by said agent shall not relieve you of responsibility for complying with the requirements of the Contract Documents.
3. The Engineer may elect City Lab staff to perform inspection of an out-of-town manufacturer. You shall incur additional inspection costs of the Engineer including lodging, meals, and incidental expenses based on Federal Per Diem Rates, along with travel and car rental expenses. If the manufacturing plant operates a double shift, a double shift shall be figured in the inspection costs.
 - a) At the option of the Engineer, full time inspection shall continue for the length of the manufacturing period. If the manufacturing period will exceed 3 consecutive weeks, you shall incur additional inspection expenses of the Engineer's supervisor for a trip of 2 Days to the site per month.
 - b) When the Engineer elects City Lab staff to perform out-of-town inspections, the wages of staff employed by the City shall not be part of the additional inspection expenses paid by you.
 - c) Federal Per Diem Rates can be determined at the location below:
<https://www.gsa.gov/portal/content/104877>
4. The Engineer will perform inspections of out-of-town manufacturers for the items of Work specified here:
 - a) Structural steel. See plan sheets 33996-5-D and 33996-6-D, Structural General Notes.

4-1.3.4 Inspection Paid For By the Contractor. To the WHITEBOOK ADD the following:

- a) The special inspections required shall include but not be limited to the following:

Refer to plan sheets 33996-5-D and 33996-6-D, Structural General Notes.

- 4-1.3.5 Special Inspection.** To the "WHITEBOOK", ADD the following:
5. The payment for special inspection Work specified under this section shall be paid in accordance with 4-1.3.4.1, "Payment".

- 4-1.3.6 Preapproved Materials.** To the "WHITEBOOK", ADD the following:
3. You shall submit in writing a list of all products to be incorporated in the Work that are on the AML.

- 4-1.6 Trade Names or Equals.** To the "WHITEBOOK", ADD the following:
11. You shall submit your list of proposed substitutions for an "equal" item **no less than 15 Working Days prior to the Bid due date** and on the City's Product Submittal Form available at:

<http://www.sandiego.gov/publicworks/edocref/index.shtml>

SECTION 5 - UTILITIES

- 5-2 PROTECTION.** To the "WHITEBOOK", item 2, ADD the following:
- g) Refer to **Appendix J** for more information on the protection of AMI devices.

SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF WORK

- 6-1.1 Construction Schedule.** To the "WHITEBOOK", item 5, 9, and 22, DELETE in their entirety and SUBSTITUTE with the following:
5. Monthly progress payments are contingent upon the submittal of an updated Schedule and cash flow forecast as discussed in item 22 of 6-1.1, "Construction Schedule" to the Engineer. The Engineer may refuse to recommend the whole or part of any monthly payment if, in the Engineer's opinion, your failure or refusal to provide the required Schedule and cash flow forecast information precludes a proper evaluation of your ability to complete the Project within the Contract Time and amount.
 9. Inclusive to the Contract Time, include 15 Working Days to the Schedule for the generation of the Punchlist. You shall Work diligently to complete all Punchlist items within 30 Working Days after the Engineer provides the Punchlist.
 22. With every pay request, submit the following:
 - a) An updated cash flow forecast showing periodic and cumulative construction billing amounts for the duration of the Contract Time. If there has been any Extra Work since the last update, include only the approved amounts.

- b) A curve value percentage comparison between the Contract Price and the updated cash flow forecast for each Project ID included in the Contract Documents. Curve values shall be set on a scale from 0% to 100% in intervals of 5% of the Contract Time. Refer to the Sample City Invoice materials in **Appendix D – Sample City Invoice with Spend Curve** and use the format shown. Your invoice amounts shall be supported by this curve value percentage. For previous periods, use the actual values and percentages and update the curve value percentages accordingly. See “Cash Flow Curve Fitting Example” at the location below:

<https://www.sandiego.gov/publicworks/edocref>

To the “WHITEBOOK”, ADD the following:

- 23. From issuance of Notice to Proceed (NTP), California Tower will be closed until further notice. San Diego Museum of Man (SDMoM) will be in operation for the entire duration of the construction project until further notice.

A. Submittal:

- a. Providing all submittals including but not limited to the following: detailed Schedule of Values, structural steel and rebar shop drawings, concrete mix designs, adhesive and grout submittals, steel erection plan, scaffolding and construction access plans (written plan for staging, crane scheduling, demolition & removal, material uploading, shotcrete rebound removal), tower temporary bracing plans and calculations, protection plans for historic features, and protection plan for services and utilities, offsite fabrication – fabrication and mock-up, if required, off-site assembly of all steel bracing at upper three floors to demonstrate erection sequence and fit-up, shoring design and permit (if needed), crane specifications (if applicable).
- b. Coordination with the City, City approved vendor and SDMoM in advance of the work on the 3rd Floor to allow the temporary relocation of the affected carillon, security panels, and collections of historic features. (See section 4-1.2 “Protection of Work and Materials” for the list of items to protect).

B. Construction:

Due to structural characteristics and safety requirements, the Contractor shall follow the following sequence of work:

- a. Building a temporary separation walls to separate the San Diego Museum of Man (SDMoM – tenants/leaseholder) from the area of construction on the 1st and 2nd floor.
- b. Foundation excavation and construction.

- c. 1st and 2nd floor concrete wall construction, including drilling and coring, installation of dowels and rebar, rerouting or repair of affected non-structural systems, and placement of concrete.
 - i. Drag bars installation on the 2nd Floor shall be completed outside SDMoM's hours of operations.
 - 1. The contractor shall install barricades around the work area to assure public safety during normal museum operating hours, minimize and control the generation of dust and provide daily cleanup following the night work completion.
 - 2. The work shall be completed and the area shall be restored within 10 working days.
- d. Upper floors 3 through 7: Drilling and coring, installation of dowels, drags and other rebar, placement of concrete.
- e. Floors 8 through 10: installation of temporary bracing, removal of existing steel bracing, installation of new steel bracing, removal of temporary bracing, installation of floor fill and waterproofing repairs.
- f. Completion of repairs, reinstalls, and finish repairs, for affected non-structural systems, any other works required per plans sheet 33996-1-D thru 33996-24-D and specifications inclusive.
- g. Crane activity must be completed.
- h. All punch list activities.

Note: During Construction, Tasks a and b must precede concrete placement in Task c. Task d can be completed at any time, and can be simultaneous with other tasks.

6-1.3 Work Outside Normal Working Hours. To The "WHITEBOOK", ADD the following:

- 4. The contractor shall be allowed, upon pre-approval by the City, to work outside normal working hours and on Saturday and/or Sunday, exclusive of holidays.
- 5. During Work outside of Normal Working Hours, the contractor shall compensate the SDMoM for the additional night time security costs that might be incurred by this work.
- 6. The contractor shall act as a good neighbor, adjust work hours when requested by the SDMoM, who are the tenants/leaseholder and the Parks & Recreation managers due to special events within the park. In addition, the contractor shall coordinate with the neighboring Old Globe Theater to

minimize impact to this activity. For annual special events within Balboa Park, see **Appendix L** – Modified Balboa Park Special Events List.

7. The contractor shall provide safety work lighting when required and maintain clean working areas in order to prevent accidents within the work area .
8. The contractor shall submit a request to work outside normal working hours to the City for approval, 10 working days in advance prior to the start of work.
9. The contractor shall submit a request for the work in the museum from the City for approval and to allow coordination with SDMoM, 30 calendar days in advance for the closure of portion of the museum.

ADD:

6-3.2.1.1 Environmental Document.

1. The City of San Diego has prepared a **Notice of Exemption** for **California Tower Seismic Retrofit**, Project No. **1177043 & 203569**, as referenced in the Contract Appendix. You shall comply with all requirements of the **Notice of Exemption** as set forth in **Appendix A**.
2. Compliance with the City's environmental document shall be included in the Contract Price.

SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

7-3 INSURANCE. To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

7-3 INSURANCE.

1. The insurance provisions herein shall not be construed to limit your indemnity obligations contained in the Contract.

7-3.1 Policies and Procedures.

1. You shall procure the insurance described below, at its sole cost and expense, to provide coverage against claims for loss including injuries to persons or damage to property, which may arise out of or in connection with the performance of the Work by you, your agents, representatives, officers, employees or Subcontractors.
2. Insurance coverage for property damage resulting from your operations is on a replacement cost valuation. The market value will not be accepted.
3. You shall maintain this insurance for the duration of this Contract and at all times thereafter when you are correcting, removing, or replacing Work in accordance with this Contract. Your liabilities under the Contract, e.g., your

indemnity obligations, is not deemed limited to the insurance coverage required by this Contract.

4. The payment for insurance shall be included in the Contract Price as bid by you. Except as specifically agreed to by the City in writing, you are not entitled to any additional payment. Do not begin any Work under this Contract until you have provided and the City has approved all required insurance.
5. Policies of insurance shall provide that the City is entitled to 30 Days (10 Days for cancellation due to non-payment of premium) prior written notice of cancellation or non-renewal of the policy. Maintenance of specified insurance coverage is a material element of the Contract. Your failure to maintain or renew coverage or to provide evidence of renewal during the term of the Contract may be treated by the City as a material breach of the Contract.

7-3.2 Types of Insurance.

7-3.2.1 Commercial General Liability Insurance.

1. Commercial General Liability Insurance shall be written on the current version of the ISO Occurrence form CG 00 01 07 98 or an equivalent form providing coverage at least as broad.
2. The policy shall cover liability arising from premises and operations, XCU (explosions, underground, and collapse), independent contractors, products/completed operations, personal injury and advertising injury, bodily injury, property damage, and liability assumed under an insured's contract (including the tort liability of another assumed in a business contract).
3. There shall be no endorsement or modification limiting the scope of coverage for either "insured vs. insured" claims or contractual liability. You shall maintain the same or equivalent insurance for at least 10 years following completion of the Work.
4. All costs of defense shall be outside the policy limits. Policy coverage shall be in liability limits of not less than the following:

<u>General Annual Aggregate Limit</u>	<u>Limits of Liability</u>
Other than Products/Completed Operations	\$4,000,000
Products/Completed Operations Aggregate Limit	\$4,000,000
Personal Injury Limit	\$2,000,000
Each Occurrence	\$2,000,000

7-3.2.2 Commercial Automobile Liability Insurance.

1. You shall provide a policy or policies of Commercial Automobile Liability Insurance written on the current version of the ISO form CA 00 01 12 90 or later version or equivalent form providing coverage at least as broad in the

amount of \$1,000,000 combined single limit per accident, covering bodily injury and property damage for owned, non-owned, and hired automobiles (“Any Auto”).

2. All costs of defense shall be outside the limits of the policy.

7-3.2.4 Contractors Hazardous Transporters Pollution Liability Insurance.

1. You shall provide at your expense or require your Subcontractor to provide, as described below, Contractors Hazardous Transporters Pollution Liability Insurance including contractual liability coverage to cover liability arising out of transportation of hazardous or toxic, materials, substances, or any other pollutants by you or any Subcontractor in an amount not less than \$2,000,000 limit per occurrence/aggregate for bodily injury and property damage.
2. All costs of defense shall be outside the limits of the policy. The deductible shall not exceed \$25,000 per claim. Any such insurance provided by a subcontractor instead of you shall be approved separately in writing by the City.
3. For approval of the substitution of Subcontractor’s insurance the Contractor shall certify that all activities for which Contractors Hazardous Transporters Pollution Liability Insurance will provide coverage will be performed exclusively by the Subcontractor providing the insurance.
4. Contractual liability shall include coverage of tort liability of another party to pay for bodily injury or property damage to a third person or organization. There shall be no endorsement or modification of the coverage limiting the scope of coverage for either “insured vs. insured” claims or contractual liability. Occurrence based policies shall be procured before the Work commences and shall be maintained for the duration of this Contract. Claims Made policies shall be procured before the Work commences, shall be maintained for the duration of this contract, and shall include a 12 month extended Claims Discovery Period applicable to this contract or the existing policy or policies that shall continue to be maintained for 12 months after the completion of the Work under this Contract without advancing the retroactive date.
5. Except as provided for under California law, the policy or policies shall provide that the City is entitled to 30 Days prior written notice (10 Days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies.

7-3.2.5 Contractors Builders Risk Property Insurance..

1. You shall provide at your expense, and maintain until Final Acceptance of the Work, a Special Form Builders Risk Policy or Policies. This insurance shall be in an amount equal to the replacement cost of the completed Work (without deduction for depreciation) including the cost of excavations, grading, and filling. The policy or policies limits shall be 100% of this Contract value of the Work plus 15% to cover administrative costs, design costs, and the costs of inspections and construction management.

2. Insured property shall include material or portions of the Work located away from the Site but intended for use at the Site and shall cover material or portions of the Work in transit. The policy or policies shall include as insured property scaffolding, falsework, and temporary buildings located at the Site. The policy or policies shall cover the cost of removing debris, including demolition.
3. The policy or policies shall provide that all proceeds thereunder shall be payable to the City as Trustee for the insured, and shall name the City, the Contractor, Subcontractors, and Suppliers of all tiers as named insured. The City, as Trustee, will collect, adjust, and receive all monies which may become due and payable under the policy or policies, may compromise any and all claims thereunder, and will apply the proceeds of such insurance to the repair, reconstruction, or replacement of the Work.
4. Any deductible applicable to the insurance shall be identified in the policy or policies documents and responsibility for paying the part of any loss not covered because of the application of such deductibles shall be apportioned among the parties except for the City as follows: if there is more than one claimant for a single occurrence, then each claimant shall pay a pro-rata share of the per occurrence deductible based upon the percentage of their paid claim to the total paid for insured. The City shall be entitled to 100% of its loss. You shall pay the City any portion of that loss not covered because of a deductible at the same time the proceeds of the insurance are paid to the City as trustee.
5. Any insured, other than the City, making claim to which a deductible applies shall be responsible for 100% of the loss not insured because of the deductible. Except as provided for under California law, the policy or policies shall provide that the City is entitled to 30 Days prior written notice (10 Days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies.

7-3.3 Rating Requirements. Except for the State Compensation Insurance Fund, all insurance required by this Contract as described herein shall be carried only by responsible insurance companies with a rating of, or equivalent to, at least "A-, VI" by A.M. Best Company, that are authorized by the California Insurance Commissioner to do business in the State, and that have been approved by the City.

7-3.3.1 Non-Admitted Carriers. The City will accept insurance provided by non-admitted, "surplus lines" carriers only if the carrier is authorized to do business in the State and is included on the List of Approved Surplus Lines Insurers (LASLI list).

All policies of insurance carried by non-admitted carriers shall be subject to all of the requirements for policies of insurance provided by admitted carriers described herein.

7-3.4 Evidence of Insurance. Furnish to the City documents e.g., certificates of insurance and endorsements evidencing the insurance required herein, and furnish renewal documentation prior to expiration of this insurance. Each required document shall be signed by the insurer or a person authorized by the insurer to bind coverage on its

behalf. We reserve the right to require complete, certified copies of all insurance policies required herein.

7-3.5 Policy Endorsements.

7-3.5.1 Commercial General Liability Insurance.

7-3.5.1.1 Additional Insured.

1. You shall provide at your expense policy endorsement written on the current version of the ISO Occurrence form CG 20 10 11 85 or an equivalent form providing coverage at least as broad.
2. To the fullest extent allowed by law e.g., California Insurance Code §11580.04, the policy shall be endorsed to include the City and its respective elected officials, officers, employees, agents, and representatives as additional insured.
3. The additional insured coverage for projects for which the Engineer's Estimate is \$1,000,000 or more shall include liability arising out of:
 - a) Ongoing operations performed by you or on your behalf,
 - b) your products,
 - c) your Work, e.g., your completed operations performed by you or on your behalf, or
 - d) premises owned, leased, controlled, or used by you.
4. The additional insured coverage for projects for which the Engineer's Estimate is less than \$1,000,000 shall include liability arising out of:
 - a) Ongoing operations performed by you or on your behalf,
 - b) your products, or
 - c) premises owned, leased, controlled, or used by you.

7-3.5.1.2 Primary and Non-Contributory Coverage. The policy shall be endorsed to provide that the coverage with respect to operations, including the completed operations, if appropriate, of the Named Insured is primary to any insurance or self-insurance of the City and its elected officials, officers, employees, agents and representatives. Further, it shall provide that any insurance maintained by the City and its elected officials, officers, employees, agents and representatives shall be in excess of your insurance and shall not contribute to it.

7-3.5.1.3 Project General Aggregate Limit. The policy or policies shall be endorsed to provide a Designated Construction Project General Aggregate Limit that will apply only to the Work. Only claims payments which arise from the Work shall reduce the Designated Construction Project General Aggregate Limit. The Designated Construction Project General Aggregate Limit shall be in addition to the aggregate limit provided for the products-completed operations hazard.

7-3.5.2 Commercial Automobile Liability Insurance.

7-3.5.2.1 Additional Insured. Unless the policy or policies of Commercial Auto Liability Insurance are written on an ISO form CA 00 01 12 90 or a later version of this form or equivalent form providing coverage at least as broad, the policy shall be endorsed to include the City and its respective elected officials, officers, employees, agents, and representatives as additional insured, with respect to liability arising out of automobiles owned, leased, hired or borrowed by you or on your behalf. This endorsement is limited to the obligations permitted by California Insurance Code §11580.04.

7-3.5.4 Contractors Hazardous Transporters Pollution Liability Insurance Endorsements.

7-3.5.4.1 Additional Insured.

1. The policy or policies shall be endorsed to include as an Insured the City and its respective elected officials, officers, employees, agents, and representatives, with respect to liability arising out of:
 - a) Ongoing operations performed by you or on your behalf,
 - b) your products,
 - c) your work, e.g., your completed operations performed by you or on your behalf, or
 - d) premises owned, leased, controlled, or used by you.

Except that in connection with, collateral to, or affecting any construction contract to which the provisions of subdivision (b) of §2782 of the California Civil Code apply, this endorsement shall not provide any duty of indemnity coverage for the active negligence of the City and its respective elected officials, officers, employees, agents, and representatives in any case where an agreement to indemnify the City and its respective elected officials, officers, employees, agents, and representatives would be invalid under subdivision (b) of §2782 of the California Civil Code.

2. In any case where a claim or loss encompasses the negligence of the Insured and the active negligence of the City and its respective elected officials, officers, employees, agents, and representatives that are not covered because of California Insurance Code §11580.04, the insurer's obligation to the City and its respective elected officials, officers, employees, agents, and representatives shall be limited to obligations permitted by California Insurance Code §11580.04.

7-3.5.4.2 Primary and Non-Contributory Coverage. The policy or policies shall be endorsed to provide that the insurance afforded by the Contractors Pollution Liability Insurance policy or policies is primary to any insurance or self-insurance of the City and its elected officials, officers, employees, agents and representatives with respect to operations including the completed operations of the Named Insured. Any insurance maintained by the City and its elected officials, officers, employees, agents and representatives shall be in excess of your insurance and shall not contribute to it.

- 7-3.5.4.3 Severability of Interest.** For Contractors Hazardous Transporters Pollution Liability Insurance, the policy or policies shall provide that your insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability and shall provide cross-liability coverage.
- 7-3.5.5 Builders Risk Endorsements.**
- 7-3.5.5.1 Waiver of Subrogation.** The policy or policies shall be endorsed to provide that the insurer will waive all rights of subrogation against the City, and its respective elected officials, officers, employees, agents, and representatives for losses paid under the terms of the policy or policies and which arise from Work performed by the Named Insured for the City.
- 7-3.5.5.2 Builders Risk – Partial Utilization.** If the City desires to occupy or use a portion or portions of the Work prior to Acceptance in accordance with this Contract, the City will notify you and you shall immediately notify your Builder's Risk insurer and obtain an endorsement that the policy or policies shall not be cancelled or lapse on account of any such partial use or occupancy. You shall obtain the endorsement prior to the City's occupation and use.
- 7-3.6 Deductibles and Self-Insured Retentions.** You shall pay for all deductibles and self-insured retentions. You shall disclose deductibles and self-insured retentions to the City at the time the evidence of insurance is provided.
- 7-3.7 Reservation of Rights.** The City reserves the right, from time to time, to review your insurance coverage, limits, deductibles and self-insured retentions to determine if they are acceptable to the City. The City will reimburse you, without overhead, profit, or any other markup, for the cost of additional premium for any coverage requested by the Engineer but not required by this Contract.
- 7-3.8 Notice of Changes to Insurance.** You shall notify the City 30 Days prior to any material change to the policies of insurance provided under this Contract.
- 7-3.9 Excess Insurance.** Policies providing excess coverage shall follow the form of the primary policy or policies e.g., all endorsements.
- 7-3.10 Architects and Engineers Professional Insurance (Errors and Omissions Insurance).**
1. For Contracts with required engineering services (e.g., Design-Build, preparation of engineered Traffic Control Plans (TCP), and etc.) by you, you shall keep or require all of your employees or Subcontractors, who provide professional engineering services under this contract, Professional Liability coverage with a limit of **\$1,000,000** per claim and **\$2,000,000** annual aggregate in full force and effect.

2. You shall ensure the following:
 - a) The policy retroactive date is on or before the date of commencement of the Project.
 - b) The policy will be maintained in force for a period of 3 years after completion of the Project or termination of this Contract, whichever occurs last. You agree that for the time period specified above, there will be no changes or endorsements to the policy that affect the specified coverage.

3. If professional engineering services are to be provided solely by the Subcontractor, you shall:
 - a) Certify this to the City in writing and
 - b) Agree in writing to require the Subcontractor to procure Professional Liability coverage in accordance with the requirements set forth above.

7-4 NOT USED. To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

7-4 WORKERS' COMPENSATION INSURANCE AND EMPLOYERS LIABILITY INSURANCE.

1. In accordance with the provisions of §3700 of the California Labor Code, you shall provide at your expense Workers' Compensation Insurance and Employers Liability Insurance to protect you against all claims under applicable state workers compensation laws. The City, its elected officials, and employees will not be responsible for any claims in law or equity occasioned by your failure to comply with the requirements of this section.

2. Limits for this insurance shall be not less than the following:

<u>Workers' Compensation</u>	<u>Statutory Employers Liability</u>
Bodily Injury by Accident	\$1,000,000 each accident
Bodily Injury by Disease	\$1,000,000 each employee
Bodily Injury by Disease	\$1,000,000 policy limit

3. By signing and returning the Contract you certify that you are aware of the provisions of §3700 of the Labor Code which requires every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code and you shall comply with such provisions before commencing the Work as required by §1861 of the California Labor Code.

7-4.1 Waiver of Subrogation. The policy or policies shall be endorsed to provide that the insurer will waive all rights of subrogation against the City and its respective elected officials, officers, employees, agents, and representatives for losses paid under the terms of the policy or policies and which arise from Work performed by the Named Insured for the City.

7-5.3 Permits, Fees, and Notices. To the "WHITEBOOK", ADD the following:

3. The allowance bid item for "Building Permits" shall also include but is not limited to the following permits:
 - a. Temporary seismic bracing
 - b. Shoring (if applicable)
 - c. Scaffolding
 - d. Crane (if applicable)

ADD:

7-6 THE CONTRACTORS REPRESENTATIVE. To the "GREENBOOK", ADD the following:

1. Both the representative and alternative representative shall be employees of the Contractor and shall not be assigned to a Subcontractor unless otherwise approved by the City in writing.

7-8.6 Water Pollution Control. To the "WHITEBOOK", ADD the following:

6. Based on a preliminary assessment by the City, this Contract is subject to WPCP.

7-13.4 Contractor Standards and Pledge of Compliance. To the "WHITEBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. The Contract is subject to City's Municipal Code §22.3004 as amended 10/29/13 by ordinance O-20316.
2. You shall complete a Pledge of Compliance attesting under penalty of perjury that you complied with the requirements of this section.
3. You shall ensure that all Subcontractors complete a Pledge of Compliance attesting under penalty of perjury that they complied with the requirements of this section.
4. You shall require in each subcontract that the Subcontractor shall abide by the provisions of the City's Municipal Code §22.3004. A sample provision is as follows:

"Compliance with San Diego Municipal Code §22.3004: The Subcontractor acknowledges that it is familiar with the requirements of San Diego Municipal Code §22.3004 ("Contractor Standards"), and agrees to comply with requirements of that section. The Subcontractor further agrees to complete the Pledge of Compliance, incorporated herein by reference."

**ADD:
7-13.8**

Equal Pay Ordinance.

1. You shall comply with the Equal Pay Ordinance (EPO) codified in the San Diego Municipal Code (SDMC) in section 22.4801 through 22.4809, unless compliance is not required based on an exception listed in SDMC section 22.4804.
2. You shall require all of your Subcontractors to certify compliance with the EPO in their written subcontracts.
3. You shall post a notice informing your employees of their rights under the EPO in the workplace or job site.
4. By signing this Contract with the City of San Diego, you acknowledge the EPO requirements and pledge ongoing compliance with the requirements of SDMC Division 48, section 22.4801 et seq., throughout the duration of this Contract.

7-20

ELECTRONIC COMMUNICATION. To the "WHITEBOOK", ADD the following:

2. Virtual Project Manager shall be used on this Contract.

7-21.1

General. To the "WHITEBOOK", item 3, DELETE in its entirety and SUBSTITUTE with the following:

3. During the construction phase of projects, the minimum waste management reduction goal is 90% of the inert material (a material not subject to decomposition such as concrete, asphalt, brick, rock, block, dirt, metal, glass, and etc.) and 65% of the remaining project waste. You shall provide appropriate documentation, including a Waste Management Form attached as an appendix, and evidence of recycling and reuse of materials to meet the waste reduction goals specified.

7-22.1

General. To the "WHITEBOOK", ADD the following:

12. You shall submit to the City all required permits or licenses for abatement of lead necessary to carry out the work per **Appendix G**, Lead Abatement Specifications, Item G-Permits and Licenses at submittal of bid.

SECTION 9 - MEASUREMENT AND PAYMENT

9-3

PAYMENT

9-3.1

General. To the "WHITEBOOK", ADD the following:

3. The Lump Sum bid item "Construction of California Tower Seismic Upgrades" shall include payment for all work required per plan sheets 33996-1-D through 33996-24-D and this Notice Inviting Bids inclusive.
4. The payment for providing an external access and delivery of the material, equipment and personnel to the Tower, shall be included in Lump Sum bid item for "Construction of California Tower Seismic Upgrades".

5. The payment for abatement of lead containing materials shall be included in the Bid Item for "Lead Paint Handling, Removal, Transportation and Disposal (EOC Type I)". It shall include payment for all work required per **Appendix G**, Lead Abatement Specifications.

9-3.2 Partial and Final Payment. To the "GREENBOOK", paragraph (3), DELETE in its entirety and SUBSTITUTE with the following:

3. Upon commencement of the Work, an escrow account shall be established in a financial institution chosen by you and approved by the City. Documentation for an escrow payment shall have an escrow agreement signed by you, the City, and the escrow agent. From each progress payment, no less than 5% will be deducted and deposited by the City into the escrow account. Upon completion of the Contract, the City will notify the Escrow agent in writing to release the funds to you. Only the designated representative of the City shall sign the request for the release of Escrow funds.

9-3.7 Compensation Adjustments for Price Index Fluctuations. To the "WHITEBOOK" ADD the following:

5. This Contract is not subject to the provisions of The "WHITEBOOK" for Compensation Adjustments for Price Index Fluctuations for paving asphalt.

SECTION 304 -METAL FABRICATION AND CONSTRUCTION

304-1.12.1 General. To the "GREENBOOK", DELETE in its entirety and SUBSTITUTE with the following:

1. Steel structures will be paid under in the Lump Sum price for "CONSTRUCTION OF CALIFORNIA TOWER SEISMIC UPGRADES" for quantities as shown on the plans. No payment shall be made for structural works unless previously approved by the Engineer. No payment for structural work replacement will be made when the damage is due to the Contractor's failure to protect existing improvements. The Contractor shall bear all costs for repairing or retesting. Refer to Technicals Section 01400 "QUALITY CONTROL".

SECTION 600 - ACCESS

**ADD:
600-1**

GENERAL. To the "WHITEBOOK", item 5, DELETE in its entirety and SUBSTITUTE with the following:

5. If the City's crews are unable to provide the citizens with the mandated services due to your failure to comply with these specifications, you shall collect trash, recyclables, and yard waste on the City's schedule and deliver to the City's designated locations. If you fail to perform this Work, you shall incur additional costs for the City to reschedule pick up of an area.

**ADD:
600-2.1**

Vehicular Access

1. The contractor shall verify the clearances, including the width and height, of all arches at the entrances of the California Quadrangle (Plaza) and shall ensure that all the equipment utilized, including suppliers and subcontractors, do not exceed the height and width limitation of the arches.

**SECTION 601 - TEMPORARY TRAFFIC CONTROL FOR CONSTRUCTION
AND MAINTENANCE WORK ZONES**

601-2.1.2 Engineered Traffic Control Plans (TCP). To the "GREENBOOK", ADD the following:

6. Engineered TCP (2 foot x 3 foot size) shall be required for the following areas:
 - a) Laural Street Bridge/El Prado
 - b) El Prado/Pan American Road

**ADD:
601-2.1.5**

Traffic Control for Street Closures and Detours

9. The contractor shall provide pedestrian and vehicular access into Balboa Park along Laurel Bridge and El Prado Road at all times. In the event that a construction activity requires the contractor to restrict the vehicular access into the California Quadrangle during deliveries of material and crane activity, such restriction shall be limited to no more than two and a half hours, between the hours of 7:00am to 9:30am.
 - a. Temporary daily closures along El Prado Road following approval by the Resident Engineer, shall utilize flag men.
 - b. Traffic Control Plan shall be submitted to the Resident Engineer for review and approval at least 10 days prior to the implementation.

601-6.1.1 Payment. To the "WHITEBOOK", Item 2, DELETE in its Entirety.

To the "WHITEBOOK", item 3, DELETE in its entirety and SUBSTITUTE with the following:

3. The payment for Traffic Control for both vehicular and pedestrian traffic shall include engineered TCP, permits, working drawings and shall be included in the bid item for "Traffic Control". See **Appendix K** for an example of the proposed layout of the pedestrian and vehicular traffic control and access.
4. The payment for the preparation, coordination and set up (including all the traffic control devices and flagmen) are included as part of the bid item for "Traffic Control". If the contractor decides to perform such activity after normal

working hours, there will be no additional cost to the City to cover any cost related to such activity.

5. The payment for the design, placement, maintenance and removal of temporary pedestrian ADA ramp and covered path leading to the main entrance of the museum shall be included in the bid item for "Traffic Control".

EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP) SECTION A – GENERAL REQUIREMENTS

- 4.1 **Nondiscrimination in Contracting Ordinance.** To the "WHITEBOOK", subsection 4.1.1, paragraph (2), sentence (1), DELETE in its entirety and SUBSTITUTE with the following:

You shall not discriminate on the basis of race, gender, gender expression, gender identity, religion, national origin, ethnicity, sexual orientation, age, or disability in the solicitation, selection, hiring, or treatment of subcontractors, vendors, or suppliers.

END OF SUPPLEMENTARY SPECIAL PROVISIONS (SSP)

TECHNICALS

CALIFORNIA TOWER

PROJECT TECHNICAL SPECIFICATIONS



PREPARED FOR

CITY OF SAN DIEGO

ENGINEERING & CAPITAL PROJECTS

AUGUST 23, 2018 (REV.)

A. B. COURT & ASSOCIATES

Structural & Seismic & Sustainable Engineering

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CALIFORNIA TOWER SEISMIC UPGRADES

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SECTION 01010

SUMMARY OF WORK

GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including City Amendments, the “Whitebook”, to the General Provisions found within the “Greenbook” Standard Specifications for Public Works Construction.
- B. The “Greenbook”, Standard Specifications for Public Works Construction” latest adopted edition.
- C. Technical Specifications.

1.2 SUMMARY

- A. Work on this Project shall consist of, but not be limited to, seismic upgrades of the California Tower in Balboa Park, San Diego CA. The specific seismic upgrade scope is contained in the Drawings and Specifications, and outlined below.

The Work of the following sections applies to the Work of this section. Work of other sections of the specifications, not referenced below, shall also apply to the extent required for proper performance of this work.

1. Recommended Construction Sequence:

- a. All preparation work including but not limited to field measurement and verification, preparation of submittals and RFIs, steel and rebar material acquisition and offsite fabrication, protection of all existing equipment, materials, and historical features in the area of work, drilling and coring for embedded dowels and reinforcing bars, design and installation of temporary bracing at Floors 8, 9, and 10.
- b. Foundation construction at base of Tower.
- c. First and second floor wall construction and second and fourth level drag bar installation. Installation of dowels and rebar, preparation of walls to receive concrete, repair of wall cracks, protection of surfaces not to receive concrete at floors 3 thru 7.
- d. Installation of concrete and shotcrete at floors 3 thru 7.
- e. Steel bracing systems at upper floors (can occur at any time in the construction sequence): Installation of temporary lateral bracing, removal of existing bracing, installation of permanent steel bracing system, removal of temporary bracing system.

- f. Reinstallation/refurbishment of removed or protected in place equipment, materials and historical features. Cleaning and refinishing of all affected finishes.

B. Contractor's duties:

- 1. Except as specifically noted, provide and pay for:
 - a. Labor, materials and equipment,
 - b. Tools, construction equipment, and machinery,
 - c. Water, heat, and utilities required for construction, and
 - d. Other facilities and services necessary for proper execution and completion of Work.
- 2. Pay legally required sales, consumer, and use taxes.
- 3. Secure and pay for permits, government fees, and licenses as necessary for proper execution and completion of Work, and as applicable at time of receipt of bids.
- 4. Give required notices.
- 5. Comply with codes, ordinances, rules, regulations, orders and other legal requirements of public authorities that bear on performance of Work including but not limited to The Secretary of the Interior's Standards for the Treatment of Historic Properties, Storm Water Pollution Procedures.
- 6. Promptly submit written notice to Resident Engineer of observed variance of Contract Documents from legal requirements.
 - a. Propose appropriate modifications to Contract Documents for necessary changes.
 - b. Assume responsibility for Work known to be contrary to such requirements, without notice.
- 7. Enforce strict discipline and good order among employees. Do not employ unfit persons or persons not skilled in assigned task.
- 8. Promptly submit written notice to Resident Engineer of observed evidence of hazardous materials (e.g. lead and asbestos) impacting the work. The Owner reserves the right to abate hazardous materials. The Contractor shall redirect construction activities as needed to mitigate the impacts to the project schedule.

1.3 CONTRACTS

- A. Project will be constructed under a single contract under the direction of a single designated Contractor.

- 1. The Owner reserves the right to award other contracts for additional Work in connection with this project as required to install improvements, furnish, or equip the building.
- 2. There shall be complete cooperation between Contractor and subcontractors to ensure satisfactory progress and performance of the Work.
- 3. This project will be administered under the "Greenbook" Standard Specifications, 2015 version, for Public Works Construction and any supplementary amendments, 2015 or latest edition adopted by the City of San Diego.

1.4 CONTRACTORS USE OF PREMISES

- A. Coordinate use of premises under direction of the Resident Engineer.

- B. Except as otherwise agreed, the Museum will be in continuous regular operation during the entire duration of this contract. The Contractor shall coordinate with the Resident Engineer and maintain public access and protection of the public to the building. The Museum tenant will allow alternative primary access as needed for construction operations. The Contractor shall maintain a secure “envelope” when walls are removed.
- C. Confine operations at the Project Site to areas permitted by:
 - 1. Law
 - 2. Ordinance
 - 3. Permits
 - 4. Contract Documents
- D. Do not unreasonably encumber the Project Site with materials or equipment. Public and emergency access to be maintained clear of debris, material and equipment.
- E. Do not load the structure with weight that will endanger the structure.
- F. Assume full responsibility for the protection and safekeeping of products stored on the premises. Construction equipment, shoring, tools, etc. shall not be stored in areas of the Owner’s and Tenants’ continued use.
- G. Move any common products and common casework which interfere with the operations of the Owner and Tenants.
- H. Coordinate with Resident Engineer regarding removal of exhibits and museum items that interfere with operations. The Contractor will not be responsible for the movement and protection of museum artifacts, however, the Contractor shall be responsible to inform the Resident Engineer of any operations or conditions potentially impacting or threatening the protection and security of any museum artifact.
- I. The Contractor shall temporarily suspend operations and notify the Resident Engineer when a condition is observed that could harm any museum artifact.
- J. Obtain and pay for the use of additional storage or work areas needed for construction operations.

1.5 PARTIAL OWNER OCCUPANCY

- A. The Contractor shall allow the Owner to take possession of and use any completed or partially completed portion of the work, or to place and install as much of his own furniture and equipment during the progress of the work as is possible without interference before its entire completion. Such possession and use of structure or work or such placing and installation of equipment, or both, shall not in any way evidence completion of the Work or any part of it.
- B. The Resident Engineer will execute a Certificate of Substantial Completion for each specific portion of the Work occupied.
 - 1. The Certificate will signify:
 - a. Access for the public is the City’s responsibility.
 - b. Construction operations will cease, unless otherwise noted.
 - c. Development Services Department Inspector has issued a final inspection approval.

1.6 INFORMATION NOT AVAILABLE FROM OWNER

- A. Historic architectural and engineering drawings and As-Built drawings, historic specifications, and structural loading information are not available from the Owner. The general contractor shall assume all responsibility to provide adequate data to design-build the shoring or scaffolding systems.

PRODUCTS

1.1 NOT USED

EXECUTION

1.1 SEISMIC UPGRADE WORK

- A. Museum of Man (MOM) and California Tower Levels 1 through 7
 1. Coordinate all construction work .
 2. Coordinate with MOM administrative staff, Parks and Rec and City Field Engineer.
 3. Provide temporary service connections wherever existing utility services will be affected by work.
 4. Temporarily remove for subsequent reinstallation or protect in place items and systems such as electrical, communications, fire alarm, exit signs, stairs, plaques, name plates, etc., potentially affected by the work.
 5. Provide shop drawings as indicated in the drawings and specifications. .
 6. Museum to remove any exhibits potentially affected by the work.
 7. Provide interior protection separating the Museum from the area of construction.
 8. Shore structure as needed.
 9. Remove portions of walls / steel framing per plans.
 10. Install anchors, dowels, reinforcing bars, and concrete/shotcrete.
 11. Reconstruct walls removed to access work.
 12. Reinstall all temporarily removed items and systems.
 13. Refinish all impacted exposed surfaces.

- B. California Tower – Upper Level Steel Bracing & Rod Bracing.
 1. Coordinate shotcrete/concrete work.
 2. Coordinate with MOM, Parks and Rec and City.
 3. Provide shop drawings of all intended activities, include description of means and methods to remove and install new framing.
 4. Temporarily brace upper three levels of Tower prior to removing existing steel bracing. Provide calculations for bracing for review and approval.
 5. Scaffold as required.
 - a. Remove all abandoned inserts at the end of the work and patch holes to match adjacent finish.
 - b. Do not place inserts into any tile surface.

California Tower Seismic Upgrades

Summary of Work
01010 - 4

- c. The Contractor's Registered Structural Engineer shall provide calculations for all scaffolding and related shoring as required by the Resident Engineer.
 - d. Avoid anchorage that requires drilling into cast-stone ornamentation.
 - e. Process all paperwork and pay all fees with CalOSHA prior to installing scaffolding and shoring.
6. Shore structure as needed to support construction loads.
 - a. The Contractor's Structural Engineer shall determine shoring design and placement.
 - b. The Contractor shall provide a submittal for the Owner and Project Structural Engineer to review shoring designs.
 - c. Process shoring designs as required with the Development Services Department.
 7. Remove steel bracing systems per plans.
 8. Remove speakers and related cables as needed. Reinstall to full working condition prior to completion of work.
 9. Protect exterior surfaces of the tower from debris and staining.
 - a. Do not allow water or other liquids used in drilling, cleaning, refinishing, etc. to run down the face of the tower.
 - b. Do not allow ferrous metals to remain exposed that could stain lower wall surfaces. Coat as needed.
 10. Install new steel bracing system per plans.
 11. Install new tension rods per plans.
 12. Repair concrete and elastomeric topping.
 - a. Refinish all exposed surfaces to match existing in-kind.
 13. Repair protective coatings such as liquid water repellants where the surface of cast-stone has been disturbed by the work.
 - a. Apply liquid water repellant that is compatible with the existing coating.
 - b. Apply glazing surface repair to any tile that has been disturbed by the work.

3.2 REPAIR OF CEMENT PLASTER PARGE

- A. Exterior Cement Plaster (Parge coat) at the lower portion of the Tower and at construction access holes.
 1. Remove door and door frame at first floor and demo wall openings and cement plaster (parge) as shown on the drawings.
 2. Provide new shotcrete or concrete to fill openings in with appropriate finish to receive new parge.
 3. Remove parge coating back to substrate adjacent to the new work, minimum of 6 inches beyond new wall surface.
 4. Prepare surface, dampen substrate. Use a bonding agent as necessary to achieve a good bond between the concrete and parge coat.
 5. Install cement plaster parge repair.
 6. Match existing cement plaster color and texture as required for a seamless appearance with the existing tower finish.
 - a. Provide mock-ups to establish a color and texture match.
 - b. Contractor is advised that matching may require multiple mock-ups.
 7. Protect and cure finish coat.

3.4 ELASTOMERIC MEMBRANE

- A. Repair all elastomeric finishes impacted by the work on each floor at the upper levels of Tower.
 - 1. Remove existing elastomeric membrane where shown in the Drawings and as required to complete the work.
 - 2. Prepare concrete surfaces, protect adjacent surfaces.
 - 3. Install new concrete topping where required.
 - a. Install primer.
 - b. Install topping concrete to match existing topping levels and slopes to drain.
 - c. Protect and cure topping concrete.
 - d. Prepare surface of topping concrete to receive elastomeric coating.
 - 4. Verify that substrate is dry per manufacturers requirements.
 - 5. Install primer.
 - 6. Install elastomeric membrane.

3.5 CLEAN FACADES

- A. Protect facades from damage during seismic work and floor deck repairs to prevent fluids from running over exposed finishes. Clean overall façade areas with a low pressure warm water wash and approved cleaning agent to remove any construction laitance and debris.

END OF SECTION

SECTION 01200

PROGRESS DOCUMENTATION AND PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Progress documentation requirements:
 - a. Documentation and Progress Photographs
 - b. Record Drawings
- B. Progress procedures:
 - 1. Progress meetings minutes
- C. Record Drawings
 - 1. Prepared and provided by the Contractor

1.2 SUBMITTALS

- A. Minutes of Progress Meetings. To Resident Engineer and all attendees.

1.3 FORM OF SUBMITTALS

- A. Reports - General:
 - 1. Submit a minimum of 3 copies.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 PROGRESS REPORTS

- A. Documentation and Progress Photographs:
 - 1. The purpose of the photos is to document pre-construction and historic conditions and to evidence that the completed work conforms to the Secretary of the Interior's Standards as well as to provide a resource for the contractor to properly reinstall a feature after it has been removed for restoration or temporary storage. Photos during construction will record work progress.
 - 2. Of primary concern is to photograph before and after work that disturbs the "historic fabric" of the structure, e.g. cast-stone, ceramic tiles, concrete flooring, metalwork, handrails, and the Serpent Mural at the stairwell.
 - 3. Photographs shall also document the layout of each wall of levels 3 through 7 of the Tower as a resource for re-installation of all items temporarily removed during construction.
 - 1. The Contractor shall submit two (2) DVDs or thumb drives containing "documentation" digital color photographs in jpeg format (3 MB each, minimum) documenting the condition of each feature before commencement of the work. The images on the DVD shall not be reduced in size. The photographs shall include overall and detail images depicting each side of every historic feature in the area of work.

2. The Contractor shall also submit two (2) DVDs or thumb drives prior to the Punch List process containing "progress" digital color photographs in jpeg format (3 MB each, minimum) documenting each feature during construction. The images on the DVD shall not be reduced in size. The photographs shall include overall and detail images depicting each side of every historic feature in the area of work.
4. Labeling of photos:
 - a. Format: Jpeg digital photos on DVDs or thumb drives.
 - b. Identification: Either label individual photos or organize them in subfolders clearly identifying the subject of the photos. The DVDs or thumb drives must be labelled with the following information:
 1. Name of Project.
 2. Name and address of photographer.
 The subfolders must be labelled with the following information:
 1. Name of Project.
 2. Date photograph(s) were taken (if not date stamped by camera).
 The individual jpegs must be labelled with the following information:
 1. Description of vantage point, indicating location, direction (by compass point), and elevation or story (or tier) of construction.
 - c. Provide 8 1/2" x 11" log of the photographs taken.
 - d. Deliver one set of DVDs or thumb drive to the Resident Engineer and one set to the Structural Engineer prior to start of demolition and construction. The Resident Engineer and the Structural Engineer will retain the photographs for their records.

3.2. PROGRESS MEETINGS

- A. Schedule and conduct periodic progress meetings during construction period.
 1. Have meetings at biweekly intervals with Owner.
 2. Notify the Resident Engineer, the Structural Engineer and the owner at least one week in advance of date of meeting; the Resident Engineer, the Structural Engineer and the owner may attend.
- B. Prepare and distribute agenda prior to meetings; cover the following topics when applicable:
 1. Review minutes of previous meeting.
 2. Status of submittals and impending submittals.
 3. Actual progress of activities in relation to the project schedule.
 4. Actual and anticipated delays, their impact on the schedule, and corrective actions taken or proposed.
 5. Actual and potential problems.
 6. Status of corrective work ordered by the Resident Engineer.
 7. Progress expected to be made during the next period.
- C. The following are required to attend:
 1. Project superintendent.
 2. Major subcontractors and suppliers.
 3. Others who have an interest in the agenda.

- D. Contractor to record minutes and distribute copies within 5 days to the Resident Engineer, to all participants, and to all entities affected by decisions made.

3.3 RECORD DRAWINGS

- A. The Owner shall supply a bond set and the Contractor shall update and maintain them as a complete and accurate record of all changes and/or as-built conditions (especially concealed work) of construction. Information shown on these plans and specifications are intended for the purpose of providing the basis for Construction-Record Drawings. The Contractor will record the work completed promptly and the marked-up set will be available for review by the Owner or Resident Engineer at every job meeting. Pay requests may be denied if the Contractor fails to keep record drawings up to date.
- B. Upon completion of the project, the Contractor shall deliver these record drawings to the Resident Engineer along with a letter declaring that other than those noted changes "the project was constructed in conformance with the approved plans and specifications."

END OF SECTION 01200

SECTION 01340

SUBMITTAL PROCEDURES

I.PART - GENERAL

A. SUMMARY

1. Section Includes:
 - a. Preparing and processing of submittals and resubmittals for review and action.
 - b. Preparing and processing of informational submittals.
2. Submit the following for the Resident Engineer's review and action:
 - a. Shop drawings.
 - b. Product data.
 - c. Samples.
 - d. Mock-Up Samples
 - e. Shotcrete nozzle-men qualifications and test results
 - f. Temporary bracing designs and calculations for upper levels of Tower
 - g. Methodology statement for protection of historic finishes
3. Submit the following as informational submittals:
 - a. Structural design information required by the contract documents.
 - b. Certificates.
 - c. Reports.
 - d. Submittals for which procedures are not defined elsewhere.
4. Specific submittals are described in individual sections.
5. Do not commence work which requires review of any submittals until receipt of returned submittals with an acceptable action.
6. Submit all submittals to the Resident Engineer.
7. Do not submit substitute items that have not been approved by means of the procedure specified in Section 01630, Product Options and Substitutions.
8. Do not include requests for substitution (either direct or indirect) on submittals; comply with procedures for substitutions specified in section 01630.

B. DEFINITIONS

1. "Shop drawings" are drawings and other data prepared, by the entity who is to do the work, specifically to show a portion of the work.
 - a. Shop drawings also include:
 - (1) Product data specifically prepared for this project.
 - (2) Shop or plant inspection and test reports, when made on specific materials, products, or systems to be used in the work.

2. "Product data submittals" are standard printed data which show or otherwise describe a product or system, or some other portion of the work.
3. "Samples" are actual examples of the products or work to be installed.
4. Informational Submittals: Submittals identified in the contract documents as to be submitted for information only.

C. FORM OF SUBMITTALS

1. Sheets Larger Than 8-1/2 by 14 Inches:
 - a. Sheet size: 24 by 36 inches, maximum.
 - (1) Exception: Full size pattern or template drawings.
 - b. Number of copies:
 - (1) Submittals for review:
 - (a) One electronic copy
 - (b) One correctable reproducible print, not folded and 3 copies of print(s).
 - (c) Reproducible will be returned.
 - (2) Informational submittals:
 - (a) 2 copies of opaque prints.
 - (b) No copies will be returned.
2. Small Sheets or Pages:
 - a. Minimum sheet size: 8-1/2 by 11 inches.
 - b. Maximum sheet size for opaque copies: 11 by 17 inches.
 - c. Number of copies:
 - (1) One electronic copy
 - (2) Transparencies: Same as for larger sheets.
 - (3) Opaque copies:
 - (a) For review: 3 copies.
 - i) Two copies will be retained (one by the Resident Engineer, one by the Structural Engineer).
 - (b) Informational submittals: 2 copies.
3. Digital (Electronic) Submittals
 - a. MS Word or PDF format
 - b. Maximum Size – 10 MB. Resize if failure is due to oversized documents.
 - c. Submittals must include Contractor's signature prior to Architect and Engineer's review.
 - d. Structural Engineer will return electronic submittals to Resident Engineer. Contractor shall provide multiple plots/prints of returned PDF as needed for his operations.
4. Samples: Three sets of each.
 - a. One set will be returned, one set will be retained by Structural Engineer and one by Resident Engineer.
5. If additional sets are needed by other entities involved in work represented by the samples, submit with original submittal.

6. Copies in excess of the number requested will not be returned.
7. Contractor shall maintain one record copy of all submittal documents at the site during construction. These copies shall be readily available at the site.

D. COORDINATION OF SUBMITTALS

8. Coordinate submittals and activities that must be performed in sequence, so that the Structural Engineer has enough information to properly review the submittals.
9. Coordinate submittals of different types for the same product or system so that the Structural Engineer has enough information to properly review each submittal.

II.PART - PRODUCTS (NOT USED)

III.PART - EXECUTION

A. TIMING OF SUBMITTALS

1. Transmit each submittal at or before the time indicated on the approved schedule of submittals.
 - a. Prepare and submit for approval a schedule showing the required dates of submittal of all submittals.
 - b. Organize the schedule by the applicable specification section number.
 - c. Submit before the first request for partial payment.
 - d. Revise and resubmit the schedule for approval when requested.
2. Deliver each submittal requiring approval in time to allow for adequate review and processing and reprocessing time so not to affect the project schedule, including resubmittals if necessary; failure of the contractor in this respect will not be considered as grounds for an extension of the contract time. The Contractor should be aware that Engineer or Agencies may require multiple resubmittals.
3. Deliver each informational submittal prior to start of the work involved, unless the submittal is of a type which cannot be prepared until after completion of the work; submit promptly.
4. If a submittal must be processed within a certain time in order to maintain the progress of the work, state so clearly on the front page of the submittal.

B. SUBMITTAL PROCEDURES - GENERAL

1. Notify the Resident Engineer, in writing and at time of submittal, of all points upon which the submittal does not conform to the requirements of the contract documents, if any. Comply with Section 01630 for all substitutions.

2. Preparation of Submittals:
 - a. Label each copy of each submittal, with the following information:
 - (1) Project name.
 - (2) Date of submittal.
 - (3) Contractor's name and address.
 - (4) Subcontractor's name and address.
 - (5) Supplier's name and address.
 - (6) Manufacturer's name.
 - (7) Contractor's approval stamp noting the submittal meets all the requirements of the Contract Documents.
 - (8) Specification section where the submittal is specified.
 - (9) Other necessary identifying information.
 - b. Pack submittals suitably for shipment.
 - c. Submittals to receive Structural Engineer's action marking: Provide blank space on the label or on the submittal itself for action marking; minimum 4 inches wide by 5 inches high.

3. Transmittal of Submittals:
 - a. Submittals will be accepted from the contractor only. Submittals received from other entities will be returned without review or action.
 - b. Submittals received without a transmittal form will be returned without review or action.
 - c. Transmittal form: Use standard transmittal form.
 - (1) Show current date.
 - (2) Submittal number and specification number.
 - (3) List deviations on the transmittal form.
 - b. Fill out a separate transmittal form for each submittal; also include the following:
 - (1) Other relevant information.
 - (2) Requests for additional information.

B. SHOP DRAWINGS

1. Content: Include the following information:
 - a. Dimensions, at accurate scale.
 - b. All field measurements that have been taken, at accurate scale.
 - c. Names of specific products and materials used.
 - d. Finishes and colors specified.
 - e. Details, identified by contract document sheet and detail numbers.
 - f. Show compliance with the specific standards referenced.
 - g. Coordination requirements; show relationship to adjacent or critical work.
 - h. Name of preparing firm.

2. Preparation:
 - a. Reproductions of contract documents are not acceptable as shop drawings.
 - b. Identify as indicated for all submittals.
 - c. Space for Structural Engineer's action marking shall be adjacent to the title block.

C. PRODUCT DATA

1. When product data submittals are prepared specifically for this project (in the absence of standard printed information) submit such information as shop drawings and not as product data submittals.
2. Content:
 - a. Submit manufacturer's standard printed data sheets.
 - b. Identify the particular product being submitted; submit only pertinent pages.
 - c. Show compliance with properties specified.
 - d. Clearly identify which options and accessories are applicable.
 - e. Show compliance with the specific standards referenced.
 - f. Show compliance with specified testing agency listings; show the limitations of their labels or seals, if any.
 - g. Identify dimensions which have been verified by field measurement.
 - h. Show special coordination requirements for the product.

D. SAMPLES

1. Samples:
 - a. Provide samples that are the same as proposed product.
 - b. Where products are to match a sample prepared by other entities, prepare sample to match.
2. Preparation:
 - a. Attach a description to each sample.
 - b. Attach name of manufacturer or source to each sample.
 - c. Where compliance with specified properties is required, attach documentation showing compliance.
 - d. Where selection is required, the first submittal may be a single set of all options; after return of submittal with selection indicated, submit standard number of sets of selected item.
3. Keep final sample set(s) at the project site, available for use during progress of the work.

E. REVIEW OF SUBMITTALS

1. Submittals for approval will be reviewed, marked with appropriate action, and returned.
2. Informational submittals: Submittals will be reviewed.
3. The cost for resubmittal after a second resubmittal shall be borne by the Contractor. Such costs shall include but not be limited to: the cost of the Structural Engineer's and consultants', time, and materials.

F. RETURN, RESUBMITTAL, AND DISTRIBUTION

- a. Submittals will be returned to the contractor by mail. The contractor may request to pick up the submittal from the Resident Engineer's office.
- b. Perform resubmittals in the same manner as original submittals; indicate all changes including those requested by the Structural Engineer or Architect.
 - a. Resubmittals shall use the same submittal number with the addition of "R" plus a number for the resubmittal.
- c. Distribution:
 - a. Distribute returned submittals to all subcontractors and suppliers involved in work covered by the submittal.
 - b. Record distribution on transmittal form with copy to the Structural Engineer.
 - c. Record distribution on transmittal form with copy to the owner.

END OF SECTION 01340

SECTION 01400

QUALITY CONTROL

PART 1 GENERAL

1.1 WORK OF THIS SECTION

- A. The CONTRACTOR shall produce Work that meets the quality required by the Contract Documents and shall perform the quality control efforts necessary to ensure those requirements are met. The RESIDENT ENGINEER's inspection of any Work will not relieve the CONTRACTOR of the primary responsibility for such efforts.
- B. Specific quality control requirements for the Work are indicated throughout the Contract Documents. The requirements of this Section are primarily related to performance of the Work beyond furnishing of manufactured products. The term "Quality Control" includes inspection, sampling and testing, and associated requirements.

1.2 RELATED SECTIONS

- A. The Work of the following Sections apply to Work of this Section. Work of other Sections of the Specifications not referenced below shall also apply to the extent required for proper performance of the Work.
 - 1. Section 01010 Summary of Work
 - 2. Section 01340 Submittal Procedures
 - 3. Section 01610 Historic Salvage & Protection
 - 4. Section 0611 Historic Features Restoration
 - 5. Section 01700 Construction Procedures
 - 6. Section 4 Control of Materials, Part 1 Special Provisions

1.3 PROJECT QUALITY CONTROL PLAN

- A. The CONTRACTOR shall submit to the RESIDENT ENGINEER a Quality Control Plan for review and acceptance within 21 calendar days of the Notice to Proceed. The submittal must be accepted before construction Work begins. The Quality Control Plan will include:
 - 1. A description of the workings and structure of the CONTRACTOR's Quality Control Plan that will be implemented to assure quality Work will be done.
 - 2. A contract specific Inspection Plan that lists and describes inspections that the CONTRACTOR will conduct, their frequency, acceptance criteria, and who will conduct each inspection. The Inspection Plan shall include the Work to be performed by subcontractors, fabricators, and suppliers.

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3. Identification of the individuals within the CONTRACTOR's organization who are responsible for quality control including their role and authority. After completion of the RESIDENT ENGINEER'S review of the CONTRACTOR's Quality Control Plan, the CONTRACTOR and RESIDENT ENGINEER will meet to discuss and define quality standards and expectations and to coordinate the RESIDENT ENGINEER'S inspection efforts with the CONTRACTOR'S planned efforts.

B. The CONTRACTOR will be obligated to accommodate procedural changes to contract required quality control issues requested by the RESIDENT ENGINEER.

1.4 FACTORY INSPECTIONS AND TESTS

A. The CONTRACTOR shall be responsible for inspection and testing of materials, products, or equipment at the place of manufacture at its own expense when required by the Contract Documents. Where specified in the Contract Documents, the OWNER/RESIDENT ENGINEER will perform inspection and witness tests on materials, products, or equipment at the place of manufacture. The CONTRACTOR shall bear all costs for inspection and for witnessing factory tests by the OWNER's/RESIDENT ENGINEER's representatives as nominated by the OWNER for the number of days indicated for such inspections and observations. These costs shall include travel expenses, and expenses for lodging, meals, and car rental if the place of manufacture, fabrication and factory testing is more than fifty (50) miles outside the geographical limit of the City. If air travel is involved, it shall include economy class tickets. Costs paid by the CONTRACTOR for inspection and for witnessing factory tests shall not include the salaries or salary-related expenses of the inspectors.

B. Where the Plans and/or Technical Specifications indicate that factory inspection and witnessing of testing by the OWNER/RESIDENT ENGINEER is optional or discretionary, the OWNER will pay for travel and related costs associated with such inspection and witnessing of tests by the OWNER's/CONSTRUCTION MANAGER's representatives.

C. The presence of the OWNER's/RESIDENT ENGINEER's representatives at the place of manufacture shall not relieve the CONTRACTOR of the responsibility for furnishing materials, products, and equipment which comply with all requirements of the Contract Documents. The CONTRACTOR is obligated to meet the requirements of the Contract Documents, and any act or omission on the part of the OWNER/RESIDENT ENGINEER shall not relieve the CONTRACTOR of the obligation to fulfill the requirements of its Contract.

D. Incases, where the OWNER/RESIDENT ENGINEER is indicated to perform inspection and witness tests, the CONTRACTOR shall provide the RESIDENT ENGINEER, as a minimum, an advance notice of fourteen (14) calendar days prior to the start of any testing at the place of manufacture. This notice period may be modified depending on the requirements of each specification section in the technical specifications of the Contract Documents.

1. In cases where there are equipment or materials being manufactured with multiple phases requiring inspections, the manufacturer shall provide the CONTRACTOR and OWNER a schedule of the proposed manufacturing phases that will require inspections.

E. When tests fail to meet the specified requirements, retesting because of non-conformance

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to specified requirements shall be performed by the same testing laboratory as directed by the RESIDENT ENGINEER. The CONTRACTOR shall bear all costs for such retesting, including costs for additional trips for factory inspection and testing by OWNER/RESIDENT ENGINEER's inspectors.

- F. For samples and tests required by the CONTRACTOR for its own quality assurance program and needs, whether or not specified in the Contract Documents, costs shall be included in the Contract Price.
- G. All factory inspections and tests required by the specifications, regulatory permits, or referenced codes and standards shall be the responsibility of the CONTRACTOR, unless specifically noted otherwise.

1.5 SAMPLING AND TESTING

- A. Unless otherwise indicated, all sampling and testing shall be in accordance with the methods prescribed in the most current standards of the ASTM, as applicable to the class and nature of the material, product, or equipment considered; however, the OWNER will use any generally accepted system of sampling and testing which will insure that the quality of the workmanship is in full agreement with the Contract Documents.
- B. Any waiver by the OWNER of any specific testing or other quality assurance measures, whether or not such waiver is accompanied by a guarantee of substantial performance as a relief from the specified testing or other quality assurance requirements as originally specified, and whether or not such guarantee is accompanied by a performance bond to assure execution of any necessary corrective or remedial work, shall not be construed as a waiver of any requirements of the Contract Documents.
- C. Notwithstanding the existence of such waiver, the RESIDENT ENGINEER will make independent investigations and tests; and failure of any portion of the Work to meet any of the requirements of the Contract Documents shall be reasonable cause for the RESIDENT ENGINEER to require the removal or correction and reconstruction of any such work in accordance with the Contract Documents.

1.6 INSPECTION AND TESTING LABORATORY SERVICE

- A. The OWNER will provide and pay for the services of a testing laboratory to perform routine testing of earth work and concrete at the site, and perform random tests of other areas previously completed and inspected by CONTRACTOR.
- B. The OWNER's testing laboratory will perform other inspections, testings, and other services specified in the Contract Documents, to be performed by the OWNER, or as required by the RESIDENT ENGINEER. The cost of these services will be paid for by the OWNER.
- C. Construction work located in the City right-of-way is subject to testing by the City Materials Test Lab. The CONTRACTOR shall coordinate with the RESIDENT ENGINEER to obtain City Materials Test Lab Services.
- D. Reports will be submitted by the OWNER's testing laboratory to the RESIDENT

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ENGINEER in duplicate, indicating observations and results of tests, and indicating compliance or non-compliance with Contract Documents.

- E. The CONTRACTOR shall cooperate with the RESIDENT ENGINEER and OWNER's testing laboratory by furnishing samples of materials, concrete design mix, equipment, tools, storage and other assistance as requested.
- F. The CONTRACTOR shall notify the RESIDENT ENGINEER 48 hours prior to the expected time for operations requiring inspection and laboratory testing services.
- G. Retesting required because of non-conformance to specified requirements shall be performed by the same testing laboratory as directed by the RESIDENT ENGINEER. The CONTRACTOR shall bear all costs from such retesting at no additional cost to the OWNER.
- H. For samples and tests required for the CONTRACTOR's use, the CONTRACTOR shall make arrangements with an independent firm for payment and scheduling of testing. The cost of sampling and testing for the CONTRACTOR'S use shall be included in the Contract Price.
- I. All tests required by the specifications or referenced codes and standards are the responsibility of the CONTRACTOR, unless specifically noted otherwise.

1.7 SPECIAL INSPECTION

- A. The California Building Code requires that special inspections be performed on certain structural elements of the project. The contractor will hire a Special Inspector perform all on-site and off-site special inspections required by the latest version of the California Building Code. The cost of these services will be provided during normal Work hours will be paid for by the Contractor.
- B. When building components are fabricated off site, the CONTRACTOR must utilize a fabricator approved by the City of San Diego Development Services Department. The CONTRACTOR must submit applications to perform off-site fabrications and certificates of compliance in accordance with Development Services Department procedures. If the CONTRACTOR elects to utilize a fabricator that is not approved by the Development Services Department, the CONTRACTOR shall provide a special inspector to perform continuous special inspection in the fabricator's shop. The special inspector must be certified by the Inspection Services Division of the City of San Diego Development Services Department. The CONTRACTOR shall be responsible for all costs associated with performing special inspection in the fabricator's shop.

PART 2 -- PRODUCTS (Not Used)

PART 3 -- EXECUTION

3.1 INSTALLATION

- A. Inspection: The CONTRACTOR shall inspect materials or equipment upon arrival on the job site and immediately prior to installation. The CONTRACTOR shall reject damaged and defective items. This inspection shall include a review of

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Contract requirements; a check to assure that all materials and/or equipment have been tested, submitted, and approved; examination of the work area to ascertain that all preliminary work has been completed; and a physical examination of materials and equipment to assure that they conform to reviewed shop drawings or submittal data. This inspection shall also include instruction as necessary to assure that workmen know the requirements of the Contract as they pertain to the feature, an examination of the quality of workmanship, as well as a review of control testing for compliance with the Contract requirements.

- B. Measurements: The CONTRACTOR shall verify measurements and dimensions of the Work, as an integral step of starting each installation.
- C. Special Procedures: Methods and facilities shall be provided to assure conformance with requirements for special process specifications such as welding, heat treating and nondestructive testing of materials. Certifications for personnel, procedures, and equipment shall be maintained as required to meet the requirement of the Contract Documents and all applicable codes.
- D. Manufacturer's Instructions: Where installations include manufactured products, the CONTRACTOR shall comply with manufacturer's applicable instructions and recommendations for installation, to whatever extent these are more explicit or more stringent than applicable requirements indicated in Contract Documents.

3.2 MANUFACTURER'S FIELD INSTALLATION SERVICES AND REPORTS

- A. When specified in individual specification sections, the CONTRACTOR shall require material or product suppliers or equipment manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, (test, adjust, and balance of equipment) and to provide instructions when necessary.
- B. The CONTRACTOR shall report to the RESIDENT ENGINEER in writing any observations and site decisions or instructions given by the manufacturers' representative to the CONTRACTOR that are supplemental or contrary to manufacturers' written instructions.
- C. The CONTRACTOR shall submit manufacturer representative's reports (in duplicate) within 10 working days of each field visit, to the RESIDENT ENGINEER for review. If duration of field visit is greater than one week, submit weekly reports. The final report shall certify that equipment or system has been satisfactorily installed and is functioning correctly.

** END OF SECTION **

SECTION 01500

TEMPORARY FACILITIES AND SERVICES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Temporary construction facilities and controls as required for proper performance of the Contract. Locate temporary facilities where directed by Resident Engineer and maintain in a safe and sanitary condition at all times until completion of the Contract.

1.2 REGULATORY REQUIREMENTS

- B. Comply with governing regulations and utility company regulations and recommendations.
- C. Comply with pollution and environmental protection regulations for use of water, energy, for discharge of wastes and storm drainage from Project Site, and for control of dust, air pollution and noise.

1.3 SECTION INCLUDES

- A. Temporary Utilities.
 - 1. Drinking water facilities & charges
 - 2. Telephone service.
 - 3. Electric Service & charges
 - 4. Internet Service – Minimum DSL or Cable service.
- B. Temporary Facilities
 - 1. Temporary enclosures for general building heating protection from weather.
 - 2. Temporary provisions for ventilation.
 - 3. Temporary enclosures for protection of worksite and materials.
 - 4. Cranes or lifts.
 - 5. Temporary barriers and separations between construction areas and Museum areas.
- C. Protective Facilities.
 - 1. Temporary lighting
 - 2. Waste Disposal Services
 - 3. Public protective facilities required by law.
- D. Employee Facilities.
 - 1. Temporary Sanitary Facilities
- E. Administrative Facilities.
 - 1. Jobsite Trailer / Field Office located within 500 feet of the project.
- F. Temporary services.
 - 1. Dust control services.
 - 2. Waste Disposal Services
 - 3. Security Services.

1.4 DEFINITIONS

- A. Temporary Facilities: Construction, fixtures, fittings, and other built items required to accomplish the work but which are not incorporated into the finished work.
- B. Temporary Utilities: A type of temporary facility; primary sources of electric power, water, natural gas supply, etc., obtained from public utilities, other main distribution systems, or temporary sources constructed for the project, but not including the fixtures and equipment served.
- C. Temporary Services: Activities required during construction which do not directly accomplish the work.
- D. Construction Equipment: A type of temporary facility, consisting of fixed equipment used to accomplish the work, determined by the method the contractor chooses to accomplish the work, and in accordance with the construction documents and Resident Engineer's approval.

1.5 QUALITY ASSURANCE

- A. Comply with requirements of governing authorities, as to type, quantity, location, and use of temporary facilities.
- B. Comply with requirements of governing authorities, as to type and frequency of temporary services.
- C. Comply with requirements of public utilities affected.
- D. Obtain permits where required.

1.6 SEQUENCING AND SCHEDULING

- A. Maintain required facilities until not needed or until shortly before substantial completion; remove facilities before substantial completion.
- B. Change over to use of permanent facilities, when applicable, as soon as possible, except when use of permanent facilities is not allowed.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Provide materials which are both suitable for the use and durable enough to withstand the use and abuse to be expected.

2.1 TEMPORARY UTILITIES

- A. Temporary Water Service:
 - 1. Provide water adequate for demand of construction operations.
 - 2. Contractor may expect to use water from an existing water supply, in accordance with a metering and contractor payment agreement as approved by the Resident Engineer.
- B. Piped water service:
 - 1. Do not use permanent piping system to distribute non-potable water.
 - 2. Use only potable water.
 - 3. Connect to existing metered water service.
 - 4. Provide shut-off valve.
 - 5. Disinfect temporary piping before use.

6. Take precautions to prevent damage due to leaks and spills inside building
 7. Contractor to pay water bills during the construction period.
- C. Temporary Telephone Service:
1. Provide at least one telephone on site.
 2. The contractor to pay fees and bills during the construction period.
 3. Provide email with internet capability on the site.
- D. Temporary Electric:
1. Provide electricity adequate for demand of construction operations.
 2. Electrical service:
 - a. Contractor may use existing electric meter and equipment if meter is usable & safe and pay house meter bills during the construction period.
 - b. Contractor may elect to provide a construction meter and pay such meter bills during the construction period.

2.3 TEMPORARY FACILITIES

- A. Provide temporary heat as necessary for the drying out of the building, the proper installation of Work and materials, and the protection of Work and materials against injury from dampness and cold.
- B. Provide adequate forced air ventilation of enclosed areas for curing of installed materials, to disperse humidity, and to prevent accumulations of dust, fumes, vapors, and gases.
- C. Installation of cranes or lifts shall be approved by the Resident Engineer and shall not damage permanent surfaces or the structure.
 1. Locations of temporary anchors or embedments shall be approved by the Resident Engineer.
 2. Temporary anchors or embedments shall be removed when the temporary facility is removed.
 3. Repair all affected surfaces following temporary facility removal.
 4. Provide protective measures to prohibit unauthorized use by the public.
- D. Temporary lighting: as needed to accomplish the Work.
- E. Waste Disposal Services: as needed to accomplish the Work.
- F. Provide temporary barriers and separations between the construction areas including the Tower and second floor and the other Museum areas including but not limited to exhibit areas, lobby areas, and pedestrian circulation areas.
 1. Barriers and separations shall effectively protect the Museum areas from dust, debris, construction traffic while permitting continued functioning of the Museum.
 2. Barriers and separations shall permit visitor access through the first floor of the Tower in the early and late stages of the construction if required for Museum exiting and as directed by the Resident Engineer.
 3. Barriers and separations shall be located and maintained throughout the duration of the active construction period and shall be removed at the end of construction as directed by the Resident Engineer.
 4. Barriers and separations shall provide for construction access to the Tower separated from the Museum areas open to visitors and shall provide Museum access by visitors separated from construction areas and activities.

- 5. Temporary barriers and separations shall be installed and removed without damaging the Museum building surfaces finishes, exhibits structures, or artifacts.
- G. Temporary signage shall be installed to clearly inform visitors and employees of off-limit work areas and direct them to alternate access or egress paths. Temporary signage shall be installed and removed without damaging the Museum building finishes.

2.4 PROTECTIVE FACILITIES

- A. Public protective facilities/barriers required by law. Contractor to provide protective barriers as he deems necessary and as required by law to protect life and limb of the workers and the public.
- B. Security: Barriers at scaffolding as required to prevent unauthorized use of the scaffolding and access to the building or roof.

2.5 EMPLOYEE FACILITIES

- A. Temporary Sanitary Facilities: Provide temporary sanitary and hand wash conveniences for the use of employees and persons engaged in the Work. Including sub-contractors and their employees, as required by law, ordinances, or regulations of public authorities having jurisdiction. Use of permanent toilet facilities in the Work under construction will not be permitted except by written approval of the Owner.
 - 1. Clean and maintain toilet and hand washing facilities daily.
 - 2. Provide toilet tissue for each facility.
 - 3. Temporary facilities may be required when permanent facilities are disabled.
- B. Temporary Lighting: Provide at least the lighting required by law.

2.6 ADMINISTRATIVE FACILITIES

- A. Temporary job office: Utilizing existing buildings provide and maintain, in good condition, on the site, a job office of suitable size for the Contractor, to include a meeting area for at least eight people. The office is to be weatherproof and secure and provide with adequate lighting, heat, and ventilation. Provide a location for storage of construction documents, and preparation of record drawings. The job office shall be available to the contractor, owner, Resident Engineer, Architect, and Engineers.

2.7 TEMPORARY CONSTRUCTION

- A. Temporary enclosures for security and/or weather resistance: When building enclosure is not yet complete but interior construction may be damaged by weather, provide temporary enclosures adequate to keep out weather and prevent unauthorized access.

2.8 PROJECT SIGN

- A. Provide a project sign per the City of San Diego requirements.
- B. Unless otherwise directed by Resident Engineer, provide one painted sign not less than 32 square feet in area with painted graphic design, content, letter style with a minimum of 3 colors to be provided by the Resident Engineer.

- B. Paint all exposed surfaces of the sign including the supports and framing with one coat of primer and one coat of paint. Employ a professional sign painter for painting of graphics.
- C. The location of Contractor's sign must be approved by Resident Engineer.
- D. The Contractor shall allow the Architect to post a sign adjacent to the Contractor's sign.

PART 3 - EXECUTION

3.1 GENERAL

- A. Cooperate with other contractors in location of temporary facilities.

3.2 TEMPORARY SERVICES

- A. Waste Disposal Service: Provide contracted removal service at regular intervals.
 - 1. Remove waste at least once a week.
 - 2. When temperature exceeds or is expected to exceed 80 degrees F, remove at least twice a week.
 - 3. Provide waste collection containers for use of all contractors.
- B. Security Service: As required to provide building security, protection against vandalism, and protection of stored materials.
- C. Dust Control Mitigation Service: Provide mitigation monitoring program, see specification Section 01010.

3.3 TERMINATION AND REMOVAL

- A. Remove temporary facilities when no longer needed, or when use of appropriate permanent facility is approved, but not later than substantial completion.
 - 1. Exception: When longer usage is requested by the Resident Engineer or Owner.
- B. Complete permanent work delayed until removal of temporary facilities.
- C. Restore surfaces, utilities, and landscaping to pre-construction condition.
- D. Permanent Facilities Used during Construction: Clean; replace parts that are worn in excess of that expected during normal usage.

END OF SECTION 01500

SECTION 01610

HISTORICAL AND EXISTING FEATURE SALVAGE AND PROTECTION

PART 1 GENERAL

1.1 SUMMARY

- A. Work Included:
 - 1. Historical and existing feature salvage and protection as listed and as specified herein, including but not necessarily limited to the following:
 - a. Contractor responsibilities.
 - b. Catalog, Storage and Retrieval.
 - c. Protection and Installation.
 - 2. The Contractor shall provide labor, materials, equipment and services to perform operations required for the dismantling/salvage of historic and other existing features and related work as indicated on the drawings, as specified herein, and as may be required by conditions of the contract.

- B. Related Sections:
 - 1. Summary of Work: Section 01010
 - 2. Construction Photographs: Section 01200
 - 3. Restoration of Historical and Existing Features: Section 01611
 - 4. Construction Procedures, Section 01700
 - 5. Selective Demo, Section 01732
 - 6. Painting, Section 09900

- C. Related Documents:
 - 1. Drawings and general provisions of Contract, including General and Supplementary Provisions and other Division-1 Specifications Sections, apply to this Section.
 - 2. Standard Specifications for Public Works Construction (Greenbook) Current Edition.
 - 3. U.S. Department of Interior Preservation Briefs.

1.2 CONTRACTOR RESPONSIBILITIES

- A. The Contractor's responsibilities shall include, but are not necessarily limited to, the following:
 - 1. Accept the site as it exists on the first day of work under the contract. It shall be the Contractor's responsibility to visit the site prior to bidding the work and determine the condition of the site, the exact nature and amount of work to be done, and conditions that affect his work.
 - 2. The Contractor shall provide the Resident Engineer with a Comprehensive Salvage Plan in which the approach, means, methods, and techniques for salvaging items are clearly outlined. The Contractor's Salvage Plan shall describe, in detail, how the Contractor will proceed with the following tasks: Identification, Recordation, Cataloging, Numbering, Labeling, Removal, Boxing, Crating, Storage, Protection, Restoration, Retrieval, Reinstallation, and Finishing. The Contractor's Salvage Plan must be approved by the Resident Engineer prior to the commencement of any historic

- feature removal or restoration work. The salvage plan must also include historic exterior site items, as applicable.
3. Dismantle and salvage all historical and existing building features indicated by the Drawings and as directed by the Owner or the Resident Engineer or otherwise required by conditions of the contract.
 4. Carefully handle, catalog and package all salvaged building features in an approved manner and as deemed appropriate by conservation practices to prevent damage, deterioration, loss or other adverse effects.
 5. Contractor shall transport such salvaged features with care and store in a protected area until such features are ready for restoration or return to the site for installation, as indicated by the Contract Documents.
 6. All salvaged items shall be stored by the Contractor for the duration of the Contract. The Contractor is responsible to transport back all salvaged items that were not reinstalled from the Contractor's storage to a place (on-site or within the City limits of San Diego) to be determined by the Resident Engineer at a later date.
 6. Contractor shall document his work by photographs prior to dismantling and after reinstallation. Refer to Section 01200.

1.3 REGULATORY REQUIREMENTS

- A. Dismantling and salvage operations at the building site shall be in accordance with regulatory requirements indicated per Specification Sections 01700 and 01732, and shall be subject to all applicable laws, governmental rules, regulations and orders of public authorities having jurisdiction over this part of the work.

1.4 SUBMITTALS

- A. Photographs: The Contractor shall submit photographs per Section 01200. These photographs are essential as evidence to the Owner and Architect that the work has been done per the Secretary of the Interior's Standards.
- B. Salvage Plan: After acceptance of the site, and prior to commencing with the Work, the Contractor shall submit to the Resident Engineer for approval, a written description of all methods and materials to be used in the dismantling, cataloging, transport protection and storage of each salvaged feature.
 1. Resident Engineer may withhold pay requests or a portion thereof until the Salvage Plan is approved.

1.5 TRAFFIC AIDS AND ACCESS

- A. The Contractor shall provide necessary equipment and services required to perform the work.
- B. Throughout progress of work, do not interfere with use of or access to adjacent buildings or property.
- C. Do not close or otherwise obstruct means of egress, sidewalks, or streets without permission from the City of San Diego and obtaining and paying for permits to do so.

1.6 WORKMANSHIP

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- A. Complete dismantling and salvage in an orderly and careful manner. Remove and undertake dismantling and salvage in a deliberate and systematic manner, taking note of all materials and systems encountered, and providing photographs and drawings per Section 01200.
- B. Ensure that no existing construction is dismantled, demolished or removed without knowing specifically what it is, how it should be handled, and what impact on existing construction, structure and building services its removal or demolition will have.
- C. Any questions concerning the disposition of existing construction encountered, notify Resident Engineer in writing before proceeding.
- D. Contractor assumes all responsibility and liability, including consequential damages, as a result of his failure to proceed without reasonable caution.
- E. Contractor shall diligently mark and catalogue historic fabric removed from the building and maintain records as to the location of salvaged materials.

1.7 UTILITIES

- A. Protect and maintain existing utility lines which are to remain in service in such a manner as to avoid interruption of these lines. Cap all utility lines terminated by salvage operations in a manner approved by government authorities and utility companies having jurisdiction.
- B. Contact and coordinate with governing authorities and utility companies for exact locations of utilities and for the timely termination of services.

1.8 REMOVAL OF MATERIALS

- A. Remove all material resulting from the salvage operation that are not indicated as salvaged features, from the site in such a manner as to avoid creating a nuisance. Dispose of such material from the site on a daily basis to locations determined by the Contractor, at no additional cost to the Owner. Take possession of all material and equipment as property of the Contractor and promptly remove from the site. Such material is not to be sold on the site.

1.9 CATALOG, STORAGE AND RETRIEVAL

- A. Catalog:
 1. The Contractor shall maintain a catalog record system that readily identifies the salvaged feature by salvage number, as indicated in the Salvage Inventory, description, original location (horizontal and vertical dimensions as well as photographic documentation), proposed location, restoration, and installation. This system shall include a schedule(s) that tracks each feature through the construction phase to substantial completion.
 2. The Contractor shall control the salvaged features by an orderly system and schedules that permits ready access by which pertinent data relative to new construction, restoration status and installation or transfer to owner control at substantial completion can be known.
 3. The above described system and its schedules, once approved by the Resident Engineer, shall be updated and distributed on a monthly basis to the Resident Engineer and his consultants, Sub-Contractors and others as necessary, so that at any given time, a salvaged feature may be researched, during normal business hours, with the assistance of at least one knowledgeable person of the Contractor's staff, who is on the premises.
- B. Storage and Retrieval:

1. Employ appropriate conservation practices for protection, transportation and storage of salvaged features to a weather-tight facility.
2. Arrange storage to provide access for inspection and research. Periodically inspect to assure features are undamaged and are maintained under required conditions.
3. Provide equipment and personnel to handle features by methods which prevent soiling or damage due to stock and inventory movement necessary to provide access for inspection and research.
4. All items to be stored by the Contractor until completion of the Project.

1.10 PROTECTION AND INSTALLATION

- A. All salvaged features shall be protected throughout construction to Substantial Completion including dismantling, transit, storage, restoration, return to the Site, installation and in place at the location for which they are indicated, unless otherwise specified or directed by the Resident Engineer.
- B. Salvaged Features protected by the Contractor that are scratched, marred, stained, discolored or otherwise damaged as determined by the Resident Engineer review where touch-up cannot be accomplished, shall be replicated "in kind" by the Contractor where all costs shall be borne by the Contractor.
- C. Certain salvaged features will be stored only and not reinstalled, as indicated, but will be left in protected storage for disposition as directed by the Resident Engineer.

PART 2 PRODUCTS (not used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and sealed.
- B. Survey existing conditions and correlate with drawings and specifications to determine extent of salvage operations required.
- C. Insofar as is practical, arrange operations to reveal unknown or concealed structural conditions for examination and verification before removal.
- D. Verify actual conditions to determine in advance whether removal of any element will result in structural deficiency, overloading, failure, or unplanned collapse.

3.2 PREPARATION

- A. Protection:
 - 1 Provide for the protection of persons passing around or through the area of salvage operations.
 - 2 Perform salvage operations so as to prevent damage to adjacent improvements and facilities to remain.
 - 3 Provide protective measures to ensure free and safe passage of persons to and from occupied areas.
 - 4 Erect temporary protection such as walks, fences, railings, canopies, etc., where required by authorities having jurisdiction.
- B. Structural Support:

1. Design as required by the building official, construct, and maintain shoring, bracing, and supports as necessary to ensure the stability of structures.
2. Increase or add new supports as required by the progress of the work.
3. The Contractor shall be responsible for the design and construction of all needed shoring and bracing necessary for salvage operations and shall have a licensed Structural Engineer registered in the State of California design same. Costs for design and bracing shall be borne by the Contractor.
4. The Contractor shall notify his Structural Engineer and the Resident Engineer if unusual, latent or presently unknown conditions are encountered which might affect the structural stability of work to follow, or if existing conditions are found to be different than those indicated.

C. Damages:

1. Without cost to the Owner and without delay, repair or replace any property or construction damaged as a result of salvage operations.

3.3 CLEANING

1. Maintain broom cleaned adjoining public streets, sidewalks, walkways and stairways. Clean planting areas of all demolition materials and debris.

END OF SECTION 01610

SECTION 01611

RESTORATION OF HISTORIC AND OTHER SALVAGED FEATURES

PART 1 GENERAL

1.1 SUMMARY

- A. Contractor shall provide labor, materials, equipment and services to perform operations required for the restoration of Salvaged Historic Features and the related scope of work as indicated on the drawings, as listed in this specification section, and as may be required by conditions of the contract.
- B. Section Includes:
 - 1. Without restricting the totality of the work, this section shall include salvaged features restoration and re-installation as indicated on the drawings and as specified herein.
 - 2. Furnish and install all replications of historic features of the type indicated by symbols at each location and quantity shown on the drawings, and as documented by the Contractor during Salvage of historic and other existing features. All materials, accessories, and any other equipment necessary for the complete and proper installation of these features shall be furnished by the Contractor.
- C. Related Sections:
 - 1. Summary of Work: Section 01010
 - 2. Progress Documentation and Procedures: Section 01200
 - 3. Shop Drawings, Submittals: Section 01300
 - 4. Historic and Existing Feature Salvage and Protection: Section 01610
 - 5. Construction Procedures: Section 01700
- D. Related Documents:
 - 1. Drawings and general provisions of Contract, including General and Supplementary Provisions and other Division-1 Specification Sections, apply to this section.
 - 2. U.S. Department of Interior Preservation Briefs.

1.2 DEFINITIONS

- A. Restoration: The act or process of accurately depicting the form, features, and character of a property (salvaged historic item) as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties (salvaged historic items) functional is appropriate within a restoration project.
- B. Conservator: A person with advanced training in science, studio arts and art history, and with experience in applying manual skills and theoretical knowledge towards the preservation of artistic and historic works.

1.3 REFERENCES

- A. References indicated in the related sections noted above shall be considered as herein stated as part of this section.

1.4 GENERAL REQUIREMENTS FOR FEATURE RESTORATION

- A. Accept the site as it exists on the first day of work under the Contract. It shall be Contractor's responsibility to visit the site prior to bidding the work and determine for himself the condition of the site, and exact nature and amount of work to be completed, and the conditions that affect his work.
- B. The Contractor shall provide the Resident Engineer with a Comprehensive Salvage Plan in which the approach, means, methods, and techniques for salvaging items are clearly outlined. The Contractor's Salvage Plan shall describe, in detail, how the Contractor will proceed with the following tasks: Identification, Recordation, Cataloging, Numbering, Labeling, Removal, Boxing, Crating, Storage, Protection, Restoration, Retrieval, Reinstallation, and Finishing. The Contractor's Salvage Plan must be approved by the Resident Engineer prior to the commencement of any historic feature removal or restoration work. The salvage plan must also include historic exterior site items, as applicable.
- C. All salvaged items used as "Models for Replication" shall be kept in good condition by Contractor for the duration of the project. At completion of the project all Models for Replication shall be turned over to the Owner.
- D. All replications shall match exactly the historic original. Any changes or substitutions of materials or techniques shall be submitted for approval to the Resident Engineer in accordance to Division 1 specification requirements prior to execution.
- E. If an item listed for salvage cannot be removed in a manner that renders it reconditionable for reinstallation, as judged by the Resident Engineer, the Contractor shall replicate the object new, to exactly match the original, and install that replication. Any item listed for salvage which is missing or has been damaged must be brought to the attention of the Resident Engineer within three (3) days of such a discovery by the Contractor.
- F. No item listed for salvage in the following "Specific Features Restoration" in this specification section shall be disposed of without advance approval from the Resident Engineer.
- G. Salvaging, cataloging, restoring and installing historic features in a project of this magnitude will require careful and constant coordination of the work. The following descriptions are a general guide and not meant to be specific directions for how the restoration portion of the project is to be accomplished. The Contractor is responsible for the means, methods, and techniques based on specified codes and standards for the restoration of salvaged features.
- H. In preparing salvaged items for reinstallation in the reconstructed building, the general objective will be to clean, consolidate and patch areas of loss and replace missing elements to provide a uniform and consistent appearance among like items as they would have been when the building was in use starting in 1915. Salvaged historic items shall be treated in a manner that will retain visual evidence of their age, their "patina", but the desired appearance after

treatment for all salvaged historic items shall be that of items retaining the integrity of their original aesthetic character without subsequent overt damage by vandalism, deterioration, neglect or invasive or anachronistic refurbishing.

- I. The Owner will remove all stored artifacts and exhibits in the areas of the building affected by construction, the contractor need not include stored artifacts in the salvage plan.

1.5 SPECIFIC FEATURES RESTORATION

- A. Building Facade Parge Coat (Cement Plaster)
 1. Parge patching material shall match existing in-kind.
 2. Texture to match existing adjacent to repair.
 3. Color to match existing.
 4. Repair cracks and holes left from removed brackets, conduit, etc.
 5. Sandblasting is not permitted.
 6. High pressure water washing is not permitted unless approved by the Resident Engineer.
- B. Cast-Stone Ornamentation
 1. Protect existing historic cast-stone ornamentation in place.
 2. Salvage all removed wood trim, catalogue locations and mark materials.
 3. Repair damaged materials, match base material, and finishes exactly.
 4. Replace Liquid Water Repellant when the surface is removed.
 5. Clean surfaces below repairs of laitance and debris.
- C. Wood Windows
 1. Protect all wood windows in place.
 2. Remove windows only when approved by Resident Engineer.
 4. All windows shall be restored and operable when the project is complete.
- D. Stair Hand Railings
 1. Photo document and measure the location of all railings to be removed.
 2. Remove handrails impacted by the work.
 3. Protect and catalogue salvaged handrails.
 4. Replace deteriorated members in-kind when severely deteriorated.
 5. Reinstall handrails in original positions.
 6. Touch up any paint losses to match existing.
- E. Interior Plaster Finishes
 1. Plaster patching material shall match existing in-kind.
 2. Texture to match existing impacted by the work.
 3. Repair cracks and holes left from removed brackets, conduit, etc.
 4. All loose paint adjacent to repairs is to be removed, and well adhered paint shall be feather sanded so no edge is apparent, all paint is to be assumed to be lead-based paint.
 5. Finish color to match existing.
- F. Plaster Ornamentation
 1. All historic plaster ornamentation is to be protected in place unless noted otherwise.
 2. Touch-up damage to match historic finishes.
 3. Retain historic finishes whenever possible.

4. Replicate any damaged plaster ornamentation in-kind.
5. Refinish to achieve a seamless appearance between new and historic material.
6. Provide paint finish to match adjacent color and finish exactly.

G. Ceramic Tile

1. All historic ceramic tile on the exterior of the tower is to be protected in place.
2. Previous failed patches and coatings shall be removed without damaging the tile.
3. Touch up damage to tile finish with an approved repair glaze that matches the tile finish color.
4. Damage to the body of the tile shall be stabilized with epoxy injection and the tile surface repaired with glaze matching the tile color.
5. Only in conditions where severe damage is replacement tile to be considered, replacement tile must match historic in-kind with exact color match.

H. Historic Light Fixtures

1. Photograph and measure the placement of light fixtures.
2. Remove and salvage all historic light fixtures impacted by the work.
3. Salvage, catalogue, store, and protect fixtures.
4. Reinstall fixtures in historic locations.

I. Scored Concrete Flooring

1. Protect existing historic floor in place.
2. Carefully clean score lines.
3. Minimize the cutting of flooring as much as possible.
4. Cut only at concrete score lines.
5. Clean floor with mild detergent.
6. See drawings for repair locations.
7. Test existing concrete for color and composition to determine mix for new concrete, provide data to Resident Engineer.
8. Replicated floor areas shall match historic scored floor exactly in size, finish, and color, joints between existing and new shall occur at scored lines and / or walls.
9. Provide mock-ups as required to achieve exact color and gloss match.
10. Provide non-slip wax finish on new and adjacent surfaces.

J. Ornamental Painting

1. Protect ornamental paintings/murals in place or document and reproduce with approval of Resident Engineer and Architect.
2. An example of such painting is a painted graphic in the lower tower stairway applied to the plaster finish.

1.06 REGULATORY REQUIREMENTS

- A. The following codes, standards, laws, regulations, specifications and manuals are applicable to this section and when referenced mean the latest adopted edition, amendment or revision of such referenced code in effect as of the date of these Contract Documents.

1. Current California Historical Building Code (CHBC), Part 8, Title 24 CCR.
2. Secretary of the Interior's Standards for the Treatment of Historic Properties (Latest Edition).

3. ANSI, American National Standards Institute;
4. ASTM, American Society for Testing and Material;
5. AWI, American Woodworking Institute;
6. NEC, National Electric Code.
7. WIC, Woodwork Institute of California; "Manual of Millwork;
8. AIC, American Institute for Conservation of Historic and Artistic Works, "Code of Ethics and Standards of Practice" (Latest Edition).

1.07 SUBMITTALS

- A. The Contractor shall submit digital color photographs documenting the condition of each feature before commencement of the work and after completion.
 1. Photos and technique shall be as defined in Specification Section 01200.
- B. Work Description:
 1. After Tests and Samples are approved, and prior to commencing with the Work, the Contractor shall submit to the Resident Engineer a written description of all methods and materials to be used in the restoration of each feature.

1.08 QUALITY ASSURANCE

9. A. All work shall comply with "The Secretary of the Interior's Standards for the Treatment of Historic Properties."
- B. Salvage, storage, restoration and reinstallation of historic items shall comply with the American Institute for Conservation of Historic and Artistic Works "Code of Ethics and Standards of Practice" (Latest Edition).
- C. Aggressive or destructive cleaning methods and materials (e.g. sandblasting) are prohibited.
- D. Qualifications: Pre-qualifying criteria for the Contractor's sub-contracting labor in regards to restoration and replication of the various items listed in the Historic Features Salvage Schedule are:
 1. Shall have _____ experience in the design and manufacture of the type and quality shown for the specific specialty for which they are listed as sub-contracting labor. Pre-qualification submissions must include a list of completed projects and dated catalogue pages or drawings indicating length of experience.
 2. Demonstrate expertise in the use of techniques, materials and finishes similar to the techniques, materials and finishes of this building.
- E. Pre-Approved Specialty Sub-contracting:
 1. Tile Repair/Replacement
 - a. Preservation Arts, Inc., 5057 W. Washington Blvd., Los Angeles, CA 90016 P: (310) 558-8003 Contact: Charles Kibby
 - b. Kitson Specialty Contracting Inc., 10370 Slusher Dr. Suite 9, Santa Fe Springs, CA. 90670, Tel (562) 941-1949. Contact John Kitson
 - c. Spectra Company, Spectra Company, 2510 Supply Street, Pomona, CA 91767, Tel (909) 455-8238, Contact: Ray Adamyk
 - d. Williams Art Conservation Inc., 6234 Afton Place, Los Angeles, CA 90028 Tel (323) 462-2346 Contact: Donna Williams

2. Parge / Cast-Stone Repair
 - a. Kitson Specialty Contracting Inc., 10370 Slusher Dr. Suite 9, Santa Fe Springs, CA. 90670, Tel (562) 941-1949. Contact John Kitson
 - b. Spectra Company, Spectra Company, 2510 Supply Street, Pomona, CA 91767, Tel (909) 455-8238, Contact: Ray Adamyk

1.09 WARRANTY

- A. The Contractor shall warrant in accordance with the General Conditions the custom fabricated replications, their finishes, and all of their component parts, to be free from defects for a period of one year from date of completion. Replacement of faulty materials and the cost of labor required to make the replacement shall be the responsibility of the Contractor.

1.10 MOCK-UPS

- A. Cleaning Tests:
 1. Cleaning tests for each type of material found in the salvaged features shall be performed by the Contractor.
 2. The cleaning tests for each material shall be conducted in an area(s) of the salvaged feature(s) exhibiting conditions representative of all such salvaged features in each section.
 3. The testing methods and cleaning and conservation materials used in the tests shall be inspected and approved by the Resident Engineer. After approval by the Resident Engineer, the Contractor shall maintain the tests for the duration of the work and they shall serve as the standard by which subsequent work in this section will be judged.
- B. Patching Samples:
 1. Pigmented patch samples in areas of loss from material found in the salvaged features shall be demonstrated by the Contractor.
 2. The patch samples shall be conducted in an area(s) of the salvaged feature(s) exhibiting representative conditions for all materials in the group.
 3. The patch samples shall match the adjacent surfaces in color, texture, and surface finish.
 4. The patch samples and materials shall be inspected and approved by the Resident Engineer. After approval by the Resident Engineer, the Contractor shall maintain the samples for the duration of the work and they shall serve as the standard by which subsequent work in this section will be judged.
- C. Refinishing Samples:
 1. Finish samples in areas of material found in the salvaged features shall be demonstrated by the Contractor.
 2. The finish samples shall be conducted in an area(s) of the salvaged feature(s) exhibiting representative conditions for all materials in that group.
 3. The finish samples shall match existing historic finishes in good and clean condition, when applicable, or the manufacturer's prescribed surface finish in color, texture, and surface finish.
 4. The finish samples and materials shall be inspected and approved by the Resident Engineer. After approval by the Resident Engineer, the Contractor shall maintain the samples for the duration of the work and they shall serve as the standard by which subsequent work in this section will be judged.

1.11 STORAGE AND HANDLING

- A. Store features and products in accordance with appropriate conservation practices and manufacturer's instructions, with catalog tags, seals and labels intact and legible. Store sensitive features and products in weather-tight enclosures.
- B. Provide and maintain labeling or other appropriate inventory identification methods for all salvaged items. Keep sub-components of salvaged items together with those primary items (such as historic door and window hardware), or label and store sub-components in such a manner that will allow easy reinstallation with the original primary item.
- C. Arrange storage to provide ready access for inspection. Periodically inspect to assure features and products are undamaged and are maintained under required conditions. Any discoveries of damage or deterioration of features or products shall be immediately reported to the Resident Engineer. To minimize additional damage, correction of conditions causing damage or deterioration shall be carried out within a time-frame appropriate to the nature of the problem, and a narrative report of measures taken to correct any such problems shall be submitted to the Resident Engineer within five working days after the correction has been made.
- D. Transport features and products by means and methods chosen to prevent damage to salvaged features; deliver in undamaged condition in Contractor provided containers or packaging, or manufacturer's unopened containers or packaging, dry.
- E. Provide equipment and personnel to handle features and products by methods chosen to prevent soiling or damage.
- F. Promptly inspect features as they arrive at Contractor's storage facility to assure that features have been properly cataloged, packaged and are undamaged. Any discoveries of damage to features, inadequate packing or cataloging techniques or losses of features shall be immediately reported to the Resident Engineer. A narrative report of measures taken to correct any such problems shall be submitted to the Resident Engineer within five working days after the correction has been made.
- G. Promptly inspect shipments to insure that products comply with requirements, quantities are correct and products are undamaged.

PART 2 PRODUCTS

2.1 RESTORATION MATERIALS GENERAL

- A. Select and use all restoration materials and equipment with care in accordance with appropriate conservation practices to avoid scratching, marring, defacing, staining, discoloring or otherwise degrading surfaces being restored.
- B. Use only those restoration materials recommended by the conservation materials manufacturer and/or restoration materials appropriate to conservation practices on surfaces to be restored.
- C. Use restoration materials only on surfaces for which they are recommended by the restoration material manufacturer or appropriate conservation practices.

- D. The Contractor shall inspect and confirm that all materials used in the restoration process are in compliance with federal, state and local codes and government regulations.

2.2 MATERIAL MANUFACTURERS

- A. The following manufacturer's have products for use in feature restoration and are knowledgeable in the restoration of materials found in this project. They are an available source for reference to alternate products, methods and standards. The Contractor and his Conservator are responsible for the selection of the final products to be used. All proposed products are to be submitted to the Resident Engineer for approval.
 - 1. SureKlean, ProSoCo Inc. P.O.Box 171677 Kansas City, KS, 66117 (913) 281-2700
 - 2. ABATRON Inc. 5501 95th Avenue, Kenosha, Wisconsin, 53144 (800) 445-1754
 - 3. Professional Products of Kansas, Inc. 4456 South Clifton Wichita, Kansas, 67216 (800) 522-7346
 - 4. Conservation Materials Ltd. 1275 Kleppa Lane Sparks, NV, 89431 (702) 331-0582, Fax:(702) 331-0588.
 - 5. Chem Lab Supplies 1060-C Ortega Way Placentia, CA, 92670 (714) 630-7902.

2.3 MATERIALS

- A. Unless otherwise noted, materials used in restoration shall conform to Standard Conservation Practices and Archival Preservation Standards as specified herein. The selection of specific materials shall be dependent upon the condition of the features and the results of tests and sampling conducted by the Contractor at the job site.
- B. The conservation standard concept of reversibility shall be employed where appropriate to the desired project outcome and shall be waived in those specific instances where adherence to the standard prevents restoration of the historic appearance of the feature. In these instances the Contractor shall submit notice of deviation from the standard to the Resident Engineer for approval with a description of the alternative practice and reason for its use.
- C. Clean and Strip Products
 - 1. Concrete:
 - a. "Limestone Restorer": Sure Klean
 - b. "Light Duty Restoration Cleaner": Sure Klean
 - c. "Heavy Duty Restoration Cleaner": Sure Klean
 - 2. Brick:
 - a. "No. 600 Detergent": Sure Klean
 - b. "Vana Trol": Sure Klean
 - c. "Light Duty Restoration Cleaner": Sure Klean
 - 3. Grout:
 - a. "Light Duty Restoration Cleaner": Sure Klean
 - b. Grout Cleaner: Sure Klean
 - 4. Cast-Stone:
 - a. "Limestone Restorer": Sure Klean
 - b. "No. 600 Detergent": Sure Klean
 - c. "Vana Trol": Sure Klean
 - 5. Marble:
 - a. Marble Cleaner: "Marble Poultice" Sure Klean

6. Paint:
 - a. "509 Paint Stripper": Sure Klean
 - b. "859 Stripper": Sure Klean
 - c. "Heavy Duty Paint Stripper": Sure Klean
7. Ceramic Tile:
 - a. Tile Cleaner: "1026 Liquid Marble Cleaner" Sure Klean

D. Fill/Patch Products

1. Concrete:
 - a. Abocrete; Abatron
2. Metal:
 - a. Ferrobond-P: Abatron
 - b. Metalfix-LL: Abatron
 - c. Ferrobond-L: Abatron
3. Ceramic Tile/Porcelain Coating:
 - a. Kromakote 8601-1: Abatron
 - b. Kromakote 8901-8: Abatron
4. Wood:
 - a. Wood Epox: Abatron
 - b. Liquid Wood: Abatron
5. Gypsum Plaster:
 - a. Gypsum-1: Abatron
6. Adhesives:
 - a. Aboweld: Abatron
 - b. Epotron 5: Abatron
 - c. Aboweld 55-22: Abatron

2.4 MISCELLANEOUS MATERIALS

- A. Provide joint sealant products which are recommended and approved by their manufacturer for the specific use to which they are put and which comply with all requirements of the contract documents.
 1. For each generic product, use only materials from one manufacturer.
 2. Provide only materials which are compatible with each other and with joint substrates.
 3. Colors of exposed sealers: As selected by the Resident Engineer from manufacturer's custom colors.

- B. Apply sealer which is compatible with specified finishes to surfaces cut during field fitting and machining.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that substrates are in satisfactory condition to receive restored features.

3.2 INSTALLATION

- A. Install restored and replicated features in correct location, plumb and true, free of warp or twist; conceal fasteners where possible; any exposed fasteners required for secure installation of salvaged features not in visual accord with historic fastening methods shall be submitted in advance of use for approval by the Resident Engineer; install hardware as indicated by the drawings and/or other related Specification Sections.
- B. Do not begin installation of restored features until potentially damaging construction operations are complete in the installation area.
- C. All construction document dimensions related to re-installation of salvaged items such as box beams, corbels, windows, doors, railings, and other features, are for reference only. Actual dimensions may vary and may require additional furring or shimming for proper fit. Contractor shall field verify and coordinate salvaged objects and their indicated location prior to final installation; make ready (furring, shimming, and other construction techniques), substrates that are to receive salvaged or replicated items based on contractors verification of conditions as required.
- D. Provide temporary supports and bracing as required. Contractor shall employ only methods of temporary support and bracing that will protect the integrity of restored and replicated surface finishes of salvaged and replicated features.
- E. Anchor to substrates indicated; provide all fasteners as indicated, where no fasteners are indicated provide as necessary for secure installation; provide shim's and furring as required.
- F. Perform all field fabrication required for installation.
- G. Review U.S. Department of Interior Preservation Briefs for proper installation of restoration materials.

3.3 CLEANING

- A. Select and use all cleaning materials and equipment with care to avoid scratching, marring, defacing, staining, discoloring or otherwise degrading surfaces cleaned.
- B. Use only cleaning materials recommended by the manufacturer of surface (or its component materials) as safe and compatible for cleaning of that surface.
- C. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.
- D. Touch-up marred, abraded or otherwise damaged areas of finished elements. If upon determination by the Resident Engineers review that satisfactory touch-up cannot be accomplished, remove and replace element, where all costs shall be borne by the Contractor.

3.4 PROTECTION

- A. Protect each feature from adjacent work during salvage, demolition and construction phases until completion. Employ methods of protection appropriate to conservation standards for the materials of the feature and its surfaces and to the activities from which the feature is being protected. Protection will include (but not be limited to) shielding features with heavy mil polyethylene sheeting and framed plywood crating and provide ventilation to avoid condensation. Ornamental surfaces of features shall not be in direct contact with the wood crating or other non-archivally protective surfaces or materials. Appropriate non-abrasive archivally safe wrappings (such as polyethylene sheeting, neutral-Ph glassine paper, or other protective materials), and high density polyethethylene foam padding must be used between all wood bracing and ornamental surfaces.

- B. Protect areas adjacent to each feature from equipment and materials used in the restoration process. Use materials appropriate to conservation standards for the feature and for the activities from which the area is to be protected.

END OF SECTION 01611

SECTION 01700

CONSTRUCTION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. General construction and installation procedures.
 - 2. Cutting procedures.
 - 3. Patching procedures.
 - 4. Correction of defective work.
 - 5. Cleaning during construction.

1.2 DEFINITIONS

- A. Concealed Spaces: Spaces which are not accessible after completion of construction.
- B. Cutting: Removal of material by cutting, sawing, drilling, coring, breaking, chipping, grinding, and similar operations, including excavation.
- C. Damage: Any sort of deterioration whether due to weather, normal wear and tear, accident, or abuse, resulting in soiling, marring, breakage, corrosion, rotting, or impairment of function.
- D. Debris: Rubbish, waste materials, litter, volatile wastes, and similar materials, with the exception of surplus materials which are to become the property of the owner.
- E. Operational Elements: Equipment, moving parts, electrical conductors, sound and vibration control materials, waterproofing, vapor retarders, piping, ducts, tanks, and other similar materials and components which convey or retard the passage of liquids, gases, heat, light, persons, animals, or insects or which perform a similar function; not including structural elements.
- F. Patching: Restoration to completed condition by patching, repairing, refinishing, finishing, filling, closing up, and similar operations.
- G. Replacement: Replace the entire element, surface, or product.
- H. Safety-Related Elements: Materials and assemblies whose principal function is the promotion of the safety of the building and its occupants, including fire and smoke barriers, fire proofing, emergency egress doors and windows, guardrails, equipment guards, and other similar construction.

1.3 SUBMITTALS

- A. Proposals for Cutting and Patching: Submit request sufficiently in advance of the time the work is to be performed to obtain approval; include:
 - 1. Description of the nature of the work and how it is to be performed.
 - 2. Description of results expected, including impact on safety and on structural, operational, and visual qualities.
 - 3. Products to be used.
 - 4. If utilities are affected, describe the changes required and be specific as to how long service will be cut off.

5. If cutting of structural work results in the need for additional reinforcement, provide details and engineering calculations to show how that reinforcement satisfies the original structural requirements.
- B. Field Correction Requests: Submit immediately upon discovery of deviation required; include a detailed description of the problem, recommended changes, and reasons it is not possible to comply with the contract documents.
 - C. Certificate of Extermination from licensed pest control following demolition work.
 - D. Comprehensive Salvage Plan. Identifying historical features and understanding the method of treatment is essential to a successful rehabilitation project. Lack of care and sensitivity often causes the loss of irreplaceable features that in turn reduces the quality of the buildings. Sections 01610 and 01611 have been written to identify these features and assist the contractor in understanding the project. Development of the Salvage Plan in the first 30 days of the project will assist the Contractor to focus on the more sensitive parts of the project and develop a realistic project schedule. Submit prior to demolition and salvage of any historic materials.

1.4 QUALITY ASSURANCE

- A. Materials Cleaning: Perform cleaning in accordance with the recommendations of the manufacturer or fabricator of the product or system. Use only cleaning materials and tools which are specifically recommended, which are not hazardous to health or property, and which will not damage finishes.
- B. Project Housekeeping: – Prompt removal of salvaged materials and continuous cleaning up of debris can help avoid the accidental disposal of salvaged historical materials and incidental damages to exposed surfaces.
- C. Catalogue of Salvaged Materials: Contractor shall keep an inventory of salvaged materials which includes the location of the stored material and items being refurbished off-site. This inventory shall be up-to-date and available to the Resident Engineer or Owner at any time.

1.5 PROJECT CONDITIONS

- A. Take precautions to prevent fires and to facilitate fire-fighting operations.
 1. Keep flammable materials in non-combustible containers; store away from potential fire sources; remove flammable waste regularly.
 2. Keep temporary and permanent fire fighting facilities readily accessible; keep fire fighting routes open.
 3. Do not allow smoking in areas where highly combustible or explosive materials are present.
 4. Carefully supervise the operation of potential fire sources, including heating units.
 5. Conduct welding operations in manner to prevent fire; comply with local regulations.

- B. Take precautions to prevent accidents due to physical hazards:
 1. Provide barricades, warning lights, or signs as required to inform personnel and the public of the hazard being protected against.
 2. Safety barricades: Comply with regulations.
 3. Provide temporary walkways where walking surfaces are hazardous.
 4. Notify the owner before beginning work that involves hazardous operations, including use of explosives and the like.

- C. Take care to prevent pollution of air, water, and soil.
 1. Comply with environmental protection regulations.
 2. Limit effluent and rainwater runoff into waterways as required by regulations.
 3. Do not dump contaminants in areas that will result in contamination of waterways.

- D. Minimize discharge of effluent and rainwater runoff into sewers.
 1. Control sediment discharge into sewers; filter out construction debris, soil, and contaminants.
 2. Comply with regulations and orders of public utilities regarding use of sewers.
 3. Where disposal of effluent or rainwater by means of sewers is not lawful or is not possible, provide alternative methods of disposal.

- E. Take care to prevent exposure to hazardous materials
 1. Comply with environmental protection regulations.
 2. Employ contractors licensed to remove and mitigate lead, asbestos, mold, etc.

- F. Prevent erosion due to rainwater runoff.
- G. Control windblown dust; prevent erosion to site and nuisance to neighbors.
- H. Prevent flooding of excavations, below-grade construction from runoff and utility repairs.
- I. Protect existing property indicated to remain, including:
 1. Plants and trees, as indicated on the drawings.
 2. Historic Fabric.
- J. Do not use tools or equipment which produce disruptive levels of noise or vibration.
- K. Keep the site and adjacent public ways free of hazardous and unsanitary conditions and public nuisances.
- L. Control rodents and other pests; prevent infestation of adjacent sites and buildings due to pests on this site.
- M. Keep public streets free of debris due to this work.
- N. Provide adequate traffic control by means of signs, signals, and flagmen, as necessary.
- O. Provide temporary means of draining roofs where required.
- P. Conduct construction operations so that no part of the work and no part of the existing construction is subjected to damaging operations or influences which are in excess of those to be expected during normal occupancy conditions.
- Q. Conduct construction operations so that waste of power, water, and fuel is avoided.
- R. Provide temporary supports as required to prevent movement and structural failure.
- S. Install products only during environmental conditions which will ensure the best possible results.

1.6 SEQUENCING AND SCHEDULING

- A. Install products only at the time and in the sequence which will ensure the best possible results.
- B. Coordinate required administrative activities with related construction activities.

PART 2 - PRODUCTS

1.1 MATERIALS

- A. Patching Materials: Identical to the materials of the work to be cut, unless indicated as specific materials specified in other sections.
 - 1. For exposed materials for closing up openings, use materials identical to those of the adjacent construction; concealed materials are not required to be identical.
 - 2. If identical materials are not available or cannot be used, use materials that provide best visual match; obtain approval of the Resident Engineer.
 - 3. Use materials that perform equally as well as, or better than, the material cut.
 - 4. If necessary, determine composition of existing materials to be patched by testing.
 - 5. Refer to section 01611 for approved patching materials.

PART 3 - EXECUTION

3.1 GENERAL EXAMINATION REQUIREMENTS

- A. Prior to performing work, examine the applicable substrates and the conditions under which the work is to be performed.
- B. If unsafe or otherwise unsatisfactory conditions are encountered, take corrective action before proceeding.
- C. Conditions which could have been discovered by examination will not be allowed as cause for claims for extra work.
- D. Notify the Resident Engineer promptly of any modifications required due to existing conditions or previous work.
- a. Before starting work which might affect existing construction, verify the existence and location of such construction. In particular, verify the following:
 - 1. Underground utilities.
 - 2. Other underground construction.
 - 3. Location and invert elevation of points of connection to piped utilities.
 - 4. Wiring, piping, communications, and fire alarm systems within the walls, floors, and cavities in the areas of work.
- E. Verify that utility requirements of operating equipment are compatible with building utilities.
- F. Verify space requirements of items shown diagrammatically on the drawings.

3.2 GENERAL PREPARATION REQUIREMENTS

- A. Take field measurements as required to fit the work properly.
- B. Recheck measurements prior to installing each product.

3.3 GENERAL INSTALLATION PROCEDURES

- A. Accurately locate the work and components of the work; make vertical work plumb; make horizontal work level.
- B. See sections describing specific parts of the work for additional requirements.
- C. Where space is limited, install components to maximize space available for maintenance and to maximize ease of removal for replacement.
- D. In finished areas, conceal pipes, ducts, and wiring within the construction, unless otherwise indicated.
- E. In ceiling areas without a finished suspended ceiling, maintain minimum headroom clearance of 8 feet.
- F. Coordinate exact locations of fixtures and outlets with finish elements.
- G. Install work in such manner and sequence as to preclude, if possible, or at least to minimize, cutting and patching.
- H. Existing Construction:
 - 1. Perform work in existing construction in same manner as for new construction unless otherwise specified.
 - 2. Where a new surface exposed to view is an extension of any existing surface, align both surfaces without a change of plane and make a neat transition between finishes.
 - a. If a change of plane is necessary due to the configuration of the existing surface, terminate the existing surface and its finish along a straight line at a natural line of division.
 - 3. Where portions of existing work are removed, patch remaining work with neat transitions between remaining surfaces without evidence of cutting.
 - a. Where neat transitions between remaining surfaces are not possible due to configuration of existing surfaces, obtain instructions from the Resident Engineer.
 - 4. Where existing construction is removed, remove existing utility services located within or upon the existing construction.
 - a. Cap cut ends of abandoned piping, conduit, and duct in such a manner that they are concealed in finish work.

3.4 CLEANING AND PROTECTION

- A. Remove debris from concealed spaces prior to enclosing the space.
- B. Keep the site and the work free of waste materials and debris.
 - 1. Remove waste from site periodically.
 - 2. When temperature exceeds or is expected to exceed 80 degrees F, remove waste at frequency necessary to prevent development of health hazards and nuisance odors.
 - 3. Keep hazardous and unsanitary materials in containers separate from other waste.

- C. Clean areas in which work is to be done to level of cleanliness necessary for proper execution of that work.
 - 1. Where dust would impair execution of work, broom- and vacuum-clean the entire interior area and keep clean.
- D. Keep installed work clean, and clean again when soiled by other operations.
 - 1. Provide periodic cleaning as required to prevent damage due to soiling.
 - 2. Remove liquid spills promptly.
- E. Protect installed work from soiling and damage.
 - 1. Provide protective coverings as required.
 - 2. Provide protective coverings for work which may be damaged by subsequent operations.
 - 3. Where heavy abuse is expected, use minimum of plywood for protection.
 - 4. Maintain protective coverings until substantial completion.

3.5 CUTTING AND PATCHING PROCEDURES

- A. Use specified cutting and patching procedures when cutting or patching is required for any of the following activities:
 - 1. Installation of dowels, rods, anchors, and other inserted items.
 - 2. Fitting the parts of the work together.
 - 3. Modifying existing construction.
 - 4. Repairing existing work to remain.
 - 5. Installing ill-timed work.
 - 6. Removing and replacing defective and nonconforming work.
 - 7. Removing samples of work for testing.
 - 8. Making openings in elements of work for penetrations, such as for piping, conduit, duct, and the like.
 - 9. Uncovering work for observation.
 - 10. Repairing damage.
- B. Perform cutting and patching at earliest time feasible, unless otherwise indicated or directed by the Resident Engineer.
- C. Use procedures specified in applicable product sections as well as those specified in this section:
 - 1. Use procedures recommended by original installer, when such information is available.
 - 2. Where required, obtain approval of procedures by the Resident Engineer.
 - 3. Cut using methods that are least likely to damage adjacent work and work to remain and which will provide proper surfaces for patching.
 - 4. Make cuts neatly with minimum disturbance of adjacent work.
 - a. Use appropriate tools intended for sawing or grinding and not for chopping or hammering.
 - b. Do not use pneumatic tools without prior approval from Resident Engineer.
 - 5. Where installation of similar new work is included, perform patching in manner specified for installation of new work.

6. Where new work is inserted into or through the work that is cut, fit the patched work tightly to the new work.
 7. Patch with seams which are durable and as invisible as possible.
 8. Repair substrate prior to patching finish.
- D. Employ skilled workers to perform cutting and patching work.
- E. Work Exposed to View: Do not cut or patch in a manner that would result in a lessening of the building's aesthetic value, as determined by the Resident Engineer.
1. Generally, cut from exposed side into concealed spaces to avoid unnecessary damage to finish.
 2. Do not cut and patch in a manner that would result in substantial visual evidence of cut and patch work.
 3. Restore exposed patched finishes in a manner that eliminates evidence of patching and refinishing.
 - a. For continuous surfaces, extend refinish to nearest intersection, with a neat transition to adjacent surfaces.
 - b. For assemblies: Refinish entire unit.
 - c. Painted piping, conduit, and duct: Clean and repaint.
 4. Remove and replace work that is patched in a visually unacceptable manner.
- F. Structural Elements: Maintain structural capacity; do not increase deflection under design load; provide reinforcing where required.
1. See structural sections for additional requirements.
 2. Before cutting any structural member, obtain the Resident Engineer's approval of the proposed method.
- G. Existing Construction:
1. Patch existing work to match adjacent existing work to remain.
 2. Where specified procedures for similar new work are applicable, use those procedures for cutting and patching existing construction.
 3. Take precautions to avoid damage to unanticipated utilities and structural elements. If such elements are encountered, report nature and extent to the Resident Engineer and request instructions as to how to proceed.
 4. Make neat transitions between existing and new surface finishes.
- H. Concealed Work: Uncover the concealed work, cut and patch, and patch the covering work.
- I. Concrete and Masonry: Use saws or drills which produce a neat cut; remove in small sections.
- J. Insulation: Replace insulation whenever it is cut in order to modify the element it is insulating.
- K. Slabs on Grade: Use methods that will not crack or disturb adjacent slabs or partitions.
- L. Operational Elements: Maintain capacity to perform in the manner intended, including energy performance; do not cut or patch in any manner that would increase maintenance requirement, decrease life expectancy, or decrease safety.
- M. Safety-Related Elements: Do not cut or patch in a manner that would result in decreased safety.

1. Before cutting the following, obtain the Resident Engineer's approval of the proposed method:
 - a. Any product for which approval is required in the applicable product section.
- N. Protect that part of the project exposed during cutting and patching operations from adverse weather.
- O. Cover openings made whenever they are not in use.

3.6 INSTALLATION OF COMPONENTS

- A. Install all products in accordance with manufacturer's instructions and recommendations, whether conveyed in writing or not.
- B. Mounting Heights: Where mounting heights are not indicated, mount at heights directed by the Resident Engineer.
- C. Separate incompatible materials with suitable materials or spacing.
 1. Prevent cathodic corrosion.
- D. Provide all anchors and fasteners required and use methods necessary to securely fasten work.
 1. Allow for thermal expansion and contraction, and for building movement.
- E. Joints in Exposed Work:
 1. Make joints of uniform widths.
 2. Where joint locations are not indicated, arrange joints for the best visual effect.
 - a. When in doubt, obtain the Resident Engineer's instructions.
- F. After installation, adjust operating components to proper operation.

3.7 PROCEDURES FOR CORRECTION OF WORK

- A. The following must be replaced (repair is not acceptable):
 1. Damaged surfaces exposed to view which cannot be repaired without visible evidence of repair.
 2. Components which cannot be repaired to proper operating condition.
 3. Scratched transparent materials.
- B. Repair or Replace:
 1. Components which do not operate properly.
 2. Surfaces exposed to view which cannot be cleaned to original condition.
- C. Acceptable Repair Methods:
 1. Replacing parts.
 2. Refinishing.
 3. Touching up with matching materials.
 4. Proper adjustment of equipment.

- D. When it is necessary to deviate from the contract documents in order to accomplish corrective action, submit a field correction request.
- E. Restore permanent facilities used during construction to specified condition.
- F. Restore existing facilities used during construction, and existing facilities affected by construction operations, to original condition.

END OF SECTION 01700

SECTION 01732

SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Demolition and removal of portions of buildings or structures.
 - 2. Required demolition as indicated on the drawings.
- B. Related Sections:
 - 1. Section 01010 – Summary of Work
 - 2. Section 01500 – Temp Facilities
 - 3. Section 01610 – Historic and Existing Features Salvage and Protection
 - 4. Section 01611 – Historic and Existing Features Restoration
 - 5. Section 01700 – Construction Procedures

1.2 SUBMITTALS

- A. Project Record Documents.
- B. Indicate unanticipated structural, electrical, or mechanical conditions.

1.3 PROJECT CONDITIONS

- A. Occupancy:
 - 1. The Museum of Man will remain open and occupied throughout the duration of construction, unless agreed otherwise.
 - 2. Adjacent structures will not be vacated during construction.
- B. Existing Conditions:
 - 1. After the project is begun, the contractor is responsible for the condition of structures involving demo work.
 - 2. The California Tower and Museum of Man are listed on the National Register of Historic Places and all work must conform to The Secretary of the Interior's Standards.
 - 3. All elements unless specifically identified otherwise are to be considered historic fabric and must be protected in place or salvaged.
- C. Unforeseen Conditions: Should unforeseen conditions be encountered that affect design or function of the project, investigate fully and submit an accurate, detailed, written report to the Resident Engineer. While awaiting response, reschedule operations if necessary to avoid delay of overall project.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that active utilities have been located and marked. Disconnect and seal any utilities to be abandoned.
- B. Survey existing conditions and correlate with drawings and specifications to determine extent of demolition required.
- C. Survey existing conditions as they relate to the removal of the steel frame at the upper tiers of the Tower. Provide a written description of the means and methods the Contractor intends to use to execute this selective demolition operation.
- D. Insofar as is practicable, arrange operations to reveal unknown or concealed structural conditions for examination and verification before removal or demolition.
- E. Verify actual conditions to determine in advance whether removal or demolition of any element will result in structural deficiency, overloading, failure, or unplanned collapse. The contractor shall employ a registered California Structural engineer to provide necessary shoring. Such calculations shall be provided to the satisfaction of the building department official.
- F. If the Contractor discovers any conflicts or perceives any unaddressed condition, he shall contact the Resident Engineer for clarification.

3.2 PREPARATION

- A. Traffic and Pedestrian ways: Do not obstruct walks or public ways without the written permission of governing authorities and of the owner. Where routes are permitted to be closed, provide alternate routes if required.
- B. Protection:
 - 1. Provide for the protection of persons passing around or through the area of demolition.
 - 2. Perform demolition so as to prevent damage to adjacent improvements and facilities to remain.
 - 3. Erect temporary protection such as walks, fences, railings, canopies, etc., where required by authorities having jurisdiction.
 - 4. Protect walls, floors, ceilings, windows, features, and other new or existing work from damage during demolition operations.
 - 5. Protect existing site appurtenances and landscaping to remain.
 - 6. Erect a plainly visible fence at least 5 feet from trunks of individual trees or around outer perimeter of clumps of trees.
- C. Structural Support:
 - 1. Design, construct and maintain shoring, bracing, and supports as necessary to ensure the stability of structures.
 - 2. Increase or add new supports as required by the progress of the work.
- D. Damages: Without cost to the owner and without delay, repair any damages caused to facilities to remain.

3.3 UTILITY SERVICES

- A. Provide selective demolition to remove any utility equipment as required by the construction documents for the completion of the work.

3.4 IMPACT TOOLS

- A. Use of impact tools shall be minimized and will only be used as allowed by Resident Engineer.
- B. Contractor shall use cutting tools and methods to minimize vibration impact to the existing structures.

3.5 POLLUTION CONTROLS

- A. Control as much as practicable the spread of dust and dirt.
- B. Observe environmental protection regulations.
- C. Do not allow water usage that results in freezing or flooding.
- D. Do not allow adjacent improvements to remain to become soiled by demolition operations.

3.6 DEMOLITION - GENERAL

- A. Remove: Unless items are otherwise indicated to be reinstalled remove and salvage. Scrap items as directed by Resident Engineer.
- B. Remove and Reinstall: Remove items indicated; clean, service, store, and otherwise restore for reuse; reinstall in the same location (or in the location indicated).
- C. Remove and Install New: Remove and dispose of items indicated and install new items in the same location (or in the location indicated).
- D. Remove and Salvage (without reinstallation): Items indicated to be salvaged will remain the owner's property. Carefully remove and clean items indicated to be salvaged; pack or crate to protect against damage; identify contents of containers; deliver to the locations indicated.
- E. Remove and Scrap: Remove and dispose of items indicated.
- F. All demolished or removed items and materials shall be considered historic fabric except for those indicated as non-historic. Confirm items to be considered scrap with Resident Engineer.
- G. Provide a suitable, secure storage unit for items of value in a location as directed by the Resident Engineer. The Contractor may assume the storage unit will be located within 1,000 feet of the project site.
- H. Existing to Remain: Construction or items indicated to remain shall be protected against damage or shotcrete spatter during demolition operations, including all existing concrete and metal surfaces. Where practicable, and with the Resident Engineer's permission, the contractor may elect to move items to a suitable storage location during demolition and then properly clean and reinstall the items.
- I. On the site or in the building, historical items, relics, and similar items (including but not limited to cornerstones and their contents, commemorative plaques and tablets, antiques, and other items of interest or value to the owner) which may be encountered in the course of demolition will remain the owner's property. Notify the Resident Engineer if such

items are encountered. Obtain the Resident Engineer's and the owner's acceptance of removal methods, and salvage these items for the owner.

- J. Detailed requirements for cutting are specified under cutting and patching in Section 01700.
- K. Perform work in a systematic manner.
- L. Demolish and remove existing construction only to the extent required by new construction and as indicated in the Contract Documents.
- M. Perform selective demolition using methods which are least likely to damage work to remain and which will provide proper surfaces for patching.
- N. Protect exterior surfaces of tower ornamentation and plaster from debris or staining from work at the upper part of the tower.
- O. Protect interior surfaces from concrete seepage and shotcrete overspray.
- P. Remove debris daily.
- Q. Masonry: Detach masonry to be demolished from adjoining construction to remain with power-driven masonry saws or hand tools.
 - 1. Use any methods permitted by governing regulations and the requirements of the contract documents.

3.7 DEMOLITION ON OR BELOW GRADE

- A. Where portions of concrete slabs-on-grade are to be removed, first outline the portion with a concrete saw to a depth of at least 1 inch.
- B. Remove concrete slabs-on-grade as indicated in the plans.

3.8 DISPOSAL OF DEMOLISHED MATERIALS

- A. Promptly dispose of materials resulting from demolition operations. Do not allow materials to accumulate on site.
- B. Transport materials resulting from demolition operations and legally dispose of off-site.
- C. Off-site disposal location shall not be within one-half mile of any portion of the project site or within sight of the project site.
- D. Do not burn removed materials on project site.
- E. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.

3.9 REPAIRS AND PATCHING

- A. Perform repairs in accordance with patching requirements as specified in the Contract Documents
- B. Perform repairs in accordance with The Secretary of the Interiors Standards.

3.10 CLEANING

- A. Remove tools and equipment. Dispose of scrap.
- B. Broom clean interior areas.
- C. Leave exterior areas free of debris.
- D. Clean soil, smudges, and dust from surfaces to remain.
- E. Return structures and surfaces to remain to condition existing prior to commencement of demolition.

3.11 EXTERMINATION

- A. Extermination: At the completion of demolition, when the indicated wall/ceiling surfaces are removed and framing members exposed, the contractor will employ a licensed exterminator to make inspection and rid the project of rodents, insects, and other pests. A final extermination is required at the end of the project.

END OF SECTION 01732

SECTION 03300

CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract Documents.

1.2 SUMMARY

- A. This Section specifies cast-in place concrete, including formwork, reinforcement, concrete materials, mix design, placement procedures, and finishes.
- B. Related Sections include the following:
 - 1. Division 3 Section "Plant-Cast Architectural Concrete" for precast concrete.

1.3 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash and other pozzolans, ground granulated blast-furnace slag, and silica fume.

1.4 SUBMITTALS

- A. Product Data: For each type of manufactured material and product indicated.
- B. Design Mixes: For each concrete mix. Include alternate mix designs when characteristics of materials, project conditions, weather, test results, or other circumstances warrant adjustments.
- C. Steel Reinforcement Shop Drawings: Details of fabrication, bending, and placement, prepared according to ACI 315, "Details and Detailing of Concrete Reinforcement." Include material, grade, bar schedules, stirrup spacing, bent bar diagrams, arrangement, and supports of concrete reinforcement. Include special reinforcement required for openings through concrete structures.
- D. Welding Certificates: Copies of certificates for welding procedures and personnel.
- E. Material Certificates: Signed by manufacturers certifying that each of the following items complies with ASTM requirements:
 - 1. Cementitious materials and aggregates.
 - 2. Steel reinforcement and reinforcement accessories.
 - 3. Fiber reinforcement.
 - 4. Admixtures.
- F. Concrete delivery tickets.

1.5 QUALITY ASSURANCE

- A. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, each aggregate from one source, and each admixture from the same manufacturer.
- B. Regulatory Requirements: Concrete construction shall conform to the California Code of Regulations (CCR) Title 24 Part 2, California Building Code, Chapters 16, 17, 18 and 19 and the requirements specified herein.
- C. Welding: Qualify procedures and personnel according to AWS D1.4, "Structural Welding Code--Reinforcing Steel."
- D. ACI Publications: Comply with the following, unless more stringent provisions are indicated:
 - 1. ACI 301, "Specification for Structural Concrete."
 - 2. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle steel reinforcement to prevent bending and damage.

PART 2 - PRODUCTS

2.1 FORM-FACING MATERIALS

- A. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.
 - 1. Exterior-grade plywood panels, suitable for concrete forms, complying with DOC PS 1, and as follows:
 - a. High-density overlay, Class 1, or better.
- B. Rough-Formed Finished Concrete: Plywood, lumber, metal, or other approved material. Provide lumber dressed on at least two edges and one side for tight fit.
- C. Chamfer Strips: Wood, metal, PVC, or rubber strips, 3/4 by 3/4 inch, unless otherwise shown.
- D. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.
 - 1. Formulate form-release agent with rust inhibitor for steel form-facing materials.
- E. Form Ties: Factory-fabricated, removable or snap-off metal or glass-fiber-reinforced plastic form ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.
 - 1. Furnish units that will leave no corrodible metal closer than 1 inch to the plane of the exposed concrete surface.

2. Furnish ties that, when removed, will leave holes not larger than 1 inch in diameter in concrete surface.

2.2 STEEL REINFORCEMENT

- A. Reinforcing Bars: ASTM A 615, Grade 60, deformed; ASTM A 706, Grade 60, deformed where bars are to be welded.
- B. Plain-Steel Wire: ASTM A 82, as drawn.
- C. Plain-Steel Welded Wire Fabric: ASTM A 185, fabricated from as-drawn steel wire into flat sheets.

2.3 REINFORCEMENT ACCESSORIES

- A. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire fabric in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire and as follows:
 1. For concrete surfaces exposed to view where legs of wire bar supports contact forms, use CRSI Class 1 plastic-protected or CRSI Class 2 stainless-steel bar supports.

2.4 CONCRETE MATERIALS

- A. Cementitious Materials (Portland Cement and Supplementary Cementitious Materials):
 1. Portland Cement: ASTM C 150, Type II, complying with UBC Std. 19-1.
 2. Blended Hydraulic Cements: ASTM C595 or ASTM C1157.
 3. Fly Ash: ASTM C 618, Class N or F.
- B. Normal-Weight Aggregate: ASTM C 33, uniformly graded.
 1. Fine Aggregate: Minimum sand equivalent (ASTM D2410) is 80.
 2. Coarse Aggregate: Minimum cleanness value (Caltrans Test cv 227) is 80.
 3. Do not use aggregates containing spalling-causing deleterious substances.
- C. Lightweight Aggregate: ASTM C 330.
 1. Use expanded shale only.
- D. Water: Potable and complying with ASTM C 94.

2.5 ADMIXTURES

- A. General: Admixtures certified by manufacturer to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material and to be compatible with other admixtures and cementitious materials. Do not use admixtures containing calcium chloride.
- B. Air-Entraining Admixture: ASTM C 260.
- C. Water-Reducing Admixture: ASTM C 494, Type A.

- D. High-Range, Water-Reducing Admixture: ASTM C 494, Type F.
- E. Water-Reducing and Accelerating Admixture: ASTM C 494, Type E.

2.6 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. dry.
- B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- C. Water: Potable.

2.7 RELATED MATERIALS

- A. Bonding Agent: ASTM C 1059, Type II, non-redispersible, acrylic emulsion or styrene butadiene.
- B. Epoxy-Bonding Adhesive: ASTM C 881, two-component epoxy resin, capable of humid curing and bonding to damp surfaces, of class and grade to suit requirements, and as follows:
 - 1. Types IV and V, load bearing, for bonding hardened or freshly mixed concrete to hardened concrete.
- C. Reglets: Fabricate reglets of not less than 0.0217-inch- thick galvanized steel sheet. Temporarily fill or cover face opening of reglet to prevent intrusion of concrete or debris.
- D. Dovetail Anchor Slots: Hot-dip galvanized steel sheet, not less than 0.0336 inch thick, with bent tab anchors. Temporarily fill or cover face opening of slots to prevent intrusion of concrete or debris.

2.8 CONCRETE MIXES

- A. Mix designs shall be subject to approval by the Project Testing Laboratory of record. Contractor shall employ a testing laboratory to design mixes under the supervision of a California Registered Civil Engineer, who shall determine mix proportions to fulfill the specified requirements for strength, aggregate size, and workability. Mix designs shall bear the signature and seal of a California Registered Civil Engineer.
 - 1. Design mixes in accordance with ACI 318 and CCR Title 24 Part 2, Sec. 1905, Method B.
 - 2. Cost for the mix designs will be paid for by the Contractor.
- B. Prepare design mixes for each type and strength of concrete determined by laboratory trial mix method, as follows:
 - 1. Proportion normal-weight concrete according to ACI 211.1 and ACI 301.
 - 2. Proportion lightweight structural concrete according to ACI 211.2 and ACI 301.
- C. Normal Weight Concrete: Proportion normal-weight concrete mix as follows:

1. Compressive Strength (28 Days): As indicated on drawings.
 2. Maximum Slump: 4 inches.
 3. Water-Cementitious Materials Ratio: 0.50 or less.
 4. Minimum Cementitious Materials Content: 517 lb/cu. Yd.
 5. Maximum Slump for Concrete Containing High-Range Water-Reducing Admixture: 8 inches after admixture is added to concrete with 2- to 4-inch slump.
- D. Maximum Size Aggregate: In no case shall the maximum aggregate size used exceed one third of the depth of slabs, nor three fourths of the minimum clear spacing between individual reinforcing bars or bundles of bars.
- E. Lightweight Concrete: Proportion lightweight concrete mix as follows:
1. Compressive Strength (28 Days): As indicated on drawings.
 2. Calculated Equilibrium Unit Weight: 115 lb/cu. ft. plus or minus 3 lb/cu. ft. as determined by ASTM C 567.
 3. Maximum Slump: 5 inches.
- F. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:
1. Fly Ash: 25 percent.
 2. Combined Fly Ash and Pozzolan: 25 percent.
- G. Maximum Size Aggregate: Maximum aggregate size shall not exceed 1-1/2 inch, nor one third of the depth of slabs, nor three fourths of the minimum clear spacing between individual reinforcing bars or bundles of bars.
- H. Maximum Water-Cementitious Materials Ratio: 0.50 unless otherwise indicated.
- I. Air Content: Add air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having an air content as follows within a tolerance of plus 1 or minus 1.5 percent, unless otherwise indicated:
1. Air Content: 5.0 percent all concrete.
- J. Limit water-soluble, chloride-ion content in hardened concrete to 0.15 percent by weight of cement.
- K. Admixtures: Use admixtures according to manufacturer's written instructions.
1. Use water-reducing admixture or high-range water-reducing admixture (superplasticizer) in concrete, as required, for placement and workability.
 2. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
 3. Use water-reducing admixture in pumped concrete, concrete required to be watertight, and concrete with a water-cementitious materials ratio below 0.50.

2.9 FABRICATING REINFORCEMENT

- A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

2.10 CONCRETE MIXING

- A. Concrete shall be provided by certified automatic concrete batch plants only.
- B. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94, and furnish batch ticket information.
 - 1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.
- C. Waiver of Batch Plant Inspection: Batch plant inspection may be pursued by the IOR. Concrete plant shall comply with the requirements of UBC Standard 19-3, and be certified to comply with the requirements of the National Ready Mixed Concrete Association. Plant shall be equipped with an automatic batcher in which the total batching cycle, except for the measuring and introduction of an admixture, is completed by activating a single starter device.

PART 3 - EXECUTION

3.1 FORMWORK

- A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until concrete structure can support such loads.
- B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.
- C. Limit concrete surface irregularities, designated by ACI 347R as abrupt or gradual, as follows:
 - 1. Surfaces exposed to view: Class A, 1/8 inch.
 - 2. Surfaces not exposed to view: Class C, 1/2 inch.
- D. Construct forms tight enough to prevent loss of concrete mortar.
- E. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical. Kerf wood inserts for forming keyways, reglets, recesses, and the like, for easy removal.
 - 1. Do not use rust-stained steel form-facing material.
- F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.
- G. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.
- H. Chamfer exterior corners and edges of permanently exposed concrete.

- I. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds, and bulkheads required in the Work. Determine sizes and locations from trades providing such items.
- J. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.
- K. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.
- L. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

3.2 EMBEDDED ITEMS

- A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use Setting Drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
 - 1. Install anchor bolts, accurately located, to elevations required.
 - 2. Install reglets to receive top edge of foundation sheet waterproofing and to receive through-wall flashings in outer face of concrete frame at exterior walls, where flashing is shown at lintels, shelf angles, and other conditions.
 - 3. Install dovetail anchor slots in concrete structures as indicated.

3.3 REMOVING AND REUSING FORMS

- A. General: Formwork, for sides of beams, walls, columns, and similar parts of the Work, that does not support weight of concrete may be removed after cumulatively curing at not less than 50 deg F for 24 hours after placing concrete provided concrete is hard enough to not be damaged by form-removal operations and provided curing and protection operations are maintained.
- B. Leave formwork, for beam soffits, joists, slabs, and other structural elements, that supports weight of concrete in place for 14 days or until concrete has achieved the following:
 - 1. At least 75 percent of 28-day design compressive strength.
 - 2. Determine compressive strength of in-place concrete by testing representative field- or laboratory-cured test specimens according to ACI 301.
 - 3. Remove forms only if shores have been arranged to permit removal of forms without loosening or disturbing shores.
- C. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material will not be acceptable for exposed surfaces. Apply new form-release agent.
- D. When forms are reused, clean surfaces, remove fins and laitance, and tighten to close joints. Align and secure joints to avoid offsets. Do not use patched forms for exposed concrete surfaces unless approved by Resident Engineer.

3.4 SHORES AND RESHORES

- A. Comply with ACI 318, ACI 301, and recommendations in ACI 347R for design, installation, and removal of shoring and reshoring.
- B. Plan sequence of removal of shores and reshore to avoid damage to concrete. Locate and provide adequate reshoring to support construction without excessive stress or deflection.

3.5 STEEL REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for placing reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials.
- C. Accurately position, support, and secure reinforcement against displacement. Locate and support reinforcement with bar supports to maintain minimum concrete cover. Do not tack weld crossing reinforcing bars.
 - 1. Shop- or field-weld reinforcement according to AWS D1.4 only where indicated or specifically approved.
- D. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.
- E. Install welded wire fabric in longest practicable lengths on bar supports spaced to minimize sagging. Lap edges and ends of adjoining sheets at least one mesh spacing. Offset laps of adjoining sheet widths to prevent continuous laps in either direction. Lace overlaps with wire.

3.6 JOINTS

- A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.
- B. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Resident Engineer.
 - 1. Place joints perpendicular to main reinforcement. Continue reinforcement across construction joints, unless otherwise indicated.
 - 2. Form from preformed galvanized steel, plastic keyway-section forms, or bulkhead forms with keys, unless otherwise indicated. Embed keys at least 1-1/2 inches into concrete.
 - 3. Locate joints for beams, slabs, joists, and girders in the middle third of spans. Offset joints in girders a minimum distance of twice the beam width from a beam-girder intersection.
 - 4. Locate horizontal joints in walls and columns at underside of floors, slabs, beams, and girders and at the top of footings or floor slabs.
 - 5. Space vertical joints in walls as indicated. Locate joints beside piers integral with walls, near corners, and in concealed locations where possible.
 - 6. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.

3.7 CONCRETE PLACEMENT

- A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.
- B. Do not add water to concrete during delivery, at Project site, or during placement, unless approved by Resident Engineer.
- C. Deposit concrete continuously or in layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as specified. Deposit concrete to avoid segregation.
- D. Deposit concrete in forms in horizontal layers no deeper than 24 inches and in a manner to avoid inclined construction joints. Maximum length of wall pour shall be 60 feet. Place each layer while preceding layer is still plastic, to avoid cold joints. Do not allow concrete free-fall to exceed 10 feet.
 - 1. Consolidate placed concrete with mechanical vibrating equipment. Use equipment and procedures for consolidating concrete recommended by ACI 309R.
 - 2. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations no farther than the visible effectiveness of the vibrator. Place vibrators to rapidly penetrate placed layer and at least 6 inches into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mix constituents to segregate.
- E. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
 - 1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.
 - 2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
 - 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators, unless otherwise specified and approved in mix designs.
- F. Hot-Weather Placement: Place concrete according to recommendations in ACI 305R and as follows, when hot-weather conditions exist:
 - 1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.

2. Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

3.8 FINISHING FORMED SURFACES

- A. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defective areas repaired and patched. Remove fins and other projections exceeding ACI 347R limits for class of surface specified.
- B. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defective areas. Remove fins and other projections exceeding 1/8 inch in height.
 1. Apply to concrete surfaces exposed to public view or to be covered with a coating or covering material applied directly to concrete, such as waterproofing, dampproofing, veneer plaster, or painting.
- C. Rubbed Finish: Apply the following to smooth-formed finished concrete:
 1. Smooth-Rubbed Finish: Not later than one day after form removal, moisten concrete surfaces and rub with carborundum brick or another abrasive until producing a uniform color and texture. Do not apply cement grout other than that created by the rubbing process.
 2. Grout-Cleaned Finish: Wet concrete surfaces and apply grout of a consistency of thick paint to coat surfaces and fill small holes. Mix one part portland cement to one and one-half parts fine sand with a 1:1 mixture of bonding admixture and water. Add white portland cement in amounts determined by trial patches so color of dry grout will match adjacent surfaces. Scrub grout into voids and remove excess grout. When grout whitens, rub surface with clean burlap and keep surface damp by fog spray for at least 36 hours.
- D. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces, unless otherwise indicated.

3.9 MISCELLANEOUS CONCRETE ITEMS

- A. Filling In: Fill in holes and openings left in concrete or masonry structures, unless otherwise indicated, after work of other trades is in place. Mix, place, and cure concrete, as specified, to blend with in-place construction. Provide other miscellaneous concrete filling indicated or required to complete Work.

3.10 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and with recommendations in ACI 305R for hot-weather protection during curing.

- B. Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces. If forms remain during curing period, moist cure after loosening forms. If removing forms before end of curing period, continue curing by one or a combination of the Moisture Curing methods in paragraph C below.
- C. Unformed Surfaces: Begin curing immediately after finishing concrete. Cure unformed surfaces, including floors and slabs, concrete floor toppings, and other surfaces, by one or a combination of the following methods:
 - 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
 - a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
 - 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.

3.11 CONCRETE SURFACE REPAIRS

- A. Defective Concrete: Repair and patch defective areas when approved by Resident Engineer. Remove and replace concrete that cannot be repaired and patched to Resident Engineer's approval.
- B. Patching Mortar: Mix dry-pack patching mortar, consisting of one part portland cement to two and one-half parts fine aggregate passing a No. 16 sieve, using only enough water for handling and placing.
- C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.
 - 1. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch in any dimension in solid concrete but not less than 1 inch in depth. Make edges of cuts perpendicular to concrete surface. Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried. Fill form-tie voids with patching mortar.
 - 2. Repair defects on surfaces exposed to view by blending white portland cement and standard portland cement so that, when dry, patching mortar will match surrounding color. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.
 - 3. Repair defects on concealed formed surfaces that affect concrete's durability and structural performance as determined by Resident Engineer.

- D. Perform structural repairs of concrete, subject to Resident Engineer's approval, using epoxy adhesive and patching mortar.

3.12 FIELD QUALITY CONTROL

- A. Testing Agency: Contractor shall engage a qualified independent testing and inspecting agency to perform tests and submit test reports during concrete placement.
- B. Testing Services: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
 - 1. Testing Frequency: Obtain at least one composite sample for each 100 cu. yd. or fraction thereof of each concrete mix placed each day.
 - 2. Slump: ASTM C 143; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mix. Perform additional tests when concrete consistency appears to change.
 - 3. Unit Weight: ASTM C 567, fresh unit weight of structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mix.
 - 4. Compression Test Specimens: ASTM C 31/C 31M; cast and laboratory cure one set of four standard cylinder specimens for each composite sample.
 - 5. Compressive-Strength Tests: ASTM C 39; test one laboratory-cured specimen at 7 days and two at 28 days. Keep one specimen in reserve.
 - a. A compressive-strength test shall be the average compressive strength from two specimens obtained from same composite sample and tested at age indicated.
- C. Strength of each concrete mix will be satisfactory if every average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
- D. Test results shall be reported in writing to Resident Engineer, City Project Manager, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mix proportions and materials, compressive breaking strength, and type of break for both 7-and 28-day tests.
- E. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Resident Engineer. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42 or by other methods as directed by Resident Engineer.

END OF SECTION

SECTION 03308

EPOXY ANCHORS

PART 1 GENERAL

1.1 WORK INCLUDED

- A. This work shall consist of providing the necessary labor, materials, equipment and supervision to install epoxy anchors and rods as required in the Drawings.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 03300 – Cast In Place Concrete
- B. Section 03361 - Shotcrete

1.3 REFERENCE STANDARDS

- A. Titles, designations, dates of issue or revision or reference standards and documents shall be those in effect at the time the bids are received, unless otherwise specified herein.
- B. Except as modified by the Project Specifications, applicable portions of the following reference standards and documents shall govern the Work:
 - 1. American Society for Testing Materials Standards.
 - a. ASTM D2730 - Test for Sag Floor of Highly Viscous Resins.
 - b. ASTM D2471 – Test for Gel Time and Peak Exothermic Temperature of Reacting Thermosetting Resins.
 - c. ASTM C78 – Test for Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading).
 - d. ASTM D695 – Test for Compressive Properties of Rigid Plastics.
 - e. ASTM D648 – Test for Deflection Temperature of Plastics under Flexural Load.
 - f. ASTM D 638 – Test for Tensile Properties of Plastics.
 - g. ASTM D790 – Test for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
 - h. ASTM A276 – Specifications for Stainless and Heat-Resisting Steel Bars and Shapes.
 - 2. American Association of State Highway and Transportation Officials Test for Slant Shear Strength of Epoxy bonding Agent (AASHTO 237).
 - 3. American Concrete Institute “Manual of Standard Practice for Detailing Concrete Structures” (ACI 315).
 - 4. Concrete Reinforcing Steel Institute “Manual of Standard Practice.”

1.4 SUBMITTALS

- A. The Contractor shall submit the following for approval of the Resident Engineer:
 - 1. Technical data sheets for each product or formulation to be used showing that the products meet the requirements of the specifications.
 - 2. Technical data for the epoxy shall include:
 - a. Intended use.

- b. Pot life (neat).
- c. Initial cure time (1000 psi).
- d. Tack free (thin film).
- e. Final cure (75% ultimate strength).
- f. Tensile strength by ASTM D638 (14 days).
- g. Tensile elongation by ASTM D638 modified (14 days).
- h. Flexural strength and modules per ASTM D790 at 24 hours, 3 days, and 7 days at 77°F.
- i. 24-hour compressive strength by ASTM C109 modified (1 part epoxy to 3-1/4 parts aggregate).

1.5 QUALITY ASSURANCE

- A. Applicator Qualifications
 - 1. The Contractor shall have _____ experience in performing work similar to that shown on the drawings and described in these specifications.
 - 2. The Contractor shall provide an on-site supervisor for the duration of the epoxy anchor work. This supervisor shall have _____ supervisory experience with the products to be used.

- B. Source Quality Control
 - 1. The Contractor shall provide the manufacturer's test data for the following properties for each production run or batch or epoxy formulation to be used.
 - a. Tensile Strength by ASTM D638.
 - b. Elongation at break by ASTM D638.
 - c. Flexural strength by ASTM D790.
 - d. Flexural modules by ASTM D790.
 - e. Compressive yield strength by ASTM D695.
 - f. Compressive modules by ASTM D695.
 - g. Heat deflection temperatures by ASTM D648.
 - h. Slant shear by ASSHTO 237.

- C. Allowable Tolerances:
 - 1. The epoxy anchors shall be installed such that the clear cover to the exterior face of patches or masonry falls within +0 and -1/4-inch of that specified.

1.6 PRODUCT DELIVERY

- A. The product shall be delivered and handled according to the manufacturer's recommendations.
- B. Damaged, open containers shall not be used.

1.7 JOB CONDITIONS

- A. Existing and environmental conditions: The Contractor shall examine the condition of surfaces where epoxy anchors are required and shall follow the recommendations of the manufacturer with regard to limitations of the materials in various moisture and temperature conditions.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Epoxy for Anchors: The epoxy shall be:
 - 1. Simpson SET-XP as manufactured by Simpson Strongtie, Pleasanton, California.
 - 2. Hilti HIT-RE 500-SD as manufactured by Hilti Inc., Tulsa, Oklahoma.
 - 3. Embedded rods and drag bars: Submit epoxy injection products and procedures for approval prior to installation

- B. Stainless Steel Anchors: Type 304, stainless steel wire and stainless steel threaded rods cut and bent to shapes indicated on drawings.
 - 1. Maximum yield strength – 30 ksi.
 - 2. Minimum tensile strength – 75 ksi.

- C. Reinforcing rods and Post-tensioning rods: As indicate in drawings

PART 3 EXECUTION

3.1 INSPECTION

- A. Examine surfaces where epoxy anchors are designated to be installed to verify the soundness of the substrate and to locate unsound brick or other conditions that would adversely affect the execution and quality of Work.

- B. Where such conditions are found, notify the Resident Engineer. Do not proceed with work until the adverse conditions have been remedied.

3.2 PREPARATION

- A. Lay out the locations of epoxy anchors according to the Drawings and Specifications.

3.3 INSTALLATION OF STEEL RODS AND ANCHORS

- A. Drilling holes:
 - 1. Drill holes into the existing concrete and back-up material. Avoid drilling into embedded steel reinforcing bars, spandrel beams and columns.
 - 2. Holes to be 1/8-inch diameter larger than anchor.
 - 3. Drill horizontal holes with a downward slant of about 10-degrees to the horizontal.
 - 4. Blow holes clean of drill dust with oil-free compressed air. Use tube extension at the end of the air gun and begin cleaning from the back of the hole.
 - 5. See Drawings and individual repair procedures for required anchor diameters, embedments, and configurations.

- B. Installation:
 - 1. Clean and degrease the steel rod and anchors to remove all contaminants, which may hinder the epoxy bond.

2. Pressure-inject a pumpable epoxy gel into the pre-drilled hole for its complete length.
3. Insert anchor into the epoxy-filled hole. Unless noted otherwise, the anchor shall be set back 3/4-inch from the exterior face of the masonry and patches.
4. The method of installation is intended to achieve 100 per cent filling of the annular space between the anchor and the drilled hole.
5. Leave repair area neat and clean. Excess epoxy and mortar shall be removed at once. After each work day, remove epoxy droppings. No epoxy shall be left unfinished at any locations.
6. Install anchors without breaking or chipping the exposed masonry. Repair damaged areas as specified in other sections.
7. Finish hole with finish patching mortar as described in Section 04910.
8. Alternate procedures (contractor's option): Inject epoxy after installation of bar. Submit proposed procedures and product data for approval prior to installation.

3.4 CLEAN-UP

- A. The epoxy anchors shall be cleanly installed and squared up as shown on the Drawings. Excess epoxy shall be cleaned up immediately after anchor installation.
- B. Safety of Personnel: Consult manufacturer's literature for proper safety precautions for stage, handling, and clean-up of specified products.

END OF SECTION

SECTION 03361

SHOTCRETE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract Documents.

1.2 SUMMARY

- A. This Section includes shotcrete applied by either the wet- or dry-mix process.

1.3 DEFINITIONS

- A. Shotcrete: Mortar or concrete pneumatically projected onto a surface at high velocity.
- B. Dry-Mix Shotcrete: Shotcrete with most of the water added at nozzle.
- C. Wet-Mix Shotcrete: Shotcrete with ingredients, including mixing water, mixed before introduction into delivery hose. Accelerator, if used, is normally added at nozzle.

1.4 SUBMITTALS

- A. General: Submit each item in this Article according to the conditions of the Contract Documents.
- B. Product Data and instructions for manufactured materials and products including reinforcement and forming accessories, shotcrete materials, admixtures, curing compounds, and others requested by Resident Engineer.
- C. Shop Drawings for reinforcement detailing fabricating, bending, and placing shotcrete reinforcement. Include support and anchor details, number and location of splices, and special reinforcing required for openings through shotcrete structures.
- D. Samples of materials requested by Resident Engineer, including names, sources, and descriptions.
- E. Design mixes for each shotcrete mix.
- F. Material test reports from a qualified independent testing agency indicating and interpreting test results relative to compliance of shotcrete with requirements indicated.
- G. Nozzle-operator certifications according to ACI 506.3R.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced Installer who has completed shotcrete work similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.
1. Nozzle operators must be certified according to ACI 506.3R, "Guide to Certification of Shotcrete Nozzlemen."
 2. Nozzle operators must attain a test-panel mean core grade of 2.0 or less according to ACI 506.2 on preconstruction tests.
- B. Comply with provisions of the following, except where more stringent requirements are indicated:
1. American Concrete Institute (ACI) 301, "Specifications for Structural Concrete for Buildings."
 2. ACI 506.2, "Specification for Materials, Proportioning, and Application of Shotcrete."
 3. Concrete Reinforcing Steel Institute's (CRSI) "Manual of Standard Practice."
 4. California Building Code Section – Shotcrete.
- C. Preconstruction Testing: Comply with the following requirements:
1. Preconstruction Testing Service: Contractor shall engage a qualified independent testing agency to perform the preconstruction tests and inspections indicated.
 2. Produce test panels before shotcrete placement according to requirements of ACI 506.2 and ASTM C 1140 for each design mix, shooting orientation, and each nozzle operator. Produce test panels with dimensions of 48 by 48 inches minimum and of average thickness of shotcrete, but not less than 4 inches. From each test panel, obtain 3 test specimens.
 - a. Test each set of unreinforced specimens for compressive strength according to ASTM C 42.
 - b. Visually inspect each set of reinforced shotcrete cores taken from test panels and determine mean core grades according to ACI 506.2.
 - c. Comply with 2010 CBC Section 1924A.5 – Preconstruction Tests.
 - d. Strength tests shall comply with 2010 CBC Section 1924A.10

1.6 PROJECT CONDITIONS

- A. Cold-Weather Shotcreting: Protect shotcrete work from physical damage or reduced strength caused by frost, freezing, or low temperatures according to ACI 306R and as follows:
1. Discontinue shotcreting when ambient temperature is 40 deg F and falling. Uniformly heat water and aggregates before mixing to obtain a shotcrete shooting temperature of not less than 50 deg F and not more than 90 deg F.
 2. Do not use frozen materials or materials containing ice or snow.
 3. Do not place shotcrete on frozen surfaces or surfaces containing frozen materials.
 4. Do not use calcium chloride, salt, and other materials containing antifreeze agents.

- B. Hot-Weather Shotcreting: Mix, place, and protect shotcrete according to ACI 305R when hot-weather conditions and high temperatures would seriously impair quality and strength of shotcrete and as follows:
 - 1. Cool ingredients before mixing to maintain shotcrete temperature at time of placement below 90 deg F for wet mix; 100 deg F for dry mix.
 - 2. Lower temperature of reinforcing steel and receiving surfaces below 100 deg F before shotcreting.

PART 2 - PRODUCTS

2.1 FORM MATERIALS

- A. Forms for Exposed-Finish Shotcrete: Plywood, metal, or similar panel-type materials. Provide continuous, straight, smooth, exposed surfaces. Furnish in largest practicable sizes to minimize number of joints.
- B. Forms for Unexposed-Finish Shotcrete: Plywood, lumber, metal, or similar materials. Provide lumber dressed on at least 2 edges and 1 side for tight fit.

2.2 REINFORCING MATERIALS

- A. Reinforcing Bars: ASTM A 615, Grade 60, deformed, if not otherwise indicated on drawings.
- B. Steel Wire: ASTM A 82, plain, cold drawn.
- C. Deformed-Steel-Welded Wire Fabric: ASTM A 497, cold drawn.
- D. Reinforcement Support: Provide bolsters, chairs, spacers, ties, and other devices for spacing, supporting, and fastening reinforcing against wood forms, complying with CRSI recommendations.
 - 1. For exposed-to-view shotcrete surfaces, where legs of supports are in contact with removable forms, provide supports with legs protected with plastic (CRSI, Class 1) or stainless steel (CRSI, Class 2).
- E. Reinforcement Anchors: ASTM A 36, unheaded rods or ASTM A 307, Grade A, headed bolts; carbon-steel, hex-head bolts; and carbon-steel nuts.
- F. Finish: Plain, uncoated.

2.3 SHOTCRETE MATERIALS

- A. Portland Cement: ASTM C 150, Type II.
- B. Fly Ash: ASTM C 618, Class C or Class F.
- C. Ground Granulated Blast-Furnace Slag: ASTM C 989, Grade 100 or Grade 120
- D. Normal-Weight Aggregates: ASTM C 33, Class 4S. Provide aggregates from a single source.

Lightweight Aggregate: ASTM C 330.

1. Use expanded shale only.

- E. Water: Potable; free from deleterious material that may affect color stability, setting, or strength of concrete.
- F. Synthetic Fiber: Polypropylene fibers engineered and designed for secondary reinforcement of shotcrete, complying with ASTM C 1116, Type III, not less than 1-1/2 inches long.
- G. Ground Wire: High-strength steel wire, 0.8 to 1 mm in diameter.

2.4 CHEMICAL ADMIXTURES

- A. General: ASTM C 1141, Class A or Class B, but limited to the following admixture materials. Provide admixtures for shotcrete that contain not more than 0.1 percent chloride ions.
 - I. Certify compatibility of admixtures with other cementitious materials.
- B. Air-Entraining Admixture: ASTM C 260, certified by manufacturer to be compatible with other required shotcrete admixtures.
- C. Water-Reducing Admixture: ASTM C 494, Type A.
- D. Water-Reducing and Retarding Admixture: ASTM C 494, Type D.
- E. Water-Reducing and Accelerating Admixture: ASTM C 494, Type E.
- F. High-Range, Water-Reducing Admixture: ASTM C 494, Type F.
- G. Accelerating Admixture: ASTM C 494, Type C.

2.5 CURING MATERIALS

- A. Sheet Materials: ASTM C 171, curing paper, polyethylene film, or white-burlap polyethylene sheet; nonstaining.

2.6 SHOTCRETE MIXES, GENERAL

- A. Prepare design mixtures for each type and strength of shotcrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 506.2 and Section 03300, as modified for shotcrete.
- B. Cementitious Materials: Use fly ash, pozzolan, ground granulated blast-furnace slag, and silica fume as needed to reduce the total amount of portland cement, which would otherwise be used, by not less than 20 percent.
- C. Limit water-soluble chloride ions to maximum percentage by weight of cement or cementitious material permitted by ACI 301.

- D. Other Admixtures: When included in shotcrete design mixes, use water-reducing, high-range water-reducing, water-reducing and accelerating, or water-reducing and retarding admixtures according to manufacturer's written instructions.
- E. Fiber Reinforcement: Include fiber reinforcement at manufacturer's recommended rate, but not less than rate required by shotcrete design mix.

2.7 NORMAL-WEIGHT (145 PCF) and LIGHT-WEIGHT (125 PCF) SHOTCRETE MIXES

- A. Proportion wet mixes according to ACI 211.1 and ACI 301, using materials to be used on Project, to provide normal-weight shotcrete with the following properties:
 - 1. Compressive Strength (28 Day): As indicated on structural drawings
 - 2. Aggregate Gradation: Gradation No. 3, ACI 506R, with 3/4-inch maximum aggregate size.
 - 3. Add air-entraining admixture at manufacturer's prescribed rate to result in shotcrete having an air content before pumping of 7 percent with a tolerance of plus or minus 1-1/2 percent.
 - 4. Slump: 1-1/2 inch minimum to 2-1/2 inch maximum at point of discharge
- B. Proportion dry mixes by field test data methods, using materials to be used on Project, to provide shotcrete with the following properties:
 - 1. Compressive Strength (28 Day): As indicated on structural drawings
 - 2. Aggregate Gradation: Gradation No. 3, ACI 506R, with 3/4-inch maximum aggregate size.
 - 3. Add air-entraining admixture at manufacturer's prescribed rate to result in shotcrete having an air content before pumping of 7 percent with a tolerance of plus or minus 1-1/2 percent.
 - 4. Slump: 1-1/2 inch minimum to 2-1/2 inch maximum at point of discharge

2.8 SHOTCRETE EQUIPMENT

- A. Mixing Equipment: Capable of thoroughly mixing shotcrete materials in sufficient quantities to maintain continuous placement.
- B. Wet-Mix Delivery Equipment: Capable of discharging aggregate-cement-water mixture accurately, uniformly, and continuously.
- C. Dry-Mix Delivery Equipment: Capable of discharging aggregate-cement mixture into delivery hose under close control and maintaining continuous stream of uniformly mixed material at required velocity to discharge nozzle. Equip discharge nozzle with manually operated water-injection system for directing even distribution of water to aggregate-cement mixture.
 - 1. Provide uniform, steady supply of clean, compressed air to maintain constant nozzle velocity while simultaneously operating blow pipe for cleaning away rebound.
 - 2. Provide water supply with uniform pressure at discharge nozzle to ensure uniform mixing with aggregate-cement mix. Provide water pump to system if line water pressure is inadequate.

2.9 BATCHING AND MIXING

- A. Wet-Mix Process: Measure mix proportions by weight batching according to ASTM C 94. Mix and deliver ready-mix shotcrete material according to ASTM C 94.
 - 1. Comply with ASTM C 685 when shotcrete ingredients are delivered dry and proportioned and mixed on-site.
- B. Dry-Mix Process: Measure mix proportions by weight batching according to ASTM C 94 or by volume batching complying with ASTM C 685 requirements.
 - 1. In volume batching, adjust fine-aggregate volume for bulking. Test fine-aggregate moisture content at least once daily to determine extent of bulking.

PART 3 - EXECUTION

3.1 SURFACE PREPARATION

- A. Concrete or Masonry: Before applying shotcrete, remove unsound or loose material and contaminants that may inhibit shotcrete bonding. Abrasive blast, chip or scarify areas to receive shotcrete to extent necessary to provide sound substrate with 1/8" minimum amplitude exposed aggregate. Dampen surfaces before shotcreting.
- B.
- C. Repair/seal cracks in existing concrete per drawings.

3.2 FORMS

- A. General: Design, erect, support, brace, and maintain forms to support construction loads. Construct forms so shotcrete members and structures are secured to prevent excessive vibration or deflection during shotcreting.
 - 1. Fabricate forms to be readily removable without impact, shock, or damage to shotcrete surfaces and adjacent materials.
 - 2. Construct forms to required sizes, shapes, lines, and dimensions using ground wires and depth gages to obtain accurate alignment, location, and grades in finished structures. Construct forms to prevent mortar leakage but permit escape of air and rebound during shotcreting. Provide for openings, offsets, blocking, screeds, anchorages, inserts, and other features required in Work.
- B. Provisions for Other Trades: Provide openings in shotcrete forms to accommodate work of other trades. Determine size and location of openings, recesses, and chases from trades providing such items. Accurately place and securely support items built into forms.

3.3 PLACING REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, and other materials that weaken bonding of shotcrete.
- C. Securely embed reinforcement anchors into existing substrates, located as required.

- D. Accurately position, support, and rigidly secure reinforcement against displacement by formwork, construction, or shotcreting. Locate and support reinforcing by metal chairs, runners, bolsters, spacers, and hangers, as required.
- E. Place reinforcement to obtain minimum coverages for shotcrete protection. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during shotcreting. Set wire ties with ends directed into shotcrete, not toward exposed shotcrete surfaces.
- F. Install welded wire fabric in lengths as long as practicable. Lap adjoining pieces at least one full mesh and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.

3.4 JOINTS

- A. Construction Joints: Locate and install construction joints tapered to a 1:1 slope where joint is not subject to compression loads and square where joint is perpendicular to main reinforcement. Continue reinforcement through construction joints, unless otherwise indicated.

3.5 ALIGNMENT CONTROL

- A. Ground Wires: Install ground wires to establish thickness and planes of required shotcrete surfaces. Install ground wires at corners and offsets not established by forms. Pull ground wires taut and position adjustment devices to permit additional tightening.

3.6 INSTALLATION OF EMBEDDED ITEMS

- A. General: Set and build into work anchorage devices and other embedded items required for other work attached to or supported by shotcrete. Use Setting Drawings, diagrams, instructions, and directions provided by suppliers of items to be attached.

3.7 APPLICATION

- A. Apply temporary protective coverings and protect adjacent surfaces against deposit of rebound and overspray or impact from nozzle stream.
- B. Moisten wood forms immediately before placing shotcrete where form coatings are not used.
- C. Apply shotcrete according to ACI 506.2 and as follows:
 1. Apply dry-mix shotcrete material within 45 minutes after predampening.
 2. Apply wet-mix shotcrete material within 90 minutes after batching.
- D. Deposit shotcrete continuously in multiple passes, to required thickness, without cold joints and laminations developing.
 1. Place shotcrete with nozzle held perpendicular to receiving surface.
 2. Place shotcrete in corners and recesses first.

- E. Place shotcrete to completely encase reinforcing and other embedded items. Maintain front face of reinforcing free of build-up during encasement.
 - 1. Maintain reinforcing in position during shotcrete placement operations.
- F. Do not place subsequent lifts until previous lift of shotcrete is capable of supporting new shotcrete.
- G. Do not permit shotcrete to sag, slough, or dislodge.
- H. Remove hardened overspray, rebound, and laitance from shotcrete surfaces to receive additional layers of shotcrete; and dampen surfaces.
- I. Do not disturb shotcrete surfaces before beginning finishing operations.
- J. Remove ground wires or other alignment control devices after shotcrete placement.
- K. Shotcrete Core Grade: Apply shotcrete to achieve a mean core grade of 2.5 or less according to ACI 506.2, with no core exceeding Grade 3.
- L. Installation Tolerances: Place gun-finished shotcrete without exceeding installation tolerances permitted by ACI 117R.

3.8 SURFACE FINISHES

- A. Trowel Finish: Shotcrete surface shall be steel-troweled to a smooth hard finish, unless otherwise indicated.
- B. Flash Coat or Finish Coat: After screeding to natural rod finish, apply up to 1/4-inch coat of shotcrete using ACI 506R, No. 1 gradation, fine-screened sand modified with maximum aggregate size not exceeding No. 4 and steel-troweled to a smooth hard finish unless otherwise approved.
 - 1. Finish: Wood-float, granular-textured finish.
 - 2. Finish: Rubber-float, coarse-textured finish.
 - 3. Finish: Hairbrush-float, fine-textured, sandy finish.
 - 4. Finish: Steel-trowel, smooth, hard finish.

3.9 CURING

- A. Protect freshly placed shotcrete from premature drying and excessive cold or hot temperatures.
- B. Start initial curing as soon as free water has disappeared from shotcrete surface after placing and finishing.
- C. Curing Exposed Surfaces: Cure shotcrete by the following methods:
 - 1. Moisture Curing: Keep surfaces continuously moist for at least 7 days with water, continuous water-fog spray, or water-saturated absorptive covers with sides and ends lapped and sealed.

- D. Curing Formed Surfaces: Cure formed shotcrete surfaces by moist curing with forms in place for full curing period or until forms are removed. If forms are removed, continue curing by methods specified above, as applicable.

3.10 FORM REMOVAL

- A. Forms not supporting weight of concrete may be removed after curing at not less than 50 deg F for 24 consecutive hours after gunning, provided shotcrete is sufficiently hard to not be damaged by form-removal operations and provided curing and protecting operations are maintained.
 - 1. Forms supporting weight of concrete may not be removed in less than 14 days and until shotcrete has attained design minimum compressive strength at 28 days. Determine potential compressive strength of in-place shotcrete by testing field-cured specimens representative of shotcrete location or members.
 - 2. Form-facing material may be removed 4 days after placement only if shores and other vertical supports have been arranged to permit removal without loosening or disturbing shores and supports.
- B. Clean and repair surfaces of forms to be reused in Work. Split, frayed, delaminated, or otherwise damaged form-facing material is unacceptable for exposed surfaces. Apply new form-coating compound as specified for new formwork.

3.11 FIELD QUALITY CONTROL

- A. Contractor shall engage a qualified independent testing agency to sample materials, visually grade cores, perform tests, and submit reports during shotcreting.
- B. Test Panels: Make a test panel, reinforced as in structure, for each shotcrete mix and for each workday or for every 20 cu. yd. of shotcrete placed, whichever is less. Produce test panels with dimensions of 48 by 48 inches minimum and of average thickness of shotcrete, but not less than 4-1/2 inches. From each test panel, testing agency will obtain six test specimens: one set of three specimens unreinforced and one set of three specimens reinforced.
 - 1. Test each set of unreinforced specimens for compressive strength according to ASTM C 1140 and construction testing requirements in ACI 506.2.
 - 2. Visually inspect each set of reinforced shotcrete cores taken from test panels and determine mean core grades according to ACI 506.2.
- C. Strength of shotcrete will be considered satisfactory when mean compressive strength of each set of 3 unreinforced cores equals or exceeds 85 percent of specified compressive strength, with no individual core less than 75 percent of specified compressive strength.
 - 1. Mean compressive strength of each set of 3 unreinforced cubes shall equal or exceed design compressive strength with no individual cube less than 88 percent of specified compressive strength.

3.12 REPAIR OF DEFECTS

- A. Remove and replace shotcrete that is delaminated or exhibits laminations, voids, or sand/rock pockets exceeding limits for specified core grade of shotcrete.

3.13 CLEANING

- A. Remove rebound and overspray materials from final shotcrete surfaces and areas not intended for shotcrete placement.

END OF SECTION

SECTION 03530

CONCRETE TOPPING (LATEX-MODIFIED CONCRETE UNDERLAYMENT)

PART 1 GENERAL

1.1 SUMMARY

- A. This Section specifies latex-modified concrete underlayment for use over existing concrete deck and under elastomeric membrane.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 7140 – Elastomeric Membrane

1.3 SUBMITTALS

- A. Product Data: For each type of manufactured material and product indicated.
- B. Material Certificates: Signed by manufacturers certifying that each of the following materials complies with requirements.
 - 1. Cementitious materials and aggregates.
 - 2. Primers.
- C. Statement of Compatibility: Manufacturer to submit a letter confirming the compatibility of its product with the elastomeric coating.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: An installer experienced in installing latex-modified concrete similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- B. Source Limitations: Obtain all materials from one manufacturer with resources to provide latex-modified concrete of consistent quality in appearance and physical properties.
- C. Manufacturer Qualifications: Manufacturer who will provide technical field service representation during construction, approving an acceptable installer, reviewing and approving substrate for application, recommending appropriate installation methods, and conducting a final inspection of the installed latex-modified concrete.
- D. Compatibility: Verify compatibility of latex modified concrete with elastomeric coating.
- E. Mockups: Before installing latex-modified concrete, build mockups to demonstrate aesthetic effects and qualities of materials and execution. Build mockups to comply with the following requirements, using materials indicated for the completed Work:
 - 1. Build mockup at least 50 square feet in location incorporating the existing steel framing to be determined by Resident Engineer.

2. Notify Resident Engineer seven days in advance of dates and times when mockups will be constructed.
3. Demonstrate curing, cleaning, and protecting of latex-modified concrete, finishes, and contraction joints, as applicable.
4. Obtain Resident Engineer's approval of mockups before proceeding with work.
5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
6. Approved mockups may become part of the completed Work if undisturbed at time of Completion.

PART 2 PRODUCTS

2.1 PRODUCTS

- A. Topping concrete: Cement-based, latex-modified product that can be applied to a thickness from 1/4-inch.
 1. Excel-Crete; Excellent Coatings, Vista, California or approved equal.
- B. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch, as recommended by topping concrete manufacturer. Adjust aggregate size based on the finished thickness of the topping concrete.
 1. Provide aggregate, when recommended in writing by topping concrete manufacturer, for topping concrete thickness required.
- C. Water: Potable and at a temperature of not more than 70 deg F.
- D. Primer: Manufacturer's recommended water-based primer specifically formulated to enhance bond of topping concrete to existing concrete.

2.2 CURING MATERIALS

- A. Moisture-Retaining Cover: ASTM C 171, 4-mil polyethylene film.

2.3 CONCRETE MIXING

- A. Mixing: Measure, batch, and mix concrete materials and concrete according to manufacturer's instructions.

PART 3 EXECUTION

3.1 SURFACE PREPARATION

- A. Surface to receive topping concrete must be clean and sound.
- B. Remove all deteriorated concrete, existing waterproofing, dirt, oil, grease and all bond inhibiting materials from surface.
- C. Prepare surface by abrasive cleaning and other appropriate mechanical means to remove all remnants of existing waterproofing and to obtain a finish acceptable to latex-modified concrete manufacturer for use as substrate. The contractor shall erect

barriers to confine dust and debris during the cleaning and abrasive cleaning process. The barrier will prevent any deleterious impacts on the park facilities or patrons.

- D. The Contractor will determine and review the means and methods of confining the abrasive cleaning process with the Resident Engineer prior to commencing with abrasive cleaning.
- E. Patch holes in concrete substrate deeper than 1 inch with polymer modified mortar mix specified in Section 04070 2.1.H and use installation procedures specified in Section 04910.
- F. Manufacturer's representative to approve surface preparation, in a timely manner, before placement begins.

3.2 LATEX-MODIFIED CONCRETE PLACEMENT

- A. Before placing concrete, verify that installation of related items is complete and that required inspections have been performed.
- B. Apply surface primer in accordance with manufacturer's written recommendations.
- C. Deposit concrete continuously between high points of slope. Deposit concrete to avoid segregation.
- D. Cold-Weather Placement: Comply with ACI 306.1 and manufacturer's recommendations when air temperature has fallen to or is expected to fall below 40 deg F. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
- E. Hot-Weather Placement: Place concrete according to recommendations in ACI 305R and manufacturers recommendations, when hot-weather conditions exist.

3.3 FINISHING UNFORMED SURFACES

- A. General: Comply with ACI 302.1R for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. Screenshot surfaces with a straightedge and strike off. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane before excess moisture or bleed-water appears on the surface. Do not further disturb surfaces before starting finishing operations.
- C. Provide wood float finish or other finish as required by manufacturer of primary waterproofing membrane as specified in Section 07140 "Elastomeric Membrane."

3.4 CONCRETE CURING

- A. Protect freshly placed concrete from premature drying and excessive cold or hot temperatures according to ACI 301.

- B. Maintain concrete temperature above 50°F and in a moist condition for at length of time recommended by manufacturer to avoid shrinkage cracks.
- C. Concrete with shrinkage cracks greater than 0.01 in., or in large numbers, during the curing period, is considered defective, and must be removed and replaced at no extra cost to the Owner.
- D. Allow topping concrete to dry for a minimum of 28 days after completion of curing procedures. Coordinate placement, curing, drying and protection of topping concrete with requirements of elastomeric membrane.

3.5 REPAIRS, PROTECTION, AND CLEANING

- A. Repair and cure damaged finished surfaces of latex-modified concrete when approved by Resident Engineer. Match repairs to texture and uniformity of surrounding surfaces and to repairs on approved mockups. Remove and replace latex-modified concrete that cannot be repaired and cured to Resident Engineer's approval.
- B. Protect corners, edges, and surfaces of latex-modified concrete from damage.
- C. Protect latex-modified concrete from staining, laitance, and contamination during remainder of construction period.
- D. Clean latex-modified concrete surfaces after finish treatment to remove stains, markings, dust, and debris.
- E. Wash and rinse surfaces according to concrete finish applicator's written recommendations. Protect other Work from staining or damage due to cleaning operations. Do not use cleaning materials or processes that could change the appearance of cast-in-place architectural concrete finishes.

END OF SECTION

SECTION 05120
STRUCTURAL STEEL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract Documents apply to this Section.

1.2 SUMMARY

- A. This Section includes structural steel.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
1. Contract Documents.
 2. Section 05720 - "Ornamental Metal Repair."
 3. Section 09900 - "Painting"

1.3 SUBMITTALS

- A. General: Submit each item in this Article according to the conditions of the Contract Documents.
- B. Shop Drawings detailing fabrication of structural steel components.
1. Include details of cuts, connections, splices, camber, holes, and other pertinent data.
 2. Indicate welds by standard AWS symbols, distinguishing between shop and field welds, and show size, length, and type of each weld.
 3. Indicate type, size, and length of bolts, distinguishing between shop and field bolts. Identify high-strength bolted slip-critical, direct-tension, or tensioned shear/bearing connections.
- C. Mill test reports for each heat of steel used prior to start of fabrication. Mill reports shall show chemical analysis to include chemical content and full mechanical properties.
- D. Certification of inspection test reports for each production lot of high-strength bolts indicating proof load, tensile strength and hardness.
- E. Submit written welding procedures to the Resident Engineer for all welding on the project. Procedures shall be in accordance with AISC pre-qualified welds. For welds not pre-qualified by AISC, provide project specific procedures qualified by testing per AWS to match actual materials, conditions and orientations.

1.4 QUALITY ASSURANCE

- A. Comply with applicable provisions of the following specifications and documents:
 - 1. AISC's "Specification for Structural Steel Buildings--Allowable Stress Design and Plastic Design."
 - 2. AISC's "Specification for Allowable Stress Design of Single-Angle Members."
 - 3. AISC's "Seismic Provisions for Structural Steel Buildings."
 - 4. ASTM A 6 "Specification for General Requirements for Rolled Steel Plates, Shapes, Sheet Piling, and Bars for Structural Use."
 - 5. Research Council on Structural Connections' (RCSC) "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
 - 6. AWS D1.1, 6.1, Inspection.
- B. Inspection: Fabrication and erection testing and inspection by an independent testing laboratory are the responsibilities of the Contractor. Verification of inspection and testing will be performed by the City's Resident Engineer.
- C. Materials delivered without certificates will be classified as unidentifiable and will require testing by the Special Inspector/testing agency at the expense of the Contractor.
- D. Fabricator Qualifications: Fabricator shall have experi-
ence in similar types of fabrication.
- E. Welding Standards: Comply with applicable provisions of AWS D1.1 "Structural Welding Code--Steel."
 - 1. Present evidence that each welder has satisfactorily passed AWS qualification tests for welding processes involved and, if pertinent, has undergone recertification.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver structural steel to Project site in such quantities and at such times to ensure continuity of installation.
- B. Store materials to permit easy access for inspection and identification. Keep steel members off ground by using pallets, platforms, or other supports. Protect steel members and packaged materials from erosion and deterioration.
 - 1. Store fasteners in a protected place. Clean and relubricate bolts and nuts that become dry or rusty before use.
 - 2. Do not store materials on structure in a manner that might cause distortion or damage to members or supporting structures. Repair or replace damaged materials or structures as directed.

1.6 SEQUENCING

- A. Supply anchorage items to be embedded in or attached to other construction without delaying the Work. Provide setting diagrams, templates, instructions, and directions, as required, for installation.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Structural Steel Shapes, Plates, and Bars: As follows:
 - 1. Carbon Steel: ASTM A 36. Use where indicated on drawings.
 - 2. Steel for Structural Shapes in Building Framing: ASTM A 992. Typical unless otherwise indicated.
- B. Anchor Rods: As follows:
 - 1. Unheaded Rods: ASTM A 36.
 - 2. Unheaded Rods: ASTM A 572, Grade 50.
- C. Nonhigh-Strength Bolts, Nuts, and Washers: ASTM A 307, Grade A; carbon-steel, hex-head bolts; carbon-steel nuts; and flat, unhardened steel washers.
 - 1. Finish: Plain, uncoated.
 - 2. Finish: Hot-dip zinc-coating, ASTM A 153, Class C.
- D. High-Strength Bolts, Nuts, and Washers: ASTM A 325, Type 1, or ASTM A 490, Class A or B, as indicated, heavy hex steel structural bolts, heavy hex carbon-steel nuts, and hardened carbon-steel washers.
 - 1. Finish: Plain, uncoated.
 - 2. Finish: Hot-dip zinc-coating, ASTM A 153, Class C where required.
 - 3. Direct-Tension Indicators: ASTM F 959, Type 325.
 - a. Finish: Plain, uncoated.
 - b. Finish: Mechanically deposited zinc-coating, ASTM B 695, Class 50.
- E. Welding Electrodes: Comply with AWS requirements.

2.2 GROUT

- A. Nonmetallic, Shrinkage-Resistant Grout: Premixed, nonmetallic, noncorrosive, non-staining grout containing selected silica sands, portland cement, shrinkage compensating agents, plasticizing and water-reducing agents, complying with ASTM C 1107, of consistency suitable for application, and a 30-minute working time.

2.3 FABRICATION

- A. Fabricate and assemble structural steel in shop to greatest extent possible. Fabricate structural steel according to AISC specifications referenced in this Section and in Shop Drawings.
 - 1. Camber structural steel members where indicated.
 - 2. Identify high-strength structural steel according to ASTM A 6 and maintain markings until steel has been erected.
 - 3. Mark and match-mark materials for field assembly.
 - 4. Fabricate for delivery a sequence that will expedite erection and minimize field handling of structural steel.
 - 5. Complete structural steel assemblies, including welding of units, before starting shop-priming operations.

6. Comply with fabrication tolerance limits of AISC's "Code of Standard Practice for Steel Buildings and Bridges" for structural steel.
- B. Thermal Cutting: Perform thermal cutting by machine to greatest extent possible.
 1. Plane thermally cut edges to be welded.
 - C. Holes: Provide holes required for securing other work to structural steel framing and for passage of other work through steel framing members, as shown on Shop Drawings.
 1. Cut, drill, or punch holes perpendicular to metal surfaces. Do not flame-cut holes or enlarge holes by burning. Drill holes in bearing plates.
 2. Weld threaded nuts to framing and other specialty items as indicated to receive other work.

2.4 SHOP CONNECTIONS

- A. Shop install and tighten non-high-strength bolts, except where high-strength bolts are indicated.
- B. Shop install and tighten high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
 1. Bolts: ASTM A 325 high-strength bolts, unless otherwise indicated.
- C. Welded Connections: Comply with AWS D1.1 for procedures, appearance and quality of welds, and methods used in correcting welding work.
 1. Assemble and weld built-up sections by methods that will maintain true alignment of axes without warp.
 2. Verify that weld sizes, fabrication sequence, and equipment used for architecturally exposed structural steel will limit distortions to allowable tolerances. Prevent surface bleeding of back-side welding on exposed steel surfaces. Grind smooth exposed fillet welds 1/2 inch and larger. Grind flush butt welds. Dress exposed welds.

2.5 GALVANIZING

- A. Hot-Dip Galvanized Finish: Apply zinc coating by the hot-dip process to structural steel indicated for galvanizing according to ASTM A 123.

2.6 PAINTING

- A. Shop paint all structural steel not embedded in concrete and not indicated for galvanizing.
- B. Paint all exposed steel to match existing exposed steel in Tower.

2.7 SOURCE QUALITY CONTROL

- A. Steel fabricator shall provide Contractor's quality control testing for welding as required by AWS Chapter 6.

1. Owner/contractor may engage an independent testing and inspecting agency (Special Inspector) to perform verification of shop inspections and tests.
- B. Correct deficiencies in or remove and replace structural steel that inspections and test reports indicate do not comply with specified requirements.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Before erection proceeds, and with the steel erector present, verify elevations of concrete and masonry bearing surfaces and locations of anchorages for compliance with requirements.
- B. Do not proceed with erection until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Provide temporary shores, guys, braces, and other supports during erection to keep structural steel secure, plumb, and in alignment against temporary construction loads and loads equal in intensity to design loads. Remove temporary supports when permanent structural steel, connections, and bracing are in place, unless otherwise indicated.
1. Do not remove temporary shoring supporting composite deck construction until cast-in-place concrete has attained its design compressive strength.

3.3 ERECTION

- A. Carefully field measure all steel installation locations prior to fabrication. Dimensions shown in drawings are approximate. Tower layout is not perfectly symmetrical.
- B. Set structural steel accurately in locations and to elevations indicated and according to AISC specifications referenced in this Section.
- C. Base and Bearing Plates: Clean concrete and masonry bearing surfaces of bond-reducing materials and roughen surfaces prior to setting base and bearing plates. Clean bottom surface of base and bearing plates.
1. Set base and bearing plates for structural members on wedges, shims, or setting nuts as required.
 2. Tighten anchor bolts after supported members have been positioned and plumbed. Do not remove wedges or shims but, if protruding, cut off flush with edge of base or bearing plate prior to packing with grout.
 3. Pack grout solidly between bearing surfaces and plates so no voids remain. Finish exposed surfaces, protect installed materials, and allow to cure.
 - a. Comply with manufacturer's instructions for proprietary grout materials.
- D. Maintain erection tolerances of structural steel within AISC's "Code of Standard Practice for Steel Buildings and Bridges."

1. Maintain erection tolerances of architecturally exposed structural steel within AISC's "Code of Standard Practice for Steel Buildings and Bridges."
- E. Align and adjust various members forming part of complete frame or structure before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that will be in permanent contact. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.
 1. Level and plumb individual members of structure.
- F. Splice members only where indicated.
- G. Remove erection bolts on welded, architecturally exposed structural steel; fill holes with plug welds; and grind smooth at exposed surfaces.
- H. Finish sections thermally cut during erection equal to a sheared appearance.
- I. Do not enlarge unfair holes in members by burning or by using drift pins. Ream holes that must be enlarged to admit bolts.

3.4 FIELD CONNECTIONS

- A. Install and tighten non-high-strength bolts, except where high-strength bolts are indicated.
- B. Install and tighten high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
 1. Bolts: ASTM A 325 high-strength bolts, unless otherwise indicated.
- C. Welded Connections: Comply with AWS D1.1 for procedures, appearance and quality of welds, and methods used in correcting welding work.
 1. Comply with AISC specifications referenced in this Section for bearing, adequacy of temporary connections, alignment, and removal of paint on surfaces adjacent to field welds.
 2. Assemble and weld built-up sections by methods that will maintain true alignment of axes without warp.
 3. Verify that weld sizes, fabrication sequence, and equipment used for architecturally exposed structural steel will limit distortions to allowable tolerances. Prevent surface bleeding of back-side welding on exposed steel surfaces. Grind smooth exposed fillet welds 1/2 inch and larger. Grind flush butt welds. Dress exposed welds.

3.5 FIELD QUALITY CONTROL

- A. Owner/Contractor will engage an independent testing and inspecting agency (Special Inspector) to perform field inspections and tests and to prepare test reports.
 1. Testing agency will conduct and interpret tests and state in each report whether tested Work complies with or deviates from requirements.
- B. Correct deficiencies in or remove and replace structural steel that inspections and test reports indicate do not comply with specified requirements.

- C. Field-bolted connections will be tested and inspected according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
 - 1. Direct-tension indicator gaps will be verified to comply with ASTM F 959, Table 2.

- D. In addition to visual inspection, field-welded connections will be inspected and tested according to AWS D1.1 and the inspection procedures listed below, at testing agency's option.
 - 1. Liquid Penetrant Inspection: ASTM E 165.
 - 2. Magnetic Particle Inspection: ASTM E 709; performed on root pass and on finished weld. Cracks or zones of incomplete fusion or penetration will not be accepted.
 - 3. Radiographic Inspection: ASTM E 94 and ASTM E 142; minimum quality level "2-2T."
 - 4. Ultrasonic Inspection: ASTM E 164.

3.6 CLEANING

- A. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and apply galvanizing repair paint according to ASTM A 780.
- B. Painted Surfaces: Clean field welds, bolted connections, and abraded areas and apply repair paint according to Section 9900 and industry standards.

END OF SECTION

SECTION 07110

EXTERIOR CEMENT PLASTER PARGE REPAIR

PART 1 GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Removal of sound and unsound parge as required to install repairs.
 - 2. Preparation of substrate to receive new parge.
 - 3. Installation of substrate coatings, and reinforcement.
 - 4. Installation of new parge coat.
 - 5. Curing and protecting finished parge work.
- B. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Section 01611 – Historic and Existing Features Restoration
 - 2. Section 03361 - Shotcrete

1.2 SUBMITTALS

- A. General: Submit each item in this Article according to the Conditions of the Contract and Division 1 Specification Sections.
- B. Product Data for each product specified.
- C. Samples for initial selection in the form of manufacturer's color charts consisting of actual units or sections of units at least 12 inches (300 mm) square showing the full range of colors, textures, and patterns available for each type of finish indicated.
 - 1. Where finish involves normal color and texture variations, include Sample sets composed of 2 or more units showing the full range of variations expected.
 - 2. Include similar Samples of material for joints and accessories involving color selection.

1.3 QUALITY ASSURANCE

- A. Mockups: Prior to installing exterior parge repairs, construct panels for each type of finish and application to demonstrate aesthetic effects as well as qualities of materials, relationship to existing materials and execution. Install mockups to comply with the following requirements, using materials indicated for final Work.
 - 1. Install mockups at the location and of the sizes approved by Resident Engineer.
 - 2. Mockups shall consist of the complete repair as indicated for the final work. At minimum mockup repairs shall be installed at the following locations:
 - a. One 4-foot square area adjacent to new concrete installation.
 - 3. Notify Resident Engineer 7 days in advance of the dates and times when mockups will be constructed.
 - 4. Demonstrate the proposed range of aesthetic effects and workmanship.

5. Obtain Resident Engineer's approval of mockups before start of exterior parge repair Work.
6. Retain and maintain mockups during construction in an undisturbed condition as a standard for judging the completed exterior parge repair Work.
 - a. When directed by Resident Engineer, remove mockups from Project site.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver cementitious materials to Project site in original packages, containers, or bundles, labeled with manufacturer's name, product brand name, and lot number.
- B. Store materials inside, under cover, and dry, protected from weather, direct sunlight, surface contamination, aging, corrosion, and damage from construction traffic and other causes.

1.5 PROJECT CONDITIONS

- A. Environmental Requirements, General: Comply with requirements of referenced plaster application standards and recommendations of plaster manufacturer for environmental conditions before, during, and after parge application.
- B. Cold-Weather Requirements: Provide heat and protection, temporary or permanent, as required to protect each coat of parge from freezing for at least 24 hours after application. Distribute heat uniformly to prevent concentration of heat on parge near heat sources; provide deflection or protective screens.
- C. Warm-Weather Requirements: Protect parge against uneven and excessive evaporation and from strong flows of dry air, both natural and artificial. Apply and cure parge as required by climatic and job conditions to prevent dry out during cure period. Provide suitable coverings, moist curing, barriers to deflect sunlight and wind, or combinations of these, as required.
- D. Exterior Parge Work: Do not apply exterior parge repairs when ambient temperature is below 40 degrees F (4 degrees C).
- E. Protect contiguous work from soiling and moisture deterioration caused by parging or other Work. Provide temporary covering and other provisions necessary to minimize harmful spattering of exterior parge repair on other work.

PART 2 PRODUCTS

2.1 PARGING MATERIALS

- A. Job-Mixed Finish-Coat Cement: Material and color as indicated below:
 - 1. Portland cement, ASTM C 150, Type II.
 - 2. Color to match adjacent parge in the area receiving the repair.
- B. Lime: Special hydrated lime for finishing purposes, ASTM C 206, Type S; or special hydrated lime for masonry purposes, ASTM C 207, Type S.
- C. Sand Aggregate: Natural sand, free of organic contaminants per ASTM C 897. Sand shall contain no more than 50 parts per million of chloride ions.

2.2 MISCELLANEOUS MATERIALS

- A. Fiber for Base Coat: Alkaline-resistant glass or polypropylene fibers, 1/2-inch (13 mm) long, free of contaminants, manufactured for use in Portland cement plaster.
- B. Water for Mixing and Finishing Parge: Potable.
- C. Bonding Agent: ASTM C 932.

2.3 PARGE MIXES AND COMPOSITIONS

- A. General: Comply with ASTM C 926 type CL for the base coat and type FL for the finish-coat mixes as applicable to parge bases, materials, and other requirements indicated.
- B. Base-Coat Mix and Compositions: Proportion materials for base coat in parts by volume per sum of cementitious materials for aggregates to comply with the following requirements for each method of application and parge base indicated.
 - 1. 1 part portland cement, 1 part lime, 6 parts sand.
 - 2. Fiber Content: Add fiber to base coat mixes after ingredients have mixed at least 2 minutes. Comply with fiber manufacturer's written instructions but do not exceed 1 lb/cu. ft. (16 kg/cu. m) of cementitious materials. Reduce aggregate quantities accordingly to maintain workability.
- C. Finish Coats: Proportion materials for finish coats in parts by volume for cementitious materials and parts by volume per sum of cementitious materials to comply with the following requirements:
 - 1. Proportions using sand aggregates as indicated below:
 - a. 1 part portland cement, 2 parts lime, 8 parts sand.

2.4 MIXING

Mechanically mix cementitious and aggregate materials for parge to comply with applicable referenced application standard.

PART 3 EXECUTION

3.1 INSPECTION

- A. Contractor to sound all areas of parging adjacent to the patch area to identify delaminated areas and other areas to be repaired.
- B. Contractor to mark out repair areas on the wall for Resident Engineer's review prior to demolition.

3.2 DEMOLITION

- A. After approval of patch locations by Resident Engineer, Contractor to remove delaminated, unsound and sound exterior parging.
- B. Contractor to take precautions to prevent damage to substrate and adjacent undeteriorated parging to remain. Use maximum 5 lb. chipping hammers at angles less than 30 percent with the surface. Direct impact of chipping hammers towards center of repair area, i.e., away from sound parging.
- C. Saw cut perimeter of patch areas to a minimum depth of 1/2-inch. Cuts to be in straight lines with square corners. Do not overrun cuts.

3.3 PREPARATIONS FOR PARGING

- A. Clean parge bases and substrates for direct application of parge, removing loose material and substances that may impair the Work.
- B. Roughen substrate surfaces by sandblasting or bush-hammering.
- C. Install temporary grounds and screeds to ensure accurate rodding of parge to true surfaces.
- D. Surface Conditioning: Immediately before parging, dampen concrete and unit masonry surfaces. Determine and apply amount of moisture and degree of saturation that will result in optimum suction for parging.

3.4 PARGE APPLICATION

- A. Application Standard: Apply parging materials, composition, and mixes to comply with ASTM C 926.
- B. Do not use materials that are frozen, caked, lumpy, dirty, or contaminated by foreign materials.
- C. Do not use excessive water in mixing and applying parge materials.
- D. Flat Surface Tolerances: Do not deviate more than plus or minus 1/8-inch in 10 feet from a true plane in finished parged surfaces, as measured by a 10-foot straightedge placed at any location on surface.

- E. Sequence parge application with installation and protection of other work so that neither will be damaged by installation of other.
- F. Install parging flush with metal frames and other built-in metal items or accessories that act as a ground, unless otherwise indicated.
- G. Corners: Make all corners and angles square; finish corners square and true with parged faces on adjoining work.
- H. Finish Coats: Apply finish coats to match the surface texture of the original and adjoining work.
- I. Cure base coat and finish coats using plastic with taped edges and in compliance with provisions of ASTM C 926.

3.5 CRACK REPAIRS AND CUTTING AND PATCHING

- A. Cut, patch, replace, repair, and point up parge as necessary to accommodate other work. Repair cracks and indented surfaces. Point-up finish parge surfaces around items that are built into or penetrate parge surfaces. Repair or replace work to eliminate blisters, buckles, check cracking, dry outs, efflorescence, excessive pinholes, and similar defects. Repair or replace work as necessary to comply with required visual effects.

3.6 CLEANING AND PROTECTING

- A. Remove temporary covering and other provisions made to minimize spattering of parge on other work. Promptly remove parging from door frames, windows, and other surfaces not to be parged. Repair surfaces stained, marred, or otherwise damaged during parging work. When parging work is completed, remove unused materials, containers, equipment, and parge debris.
- B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, which ensure parge work is without damage or deterioration at the time of Substantial Completion.

END OF SECTION 07110

SECTION 07140

ELASTOMERIC MEMBRANE

PART 1 GENERAL

1.1 DESCRIPTION

- A. This work shall consist of providing the necessary labor, materials, equipment and supervision to prepare all surfaces and install a urethane elastomeric membrane system to designated surfaces of the cast stone facade on the Museum of Man, California Tower and Museum of Art.

1.2 RELATED WORK SPECIFIED ELSEWHERE:

- A. Section 03530 – Concrete Topping
- B. Section 04080 – Epoxy Anchors.

1.3 QUALITY ASSURANCE

- A. The Contractor or subcontractor performing this work shall have experience in performing work similar to that shown in the Drawings and Specification.
- B. The Contractor performing this work shall be a licensed applicator for the elastomeric membrane system to be installed.
- C. The approved applicator shall have been certified by the Manufacturer in all phases of proper surface preparation and application of the elastomeric membrane.
- D. Compatibility: verify compatibility of elastomeric membrane with new concrete topping/ underlayment.
- E. Mock-Up:
 - 1. At locations selected by the Resident Engineer, prepare mock-ups consisting of a complete elastomeric membrane system applied to a 4-foot length along the top of a cornice, water table or balcony.
 - 2. Additional mock-up areas or samples shall be made until an acceptable result is achieved.
 - 3. Do not proceed with the Work without prior approval of the mock-up by the Resident Engineer.
 - 4. Completed approved samples and mock-ups shall be protected during the work and shall be the standard for all Work.

1.4 SUBMITTALS

- A. All submittals are to be made in accordance with the Contract Documents.
- B. Manufacturer's Literature: Three copies of manufacturer's literature for all products furnished, including standard color charts.
- C. Color sample of membrane system applied to a minimum twelve inch square piece of 1/4-inch plywood or similar rigid base.

- E. Applicator's Approval by Material Manufacturer: A document stating that the applicator has been properly trained by the manufacturer and is approved as an applicator of the specified materials.
- F. Statement of Compatibility: Material manufacturer to submit a letter confirming the compatibility of its product with the new concrete topping.
- G. Material Safety Data Sheets: MSDS for all elastomeric membrane materials and primers.
- H. Warranty Documents: Submit two copies of warranty documents for elastomeric membrane system.

1.5 DELIVERY AND STORAGE

- A. Deliver material to project in sealed, original packages or containers bearing name and brand of manufacturer, date of manufacturer and lot number. Each container shall have manufacturer's printed label.
- B. Store materials in single place designated by the Resident Engineer. Keep storage place neat and clean and make good damage thereto or to its surroundings. Cleaning rags and waste materials shall be deposited in metal containers having tight covers or removed from the building each night. Every precaution shall be taken to avoid danger of fire. Provide dry chemical or CO fire extinguishers in area. Store solvents in safety cans.
- C. Store materials in an area designated by the Resident Engineer and protected from weather and extremes temperature in accordance with the manufacturer's recommendations. Do not store for long periods in direct sunlight.
- D. Empty containers used on the job shall have labels cancelled and shall be clearly marked as to appropriate reuse.

1.6 JOB CONDITIONS

- A. Examine existing surfaces and verify existing conditions. Verify actual dimensions.
- B. Environmental Conditions:
 - 1. Do not proceed with application of materials when substrate temperature is less than 40 degrees F.
 - 2. Do not apply materials unless surface to receive coating is clean and dry.
 - 3. Do not apply materials if precipitation is imminent.
- C. Follow manufacturer's recommendations and local, state and federal rules and regulations regarding health and safety procedures.
- D. Protection:
 - 1. Follow manufacturer's instructions regarding safe handling and storage of products.
 - 2. Protect from overspray and vapors according to manufacturer's instructions.
 - 3. Cover all intake vents near the work area.
 - 4. Set up wind breaks when required.
 - 5. After completion of application, allow coated surfaces to completely cure.

6. Protect plants, vegetation and animals that might be affected by coating. Use drop cloths or masking as required.

1.7 GUARANTEE

- A. Completed installation shall be guaranteed jointly by the manufacturer and the installation contractor for a period of five years from date of final completion of the elastomeric membrane in the work area. The guarantee shall include any failure of the waterproofing system, including positive bond to the substrate under normal wear and tear conditions and shall exclude fires, structural failure, acts of God or willful damage other than intended usage. Guarantee shall include defects of both materials and workmanship. This guarantee shall include any bonding failure between the elastomeric membrane system and the substrate.
- B. All required repairs, including tears, leaks, debonding, blistering, and excessive loss of grit due to normal wear, shall be performed or the defective section replaced at no cost to the Owner.

PART 2 PRODUCTS

2.1 ELASTOMERIC MEMBRANE

- A. The elastomeric membrane shall be one of the following proprietary systems:
 1. Pedigard HD, as manufactured by Neogard Corporation, Dallas, Texas.
 2. Iso-flex 760 U.L.O. two coat, as manufactured by Lymtal International.
 3. GW-14-U, as manufactured by Gaco Western.
- B. All components and materials shall be new and shall be the product of and supplied by the selected elastomeric membrane manufacturer.

2.2 RELATED MATERIALS

- A. The manufacturers recommended primer, grit primer and metal primer, cleaning agent, and additional coatings.
- B. Reinforcing Mesh: Fiberglass Mesh – 2.7 lbs/100 sq. ft., No Moisture Absorption (ASTM D146).
- C. Sheet Flashing: 0.050 inch thick, precured, commercial grade neoprene.

2.3 EQUIPMENT

- A. Concrete cleaning equipment such as Blastrac Concrete Cleaning System, manufactured by Wheelabrator-Frye, Inc. or equal.
- B. Sandblasting equipment capable of removing contaminants and laitance from substrate.
- C. Compressed air equipment capable of removing dust and dirt from substrate.
- D. Necessary equipment to install elastomeric membrane.

PART 3 EXECUTION

3.1 SURFACE PREPARATION

- A. New concrete and other cementitious patching and repointing materials must have a full 21-day drying period after completion of curing and prior to elastomeric membrane installation. Verify that curing methods used for concrete are compatible with elastomeric membrane system.
- B. The Contractor is responsible for scarification of the substrate and final surface preparation.
- C. Surfaces shall be prepared as required by the elastomeric membrane manufacturer's recommendations.
- D. Cracks, Control Joints and Cold Joints:
 - 1. Cracks up to 1/16-inch width and cold joints shall be cleaned, primed and treated with polyurethane elastomeric membrane material a minimum distance of two inches on each side of crack to yield a total thickness of 30 dry mils (Detail Coat).
 - 2. Cracks exceeding 1/16 inch in width and control joints shall be routed or sawcut and filled with sealant. Sealant shall be applied to inside area of crack only, not applied to surface. Detail sealed cracks with elastomeric membrane material a distance of two inches on each side of crack to yield a total thickness of 30 dry mils.
- E. Protect adjacent surfaces with drop cloths or masking as required to keep free of coating.
- F. Concrete surfaces shall be clean and visibly dry and pass a 4-hour rubber mat test (no condensation) prior to application of coating system. Mat shall be taped to deck on all edges.
- G. The elastomeric membrane Contractor shall not start installing the elastomeric membrane system until personnel authorized by the elastomeric membrane manufacturer inspect and approve the substrate and related conditions as suitable for receiving the elastomeric membrane system.
- H. Commencement of elastomeric membrane installation shall be deemed to indicate applicator acceptance of substrate area as suitable to accept the elastomeric membrane system.

3.2 INSTALLATION

- A. Materials should not be applied to surfaces when the surface and ambient temperatures are below 50 degrees F during installation and until cured. The temperature of the elastomeric membrane material shall be at least 60 degrees F immediately prior to and during application.
- B. Materials shall be installed by a manufacturer approved Applicator in strict accordance with the manufacturer's written specifications. All procedures for installation shall comply with recommendations of manufacturer of products being used. If there is a conflict between drawings or specifications and the manufacturer's requirements, do not proceed with work until clarified by the Resident Engineer.

- C. Prime all concrete, masonry and metal surfaces at the manufacturer's recommended rate. Primer shall be allowed to completely dry but shall not be applied more than eight hours preceding application of coating. If base coat cannot be applied within eight hours, reprime.
- D. Application of elastomeric membrane shall meet the manufacturer's minimum thickness guidelines. Extend base coat over cracks and control joints that have received treatment at the same mil thickness as adjacent surface.
- E. Provide fluid applied reinforced integral flashings at all locations where a horizontal surface abuts a vertical surface and at all transitions between different materials and substrates.
- F. The elastomeric membrane system shall be installed at least two inches up the sides of columns, walls rail stanchion posts and other vertical surfaces unless shown otherwise on Drawings.
- G. At the outside edges of balconies, water tables, and cornices, extend membrane 1/2-inch maximum over vertical face of nosing.

3.3 FIELD QUALITY CONTROL

- A. The dry film thickness of the elastomeric membrane shall be measured in five random locations.
- B. The dry film thickness measured must be equal to or greater than the thickness specified by the manufacturer within 25 percent. If the elastomeric membrane thickness is not satisfactory, additional coatings shall be installed at no added cost the Owner.
- C. The elastomeric membrane Contractor shall reapply elastomeric membrane and topping in areas disturbed by testing.

3.4 SAFETY PRECAUTIONS

- A. Provide and maintain barricades and traffic control during installation and curing period to prevent pedestrian traffic from entering application area.
- B. Install protective elastomeric membrane system material in strict accordance with all safety and weather conditions required by the manufacturer's product literature or as modified by applicable area.
- C. The Resident Engineer shall be advised at least one (1) week in advance of any work with materials with noxious vapors. No materials with noxious vapors shall be used without prior review of application schedule by the Resident Engineer and venting precautions by the Contractor. Adequate ventilation must be provided by the Contractor during elastomeric membrane installation and until vapors are gone. Ventilation precautions shall meet the requirements of the elastomeric membrane manufacturer and the approval of the Resident Engineer.

- D. Provide safety equipment, as required, for any workers in or immediately adjacent to the work areas.clean-up
- E. Damaged, spotted or smeared parts of building and equipment shall be repaired and cleaned by the elastomeric membrane Contractor.
- F. Work on materials damaged beyond repair, in opinion of the Resident Engineer, shall be replaced by the elastomeric membrane Contractor.
- G. Remove foreign matter from finished coating surfaces.
- H. Clean up all rubbish, debris, surplus material, tools and equipment and remove from site.

END OF SECTION

**SECTION 7920
SEALANTS**

PART 1 GENERAL

1.1 WORK INCLUDED

- A. This work shall consist of providing the necessary labor, materials, tools and equipment and supervision to include the following work:
1. Install sealant at sheet metal flashings.
 2. Install sealant at designated architectural precast concrete panel joints.
 3. Install sealant at other areas as shown on the Drawings.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 07110 – Exterior Parge Repair
B. Section 07140 – Elastomeric Membrane.
C. Section 09900 – Painting

1.3 SUBMITTALS

- A. Submit the following:
1. Manufacturer’s Literature: Materials description, and preparation and installation instructions for each compound, filler, and backer material. Sealant manufacturer’s specific written approval or endorsement of the sealant’s use for project site and all conditions specified.
 2. Samples
 - a. One tube of all required sealants with sealant manufacturer’s specifications and color charts.
 - b. Samples of primer.
 - c. One (1) foot section of each size of bond breaker tape, with copy of manufacturer’s printed information.
 - d. Three weep tubes.
 3. Prior to field mock-up, submit pre-construction field sealant compatibility and adhesion test report from Sealant Manufacturer indicating that all substrates which come in contact with or are in close proximity to the sealants have been tested for compatibility and adhesion with the joint sealant, including liquid water repellent. Wet and dry adhesion tests shall be performed with and without primers. The test reports shall include Sealant Manufacturer’s interpretation of test result relative to material performance, dirt accumulation of sealant and dirt runoff from sealant. The report shall also include manufacturer’s recommendations for primers and substrate preparation needed to obtain durable adhesion.
 4. Warranties: At job completion, supply material and installation warranties for sealants to be provided.

1.4 QUALITY ASSURANCE

- A. Qualifications
1. Contractor: Must have _____ experience in construction and supervision of sealant work. Contractor shall be required to demonstrate this experience with names, dates, and locations of similar projects. The qualifying firm must designate a foreman for the duration of the work with commensurate experience who is approved by the Resident Engineer.
 2. Sealant Manufacturer: Must have a minimum of ten (10) years experience in the manufacturing of the specified sealants.

3. Sealant Installers: Must have experience in sealant work.

B. Except as modified by the drawings and specifications; perform all work in accordance with ASTM standards and sealant manufacturer's recommendations and guidelines.

C. Preconstruction Compatibility and Adhesion Testing: Submit samples of materials that will contact or affect joint sealants, including liquid water repellent, to sealant manufacturers for testing according to manufacturer's standard test method to determine whether priming and other specific joint preparation techniques are required to obtain rapid, optimum adhesion of joint sealants to joint substrates.

D. The Contractor shall consult with the sealant manufacturer, and sealant manufacturer shall perform necessary tests at the site to become familiar with the project and issue written report to the Resident Engineer verifying the following:

1. Compatibility of sealant with all materials in contact with sealant.
2. Determine if priming of all surfaces to receive sealant is required.
3. Review all proposed sealant profiles and approve their use.

1.5 SAMPLE OF WORK

A. Perform the preparation and joint sealant work specified below on representative sample areas of the building selected by Resident Engineer. Sample repair shall include the following areas:

B. The trial repair(s) when approved by the Resident Engineer will become the standard for quality, materials, and workmanship for the duration of the Contract. A successful sample may remain as part of the work.

C. Perform no work on the building until the above sample Work is accepted by the Owner and Resident Engineer.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. All material shall be delivered to the job site in manufacturer's sealed package and stored in an enclosed shelter providing protection from damage and exposure to the elements. Damaged or deteriorated materials shall be removed from the premises.

B. Store, cover, and protect material from the weather in strict compliance with the manufacturer's recommendations. The Owner shall approve the location for storage.

1.7 PROJECT CONDITIONS

A. Compounds shall not be installed below surface and ambient temperatures of 40 degrees F (or below the minimum installation temperature recommended by the Manufacturer, whichever is higher), unless specifically approved by the Resident Engineer.

PART 2 PRODUCTS

2.1 SEALANT

- A. Acceptable sealants:
1. Volcum116 by Tremco.
 2. "NP-1" by Sonneborn.
 3. "Sikaflex 1A" by Sika.

- B. The Resident Engineer shall select the sealant color based upon Contractor's sample test installation on the building.
 1. Custom color(s) to match the approved pointing mortar will be required.
 2. Different colors may be required at different places in the project.
- C. Preparatory treatment, bond breaker tape, and primer at sealant contact surfaces shall be as recommended by sealant manufacturers.

2.2 ACCESSORIES

- A. Provide other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer, based on testing and field experience.
- B. Weeps shall be made of ultraviolet resistant material.

PART 3 EXECUTION

3.1 GENERAL

- A. Protect work in progress from weather damage.
- B. Prevent sealant from staining existing and new materials in and adjacent to area of work.

3.2 PREPARATION

- A. Examine all surfaces to receive the parts of the Work specified herein. All surfaces must be clean, dry, and sound. At all times, follow the manufacturer's recommendations. Application or installation of the material constitutes acceptance of the surface of the substrate.
- B. All surfaces to receive sealants shall be clean, dry, free of loose materials, dirt, dust, oil, and other contaminants. Grind substrate as required to remove all residues from existing sealant, as required.
- C. Prime all substrates in accordance with the instructions of the manufacturer.

3.3 INSTALLATION

- A. Install all materials in accordance with the manufacturer's printed instructions. Unless otherwise directed, conform with the following:
 1. Do not apply materials if precipitation appears imminent.
 2. Confine materials to areas specified. Use masking tape to prevent staining of adjoining surfaces or spillage and migration of sealants out of the joints.
 3. Install bond breaker tape and backer rods where shown on the Drawings and in locations and of the type recommended by the sealant manufacturer to prevent bond of sealant to surfaces where such bond might impair the performance of the sealant.
 4. Mix and place sealant in joints according to sealant manufacturer's recommendations.
 5. Compress sealant in joints to a concave profile.
 6. Remove excess compound and clean adjoining surfaces immediately after application, using solvents or cleaners recommended by sealant manufacturer.
 7. Cure sealants in accordance with manufacturer's instructions.

3.4 INSPECTION

- A. Allow Resident Engineer to make random removals of completed sealant application for inspection.
- B. Replace sealant removed for inspection at no additional cost to Owner.

3.5 CLEAN-UP

- A. Remove waste materials, debris, and rubbish from site at the end of each working day.
- B. Collect existing sealant removed from building and site and properly dispose of at the end of each working day.
- C. Upon completion of Work, remove all debris and construction materials from site. Leave site in clean condition.

END OF SECTION

SECTION 09110

NON-LOAD BEARING METAL STUDS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Formed metal stud framing at interior partitions.
 - 2. Framing accessories.
- B. Related Sections:
 - 1. Section 01340 - Submittals
 - 2. Section 09210 - Gypsum Plaster

1.2 SUBMITTALS

- A. Product Data: Submit detailed technical information describing standard framing member materials and finish, product criteria, load charts, limitations, and accessories for each distinct product specified in this section.

1.3 QUALITY ASSURANCE

- A. Perform work in conformance with GA 203 and ASTM C754.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products as required to prevent damage or deterioration. Comply with manufacturer's recommendations, requirements of referenced standard.

PART 2 PRODUCTS

2.1 STUD FRAMING MATERIALS

- A. Studs: ASTM A446, Grade A minimum yield 33 ksi, hot-dip galvanized or ASTM A591, Grade A minimum yield 33ksi electro galvanized sheet steel, DW Type, punched web, 20 gage thick, sizes required to conform to details and scheduled wall thicknesses. ICBO approval number required.
- B. ASTM A570 Formed Sheet Steel; channel shaped; same width as studs, tight fit; 20 gage thick, solid web, long leg at ceilings.
- C. Approved Pre-Fabricated Slip Track: SLP-TRK, 20 gage, slotted, by Metal-Lite Inc., Anaheim, CA, or equal.
- D. Fasteners: GA 203 self-drilling, self-tapping screws, type s-12 pan head, ½ inch long.
- E. Stiffeners: 3/4 inch, .3 lb per lineal foot, cold or hot rolled channel, (16 gage).

- F. Tie Wire: Minimum 16 gage, galvanized, annealed low carbon steel.
- G. Fire Rated Sealant at Fire-Rated Walls: Conform to Section 07275.

2.2 FABRICATION

- A. Fabricate assemblies to sizes and profiles required; with framing members fitted, reinforced and braced to suit design requirements..

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that conditions are ready to receive work.
- B. Verify field measurements are as shown on Drawings.
- C. Verify that rough-in utilities are in proper locations.
- D. Beginning of installation means installer accepts existing conditions.

3.2 ERECTION

- A. Align and fasten top and bottom runners as indicated on the drawings or maximum 32 inches on center.
- B. Fit runners under and above openings; secure intermediate studs at spacing of wall studs.
- C. Install studs vertically at 16 inches on center. Studs where ceramic tile is applied on one or both sides higher than 36 inches: 12 inch spacing required.
- D. Connect studs to tracks using one fastener at each flange.
- E. Stud splicing not permissible.
- F. Connect corners using three studs.
- G. Brace stud framing and make rigid.
- H. Provide supports and attachments for the work.
- I. Install anchors and blocking for electrical and mechanical work to be placed in or behind stud framing.
- J. Align stud web openings.
- K. Install 3/4 inch furring channel stiffeners within 24 inches of top and bottom runners and one stiffener at mid height of 8 feet high walls. At higher walls, install stiffeners spaced

maximum 48 inches on centers. Tie stiffeners to studs with specified wire ties and laps.

- L. In areas where a finish material occurs on one side of wall only, provide bridging or bracing. Two systems permitted:
 - 1. Install 3/4 inch x 16 gage continuous brace through stud punch-outs, fasten to studs with angle clips welded or screw fastened, spaced as scheduled below.
 - 2. Install 1-1/4 inch x 16 gage strap, 3/4 inch x 16 gage cold-rolled channel or 2-1/2 inch 20 gage stud continuous across unrestrained edge of studs, screw fasten or weld to each stud, and connected to one blocking member screw fastened or welded to adjacent studs.

- M. Bracing Schedule:

<u>Stud Size</u>	<u>Bracing Spacing</u>
2-1/2 inch	2'-6"
3-5/8 inch	4'-0"
6 inch	6'-0"

- N. Refer to drawings for indication of partitions extending to ceiling only and for partitions extending through ceiling to structure above. Maintain clearance under structural building members to avoid deflection transfer to studs.
- O. Verify installation of insulation in multiple stud spaces made inaccessible after stud framing erection.

3.3 TOLERANCES

- A. Maximum Variation From True Position: 1/4 inch.
- B. Maximum Variation of any Member from Plane: 1/4 inch.

END OF SECTION

SECTION 09210

GYPSUM PLASTER – INTERIOR SURFACES

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Gypsum plaster.
 - 2. Metal lath.
 - 3. Trim and accessories.
- B. Related Sections:
 - 1. Non-Load Bearing Metal Studs: Section 09110
 - 2. Painting: Section 09900

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for systems specified, demonstrating compliance with requirements.
- B. Samples:
 - 1. Plaster finish: Submit two 24-inch-square samples of each required plaster finish, mounted on plywood or hardboard.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Provide installation by a company specializing in historical work similar to that required on this project and documented experience on historical building with similar plaster finishes.
- B. Mock-ups: Construct mock-ups at locations designated by the Resident Engineer. Include typical edge details, control joints, and similar features. Approved mock-ups will establish the acceptable limits of variation in texture, pattern, color, and workmanship.
 - 1. Mock-up construction may be incorporated into the final work at the contractor's option.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in original and unopened packaging, with brand names and manufacturer's labels intact and legible.
- B. Store materials in dry location, fully protected from weather and direct exposure to sunlight.
- C. Store and handle trim accessories to prevent bending, sagging, distortion, or other damage.

1.5 PROJECT CONDITIONS

- A. Environmental Requirements: Comply with provisions of ASTM C 842 and recommendations of gypsum plaster manufacturer for environmental conditions before, during, and after application of plaster.
- B. Warm Weather Requirements:
 - 1. Protect plaster against uneven and excessive evaporation of moisture and from strong flows of dry air, both natural and artificial.
 - 2. Apply and cure plaster as required by climatic and job conditions to prevent drying out during curing period.
 - a. Prevent premature drying of plaster, using any of the following: Moist curing, barriers to deflect sunlight and wind, or proprietary curing compounds.
- C. Ventilation: Provide natural or mechanical ventilation of interior spaces to remove excessive moisture from the time plastering is started until it is completely dry and cured.

PART 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Gypsum Plaster Materials: Products of United States Gypsum Corporation, Chicago, IL, are the standard of quality required and specified herein. Similar products may be submitted for approval.

2.2 METAL LATH

- A. General: Comply with ML/SFA "Guide Specifications for Metal Lathing and Furring" for type and style of metal lath to suit application and support spacing.
- B. Expanded Metal Lath: ASTM C 847.
 - 1. Diamond mesh lath at walls: 3.4 pounds per square yard nominal weight.
 - a. Galvanized.
 - 3. Ribbed Lath (high rib) at ceilings: 3.4 pounds per square yard nominal weight.
 - a. Galvanized
- C. Fasteners/Attachment Devices: Galvanized steel; comply with ML/SFA "Guide Specifications for Metal Lathing and Furring."

2.3 GYPSUM PLASTER MATERIALS

- A. Provide either neat or ready-mixed materials at Installer's option.
- B. Base Coat Materials:
 - 1. USG Hardwall
 - 2. Sand aggregate: ASTM C 35. Aggregate size appropriate to achieve finish to match existing.
- C. Finish Coat Plaster Materials:

1. USG Hardwall
2. Finishing hydrated lime: ASTM C 206, Type N or S.
3. Sand aggregate: ASTM C 35.

2.4 TRIM AND ACCESSORIES

- A. Metal Trim: Fabricate from ASTM B 69 zinc alloy.
 1. Size and shapes: Provide manufacturer's standard shapes and custom shapes required to match profiles existing at site. Furnish trim in 8-foot or 10-foot lengths.
- B. Metal Lath Accessories:
 1. Strip lath: Diamond mesh expanded metal; 4 inches wide.

2.5 MISCELLANEOUS MATERIALS

- A. General: Provide miscellaneous materials as produced or recommended by plaster manufacturer.
- B. Bonding Agent: "Plaster Weld", by Larson Industries, or equal.
- C. Joint Compound: DURABOND joint Compound with ACRI-ADD acrylic mix fortifier.
- D. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Resident Engineer.

2.6 PLASTER MIXES

- A. General: Measure proportions accurately by volume. Use of shovels for measuring is not allowed. Mix plaster using mechanical mixers unless hand mixing is specifically approved by the Resident Engineer. Match the texture of the adjacent wall, to be approved by the Resident Engineer.
- B. Gypsum Plaster: Comply with ASTM C 842 for proportions for each substrate and finish type required.
 1. System 1: Three-coat work over metal lath:
 - a. Scratch coat: Gypsum neat plaster with job-mixed sand.
 - b. Brown coat: Gypsum neat plaster with job-mixed sand.
 - c. Finish coat: Gypsum gaging plaster; 1 part plaster, 1 to 2 parts lime, maximum 8 parts sand aggregate appropriate to match existing plaster as described in item A above.
 2. System 2: Finish Coat over prepared existing plaster surface:
 - a. Bonding agent
 - b. Finish coat: Gypsum gaging plaster; 1 part plaster, 1 to 2 parts lime, maximum 8 parts sand aggregate appropriate to match existing plaster as described in item A above.

PART 3 EXECUTION

3.1 PREPARATION

California Tower Seismic Upgrades

Gypsum Plaster
09210-3

- A. Inspection: Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to the proper and timely completion of the Work. Do not proceed until unsatisfactory conditions have been corrected.
- B. Protection: Coordinate work and provide protective coverings to protect adjacent surfaces from soiling and damage.

3.2 INSTALLATION OF METAL LATHING

- A. Installation Standard: Install lathing in accordance with ASTM C 841.
- B. Provide supplementary blocking, bracing, and framing as required to support edges of lath and behind fixtures, hardware, and accessories shown to be attached to plaster construction.
- C. Install lath with long edges perpendicular to supports.
- D. Isolation: Make provisions for movement of building structure to prevent transfer of structural load or movement to the lath and plaster work.
 - 1. Do not bridge control joints or expansion joints with framing components or lath.

3.3 INSTALLATION OF PLASTERING ACCESSORIES AND TRIM

- A. General: Comply with referenced installation standards for provision and location of plaster trim and accessories.
 - 1. Miter or cope trim and accessories at corners.
 - 2. Install trim and accessories in proper alignment and with tight joints between pieces.
 - 3. Strip lath: At joints in lath.

3.4 PLASTER APPLICATION

- A. General: Comply with gypsum plaster manufacturer's recommendations and provisions of ASTM C 842.
 - 1. Coordinate plaster application with installation of adjacent work to avoid soiling and damage of plaster and other work.
- B. Tolerances: Deviation from plane not to exceed 1/8 inch in 10 feet as measured with a straightedge at any location on surface.
- C. Apply and work finish coat to match approved mock-up for each application.
- D. Provide 3-coat plaster installation at new walls and ceilings and areas scheduled for replastering. Finish texture shall match approved sample panels.

- E. Repair of Existing Plaster:
1. General: Scarify existing plaster surfaces to provide an even, uniform subsurface for the new plaster finish coat. Do not damage existing wood trim, concrete base, or adjacent surfaces to remain.
 2. Cracks to 1/4" wide: Widen and clean out crack with a sharp crack widening tool. Apply fiberglass mesh tape pressed into the patching material. After the first application of quick-setting joint compound dries, apply a second coat to cover the tape and feather the edges. When dry, apply a final coat, sand lightly, and clean. Trowel to match adjacent plastered surfaces.
 3. Moisture Damage: Remove all unsound plaster and a minimum of 6 inches to each side of the damaged area, to the existing metal lath. Remove all debris. Install expanded metal lath over the existing lath, if damaged, within the patch area. Coat edges of existing plaster with plaster bonding agent. Apply scratch and brown coats to match thickness of existing plaster, installing mesh tape at edges of the patch. Apply finish/skim coat.
 4. Out of Plane Cracks: Remove all unsound plaster and a minimum of 6 inches to each side of the damaged area, to the existing metal lath. Remove all debris. Install expanded metal lath over the existing lath, if damaged, within the patch area. Coat edges of existing plaster with plaster bonding agent. Apply scratch and brown coats to match thickness of existing plaster, installing mesh tape at edges of the patch. Apply finish/skim coat.
 5. Large Patches: Remove all unsound plaster and a minimum of 6 inches to each side of the damaged area, to the existing lath. Remove all debris. Install expanded metal lath over the existing lath, if damaged, within the patch area. Coat edges of existing plaster with plaster bonding agent. Apply scratch and brown coats to match thickness of existing plaster, installing mesh tape at edges of the patch. Apply finish/skim coat.
 6. Finish/Skim Coat: Apply plaster bonding agent to all plaster surfaces to create a uniform bond to the existing and patched areas. Apply finish coat plaster approximately 1/8" thick. Work the finish coat flat and uniform with rubber trowel. Finish texture shall match approved sample panels.

3.5 ADJUSTING

- A. Corrections: Cut out and replace defective areas so that repairs match acceptable work in all respects. Defective work includes, but is not limited to, areas showing cracks, dents, crazing, blisters, and other surface imperfections, as well as areas where bond to substrate has failed.

3.6 CLEANING

- A. Removal: Remove and discard temporary protection after plaster work in each area has been completed. Carefully remove plaster from other exposed surfaces, leaving them in undamaged condition; dispose of packaging materials and plaster debris.

END OF SECTION

SECTION 09900

PAINTING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Surface preparation.
 - 2. Painting and finishing of exposed exterior items and surfaces.
 - 3. Painting and finishing of exposed interior items and surfaces.
- B. Section does not include:
 - 1. Factory finishing of manufactured products.
 - 2. Hazardous materials abatement.

1.2 DEFINITIONS

- A. DFM (dry film mils): Thickness, measured in mils, of a coat of paint in the cured state.
- B. VOC Volatile Organic Compounds

1.3 SUBMITTALS

- A. Product Data: Manufacturer's technical data sheets for each coating.
 - 1. Contractor shall confirm submittal complies with local VOC limits. Changes of paint products following the submittal shall be made without additional cost to Owner.
 - 2. Application instructions including mixing, surface preparation, compatible primers and topcoats, recommended wet and dry film thickness, recommended application methods.
 - 3. Material analysis including vehicle type and percentage by weight and by volume of vehicle, resin, and pigment.
- B. Color and Texture Samples:
 - 1. Provide for each coating system, color, and texture and applied to representative substrate samples.
 - a. Prepare samples to show bare, prepared surface and each successive coat.
 - b. Label each sample with coating name and color.
 - 2. Miscellaneous substrates: 12-by-12-inch hardboard.
 - 3. Plaster & Gypsum Board: 12-inch square samples.
 - 4. Painted Wood: 8-inch square samples for surfaces; 8-inch long samples for trim.
 - 5. Metal 5-by-7 inch samples.

1.4 QUALITY ASSURANCE

- A. Materials: All coating materials required by this section shall be provided by a single manufacturer, unless otherwise required or approved. All paints to be mixed and applied in strict accordance with manufacturers printed instructions.
- B. Codes: The Painting Contractor shall comply with all applicable laws, codes and requirements.
- C. Applicator: Firm with _____ experience in painting work similar in scope to work of this project. Maintain throughout duration of the work a crew of painters who are fully qualified to satisfy requirements of the specifications.
- D. Mock-up: Before proceeding with work of this section, finish one complete space or item of each color scheme required, showing selected colors, finish texture, materials, and workmanship for review and approval by Resident Engineer and Architect. Contractor shall coordinate mock-up location with Resident Engineer.
- E. Warranty: No paint will be allowed to be applied without a written (3) three-year workmanship warranty. Sherwin Williams' SuperPaint (or approved equal) shall have a 20 year limited materials warranty. Paint manufacturer shall inspect and test as necessary (e.g. pH and moisture levels) to confirm the substrate is acceptable for application of paint products. Contractor to provide written confirmation from paint manufacturer's representative with test results and warranty to Owner.
- F. Contractor shall test surfaces for pH level to confirm surfaces have been adequately neutralized following the use of any paint removal products. Commencement of painting implies the contractor has tested and accepts the surface conditions. Contractor to provide a copy of test results.
- G. Contractor to confirm moisture levels of surface complies with paint manufacturers standards prior to application of paint products. Contractor to provide a copy of results of moisture testing. Surfaces subject to moisture exposure are to be tested with a Moisture Meter prior to paint system applications. Acceptable moisture readings are less than 14 percent (14%).
- H. Contractor to provide data from an independent testing laboratory to Owner confirming required dry film thickness and tested dry film thickness coverage.
- I. Provide continuous dust control to protect surrounding areas.
- J. Contractor shall comply with all ordinances relating to removal and disposal of lead-based paint dust during the surface preparation process. Personnel shall be certified as required (e.g. respirator certified) and the project site shall be protected from debris containing lead-based material (e.g. covering the ground at the perimeter of the building). Contractor shall pay all fees related to disposal of lead-based material.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials in manufacturer's original containers bearing coating name and

color, material composition data, date of manufacture, legal notices if applicable, and mixing, thinning, and application instructions.

- B. Storage:
1. Store materials in an orderly fashion and in clean, well-closed containers with labels intact.
 2. Maintain above 40 degrees F. Do not allow materials to freeze.

1.6 PROJECT CONDITIONS

- A. Apply coatings only under the following environmental conditions:
1. Air and surface temperatures are between 50 and 100 degrees F, unless otherwise recommended by manufacturer.
 2. Surface temperature is at least 5 degrees F above dew point.
 3. Relative humidity is less than 85 percent.
- B. Do not apply coatings during inclement weather.
1. Provide temporary lighting where necessary to achieve a well-lit surface with a level of at least 80 foot candles measured mid-height.
 2. Provide continuous ventilation and heating to prevent accumulation of hazardous fumes and to maintain surface and ambient temperatures above 45 degrees F for 24 hours before, during, and for 48 hours after application of finishes, or longer if required to obtain full cure as indicated by manufacturer's instructions.
 3. Do not paint when rain is expected within 24 hours.

1.7 COORDINATION

- A. General: Perform work in proper sequence with work of other trades to avoid damage to finished work.
- B. Coordination: Where special coatings will be applied over shop coatings specified in other sections, coordinate work of such other sections to ensure that only approved, compatible primers are applied.
1. Furnish the Resident Engineer with product data on both coatings demonstrating coating compatibility.
 2. Coordinate with the Owner before using noisy equipment such as compressors, lifts, etc.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. The brand-name products listed in the schedule at the end of this section and made by the following manufacturers are the basis of the contract documents:
1. Sherwin-Williams Company.
- B. Products made by one of the following manufacturers will be considered in accordance with standard substitution procedures:
1. Frazee Paint.
 2. I.C.I. Dulux Paints
 3. Dunn Edwards

2.2 PRODUCTS

- A. Colors:
 - 1. For multi-coat systems, apply each coat (including primers) using a successively darker tint or shade, unless approved otherwise.
 - 2. Top coat colors: As tested to match adjacent colors.
- B. Lead Content:
 - 1. Not more than 0.06 percent lead by weight (calculated as lead metal) in the total nonvolatile content of the paint or the equivalent measure of lead in the dried film.
 - 2. Exception: Where permitted by applicable regulations.
- C. Wood Fillers:
 - 1. Surface fillers: to fill cracks to 1/16" wide without a backer rod no surface filler thicker than 1/8" may be an elastomeric patching product such as "ConSeal" by Sherwin Williams or equal.

PART 3 EXECUTION

3.1 INSPECTION

- A. Examine surfaces scheduled to receive specified paint systems for conditions that will adversely affect execution, performance or quality of work and which can not be put into acceptable conditions through preparatory work as included in 3.2. Notify the Owner's representative in writing any defects or conditions, which prevent a satisfactory installation.
- B. Prior to commencement of work, examine surfaces scheduled to be finished.
 - 1. Report any unsatisfactory conditions in writing.
 - 2. Do not apply coatings to unsatisfactory substrates.
 - 3. Beginning painting work in an area will be construed as acceptance of surfaces in that area.

3.2 SURFACE PREPARATION

- A. General Preparation
 - 1. Before stripping procedures begin, all surfaces shall be tested and the process and results recorded to provide the least intrusive and damaging methods. Approval of the final method for removing finishes to be approved by the Resident Engineer.
 - 2. Clean and properly neutralize surface in accordance with manufacturer's instructions and as herein specified. Remove dirt, dust, grease, oils, and foreign matter. Prepare surface for proper texture necessary to optimum coating adhesion and intended finished appearance. Plan cleaning, preparation, and coating operations to avoid contamination of freshly coated surfaces.
 - 3. Do not apply coatings to labels that identify equipment, fire-resistance ratings, etc.
 - 4. Remove hardware, cover plates, and similar items before applying coatings.
 - 5. Provide protection for non-removable items not scheduled for coating. After application of coatings, install removed items. Use only skilled workmen for removal and replacement of such items.
 - 6. Protect surfaces not scheduled for coating. Clean, repair, or replace to the satisfaction of the Resident Engineer any surfaces inadvertently spattered or

- coated.
7. High pressure water blasting is not allowed. Medium and low pressure water blasting may be permitted at the discretion of the Resident Engineer. A detergent solution, a medium soft bristle brush, and a garden hose for purposes of rinsing is an approved method involving water.
 8. Use of rotary sanding tools, scraping tools, and wire stripping tools are **STRICTLY PROHIBITED**.
 9. Feather-edge sand all existing paints that remain (if any) so that the edge is no longer evident.

B. Wood:

1. Scrape and remove any sap or pitch deposits from surface and clean with mineral spirits. Seal any knots and pitch pockets with a suitable product recommended by the coating manufacturer. Set nails. Sand rough spots. Remove dirt and dust.
2. After first primer coat has dried, fill holes, cracks, or depressions with a suitable wood filler recommended by the coating manufacturer. Sand filler when dry. Filling with "Bondo" is not allowed. Acceptable fillers are discussed in the products section of this specification.
3. Feather-edge sand all existing paints that remain (if any) so that the edge is no longer evident.
4. Sand surfaces lightly between successive coats. Remove dust. Rotary sanding and scraping tools are not allowed.
5. Reattach loose wood pieces.
6. Notify the Resident Engineer if there are areas that are damaged and not able to accept paint other than repairs.
7. The painting contractor shall anticipate the need to sand all wood surfaces following paint removal procedures to a finish acceptable to the Resident Engineer or Owner.
8. The final result following primer application is a sealed finish without splits, cracks, "alligatoring," open nail holes, rotted openings, open or misaligned joints.
9. All pieces shall be nailed firmly to the substrate prior to the second primer coat. Set nails flush with finish surface with hammer, do not overdrive nails. Wire nails and stapling of trim is not acceptable. Use finish nails on all trim and penetrate subsurface material a minimum of 1".
10. All new wood shall be date stamped in letters minimum 1/4" high noting month and year in an area not exposed to view. The date stamp may include the installer's or craftsman's name as a record of time when the work was installed.

- C. Ferrous Metal:
 1. Clean and prepare surface profile in accordance with the applicable SSPC specifications for hand tool or power tool cleaning.
 2. Intricate fabricated shapes may be pickled in lieu of hand or power tool cleaning.
 3. Before hand or power tool cleaning, remove visible oil, grease, soluble welding residue, and salts by solvent cleaning. After hand or power tool cleaning, re-clean surfaces if necessary.
 4. Before touching up coatings damaged by handling or welding, re-prepare damaged surfaces.

- D. Plaster:
 1. Fill hairline cracks, small holes, and imperfections with latex patching plaster.
 2. Make smooth and flush with adjacent surfaces.
 3. Wash and neutralize high-alkali surfaces. Paint manufacturer shall inspect and test as necessary (e.g. pH and moisture levels) to confirm the substrate is acceptable for application of paint products.

- E. Gypsum Board (drywall):
 1. Fill hairline cracks, small holes, and imperfections with patching compound.
 2. Make smooth and flush with adjacent surfaces.
 3. Fix nail-pops and corner chips.
 4. Wash and neutralize high-alkali surfaces. Paint manufacturer shall inspect and test as necessary (e.g. pH and moisture levels) to confirm the substrate is acceptable for application of paint products.

- F. Mildew and bird droppings:
 1. Remove mildew and bird droppings by scrubbing with solution of trisodium phosphate and bleach.
 2. Rinse with clean water and allow surface to dry.

3.3 MIXING AND THINNING

- A. Remove and discard any skin formed on surface of coatings in containers. Discard any containers where skin comprises 2 percent or more of the remaining material. Do not add thinner except as specifically recommended (not merely permitted) by the coating manufacturer for proper coating application under the circumstances prevailing at the project site when application equipment recommended by the coating manufacturer is employed. Use only the quantities and the types of thinner recommended.

- B. Mix materials using mechanical mixers in accordance with coating manufacturer's printed instructions. Agitate mixed materials during application if recommended by manufacturer.

- C. Combine multi-component paints in quantities needed for use within the manufacturer's recommended pot life at the anticipated application temperatures. Discard remaining mixed material after pot life has expired.

- D. Strain pigmented coatings after mixing except where mechanical application equipment is provided with effective strainers.

- E. Tinting: Except where coating materials cannot be tinted, tint each successive coat of paint

a sufficiently contrasting color to facilitate identification of complete coating coverage.

3.4 APPLICATION

A. General:

1. Apply all coatings in accordance with coating manufacturer's instructions to obtain full, uniform coverage of surfaces to be coated.
2. Employ only application equipment that is clean, properly adjusted, in good working order, and of the type recommended by the coating manufacturer.
3. Apply successive coats after adequate cure of the preceding coat and within the recommended re-coating time.
4. Apply each coat to achieve the dry film thickness per coat recommended by the coating manufacturer. Application rates in excess of those recommended and fewer numbers of coats than specified will not be accepted.
5. Completed coatings shall be free of defects such as runs, sags, variations in color, lap or obvious brush marks, holidays, and skips.
6. Apply coatings according to the schedule at the end of this section and as otherwise indicated. Coat all similar surfaces not specifically mentioned unless specifically exempted.
 - a. Ensure that all surfaces receive a dry film thickness equivalent to those of flat surfaces.
7. Sand gloss coats before applying subsequent coatings.

B. When the color for a feature or area is not indicated in the documents, verify the color with the Resident Engineer prior to applying paint.

C. Apply coatings to match approved mock-ups.

D. Scheduling:

1. Apply first coat of material to properly prepared surfaces without delay.
 - a. Apply successive coats within the time limits recommended by the manufacturer.

3.5 PRIME COATS

A. General:

1. Where first coat shows signs of suction spots or poorly sealed areas, reapply first coat material to adequately seal surface before proceeding with successive coats.
2. Ferrous metals shall be field primed.
3. Re-prepare and retouch damaged prime coats using approved, compatible primer.
4. Back-prime and end-prime all new and reattached woodwork.

B. Primers for Wood and Wood Products:

1. Finish tops, bottoms, edges, and cutouts of wood doors as scheduled for exterior face.

3.6 FINISH COATS

- A. Number of Coats and Minimum Coating Thickness:
1. Apply not less than the number of coats indicated.
 2. Apply each coat to achieve not less than the dry film thicknesses recommended by paint manufacturer per coat.
 3. Apply additional coats at no additional cost to the owner when necessary to achieve complete hiding, uniform texture, or uniform sheen and appearance.

3.7 CLEANING AND PROTECTION

- A. Cleaning:
1. Clean work area on a daily basis; dispose of spent materials and empty containers. If requested, turn over the Resident Engineer all empty coatings containers used during the course of each day.
 2. Remove all trace of coatings from adjacent surfaces not scheduled to be coated. Remove by appropriate methods that do not damage surfaces.
- B. Protection:
1. Protect work against damage until fully cured. Provide signs identifying wet surfaces until surfaces are adequately cured.
 2. Shortly before final completion of the project, examine surfaces for damage to coatings and restore coatings to new, undamaged condition.
 3. Touch-up of minor damage will be acceptable where result is not visibly different from surrounding surfaces. Where result is different either in color, sheen, or texture, re-coat entire surface.
 4. Where touch-ups occur, the repainted area must be extended to the edges of each surface. For example: On a wall, the touch-up area would run to the nearest corner or trim piece.

3.8 SCHEDULE OF COATINGS

(The products listed below are by Sherwin Williams, unless noted otherwise.)

FOR EXTERIOR SURFACES

- A. Cement Plaster (Parge):
1. Full Prime: Loxon Acrylic Masonry Primer A24W300 @ 3.2 mils DFT
 2. Intermediate coat: Same as top coat.
 3. Top coat: Super Paint Flat A85 Series @ 1.3 mils DFT per coat
- B. Concrete Masonry Units (CMU):
1. Full Prime: Loxon Block Surfacer A24W200 @ 8.0 mils DFT
 2. Intermediate coat: Same as top coat.
 3. Top coat: Super Paint Flat A85 Series @ 1.3 mils DFT per coat
- C. Painted Wood:
1. Bottom Two coats: A-100 (Alkyd) Oil Wood Primer Y24W20. Min. Dry film thickness 2.3 mils
 2. Top Two coats: Super Paint SemiGloss A84 Series @ 1.4 mils DFT per coat.

- D. Ferrous Metal/ Wrought Iron:
 - 1. Kem Bond HS min. DFT 3.0 mils
 - 2. Middle coat: same as top coat
 - 3. Top coat: Industrial Enamel B54WZ @ 3.0 mils DFT per coat.

- E. Galvanized Metal:
 - 1. Full Prime: Galvite HS
 - 2. Middle Coat: Same as top coat
 - 3. Top Coat: Super Paint SemiGloss A84 Series @ 1.4 mils DFT per coat.

FOR INTERIOR SURFACES

- A. Gypsum Board & Plaster:
 - 1. Full Prime: PrepRite 200 Latex Primer @ 1.1 mils DFT
 - 2. Intermediate coat: Same as top coat.
 - 3. Top coat: ProMar 200 Interior Latex Flat @ 1.4 mils DFT per coat

- B. Wood:
 - 1. Bottom Two coats: PrepRite Wall & Wood Primer Min. Dry film thickness 1.1 mils.
 - 2. Top Two coats: ProClassic SemiGloss (B31) @ 1.4 mils DFT per coat.

- C. Ferrous Metal/ Wrought Iron:
 - 1. Kem Bond HS min. DFT 3.0 mils.
 - 2. Middle coat: same as top coat.
 - 3. Top coat: Industrial Enamel (B54WZ) @ 3.0 mils DFT per coat.

- D. Galvanized Metal & Aluminum:
 - 1. Full Prime: PrepRite Classic Latex Primer (B28W101) min. DFT 1.4 mils.
 - 2. Middle Coat: Same as top coat.
 - 3. Top Coat: Industrial Enamel (B54WZ) @ 2.4 mils DFT per coat.

END OF SECTION

SUPPLEMENTARY SPECIAL PROVISIONS
APPENDICES

APPENDIX A
NOTICE OF EXEMPTION

NOTICE OF EXEMPTION

(Check one or both)

TO: X RECORDER/COUNTY CLERK
P.O. BOX 1750, MS A-33
1600 PACIFIC HWY, ROOM 260
SAN DIEGO, CA 92101-2422

FROM: CITY OF SAN DIEGO
DEVELOPMENT SERVICES DEPARTMENT
1222 FIRST AVENUE, MS 501
SAN DIEGO, CA 92101

 OFFICE OF PLANNING AND RESEARCH
1400 TENTH STREET, ROOM 121
SACRAMENTO, CA 95814

PROJECT No.: 177043 & 203569

PROJECT TITLE: **CALIFORNIA TOWER SEISMIC RETROFIT**

PROJECT LOCATION-SPECIFIC: 1350 El Prado (Balboa Park), San Diego CA 92101

PROJECT LOCATION-CITY/COUNTY: San Diego/San Diego

DESCRIPTION OF NATURE, PURPOSE, AND BENEFICIARIES OF PROJECT: The California Tower, attached to the California Building (the Museum of Man) in Balboa Park, is part of the El Prado National Historical Landmark District. The existing structure was designed in 1912 and partially retrofitted in 1964. This project will modify or replace the 1964 steel frame segments located within the upper semi-open tiers; vertically embed tensioned reinforcing bars within the cast-stone ornamentation blocks at the top two tiers (with no exterior exposure); use shotcrete for enhancement inside of the lower portion of the tower from the base to the sixth tier; remove the existing non-historic door on the south wall of the tower facing El Prado; remove non-historic electrical equipment in the base of the tower; and add several reinforcing “drag” bars to be embedded into the existing slab at both the East and South balconies. Additionally, two interior murals at the east transept will be removed during the retrofit process and appropriately restored and replaced upon completion. General seismic enhancement of the California Building is not included in the scope of this project, but the structural enhancement of the tower has been designed to be compatible with future seismic upgrades to the California Building. The project was reviewed by the Historic Resources Board staff and determined to be consistent with the Secretary of the Interior’s Standards for the Treatment of Historic Properties.

NAME OF PUBLIC AGENCY APPROVING PROJECT: City of San Diego

NAME OF PERSON OR AGENCY CARRYING OUT PROJECT: City of San Diego Public Works Department
George Freiha, Project Manager
525 B Street, MS 908A, San Diego, CA, 92101
(619) 533-7449

EXEMPT STATUS: (CHECK ONE)

- MINISTERIAL (SEC. 21080(b)(1); 15268);
- DECLARED EMERGENCY (SEC. 21080(b)(3); 15269(a));
- EMERGENCY PROJECT (SEC. 21080(b)(4); 15269 (b)(c))
- CATEGORICAL EXEMPTION: §15301(a) "Existing Facilities" and §15331 "Historical Resources Restoration/Rehabilitation"

REASONS WHY PROJECT IS EXEMPT: The City of San Diego conducted an environmental review of the project and determined that this project meets the criteria set forth in the State CEQA Guidelines §15301(a) "Existing Facilities" which allows for repair and maintenance of existing structures involving no expansion of use; and §15331 "Historical Resources Restoration/Rehabilitation" which allows for limited maintenance and repair of historical resources in a manner consistent with the Secretary of the Interior’s Standards for the Treatment of Historic Properties. This project does not trigger any of the exceptions to categorical exemptions found in State CEQA Guideline § 15300.2. These minor alterations would not adversely affect the special character or special historical value of Balboa Park or the El Prado National Historical Landmark District.

LEAD AGENCY CONTACT PERSON: Myra Herrmann

TELEPHONE: (619) 446-5372

IF FILED BY APPLICANT:

- 1. ATTACH CERTIFIED DOCUMENT OF EXEMPTION FINDING.
- 2. HAS A NOTICE OF EXEMPTION BEEN FILED BY THE PUBLIC AGENCY APPROVING THE PROJECT?
 YES NO

IT IS HEREBY CERTIFIED THAT THE CITY OF SAN DIEGO HAS DETERMINED THE ABOVE ACTIVITY TO BE EXEMPT FROM CEQA



SENIOR PLANNER

June 24, 2009

SIGNATURE/TITLE

DATE

CHECK ONE:

- SIGNED BY LEAD AGENCY
- SIGNED BY APPLICANT

DATE RECEIVED FOR FILING WITH COUNTY CLERK OR OPR:

APPENDIX B
FIRE HYDRANT METER PROGRAM

CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS	NUMBER DI 55.27	DEPARTMENT Water Department
SUBJECT FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)	PAGE 1 OF 10	EFFECTIVE DATE October 15, 2002
	SUPERSEDES DI 55.27	DATED April 21, 2000

1. **PURPOSE**

1.1 To establish a Departmental policy and procedure for issuance, proper usage and charges for fire hydrant meters.

2. **AUTHORITY**

2.1 All authorities and references shall be current versions and revisions.

2.2 San Diego Municipal Code (NC) Chapter VI, Article 7, Sections 67.14 and 67.15

2.3 Code of Federal Regulations, Safe Drinking Water Act of 1986

2.4 California Code of Regulations, Titles 17 and 22

2.5 California State Penal Code, Section 498B.0

2.6 State of California Water Code, Section 110, 500-6, and 520-23

2.7 Water Department Director

Reference

2.8 State of California Guidance Manual for Cross Connection Programs

2.9 American Water Works Association Manual M-14, Recommended Practice for Backflow Prevention

2.10 American Water Works Association Standards for Water Meters

2.11 U.S.C. Foundation for Cross Connection Control and Hydraulic Research Manual

3. **DEFINITIONS**

3.1 **Fire Hydrant Meter:** A portable water meter which is connected to a fire hydrant for the purpose of temporary use. (These meters are sometimes referred to as Construction Meters.)

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- 3.2 **Temporary Water Use:** Water provided to the customer for no longer than twelve (12) months.
- 3.3 **Backflow Preventor:** A Reduced Pressure Principal Assembly connected to the outlet side of a Fire Hydrant Meter.

4. **POLICY**

- 4.1 The Water Department shall collect a deposit from every customer requiring a fire hydrant meter and appurtenances prior to providing the meter and appurtenances (see Section 7.1 regarding the Fees and Deposit Schedule). The deposit is refundable upon the termination of use and return of equipment and appurtenances in good working condition.
- 4.2 Fire hydrant meters will have a 2 ½" swivel connection between the meter and fire hydrant. The meter shall not be connected to the 4" port on the hydrant. All Fire Hydrant Meters issued shall have a Reduced Pressure Principle Assembly (RP) as part of the installation. Spanner wrenches are the only tool allowed to turn on water at the fire hydrant.
- 4.3 The use of private hydrant meters on City hydrants is prohibited, with exceptions as noted below. All private fire hydrant meters are to be phased out of the City of San Diego. All customers who wish to continue to use their own fire hydrant meters must adhere to the following conditions:
 - a. Meters shall meet all City specifications and American Water Works Association (AWWA) standards.
 - b. Customers currently using private fire hydrant meters in the City of San Diego water system will be allowed to continue using the meter under the following conditions:
 - 1. The customer must submit a current certificate of accuracy and calibration results for private meters and private backflows annually to the City of San Diego, Water Department, Meter Shop.

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2. The meter must be properly identifiable with a clearly labeled serial number on the body of the fire hydrant meter. The serial number shall be plainly stamped on the register lid and the main casing. Serial numbers shall be visible from the top of the meter casing and the numbers shall be stamped on the top of the inlet casing flange.
3. All meters shall be locked to the fire hydrant by the Water Department, Meter Section (see Section 4.7).
4. All meters shall be read by the Water Department, Meter Section (see Section 4.7).
5. All meters shall be relocated by the Water Department, Meter Section (see Section 4.7).
6. These meters shall be tested on the anniversary of the original test date and proof of testing will be submitted to the Water Department, Meter Shop, on a yearly basis. If not tested, the meter will not be allowed for use in the City of San Diego.
7. All private fire hydrant meters shall have backflow devices attached when installed.
8. The customer must maintain and repair their own private meters and private backflows.
9. The customer must provide current test and calibration results to the Water Department, Meter Shop after any repairs.
10. When private meters are damaged beyond repair, these private meters will be replaced by City owned fire hydrant meters.

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11. When a private meter malfunctions, the customer will be notified and the meter will be removed by the City and returned to the customer for repairs. Testing and calibration results shall be given to the City prior to any re-installation.
 12. The register shall be hermetically sealed straight reading and shall be readable from the inlet side. Registration shall be in hundred cubic feet.
 13. The outlet shall have a 2 ½ “National Standards Tested (NST) fire hydrant male coupling.
 14. Private fire hydrant meters shall not be transferable from one contracting company to another (i.e. if a company goes out of business or is bought out by another company).
- 4.4 All fire hydrant meters and appurtenances shall be installed, relocated and removed by the City of San Diego, Water Department. All City owned fire hydrant meters and appurtenances shall be maintained by the City of San Diego, Water Department, Meter Services.
- 4.5 If any fire hydrant meter is used in violation of this Department Instruction, the violation will be reported to the Code Compliance Section for investigation and appropriate action. Any customer using a fire hydrant meter in violation of the requirements set forth above is subject to fines or penalties pursuant to the Municipal Code, Section 67.15 and Section 67.37.
- 4.6 Conditions and Processes for Issuance of a Fire Hydrant Meter**
- Process for Issuance
- a. Fire hydrant meters shall only be used for the following purposes:
 1. Temporary irrigation purposes not to exceed one year.

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2. Construction and maintenance related activities (see Tab 2).
 - b. No customer inside or outside the boundaries of the City of San Diego Water Department shall resell any portion of the water delivered through a fire hydrant by the City of San Diego Water Department.
 - c. The City of San Diego allows for the issuance of a temporary fire hydrant meter for a period not to exceed 12 months (365 days). An extension can only be granted in writing from the Water Department Director for up to 90 additional days. A written request for an extension by the consumer must be submitted at least 30 days prior to the 12 month period ending. No extension shall be granted to any customer with a delinquent account with the Water Department. No further extensions shall be granted.
 - d. Any customer requesting the issuance of a fire hydrant meter shall file an application with the Meter Section. The customer must complete a "Fire Hydrant Meter Application" (Tab 1) which includes the name of the company, the party responsible for payment, Social Security number and/or California ID, requested location of the meter (a detailed map signifying an exact location), local contact person, local phone number, a contractor's license (or a business license), description of specific water use, duration of use at the site and full name and address of the person responsible for payment.
 - e. At the time of the application the customer will pay their fees according to the schedule set forth in the Rate Book of Fees and Charges, located in the City Clerk's Office. All fees must be paid by check, money order or cashiers check, made payable to the City Treasurer. Cash will not be accepted.
 - f. No fire hydrant meters shall be furnished or relocated for any customer with a delinquent account with the Water Department.
 - g. After the fees have been paid and an account has been created, the

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meter shall be installed within 48 hours (by the second business day). For an additional fee, at overtime rates, meters can be installed within 24 hours (within one business day).

4.7 Relocation of Existing Fire Hydrant Meters

- a. The customer shall call the Fire Hydrant Meter Hotline (herein referred to as “Hotline”), a minimum of 24 hours in advance, to request the relocation of a meter. A fee will be charged to the existing account, which must be current before a work order is generated for the meter’s relocation.
- b. The customer will supply in writing the address where the meter is to be relocated (map page, cross street, etc). The customer must update the original Fire Hydrant Meter Application with any changes as it applies to the new location.
- c. Fire hydrant meters shall be read on a monthly basis. While fire hydrant meters and backflow devices are in service, commodity, base fee and damage charges, if applicable, will be billed to the customer on a monthly basis. If the account becomes delinquent, the meter will be removed.

4.8 Disconnection of Fire Hydrant Meter

- a. After ten (10) months a “Notice of Discontinuation of Service” (Tab 3) will be issued to the site and the address of record to notify the customer of the date of discontinuance of service. An extension can only be granted in writing from the Water Department Director for up to 90 additional days (as stated in Section 4.6C) and a copy of the extension shall be forwarded to the Meter Shop Supervisor. If an extension has not been approved, the meter will be removed after twelve (12) months of use.
- b. Upon completion of the project the customer will notify the Meter Services office via the Hotline to request the removal of the fire hydrant meter and appurtenances. A work order will be generated

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for removal of the meter.

- c. Meter Section staff will remove the meter and backflow prevention assembly and return it to the Meter Shop. Once returned to the Meter Shop the meter and backflow will be tested for accuracy and functionality.
- d. Meter Section Staff will contact and notify Customer Services of the final read and any charges resulting from damages to the meter and backflow or its appurtenance. These charges will be added on the customer's final bill and will be sent to the address of record. Any customer who has an outstanding balance will not receive additional meters.
- e. Outstanding balances due may be deducted from deposits and any balances refunded to the customer. Any outstanding balances will be turned over to the City Treasurer for collection. Outstanding balances may also be transferred to any other existing accounts.

5. **EXCEPTIONS**

- 5.1 Any request for exceptions to this policy shall be presented, in writing, to the Customer Support Deputy Director, or his/her designee for consideration.

6. **MOBILE METER**

- 6.1 Mobile meters will be allowed on a case by case basis. All mobile meters will be protected by an approved backflow assembly and the minimum requirement will be a Reduced Pressure Principal Assembly. The two types of Mobile Meters are vehicle mounted and floating meters. Each style of meters has separate guidelines that shall be followed for the customer to retain service and are described below:

- a) **Vehicle Mounted Meters:** Customer applies for and receives a City owned Fire Hydrant Meter from the Meter Shop. The customer mounts the meter on the vehicle and brings it to the Meter Shop for

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inspection. After installation is approved by the Meter Shop the vehicle and meter shall be brought to the Meter Shop on a monthly basis for meter reading and on a quarterly basis for testing of the backflow assembly. Meters mounted at the owner's expense shall have the one year contract expiration waived and shall have meter or backflow changed if either fails.

b) **Floating Meters:** Floating Meters are meters that are not mounted to a vehicle. **(Note: All floating meters shall have an approved backflow assembly attached.)** The customer shall submit an application and a letter explaining the need for a floating meter to the Meter Shop. The Fire Hydrant Meter Administrator, after a thorough review of the needs of the customer, (i.e. number of jobsites per day, City contract work, lack of mounting area on work vehicle, etc.), may issue a floating meter. At the time of issue, it will be necessary for the customer to complete and sign the "Floating Fire Hydrant Meter Agreement" which states the following:

- 1) The meter will be brought to the Meter Shop at 2797 Caminito Chollas, San Diego on the third week of each month for the monthly read by Meter Shop personnel.
- 2) Every other month the meter will be read and the backflow will be tested. This date will be determined by the start date of the agreement.

If any of the conditions stated above are not met the Meter Shop has the right to cancel the contract for floating meter use and close the account associated with the meter. The Meter Shop will also exercise the right to refuse the issuance of another floating meter to the company in question.

Any Fire Hydrant Meter using reclaimed water shall not be allowed use again with any potable water supply. The customer shall incur the cost of replacing the meter and backflow device in this instance.

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7. **FEE AND DEPOSIT SCHEDULES**

7.1 **Fees and Deposit Schedules:** The fees and deposits, as listed in the Rate Book of Fees and Charges, on file with the Office of the City Clerk, are based on actual reimbursement of costs of services performed, equipment and materials. These deposits and fees will be amended, as needed, based on actual costs. Deposits, will be refunded at the end of the use of the fire hydrant meter, upon return of equipment in good working condition and all outstanding balances on account are paid. Deposits can also be used to cover outstanding balances.

All fees for equipment, installation, testing, relocation and other costs related to this program are subject to change without prior notification. The Mayor and Council will be notified of any future changes.

8. **UNAUTHORIZED USE OF WATER FROM A HYDRANT**

8.1 Use of water from any fire hydrant without a properly issued and installed fire hydrant meter is theft of City property. Customers who use water for unauthorized purposes or without a City of San Diego issued meter will be prosecuted.

8.2 If any unauthorized connection, disconnection or relocation of a fire hydrant meter, or other connection device is made by anyone other than authorized Water Department personnel, the person making the connection will be prosecuted for a violation of San Diego Municipal Code, Section 67.15. In the case of a second offense, the customer's fire hydrant meter shall be confiscated and/or the deposit will be forfeited.

8.3 Unauthorized water use shall be billed to the responsible party. Water use charges shall be based on meter readings, or estimates when meter readings are not available.

8.4 In case of unauthorized water use, the customer shall be billed for all applicable charges as if proper authorization for the water use had been obtained, including but not limited to bi-monthly service charges, installation charges and removal charges.

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- 8.5 If damage occurs to Water Department property (i.e. fire hydrant meter, backflow, various appurtenances), the cost of repairs or replacements will be charged to the customer of record (applicant).

Water Department Director

- Tabs: 1. Fire Hydrant Meter Application
2. Construction & Maintenance Related Activities With No Return To Sewer
3. Notice of Discontinuation of Service

APPENDIX

Administering Division: Customer Support Division

Subject Index: Construction Meters
Fire Hydrant
Fire Hydrant Meter Program
Meters, Floating or Vehicle Mounted
Mobile Meter
Program, Fire Hydrant Meter

Distribution: DI Manual Holders



Application for Fire Hydrant Meter (EXHIBIT A)

(For Office Use Only)

NS REQ	FAC#
DATE	BY

METER SHOP (619) 527-7449

Meter Information

Application Date	Requested Install Date:
------------------	-------------------------

Fire Hydrant Location: (Attach Detailed Map//Thomas Bros. Map Location or Construction drawing.) <u>Zip:</u>	T.B.	G.B. (CITY USE)
Specific Use of Water:		
Any Return to Sewer or Storm Drain, if so, explain:		
Estimated Duration of Meter Use: <input type="text"/>	<input type="checkbox"/>	Check Box if Reclaimed Water

Company Information

Company Name:			
Mailing Address:			
City:	State:	Zip:	Phone: ()
*Business license#		*Contractor license#	
A Copy of the Contractor's license OR Business License is required at the time of meter issuance.			
Name and Title of Billing Agent: <small>(PERSON IN ACCOUNTS PAYABLE)</small>			Phone: ()
Site Contact Name and Title:			Phone: ()
Responsible Party Name:			Title:
Cal ID#			Phone: ()
Signature:		Date:	
<small>Guarantees Payment of all Charges Resulting from the use of this Meter. Insures that employees of this Organization understand the proper use of Fire Hydrant Meter</small>			

Fire Hydrant Meter Removal Request	Requested Removal Date:
Provide Current Meter Location if Different from Above:	
Signature:	Title: Date:
Phone: ()	Pager: ()

<input type="checkbox"/> City Meter	<input type="checkbox"/> Private Meter	
Contract Acct #:	Deposit Amount: \$ 936.00	Fees Amount: \$ 62.00
Meter Serial #	Meter Size: 05	Meter Make and Style: 6-7
Backflow #	Backflow Size:	Backflow Make and Style:
Name:	Signature:	Date:

WATER USES WITHOUT ANTICIPATED CHARGES FOR RETURN TO SEWER

Auto Detailing
Backfilling
Combination Cleaners (Vactors)
Compaction
Concrete Cutters
Construction Trailers
Cross Connection Testing
Dust Control
Flushing Water Mains
Hydro Blasting
Hydro Seeing
Irrigation (for establishing irrigation only; not continuing irrigation)
Mixing Concrete
Mobile Car Washing
Special Events
Street Sweeping
Water Tanks
Water Trucks
Window Washing

Note:

1. If there is any return to sewer or storm drain, then sewer and/or storm drain fees will be charges.

Date

Name of Responsible Party
Company Name and Address
Account Number: _____

Subject: Discontinuation of Fire Hydrant Meter Service

Dear Water Department Customer:

The authorization for use of Fire Hydrant Meter # _____, located at *(Meter Location Address)* ends in 60 days and will be removed on or after *(Date Authorization Expires)*. Extension requests for an additional 90 days must be submitted in writing for consideration 30 days prior to the discontinuation date. If you require an extension, please contact the Water Department, or mail your request for an extension to:

City of San Diego
Water Department
Attention: Meter Services
2797 Caminito Chollas
San Diego, CA 92105-5097

Should you have any questions regarding this matter, please call the Fire Hydrant Hotline at (619) _____ - _____.

Sincerely,

Water Department

APPENDIX C

MATERIALS TYPICALLY ACCEPTED BY CERTIFICATE OF COMPLIANCE

MATERIALS TYPICALLY ACCEPTED BY CERTIFICATE OF COMPLIANCE

1. Soil amendment
2. Fiber mulch
3. PVC or PE pipe up to 16 inch diameter
4. Stabilizing emulsion
5. Lime
6. Preformed elastomeric joint seal
7. Plain and fabric reinforced elastomeric bearing pads
8. Steel reinforced elastomeric bearing pads
9. Waterstops (Special Condition)
10. Epoxy coated bar reinforcement
11. Plain and reinforcing steel
12. Structural steel
13. Structural timber and lumber
14. Treated timber and lumber
15. Lumber and timber
16. Aluminum pipe and aluminum pipe arch
17. Corrugated steel pipe and corrugated steel pipe arch
18. Structural metal plate pipe arches and pipe arches
19. Perforated steel pipe
20. Aluminum underdrain pipe
21. Aluminum or steel entrance tapers, pipe downdrains, reducers, coupling bands and slip joints
22. Metal target plates
23. Paint (traffic striping)
24. Conductors
25. Painting of electrical equipment
26. Electrical components
27. Engineering fabric
28. Portland Cement
29. PCC admixtures
30. Minor concrete, asphalt
31. Asphalt (oil)
32. Liquid asphalt emulsion
33. Epoxy

APPENDIX D

SAMPLE CITY INVOICE WITH SPEND CURVE

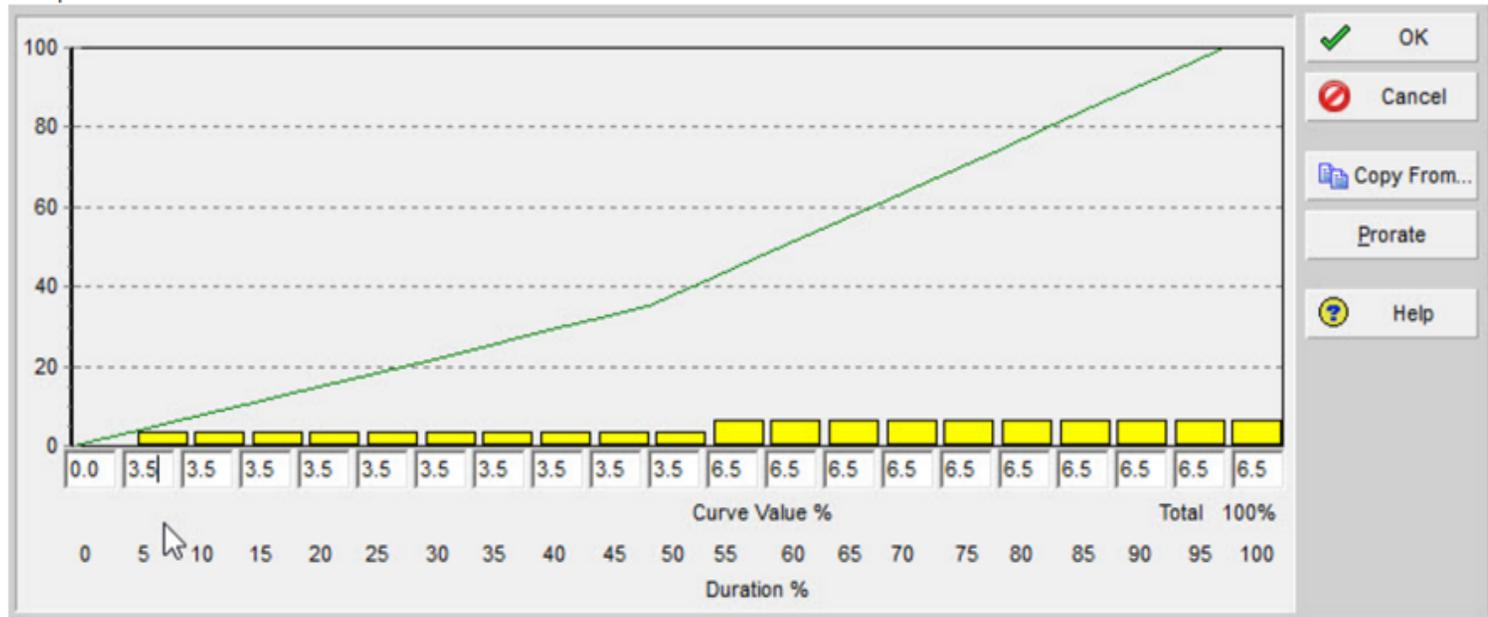
Sample Project Spend Curve

Sample Date Entries Required

Incremental Curve Value
Duration % Increment

0.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%
0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%

Sample Screenshot from Primavera P6



APPENDIX E
LOCATION MAP

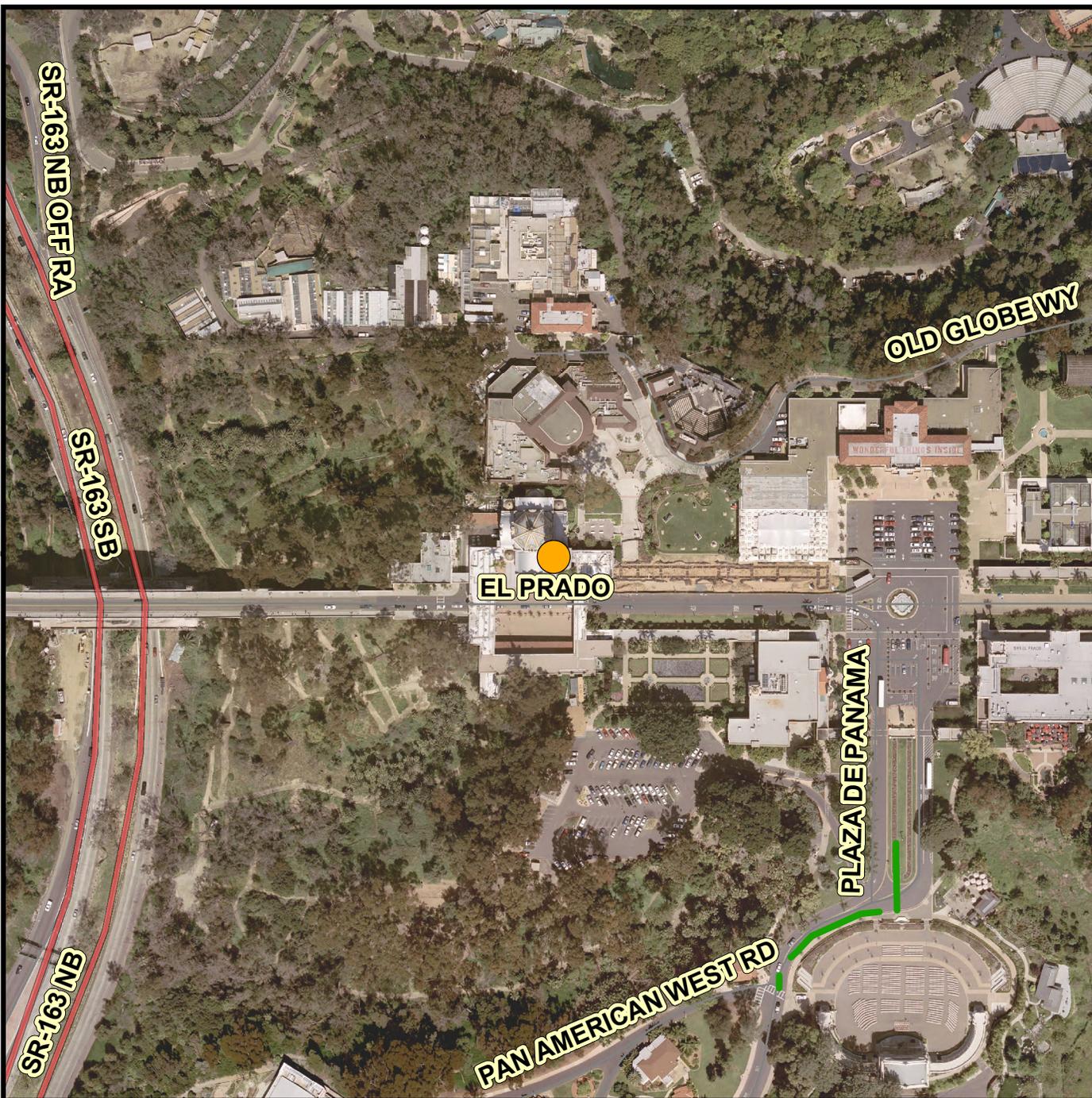
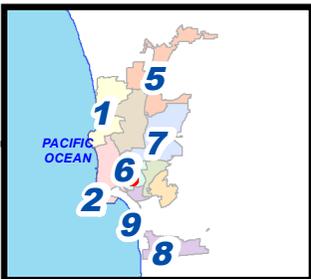
CALIFORNIA TOWER SEISMIC RETROFIT

SENIOR ENGINEER
George Freiha
619-533-7449

PROJECT MANAGER
Michelle Garcia-Quilico
619-533-6635

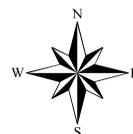
PROJECT ENGINEER
Farhad Hossan
619-533-5492

FOR QUESTIONS ABOUT THIS PROJECT
Call: 619-533-4207
Email: engineering@sandiego.gov



Legend

 California Tower



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APPENDIX F
ADJACENT PROJECTS

Balboa Park Plaza de Panama
Construction Sequence
PHASE I: Utility Relocation and Road Construction
Approximate Duration: 2 Months



Balboa Park Plaza de Panama
Construction Sequence
PHASE II.A: Bypass Bridge & Parking Structure Construction
Approximate Duration: 8 Months



Balboa Park Plaza de Panama
Construction Sequence
PHASE II.B: Bypass Bridge & Parking Structure Construction
Approximate Duration: 6 Months



Balboa Park Plaza de Panama
Construction Sequence
PHASE III: Utility Relocation, Restroom Demolition, & Alcazar Lot
Approximate Duration: 4 Months



Balboa Park Plaza de Panama
Construction Sequence
PHASE IV: Esplanade & Plaza Improvements
Approximate Duration: 4 Months



APPENDIX G

LEAD ABATEMENT SPECIFICATIONS



THE CITY OF SAN DIEGO



LEAD CONTAINING MATERIALS
ABATEMENT SPECIFICATION
for
CALIFORNIA TOWER SEISMIC UPGRADES
DECEMBER 08, 2016

Prepared by:

William B. Blondet

Asbestos & Lead Program Inspector

CDPH IA/PM/S License# 5464

Reviewed by:

George Katsikaris

Asbestos & Lead Program Inspector

CDPH IA/PM License# 20618

City of San Diego
Environmental Services Department
Disposal & Environmental Protection
Asbestos & Lead Management Program
9601 Ridgehaven Court, Ste 320
San Diego, CA 92123
Tel: (858) 492-5086
Fax: (858) 492-5089

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I. GENERAL REQUIREMENTS

A. DESCRIPTION OF WORK

1. ABATEMENT CONTRACTOR shall supply all labor, transportation, material, apparatus, and equipment for the removal, and disposal of lead containing materials to be impacted as a result of this project, as identified in Appendix C of this section.
2. ABATEMENT CONTRACTOR shall be responsible for ensuring the surrounding areas will not be contaminated with lead containing materials during work and shall be responsible for any clean-up determined necessary by City of San Diego's PROJECT MONITOR.
3. Before submitting his/her bid, the ABATEMENT CONTRACTOR shall visit the project site and verify the location of the lead containing materials that will be removed under the terms and conditions of the contract and this specification.
4. All paint chips collected must be stored in sealable drum containers (not in bags).
5. Abatement work shall be performed within agreed upon hours submitted prior to project start which will not include designated City holidays.
6. Before the beginning of abatement work the ABATEMENT CONTRACTOR shall hold a safety construction meeting with all abatement supervisors, workers, and other contractors on-site that provides an overview of the accepted work plan, decontamination procedures specific to this project (decontamination procedures shall be on paper with copies for all present), and disposal plan for this project. Meeting shall include the PROJECT MONITOR and any other designated City representative.

B. CONTRACTOR USE OF THE PREMISES

1. All site rules and regulations affecting the work should be complied with while engaged in project activities. The existing building should be maintained in a safe condition throughout the abatement activities. The ABATEMENT CONTRACTOR will be responsible for adhering to all applicable building codes and fire safety requirements.
2. All public areas will be kept free of accumulated waste, materials, rubbish, and debris.

C. PROJECT COORDINATION

1. It will be the responsibility of the ABATEMENT CONTRACTOR to coordinate all site activities with the City's Asbestos & Lead Management Program's (ALMP) PROJECT MONITOR including any meetings, surveys, special reports, and site usage limitations.

D. PROJECT SUBMITTALS

The ABATEMENT CONTRACTOR shall not commence any work until approval has been given from the City. The ABATEMENT CONTRACTOR shall submit the following at least 30 days prior to commencement of any lead abatement activities:

1. Lead Abatement Work Plan:
 - a) Submit a detailed job-specific plan that includes:
 - (1) The procedures proposed to comply with the requirements of this specification and all applicable regulations.
 - (2) Detailed drawings that identify the location, size, layout and details of the Work Areas, any equipment, disposal storage, restrooms, and worker decontamination facilities.
 - (3) The sequencing of abatement work and the interface of trades involved in the performance of work. Provide a time line that details each major phase of work activity and anticipated time it will occur.
 - (4) The methods to be used to assure the safety of occupants and visitors to the site.
 - (5) A description of methods to be used to control dispersion of hazardous materials to the interior and exterior of the building.
 - (6) The method of removal to minimize dust generation in the Work Area.
 - b) Work site coordination submittals including:
 - (1) Contingency and Spill Plan: Prepare a contingency plan for emergencies including fire, accident, power failure, or any other event that may require modification or abridgement of decontamination or Work Area isolation procedures. Include in plan specific procedures for decontamination or Work Area isolation. Plan should be specific for all types of hazardous materials or situations specific to this work site. Note that nothing in this specification should impede safe exiting or providing of adequate medical attention in the event of an emergency.
 - (2) Telephone numbers and locations of emergency services including but not limited to fire, ambulance, doctor, hospital, police, power company, telephone company.
2. Notifications:
 - a) Prior to any abatement activities the ABATEMENT CONTRACTOR must submit a CDPH Form 8551 (Abatement of Lead Hazards Notification) to the Compliance and Enforcement Unit of the CLPPB. The Form 8551 must be

posted at the entrances to the property at least 5 days prior and during abatement activities.

b) Submit Cal/OSHA pre-job notification for lead-related construction work per Title 8 CCR 1532.1 subsection (p), "Lead-Work Pre-Job Notification".

c) Permits, notifications, and licenses needed to perform work (including hazardous waste hauler's registration)

d) Notify emergency service agencies including fire, ambulance, police or other agency that may service the abatement work site in case of an emergency. Notification is to include methods of entering Work Area, emergency entry and exit locations, modifications to fire notification or fire-fighting equipment, and other information needed by agencies providing emergency services.

e) Notifications of Emergency: Any individual at the job site may notify emergency service agencies if necessary without effect on this contract or the Contract Sum.

f) Provide submittal identifying person responsible for responding to project site emergencies twenty-four hours a day, seven days a week.

3. ABATEMENT CONTRACTOR qualifications and personnel information submittals that include but are not limited to:

a) Provide all staff names, certifications, and experience. Identify their duties and responsibilities on this project. ABATEMENT CONTRACTOR shall have the following minimum levels of qualified supervision on the project site:

(1) General Superintendent: Provide a full-time General Superintendent who is experienced in administration and supervision of lead abatement projects including work practices, protective measures for building and personnel, disposal procedures, etc. This person is the ABATEMENT CONTRACTOR's representative responsible for compliance with all applicable federal, state and local regulations and guidelines, particularly those relating to lead abatement and hazardous waste. Should, in the opinion of the OWNER, any language barrier exist between the on-site superintendent and the OWNER or PROJECT MONITOR, the ABATEMENT CONTRACTOR shall employ a qualified full-time interpreter or provide a new on-site superintendent at no additional cost to the OWNER. Shall be CDPH certified as a Lead Supervisor.

(2) Foreman: Provide a full time Foreman to directly supervise and direct no more than 10 lead workers. Each Foreman will act as the Competent Person for the workers the foreman is directing. The Foreman has oversight authority over the workers and reports to the General Superintendent. If there are 10 or fewer abatement workers

on the project the General Superintendent may fill the Foreman's position. Shall be CDPH certified as a Lead Supervisor.

(3) Experience and Training: The General Superintendent and foreman shall meet all the training requirements as a Supervisor in accordance with Title 17, California Code of Regulations, Division 1, Chapter 8. They shall also have experience with projects of similar types and sizes.

(4) Workers: All abatement workers shall have current certifications as a Lead Worker in accordance with Title 17, California Code of Regulations, Division 1, Chapter 8.

(5) Certificate of Worker's Acknowledgment: Submit an original signed copy of the Certificate of Worker's Acknowledgment found in Appendix A of this section, for each worker and supervisor who is to be at the job site or enter the Work Area.

b) Identify state licensed transporter, disposal location, and associated permits for all hazardous waste.

c) Submit respiratory protection information and air monitoring data as per the following:

(1) Operating Instruction: Submit complete operating and maintenance instructions for all components and systems as a whole. Submittal is to be in bound manual form suitable for field use.

(2) Respiratory Protection Program: Submit ABATEMENT CONTRACTOR's written respiratory protection program manual as required by 8 CCR 1531 and 5144.

(3) Respiratory Protection Schedule: Submit level of respiratory protection intended for each operation required by the project.

(4) Copies of current respirator fit test: Fit tests must be performed every 6 months.

d) Submit doctor's report from medical examination conducted within the last 12 months as part of compliance with OSHA medical surveillance requirements for each worker who is to enter the Work Area. Submit, at a minimum, the following for each worker:

(1) Name and Social Security Number

(2) Copies of Blood Lead Levels and Zinc Protoporphyrin tests

(3) Physicians Written Opinion from examining physician including at a minimum the following:

- (a) Whether worker has any detected medical conditions that would place the worker at an increased risk of material health impairment from exposure to lead. Any recommended limitations on the worker or on the use of personal protective equipment such as respirators.
 - (b) Statement that the worker has been informed by the physician of the results of the medical examination and of any medical conditions that may result from lead exposure.
- e) Submit a notarized certification, signed by an officer of the ABATEMENT CONTRACTOR firm that exposure measurements, medical surveillance, and worker training records are being kept in conformance with 8 CCR 1529.
- f) Identify the laboratory that will be performing the analysis of the personal samples and provide their accreditation. Also discuss the method by which the ABATEMENT CONTRACTOR will provide the analytical results to the PROJECT MONITOR within 24 hours of sampling completion.
- 4. Submit the following during and at the completion of the work
 - a) Copies of all Waste Shipment Records
 - b) Copies of all air monitoring results within 24 hours
- 5. At the end of a project, the ABATEMENT CONTRACTOR shall submit the following to the PROJECT MONITOR:
 - a) Personal Air Sample Results
 - b) Copies of Project Daily Logs
 - c) Containment Entry/Exit Logs
 - d) Waste Disposal Documentation
 - e) Certificate of Visual Inspection

E. SCHEDULES AND REPORTS

- 1. Prior to each phase of project, the ABATEMENT CONTRACTOR shall provide the City with a tentative time line which outlines the project schedule. These documents will be reviewed and approved by the City prior to the commencement of work.

F. PRODUCT DATA

- 1. The ABATEMENT CONTRACTOR shall submit product information that is to be used during the abatement activities prior to commencement of work (i.e., encapsulants). General information required includes manufacturer's standard printed recommendations for application and use, compliance with recognized standards of trade association and testing agencies, and safety data sheets (SDSs).
- 2. Polyethylene sheet

- a) A single polyethylene film in the largest sheet size possible to minimize seams, 4.0 or 6.0 mil thick as indicated, and clear, frosted, or black as indicated.
 - b) Provide flame resistant polyethylene film that conforms to requirements set forth by the National Fire Protection Association Standard 701, Small Scale Fire Test for Flame-resistant Textiles and Films. Provide largest size possible to minimize seams, 4.0 or 6.0 mil thick as indicated, and frosted or black as indicated.
 - c) Reinforced Polyethylene Sheet: Where plastic sheet is the only separation between the Work Area and building exterior, provide translucent, nylon reinforced, laminated, flame resistant, polyethylene film that conforms to requirements set forth by the National Fire Protection Association Standard 701, Small Scale Fire Test for Flame-resistant Textiles and Films. Provide largest size possible to minimize seams, 4.0 or 6.0 mil thick as indicated, frosted or black as indicated.
3. Tape
- a) Provide duct tape in 2" or 3" widths as indicated, with an adhesive which is formulated to stick aggressively to sheet polyethylene.
4. Spray adhesive
- a) Provide spray adhesive in aerosol cans which is specifically formulated to stick tenaciously to sheet polyethylene.

G. PROJECT CLOSE-OUT

1. Upon completion of work and prior to payment, the PROJECT MONITOR will proceed with an initial inspection of the abatement work area. A Certificate of Visual Inspection (Appendix B) will be signed by both the ABATEMENT CONTRACTOR and PROJECT MONITOR. The ABATEMENT CONTRACTOR will not be paid until the area meets the established project-specific clearance criteria and has submitted the required information.

II. DEFINITIONS

- A. ABATEMENT: Any set of measures designed to permanently eliminate lead based paint hazards including paint removal, building component removal, or near-permanent enclosure of lead based paint hazards.
- B. ABATEMENT CONTRACTOR: The designated sub-contractor performing the required abatement work outlined in this specification.
- C. ACCREDITED or ACCREDITATION (when referring to a person or laboratory): A person or laboratory accredited in accordance with section 206 of Title II of the Toxic Substances Control Act (TSCA).
- D. ACTION LEVEL: An 8-hour time weighted average (TWA) lead airborne concentration of 30 µg/m³.

- E. AIR MONITORING: The process of measuring the lead content of a specific volume of air.
- F. AUTHORIZED VISITOR: The Owner, the Owner's Representative, testing lab personnel, the Architect/Engineer, emergency personnel or a representative of any federal, state and local regulatory or other agency having authority over the project.
- G. BARRIER: Any surface that seals off the work area to inhibit the movement of dust.
- H. BREATHING ZONE: A hemisphere forward of the shoulders with a radius of approximately 6 to 9 inches.
- I. CONTAINMENT: A process for protecting both workers and environment by controlling exposures to lead dust and debris created during abatement.
- J. CONTAMINATE: Refers to lead-containing dust/debris.
- K. DEMOLITION: The wrecking or taking out of any building component, system, finish or assembly of a facility together with any related handling operations.
- L. DISPOSAL BAG: A properly labeled 6 mil thick leak tight plastic bags used for transporting lead waste from work site to disposal site.
- M. ENCAPSULATION: Any covering or coating that acts as a barrier between lead based paint and the environment and that relies on adhesion and the integrity of the existing paint bonds between layers and with the substrate for its durability.
- N. ENCLOSURE: The use of rigid durable construction materials that are mechanically fastened to the substrate in order to act as a barrier between lead based paint and the living or work space.
- O. HEPA FILTER: A high Efficiency Particulate Air (HEPA) filter capable of trapping and retaining 99.97% of all mono-dispersed particles greater than 0.3 microns in diameter or larger.
- P. HEPA FILTER VACUUM COLLECTION EQUIPMENT (or vacuum cleaner): High efficiency particulate air filtered vacuum collection equipment with a filter system capable of collecting and retaining lead.
- Q. HIGH PHOSPHATE DETERGENT: Detergent which contains at least 5% tri sodium phosphate.
- R. LEAD: Means metallic lead, all inorganic lead compounds, and organic lead soaps.
- S. LEAD-BASED PAINT (LBP): For purposes of this project, LBP refers to the materials identified in these specifications as having paint or coatings that contains lead.
- T. LEAD-RELATED CONSTRUCTION SUPERVISOR: Means an individual who is responsible for implementing lead-related construction work and enforcing work practices. This person must have received certification as a lead-related construction Supervisor.

- U. LEAD-RELATED CONSTRUCTION WORK: Means any construction, alteration, painting, demolition, salvage, renovation, repair, or maintenance of a building, including preparation and cleanup, by disturbing lead-containing material that may result in exposure of individuals to lead.
- V. LEAD-RELATED CONSTRUCTION WORKER: Means any individual who performs lead-related construction work in a building under the direction of lead-related construction Supervisor, and has received certification as a lead-related construction Worker.
- W. OWNER: Refers to the City of San Diego
- X. PAINT FILM STABILIZATION: The process of using wet scraping, priming, and repainting a deteriorated lead based paint film in a dwelling including clean-up and clearance.
- Y. PAINT REMOVAL: A strategy of abatement which entails removing lead based paint form surfaces of components using chemicals, heat guns below 11000F, and certain contained abrasive methods but not open flame burning, open abrasive blasting, sandblasting, water blasting, extensive dry scraping, or methylene chloride removers.
- Z. PERMISSIBLE EXPOSURE LIMIT (PEL): An 8-hour TWA lead airborne concentration of 50 µg/m³.
- AA. PERSONAL MONITORING: Sampling of contaminant concentrations within the breathing zone of an employee.
- BB. PROJECT MONITOR: City of San Diego Asbestos & Lead Management Program staff or their designated consultant.
- CC. PROTECTION FACTOR: The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respirator at the breathing zone of the wearer. The protection factor is a measure of the degree of protection provided by a respirator to the wearer.
- DD. RRP: EPA's Renovation, Repair and Painting certification that requires contractor training and lead-safe work practices when performing renovation type activities in housing built prior to 1978.
- EE. REPLACEMENT: A strategy of abatement which entails the removal of components such as windows, doors, and trim that have lead painted surfaces and installing new components free of lead paint.
- FF. RESPIRATOR: A device designed to protect the wearer from the inhalation of harmful contaminants.

- GG. TESTING LABORATORIES: A “testing laboratory” is an entity engaged to perform specific inspections or tests, either at the project site or elsewhere, and to report on, and, if required, to interpret results of, those inspections or tests.
- HH. TIME-WEIGHTED AVERAGE (TWA): The average concentration of a contaminant in air during a specific time period.
- II. TRIGGER TASKS: Work tasks that require an employer to assume specified employee exposures until the employer has performed an exposure assessment [see T8CCr, 1532.1 (d) (2)].
- JJ. WET CLEANING: The process of eliminating lead contamination from building surfaces and objects by using cloths, mops, or other cleaning utensils which have been dampened with amended water or diluted removal encapsulant and afterwards thoroughly decontaminated or disposed of appropriately.
- KK. WORK AREA: The area where abatement work operations are performed which is defined and/or isolated to prevent the spread of contamination, and entry by unauthorized personnel.

III. SITE WORK

A. INTRODUCTION

This portion of the specification describes procedures and protocols for abatement activities. The protocols/procedures described hereafter are in accordance with federal/state/local requirements. In the absence of these requirements, the procedure/protocols are based on current industry standards.

B. BACKGROUND INFORMATION

Sampling of building materials has been performed by inspectors from the City's Asbestos and Lead Management Program (ALMP) and has been provided in Appendix C of this specification. The ABATEMENT CONTRACTOR shall visit the project site and verify the location and quantities of the lead containing materials that will be removed under the terms and conditions of the contract and this specification

C. GENERAL INFORMATION

1. Potential Hazards

- a) The disturbance of lead containing materials may cause exposure to workers and building occupants. All workers, supervisory personnel, subcontractors, and consultants who will be at the job site, need to be apprised of the seriousness of the hazard and of proper work practices which must be followed to minimize exposure. The procedures and methods described herein must be followed and the ABATEMENT CONTRACTOR must comply with all applicable federal/state/local requirements.

2. Stop Work
 - a) If the PROJECT MONITOR presents a verbal or written stop work order, the ABATEMENT CONTRACTOR shall immediately and automatically stop all work. Recommencement of the work may not begin until authorized by the PROJECT MONITOR.

D. PROJECT ADMINISTRATION

1. Certified Supervisor

The ABATEMENT CONTRACTOR needs to provide a full-time lead abatement supervisor who is experienced in administration and supervision of lead abatement projects including work practices, protective measures for building and personnel, disposal procedures, etc. This supervisor must have a current CDPH Lead Supervisor certificate. This person will act as the competent person on the job.

In addition, all employees working on the project must have current CDPH Lead Worker certification.

E. SPECIAL REPORTS

1. Reporting Unusual Events

When an event of unusual and significant nature occurs at the site (e.g., a spill of lead debris, failure of special equipment used to contain lead), the ABATEMENT CONTRACTOR shall prepare and submit a special report listing the chain of events, persons participating, response by Contractor's personnel, evaluation of results, and other pertinent information.

2. Reporting Accidents

The ABATEMENT CONTRACTOR shall prepare and submit reports of significant accidents at the subject site. Pertinent data and actions need to be recorded. In addition, response actions should comply with industry standards. For this purpose, a significant accident is defined to include events where personal injury or property loss of substance is sustained, or where the event posed a significant threat of loss or personal injury or potential environmental contamination.

F. COMPLIANCE WITH CODES AND REGULATIONS

1. Except to the extent that more explicit, or more stringent requirements are written directly into this Abatement Contract/Specification, all applicable codes, regulations, and standards have the same force and effect (and are made a part of the contract documents by reference) as if copied directly into the contract documents, or as if published copies are bound herewith.

2. The ABATEMENT CONTRACTOR will assume full responsibility and liability for the compliance with all applicable federal/state/local regulations pertaining to work practices, protection of workers, and visitors to the site, persons occupying areas adjacent to the site, hauling, and disposal of waste. The ABATEMENT CONTRACTOR shall hold the City and its representative harmless for the ABATEMENT CONTRACTOR's failure to comply with any applicable work, hauling, disposal, safety, health, or other regulation on the part of itself, its employees, or its subcontractors,

3. State requirements which govern lead hazard control activities or hauling and disposal of hazardous waste include, but are not limited to, the following:

a) California Occupational Safety and Health Administration (Cal/OSHA):

- (1) Division of Industrial Safety; Chapter 4
- (2) 8CCR, Section 1532.1, Lead in Construction
- (3) 8CCR, Section 5194, Hazard Communication Standard
- (4) 8CCR, Section 1531, Construction Respiratory Protection Standard
- (5) 8CCR, Section 1514, Construction Personal Protective Equipment
- (6) 8CCR, Section 1509, Construction Injury Illness Prevention Program
- (7) 8CCR, Section 6003-4, Accident Prevention Signs and Tags
- (8) 8CCR, Section 3204, Access to Employee Exposure Medical Records

b) California Environmental Protection Agency (Cal/EPA):

- (1) 22CCR, Division 4.5, Environmental Health Standards for the Management of Hazardous Waste.

c) California Department of Public Health (CDPH):

- (1) 17CCR, Division 1, Chapter 8, Accreditation of training providers and interim certification of individuals engaged in lead-related construction work.

4. Federal requirements which govern lead hazard control activities or hauling and disposal of hazardous waste include, but are not limited to, the following:

a) Federal Environmental Protection Agency (FED/EPA):

- (1) Hazardous Waste Standards, 40 Code of Federal Regulations (CFR), Part 261
- (2) EPA Renovate, Repair, Painting (RRP), 40 CFR 745, Subpart E.

b) U.S. Department of Transportation (DOT):

- (1) Hazardous Substances, 49CFR, Parts 171 through 180
- c) American National Standards Institute, Inc. (ANSI):
 - (1) Z9.2-79 Fundamentals Governing the Design and Operation of Local Exhaust
 - (2) Z88.2-80 Practices of Respiratory Protection
- d) Department of Housing and Urban Development (HUD):
 - (1) Guidelines for the Evaluation and Control of Lead Based Paint Hazards in Housing (most current draft or final copy)

5. In addition, the ABATEMENT CONTRACTOR must comply with any applicable regulations promulgated as a result of Title X, the Residential Lead Based Paint Hazard Reduction Act and Title IV, Lead Exposure Reduction Act.

6. Local requirements which govern lead hazard control activities include, but are not limited to, the following:

- a) Air Pollution Control District (APCD) - San Diego County
 - (1) APCD Rules and Regulations, Rule 51 (Public Nuisance), Rule 10-11 (permitting of equipment)
- b) San Diego Municipal Code §54.1001 etc. seq.
 - (1) Prevents, identifies and remedies lead hazards within the City of San Diego

G. PERMITS AND LICENSES

The ABATEMENT CONTRACTOR shall submit to the City in the bid submittal any permits or licenses necessary to carry out this work.

1. Permits

A valid Hazardous Waste Hauler registration is required for transporting any hazardous waste. Certain types of equipment require APCD permits (e.g., abrasive blasters).

2. Licenses

The ABATEMENT CONTRACTOR must be certified by the California Contractors State License Board. The Contractor, or its subcontractor, shall have current licenses, as required by all applicable state or local jurisdictions for the removal, transportation, disposal, or other regulated activity relative to the work described in this plan.

H. HEALTH AND SAFETY

This section describes the equipment and procedures required for protecting workers from Lead contamination and other workplace hazards.

- 1. Provide worker protection as required by the most stringent OSHA and/or EPA standards applicable to the work.
- 2. Training

a) ABATEMENT CONTRACTOR workers shall be trained in accordance with 8CCR, Section 1532.1 (lead). In addition, workers and supervisors must be lead-trained and have certification for lead-related work from the California Department of Public Health (CDPH).

b) Workers must be provided with initial biological monitoring (blood sampling) if they are occupationally exposed on any day to lead at or above the Action Level (AL). Employees must be provided with biological monitoring and a medical examination if they are occupationally exposed to lead above the action level for more than 30 days in any consecutive 12 month period. Periodic biological monitoring and medical examinations must be performed according to the schedule and criteria specified in T8CCR, Section 1532.1(j). In addition, employees performing "trigger" tasks must be included in biological monitoring and/or medical examinations based on their assumed exposure. In the absence of specific airborne exposure data, medical surveillance will need to be provided for all workers.

c) At a minimum, examinations shall meet all requirements as set forth in T8CCR, Section 1532.1. Furthermore, if an employee's blood levels are at or above 20µg/dl they will not be allowed to work on the project and shall be medically removed until two consecutive blood lead tests show the employee's blood lead level under 15µg/dl.

d) In addition, evaluations of each individual's ability to work in environments capable of producing heat stress in the worker should be completed. Employees who wear respirators must be medically evaluated.

3. Protective clothing

a) Coveralls: Provide disposable "full body" coveralls and disposable head covers, and require that they be worn at all times by all workers in the Work Area. Provide a sufficient number for all required changes, for all workers in the Work Area.

b) Boots: Provide work boots with non-skid soles, and where required by OSHA, foot protection for all workers. Provide boots at no cost to workers. Do not allow boots to be removed from the Work Area for any reason, after being contaminated with lead containing material. Thoroughly clean, decontaminate and bag boots before removing them from Work Area at the end of the work.

c) Hard Hats: Provide head protection (hard hats) as required by OSHA for all workers, and provide 1 spare for use by Owner's Representative, Project Administrator, and Owner. Require hard hats to be worn at all times that work is in progress that may potentially cause head injury. Provide hard hats of the type with plastic strap suspension. Require hats to remain in the Work Area throughout the work. Thoroughly clean, decontaminate and bag hats before removing them from Work Area at the end of the work.

d) Goggles: Provide eye protection (goggles) as required by OSHA for all workers involved in scraping, spraying, or any other activity which may

potentially cause eye injury. Thoroughly clean, decontaminate and bag goggles before removing them from Work Area at the end of the work.

e) Gloves: Provide work gloves to all workers and require that they be worn at all times in the Work Area. Do not remove gloves from Work Area and dispose of as lead contaminated waste at the end of the work.

4. Respirators

a) Air Purifying Respirators

(1) Respirator Bodies: Provide half face or full face type respirators based upon appropriate protection factor as determined by the ABATEMENT CONTRACTORS competent person. .

(2) Filter Cartridges: Provide, at a minimum, HEPA type filters labeled with NIOSH and MSHA Certification for "Radionuclides, Radon Daughters, Dust, Fumes, Mists including Lead Containing Dusts and Mists" and color coded in accordance with ANSI Z228.2 (1980). In addition, a chemical cartridge section may be added, if required, for solvents, etc., in use. In this case, provide cartridges that have each section of the combination canister labeled with the appropriate color code and NIOSH/MSHA Certification.

(3) Non permitted respirators: Do not use single use, disposable or quarter face respirators.

(4) Require that respiratory protection be used at all times when there is any possibility of disturbance of lead containing or other hazardous materials whether intentional or accidental.

(5) Require that a respirator be worn by anyone in a Work Area at all times, regardless of activity, during a period that starts with any operation which could cause airborne dust until the area has been cleared for re occupancy.

(6) Regardless of Airborne Levels: Require that the minimum level of respiratory protection used be half-face air purifying respirators with high efficiency filters.

b) Fit testing

(1) Initial Fitting: Provide initial fitting of respiratory protection during a respiratory protection course of training. Only allow an individual to use respirators for which training and fit testing has been provided.

(2) Upon Each Wearing: Require that each time an air purifying respirator is put on it be checked for fit with a positive and negative pressure fit check in accordance with the manufacturer's instructions or ANSI Z88.2 (1980).

- c) Respirators, disposable coveralls, head covers, and foot covers shall be provided by the ABATEMENT CONTRACTOR for the City of San Diego's Asbestos and Lead Management Program's PROJECT MONITOR, and other authorized representatives who may inspect the job site. Provide two (2) respirators and six (6) complete coveralls and, where applicable, six (6) respirator filter changes per day.
5. Materials and Equipment
- a) Only material and equipment that are recognized as being suitable for the intended use, by compliance with appropriate standards, may be used.
6. Water Service
- a) The ABATEMENT CONTRACTOR will be able to obtain water services from on-site facilities. The City will designate the facilities from which water service may be obtained.
7. Electrical Services
- a) The ABATEMENT CONTRACTOR will be able to obtain electrical services from on-site facilities. The City will designate the facilities from which electrical services may be obtained. The ABATEMENT CONTRACTOR shall provide their own electrical hook-ups, i.e. spider boxes, ground fault circuit interrupter (GFCI) etc. and installed by a licensed electrician.
- b) The electrical services need to comply with the applicable NEMA, NECA, and UL standards, and governing regulations for materials and lay-out of temporary electrical services.
8. Sanitary Facilities
- a) The ABATEMENT CONTRACTOR shall provide sanitary facilities on-site if none have been made available by the City.
9. Fire Extinguisher
- a) Applicable recommendations of the National Fire Protection Association (NFPA) Standard 10, "Standard for Portable Fire Extinguishers," must be complied with by the Contractor. Fire extinguishers need to be located where they are most convenient and effective for their intended purpose, but not less than one (1) extinguisher in each work area, the equipment room, outside/work areas, and in the clean room.
10. First Aid
- a) The ABATEMENT CONTRACTOR will need to provide first aid supplies which should comply with the governing regulations and recognized recommendations within the construction industry.

I. WORK AREA PROCEDURES

1. General guidelines for performing lead hazard control activities are presented in this section and are based on procedures established by HUD for residential settings. Due to the difference between residential settings and commercial buildings, these procedures will be modified on a case-by-case basis.
2. Require that workers NOT eat, drink, smoke, chew tobacco or gum, or apply cosmetics in the Work Area.
3. ABATEMENT CONTRACTOR shall secure work area from access by public, staff or users of the area. Accomplish this where possible, by locking doors, gates, or other means of access to the area.
4. Barricade fencing is required for securing an outside area from unauthorized access. Work area delineation shall occur at no less than twelve feet (12') from the radius of the work and/or building. Yellow caution tape shall not be used.
5. All windows, vents, mechanical systems, etc., in close proximity to the abatement area shall be sealed with plastic and tape by the ABATEMENT CONTRACTOR prior to the work beginning.
6. Warning signs for lead shall be posted as per 8CCR, Section 1532.1(m).
7. A visitor entry and exit-log, and an employee daily sign-in log will be maintained throughout the lead hazard control activities. The ABATEMENT CONTRACTOR shall be responsible for the project site security during the operations in order to protect work efforts and equipment.

J. REMOVAL OF LEAD CONTAINING MATERIALS

1. Lead containing materials shall be adequately wetted with water or a removal encapsulant before and during removal process, to reduce dust emission.
2. The ABATEMENT CONTRACTOR should exercise caution in using water, as he will be solely responsible for any water damage to the facility resulting from the work.
3. ABATEMENT CONTRACTOR is responsible for keeping all hazardous debris within the containment area at all times throughout removal. Any interior contamination, if created, is the responsibility of the ABATEMENT CONTRACTOR to clean with no additional cost to this contract.
4. ABATEMENT CONTRACTOR shall ensure there is no loose debris around the Work Area during the removal and if found, ABATEMENT CONTRACTOR shall clean the area immediately.

K. CLEANING

1. Daily cleaning includes removing large and small debris, HEPA vacuuming horizontal surfaces, wet mopping, and then HEPA vacuuming horizontal surfaces, and possible exterior cleaning.

2. Final cleaning must occur no sooner than one (1) hour after lead hazard control activities are finished. All plastic should be misted, cleaned, and folded toward the center to trap any remaining dust. The order of removal should be upper plastic, the first layer of floor plastic, vent and door plastic, the second layer of floor plastic, and finally plastic separating contaminated from non-contaminated areas. Then the entire area should be cleaned using a HEPA vacuum/wet wash/HEPA vacuum cycle. This should be from ceiling to floor. Paint or otherwise seal treated surfaces with the exception of interior floors (floors will be sealed after clearance). The Supervisor should perform an inspection for visible dust and debris.
3. Additional cleaning cycles may be necessary for porous surfaces, and difficult to clean surfaces (crevices). Failure to meet clearance criteria will require additional cleaning.

L. DECONTAMINATION PROCEDURE

1. Prior to leaving the Work Area, HEPA vacuum outer suit completely and remove, turning it inside out while doing so.
2. Proceed to decontamination area where the second suit is to be removed while turning it inside out.
3. After wiping all areas and respirator, remove respirator and wipe facial area clean.
4. Place contaminated suits, towels, and respirator cartridges in a properly labeled waste containers.
5. At the completion of the project, boots, hard hats, and goggles should be decontaminated and bagged prior to removal from the Work Area.
6. Equipment leaving the Work Area should be HEPA vacuumed and wet wiped.

M. CLEARANCE

1. Clearance must be performed by a California Department of Public Health (CDPH) Certified Lead PROJECT MONITOR. It will not be performed by the ABATEMENT CONTRACTOR (although the ABATEMENT CONTRACTOR may perform their own clearance testing). Clearance testing must occur no sooner than one (1) hour after final cleaning. It consists of two steps; visual examination and possibly environmental sampling (dust and/or soil sampling).
 - a) Visual Examination for Determination of Completed Work:
 - (1) This is a determination that the work specified in the scope of work has been completed satisfactorily. For surfaces that are to be re-painted, it is important this examination occurs prior to the re-painting (to determine that either all the paint has been removed [abatement] or that the deteriorated paint has been stabilized [interim controls]). Next the surfaces should be examined for settled dust and debris. If dust or debris is visually noted, the ABATEMENT

CONTRACTOR will be asked to re-clean prior to samples being collected.

(2) If no such dust/debris is found, the independent consultant or PROJECT MONITOR will complete a Certificate of Visual Inspection (Appendix B) for the area or for multiple areas. The Certified Supervisor will also sign this Certificate. The completed form should be submitted to the City at the end of the project.

2. Environmental Sampling:

a) The number and location of dust and/or soil samples will be determined on a case-by-case basis. The clearance criterion to be used is shown in the table below:

Surface Level

(1)	Interior Floors	40 µg/ft ²
(2)	Interior Window Sills	250 µg/ft ²
(3)	Exterior Horizontal Surfaces	400 µg/ft ²
(4)	Exterior Soil*	1000 µg/ft ²
(5)	Soil in Play Areas*	400 µg/ft ²

b) Re-cleaning, at the Contractor's expense, will be required for surfaces that do not pass clearance criteria.

c) The cost for additional tests, which may be required as a result of samples failing to meet the release criteria, shall be paid for the Contractor. This cost shall include all costs associated with sample analysis and collection of additional samples, including Consultant fees.

* Soil may not be impacted as a part of the proposed work but if contamination occurs then levels shall be used for clearances. ABATEMENT CONTRACTOR may take background soil samples to determine the pre-existing soil conditions.

N. TRANSPORTATION AND DISPOSAL

1. Waste minimization

a) The ABATEMENT CONTRACTOR is required to make all reasonable efforts to minimize the amount of hazardous waste generated from this project.

2. Waste characterization

a) The ABATEMENT CONTRACTOR shall test any potential hazardous waste generated in accordance with 22 CCR Division 4.5 within ten (10) days and/or prior to the end of the project to determine if it is hazardous waste and requires disposal. All paint chips will be considered hazardous waste and do not require testing. Components with lead paint that has been stabilized shall have a hazardous waste determination made prior to sending to a landfill.

3. Pre-transportation requirements
 - a) Any packaging used to ship hazardous waste off site such as a container, roll-off bin, tank or other device, must comply with 49 CFR Parts 173, 178, 179 and be labeled and prepared for transportation in accordance with 22 CCR Article 3.
 - b) The hazardous waste label must be affixed and filled out when the first amount of hazardous waste is placed in the container. The label must include the initial accumulation date.
 - c) All additional pre-transportation labeling, marking or placarding must be conducted prior to transporting off site and in accordance with 22 CCR Chapter 12, Article 3.
4. All containers and tanks of hazardous waste must be managed in a way which minimizes the threat of fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste to the air, soil or surface water which could threaten human health or the environment. Management techniques include containment areas capable of holding the contents of largest container within the containment area. Properly store and secure waste at all times. Do not leave hazardous waste in uncovered or unlocked trucks or dumpsters.
5. A hazardous waste manifest will be completed in accordance with 22 CCR Chapter 12, Article 2 for each shipment of hazardous waste leaving the work site. All waste shall leave the project site by the end of the project. Only The PROJECT MONITOR employees shall sign as the generator on manifests.
6. Disposal of the lead related hazardous wastes shall be by incineration unless otherwise specified by the ALMP.

APPENDIX A

CERTIFICATE OF WORKER'S ACKNOWLEDGMENT

PROJECT NAME: _____ DATE: _____

PROJECT ADDRESS: _____

CONTRACTOR'S NAME: _____

Working with lead can be dangerous. Inhaling and ingesting lead dust can cause an increase in blood lead levels which can lead to adverse health effects such as kidney damage, elevated blood pressure or infertility.

Your employer's contract with the City for the above project requires that: You be supplied with the proper respirator and be trained in its use. You be trained in safe work practices and in the use of the equipment found on the job. You receive a medical examination. These items are to have been done at no cost to you.

RESPIRATORY PROTECTION: You must have been trained in the proper use of respirators, and informed of the type respirator to be used on the above referenced project. You must be given a copy of the written respiratory protection manual issued by your employer. You must be equipped at no cost with the respirator to be used on the above project.

TRAINING COURSE: You must be licensed by the California Department of Public Health for Lead Hazard Control and be able to provide onsite documentation of training. You should have been trained in the dangers inherent in handling lead and breathing and ingesting lead dust and in proper work procedures and personal and area protective measures. The topics covered in the course must have included the following:

- Possible routes of exposure to lead
- Health hazards associated with lead
- Respiratory protection
- Use of protective equipment
- Work practices including hands on or on-the-job training
- Personal decontamination procedures
- Health and safety considerations

MEDICAL EXAMINATION: You must have had a medical examination within the past 12 months at no cost to you. This examination must have included: health history, physical examination, a blood pressure measurement, pulmonary function test and blood sample and analysis for lead.

By signing this document you are acknowledging only that the City has advised you of your rights to training and protection relative to your employer, the Contractor.

Signature: _____ Social Security No.: _____

Printed Name: _____

Witness (print): _____ Witness Signature: _____

APPENDIX B
CERTIFICATION OF VISUAL INSPECTION

Project # _____ Date: _____ Location: _____

Contractor: _____

The contractor hereby certifies that he/she has visually inspected the Work Area (all surfaces including pipes, counters, ledges, walls, ceiling and floor, behind critical barriers, sheet plastic, etc.) and has found no dust, debris or residue.

by: (Signature): _____ Date: _____

(Print Name): _____

(Company Name): _____

(Print Title): _____

CITY ALMP REPRESENTATIVE

The City ALMP Representative hereby certifies that he has accompanied the contractor on his/her visual inspection and verifies that this inspection has been thorough and to the best of his/her knowledge and belief, the contractor's certification above is a true and honest one.

by: (Signature): _____ Date: _____

(Print Name): _____

WORK AREA

Location: _____

Room: _____

Hazard Reduction Performed:

APPENDIX C

SUMMARY OF LEAD CONTAINING MATERIALS

Sample #	Location	Condition	Lead (mg/cm ²)
2009 testing			
101	Exterior White tile on cupula west side of tower	Intact	10.7
103	Exterior Light blue tile on cupula west side of tower	Intact	6.4
104	Exterior Yellow tile on cupula west side of tower	Intact	4.2
2013 testing			
5	Interior Tan Wall Plaster	Intact	.5
2016 testing			
5	Interior Black Structural Steel	Intact	7.5
6	Interior Black Structural Steel	Intact	8.0
7	Interior Black Handrails and Stairs	Intact	1.3

The remainder of this page is intentionally left blank.

CITY of SAN DIEGO **4103**
WORK REQUEST FOR ASBESTOS & LEAD MANAGEMENT PROGRAM

RECEIVED
 APR 09 2010

Department: E&CP Dept#: 545 Division: AE&E ENVIRONMENTAL PROTECTION
 Work Requested By: George Freiha MS#: 908A Phone/Fax: 5335278

Facility Name/Address: California Tower @ 1350 El Prado, Balboa Park SD

Facility #: _____ Age of Facility: 1915 Plans Attached? YES NO Target Start: _____

Description of Proposed Work (explain detail of work as well as what part of facility):

The Scope of work includes the following: upgrade of the steel bracing at the upper three levels of the tower, installation of post tensioning rods at the upper two levels, addition of concrete shear walls at the lower 6 levels of the tower, limited upgrade of the tower footing, and installation of drag bars between the tower and the building.

Accounting Numbers: 30244 545 1714 512117 B00628
 Fund Dept Org Obj.Acct Job Order

I have the authority to authorize ALMP to bill hourly inspection labor and laboratory expenses to the accounting numbers above for work related to this project.

Signature *George Freiha* Title Project Manager Date 4/8/10
 Print Name George Freiha Div. Analyst Name Cindy Delino

Send completed form to: **ASBESTOS & LEAD MANAGEMENT PROGRAM - 9601 Ridgehaven Court, Suite 320, San Diego, CA 92123 or MS 1103-B or Fax (858)492-5089**

FOR OFFICE USE ONLY

Date Received 4/9/10 Inspector Jeff Jhe S

Records/Inspection Information An inspection of the CA Tower indicate the I-beams have a primer with high levels of lead. No asbestos was found that would be impacted by the retrofitting.

Impact on Project A lead specification is forthcoming.

[Signature] 6/24/10 *[Signature]* 6-24-10
 ASBESTOS & LEAD PROGRAM INSPECTOR DATE ASBESTOS & LEAD PROGRAM MANAGER DATE

Asbestos & Lead Management Program -- (858) 573-1262 (FAX) (858) 492-5089

137101

SUBMITTAL FORM/Laboratory Services

PAGE 1 OF 1

3 day T/A

CLIENT City of San Diego
ADDRESS 9601 Ridgeway Ct. #320
San Diego, CA 92123
TELEPHONE 858-573-1277
CONTACT Jeff Jones

RELINQUISHED BY Jeff Jones
TIME / DATE 4/16/10
DATE OF SHIPMENT
CLIENT P.O. NO. 1078974
CLIENT JOB/PROJECT ID NO(S) 6456
PACKAGE SHIPPED FROM San Diego

RESULTS REQUESTED VIA Email jjones@sandiego.gov
(NOTE: Complete written reports will follow all analyses, in addition to any color transmitted verbal or fax results.)

DATE/TIME OF SAMPLE COLLECTION 4/16/10

SAMPLE PRESERVATIVES

HOLDING TIMES

NO. OF SAMPLES SENT 2 SAMPLER'S NAME Jeff Jones

TYPE WATER WASTE WATER SOIL FILTER SORBENT TUBE IMPINGER OTHER

(FOR EMS ONLY)

EMS Sample No.

CLIENT SAMPLE NO.

DESCRIPTION/LOCATION/ANALYSIS

VOLUME
IN INCHES
(If Applicable)

137101

1A
1B

6456-1A 12" gray FT and black mastic PLM

6456-1B 12" gray FT and black mastic PLM

137101

Laboratory No.

Received By

Time 9:38

Date of Package Delivery

4/19/10

Shipping Bill Retained:

YES [checked]

NONE []

Condition of Package on Receipt

ok

Condition of Custody Seal

None

No. of Samples

2

Chain-of-Custody Signature

FSL

Date of Acceptance into Sample Bank

4/19/10

Misc. Info.

Disposition of Samples

EMS Labs

EMS LABORATORIES 117 West Bellevue Drive / Pasadena CA 91105-2503 / 626-568-4065

Report No: 137101 **Customer:** City of San Diego
Date: April 21, 2010 9601 Ridgehaven Ct. #320
Date Received: April 19, 2010 San Diego, CA 92123
Date Analyzed: April 20, 2010 **Attention:** Jeff Jones
Date/Time Collected: April 16, 2010 by Jeff Jones **Reference:** 1078974; 6456
Subject: Polarized Light Microscopy Analysis for Asbestos 2 Samples
Methodology: "Method for Determination of Asbestos in Bulk Building Materials." EPA 600/R-93/116
Accredited: NVLAP Lab Code 101218-0
Certified: California Department of Health Services Environmental Testing Laboratory ELAP 1119
 County Sanitation Districts of Los Angeles County, Lab ID No. 10120

Quality Control Sample (SRM 1866 Glass Fibers as the blank): None Detected

Sample ID	Location / Description	Visual Description	Asbestiform Minerals	Other Fibrous Materials	Non-fibrous Materials
6456-1A	NON-FRIABLE	GRAY GRANULAR	NONE DETECTED	NONE DETECTED	GRANULAR MINERALS, OPAQUES
6456-1B	NON-FRIABLE	GRAY GRANULAR	NONE DETECTED	NONE DETECTED	GRANULAR MINERALS, OPAQUES



 Wesene Sebhat, Optical Microscopist
 BMK/mt

 B.M. Kolk, Laboratory Director

The EPA method is a semi-quantitative procedure. The detection limit is between 0.1 - 1% by area and is dependent upon the size of the asbestos fibers, the means of sampling and the matrix of the sampled material.

The test results reported are for the sample(s) delivered to us and may not represent the entire material from which the samples was taken. The EPA recommends three samples or more be taken from a "homogenous sampling area" before friable material is considered non-asbestos-containing.

** Negative floor tile samples may contain significant amounts (>1%) of very thin asbestos fibers which cannot be detected by PLM. Confirmation by XRD or TEM is recommended by the EPA (Federal Register Vol. 59, No. 146).

This report, from a NIST-accredited laboratory through NVLAP, must not be used by the client to claim product endorsement by NVLAP or any agency of the U.S. government. This report shall not be reproduced, except in full, without the written approval of EMS Laboratories.

Samples were received in good condition unless otherwise noted.



City of San Diego
Lead Safety and Healthy Homes Program



California Tower at Balboa Park, 1350 El Prado (Fac 630)

XRF Assay Results

Reading No	Time	Type	Duration	Units	MODE	LOCAT.	ROOM	SIDE	COMPONENT	COND.	SUBST.	COLOR	Results	PbC
1	8/14/13 17:19	SHUTTER CAL	60.11	cps										7.12
2	8/14/13 17:20	PAINT	20	mg / cm ^2	K & L				CALIB. CHECK			RED	Positive	1
3	8/14/13 17:20	PAINT	20	mg / cm ^2	K & L				CALIB. CHECK			RED	Positive	1
4	8/14/13 17:21	PAINT	20	mg / cm ^2	K & L				CALIB. CHECK			RED	Positive	1
5	8/14/13 17:22	PAINT	10.4	mg / cm ^2	Std.	CAL TOWER	ELECTRICAL	C	WALL	INTACT	PLASTER	TAN	Negative	0.5
6	8/14/13 17:24	PAINT	1.49	mg / cm ^2	Std.	CAL TOWER	ELECTRICAL	C	PANEL	INTACT	METAL	GRAY	Negative	0.11
7	8/14/13 17:25	PAINT	20	mg / cm ^2	K & L				CALIB. CHECK			RED	Positive	1
8	8/14/13 17:25	PAINT	20	mg / cm ^2	K & L				CALIB. CHECK			RED	Negative	0.9
9	8/14/13 17:26	PAINT	20	mg / cm ^2	K & L				CALIB. CHECK			RED	Positive	1



City of San Diego Asbestos Lead Management Program

California Tower, 1350 El Prado, Balboa Park, San Diego CA 92101



XRF Assay Results

Reading No	Time	Duration	Mode	Location	Room	Side	Component	Condition	Substrate	Color	Results	PbC	Units
1	12/12/16 12:45	103.82										3.85	cps
2	12/12/16 12:48	20	K & L				CALIB. CHECK			RED	Negative	0.8	mg / cm ^2
3	12/12/16 12:54	20	K & L				CALIB. CHECK			RED	Negative	0.8	mg / cm ^2
4	12/12/16 12:55	20	K & L				CALIB. CHECK			RED	Negative	0.9	mg / cm ^2
5	12/12/16 12:57	1.17	Std.	CA TOWER	INTERIOR	A	STRUCTURAL STEEL	INTACT	METAL	BLACK	Positive	7.5	mg / cm ^2
6	12/12/16 12:57	1.16	Std.	CA TOWER	INTERIOR	A	STRUCTURAL STEEL	INTACT	METAL	BLACK	Positive	8	mg / cm ^2
7	12/12/16 12:57	3.78	Std.	CA TOWER	INTERIOR	A	HANDRAIL	INTACT	METAL	BLACK	Positive	1.3	mg / cm ^2
8	12/12/16 13:06	20	K & L				CALIB. CHECK			RED	Negative	0	mg / cm ^2
9	12/12/16 13:11	20	K & L				CALIB. CHECK			RED	Negative	0.9	mg / cm ^2
10	12/12/16 13:13	20	K & L				CALIB. CHECK			RED	Negative	0.9	mg / cm ^2

Inspector: Wm. Brad Blondet
CDPH Inspector/Assessor # 5464

Niton XLp303A Serial #20132
Testing for Demolition/Renovation

APPENDIX J
HAZARDOUS LABEL/FORMS

HAZARDOUS WASTE

STATE AND FEDERAL LAW PROHIBITS IMPROPER DISPOSAL
IF FOUND, CONTACT THE NEAREST POLICE, OR PUBLIC SAFETY
AUTHORITY, OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY
OR THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES

GENERATOR NAME _____ 24 HR. PHONE () _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

EPA ID NO. _____ MANIFEST DOCUMENT NO. _____

EPA WASTE NO. _____ CA WASTE NO. _____ ACCUMULATION START DATE _____ / ____ / ____

CONTENTS, COMPOSITION _____

PROPER DOT SHIPPING NAME _____

TECHNICAL NAME (S) _____

UN/NA NO. WITH PREFIX _____

PHYSICAL STATE | HAZARDOUS PROPERTIES FLAMMABLE TOXIC
 SOLID LIQUID | CORROSIVE REACTIVE OTHER _____

HANDLE WITH CARE!
CONTAINS HAZARDOUS OR TOXIC WASTES

INCIDENT/RELEASE ASSESSMENT FORM ¹

If you have an emergency, Call 911

Handlers of hazardous materials are required to report releases. The following is a tool to be used for assessing if a release is reportable. Additionally, a non-reportable release incident form is provided to document why a release is not reported (see back).

Questions for Incident Assessment:

	YES	NO
1. Was anyone killed or injured, or did they require medical care or admitted to a hospital for observation?	<input type="checkbox"/>	<input type="checkbox"/>
2. Did anyone, other than employees in the immediate area of the release, evacuate?	<input type="checkbox"/>	<input type="checkbox"/>
3. Did the release cause off-site damage to public or private property?	<input type="checkbox"/>	<input type="checkbox"/>
4. Is the release greater than or equal to a reportable quantity (RQ)?	<input type="checkbox"/>	<input type="checkbox"/>
5. Was there an uncontrolled or unpermitted release to the air?	<input type="checkbox"/>	<input type="checkbox"/>
6. Did an uncontrolled or unpermitted release escape secondary containment, or extend into any sewers, storm water conveyance systems, utility vaults and conduits, wetlands, waterways, public roads, or off site?	<input type="checkbox"/>	<input type="checkbox"/>
7. Will control, containment, decontamination, and/or clean up require the assistance of federal, state, county, or municipal response elements?	<input type="checkbox"/>	<input type="checkbox"/>
8. Was the release or threatened release involving an unknown material or contains an unknown hazardous constituent?	<input type="checkbox"/>	<input type="checkbox"/>
9. Is the incident a threatened release (a condition creating a substantial probability of harm that requires immediate action to prevent, reduce, or mitigate damages to persons, property, or the environment)?	<input type="checkbox"/>	<input type="checkbox"/>
10. Is there an increased potential for secondary effects including fire, explosion, line rupture, equipment failure, or other outcomes that may endanger or cause exposure to employees, the general public, or the environment?	<input type="checkbox"/>	<input type="checkbox"/>

If the answer is YES to any of the above questions – report the release to the California Office of Emergency Services at 800-852-7550 and the local CUPA daytime: (619) 338-2284, after hours: (858) 565-5255. Note: other state and federal agencies may require notification depending on the circumstances.

Call 911 in an emergency

If all answers are NO, complete a Non Reportable Release Incident Form (page 2 of 2) and keep readily available. Documenting why a “no” response was made to each question will serve useful in the event questions are asked in the future, and to justify not reporting to an outside regulatory agency.

If in doubt, report the release.

¹ This document is a guide for accessing when hazardous materials release reporting is required by Chapter 6.95 of the California Health and Safety Code. It does not replace good judgment, Chapter 6.95, or other state or federal release reporting requirements.

NON REPORTABLE RELEASE INCIDENT FORM

1. RELEASE AND RESPONSE DESCRIPTION

Incident # _____

Date/Time Discovered	Date/Time Discharge	Discharge Stopped <input type="checkbox"/> Yes <input type="checkbox"/> No
Incident Date / Time:		
Incident Business / Site Name:		
Incident Address:		
Other Locators (Bldg, Room, Oil Field, Lease, Well #, GIS)		
Please describe the incident and indicate specific causes and area affected. Photos Attached?: <input type="checkbox"/> Yes <input type="checkbox"/> No		
Indicate actions to be taken to prevent similar releases from occurring in the future.		

2. ADMINISTRATIVE INFORMATION

Supervisor in charge at time of incident:	Phone:
Contact Person:	Phone:

3. CHEMICAL INFORMATION

Chemical	Quantity <input type="checkbox"/> GAL <input type="checkbox"/> LBS <input type="checkbox"/> FT ³
Chemical	Quantity <input type="checkbox"/> GAL <input type="checkbox"/> LBS <input type="checkbox"/> FT ³
Chemical	Quantity <input type="checkbox"/> GAL <input type="checkbox"/> LBS <input type="checkbox"/> FT ³
Clean-Up Procedures & Timeline:	
Completed By:	Phone:
Print Name:	Title:

EMERGENCY RELEASE FOLLOW - UP NOTICE REPORTING FORM

A	BUSINESS NAME	FACILITY EMERGENCY CONTACT & PHONE NUMBER () -	
B	INCIDENT DATE MO DAY YR	TIME NOTIFIED OES (use 24 hr time)	OES CONTROL NO.
C	INCIDENT ADDRESS LOCATION	CITY / COMMUNITY	COUNTY ZIP
D	CHEMICAL OR TRADE NAME (print or type)		CAS Number
D	CHECK IF CHEMICAL IS LISTED IN 40 CFR 355, APPENDIX A <input type="checkbox"/>	CHECK IF RELEASE REQUIRES NOTIFICATION UNDER 42 U.S.C. Section 9603 (a) <input type="checkbox"/>	
D	PHYSICAL STATE CONTAINED <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> GAS	PHYSICAL STATE RELEASED <input type="checkbox"/> SOLID <input type="checkbox"/> LIQUID <input type="checkbox"/> GAS	QUANTITY RELEASED
D	ENVIRONMENTAL CONTAMINATION <input type="checkbox"/> AIR <input type="checkbox"/> WATER <input type="checkbox"/> GROUND <input type="checkbox"/> OTHER	TIME OF RELEASE	DURATION OF RELEASE — DAYS — HOURS — MINUTES
E	ACTIONS TAKEN		
F	KNOWN OR ANTICIPATED HEALTH EFFECTS (Use the comments section for addition information)		
	<input type="checkbox"/> ACUTE OR IMMEDIATE (explain) _____		
	<input type="checkbox"/> CHRONIC OR DELAYED (explain) _____		
	<input type="checkbox"/> NOTKNOWN (explain) _____		
G	ADVICE REGARDING MEDICAL ATTENTION NECESSARY FOR EXPOSED INDIVIDUALS		
H	COMMENTS (INDICATE SECTION (A - G) AND ITEM WITH COMMENTS OR ADDITIONAL INFORMATION)		
I	CERTIFICATION: I certify under penalty of law that I have personally examined and I am familiar with the information submitted and believe the submitted information is true, accurate, and complete.		
	REPORTING FACILITY REPRESENTATIVE (print or type) _____		
	SIGNATURE OF REPORTING FACILITY REPRESENTATIVE _____		DATE: _____

EMERGENCY RELEASE FOLLOW-UP NOTICE REPORTING FORM INSTRUCTIONS

GENERAL INFORMATION:

Chapter 6.95 of Division 20 of the California Health and Safety Code requires that written emergency release follow-up notices prepared pursuant to 42 U.S.C. § 11004, be submitted using this reporting form. Non-permitted releases of reportable quantities of Extremely Hazardous Substances (listed in 40 CFR 355, appendix A) or of chemicals that require release reporting under section 103(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 [42 U.S.C. § 9603(a)] must be reported on the form, as soon as practicable, but no later than 30 days, following a release. The written follow-up report is required in addition to the verbal notification.

BASIC INSTRUCTIONS:

- The form, when filled out, reports follow-up information required by 42 U.S.C § 11004. Ensure that all information requested by the form is provided as completely as possible.
- If the incident involves reportable releases of more than one chemical, prepare one report form for each chemical released.
- If the incident involves a series of separate releases of chemical(s) at different times, the releases should be reported on separate reporting forms.

SPECIFIC INSTRUCTIONS:

Block A: Enter the name of the business and the name and phone number of a contact person who can provide detailed facility information concerning the release.

Block B: Enter the date of the incident and the time that verbal notification was made to OES. The OES control number is provided to the caller by OES at the time verbal notification is made. Enter this control number in the space provided.

Block C: Provide information pertaining to the location where the release occurred. Include the street address, the city or community, the county and the zip code.

Block D: Provide information concerning the specific chemical that was released. Include the chemical or trade name and the Chemical Abstract Service (CAS) number. Check all categories that apply. Provide best available information on quantity, time and duration of the release.

Block E: Indicate all actions taken to respond to and contain the release as specified in 42 U.S.C. § 11004(c).

Block F: Check the categories that apply to the health effects that occurred or could result from the release. Provide an explanation or description of the effects in the space provided. Use Block H for additional comments/information if necessary to meet requirements specified in 42 U.S.C. § 11004(c).

Block G: Include information on the type of medical attention required for exposure to the chemical released. Indicate when and how this information was made available to individuals exposed and to medical personnel, if appropriate for the incident, as specified in 42 U.S.C. § 11004(c).

Block H: List any additional pertinent information.

Block I: Print or type the name of the facility representative submitting the report. Include the official signature and the date that the form was prepared.

MAIL THE COMPLETED REPORT TO:

**State Emergency Response Commission (SERC)
Attn: Section 304 Reports
Hazardous Materials Unit
3650 Schriever Avenue
Mather, CA 95655**

NOTE: Authority cited: Sections 25503, 25503.1 and 25507.1, Health and Safety Code. Reference: Sections 25503(b)(4), 25503.1, 25507.1, 25518 and 25520, Health and Safety Code.

APPENDIX I
SAMPLE OF PUBLIC NOTICE



CONSTRUCTION NOTICE

PROJECT TITLE

Work on your street will begin within one week to replace the existing water mains servicing your community.

The work will consist of:

- Saw-cutting and trench work on Ingulf Street from Morena Boulevard to Galveston Street to install new water mains, water laterals and fire hydrants.
• Streets where trenching takes place will be resurfaced and curb ramps will be upgraded to facilitate access for persons with disabilities where required.
• This work is anticipated to be complete in your community by December 2016.

How your neighborhood may be impacted:

- Water service to some properties during construction will be provided by a two-inch highline pipe that will run along the curb. To report a highline leak call 619-515-3525.
• Temporary water service disruptions are planned. If planned disruptions impact your property, you will receive advance notice.
• Parking restrictions will exist because of the presence of construction equipment and materials.
• "No Parking" signs will be displayed 72 hours in advance of the work.
• Cars parked in violation of signs will be TOWED.

Hours and Days of Operation:

Monday through Friday X:XX AM to X:XX PM.

City of San Diego Contractor:

Company Name, XXX-XXX-XXXX



CONSTRUCTION NOTICE

PROJECT TITLE

Work on your street will begin within one week to replace the existing water mains servicing your community.

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• Parking restrictions will exist because of the presence of construction equipment and materials.
• "No Parking" signs will be displayed 72 hours in advance of the work.
• Cars parked in violation of signs will be TOWED.

Hours and Days of Operation:

Monday through Friday X:XX AM to X:XX PM.

City of San Diego Contractor:

Company Name, XXX-XXX-XXXX

APPENDIX J

ADVANCED METERING INFRASTRUCTURE (AMI) DEVICE PROTECTION

Protecting AMI Devices in Meter Boxes and on Street Lights

The Public Utilities Department (PUD) has begun the installation of the Advanced Metering Infrastructure (AMI) technology as a new tool to enhance water meter reading accuracy and efficiency, customer service and billing, and to be used by individual accounts to better manage the efficient use of water. **All AMI devices shall be protected per Section 5-2, "Protection", of the 2015 Whitebook.**

AMI technology allows water meters to be read electronically rather than through direct visual inspection by PUD field staff. This will assist PUD staff and customers in managing unusual consumption patterns which could indicate leaks or meter tampering on a customer's property.

Three of the main components of an AMI system are the:

- A. Endpoints, see Photo 1:

Photo 1



B. AMI Antenna attached to Endpoint (antenna not always required), see Photo 2:

Photo 2



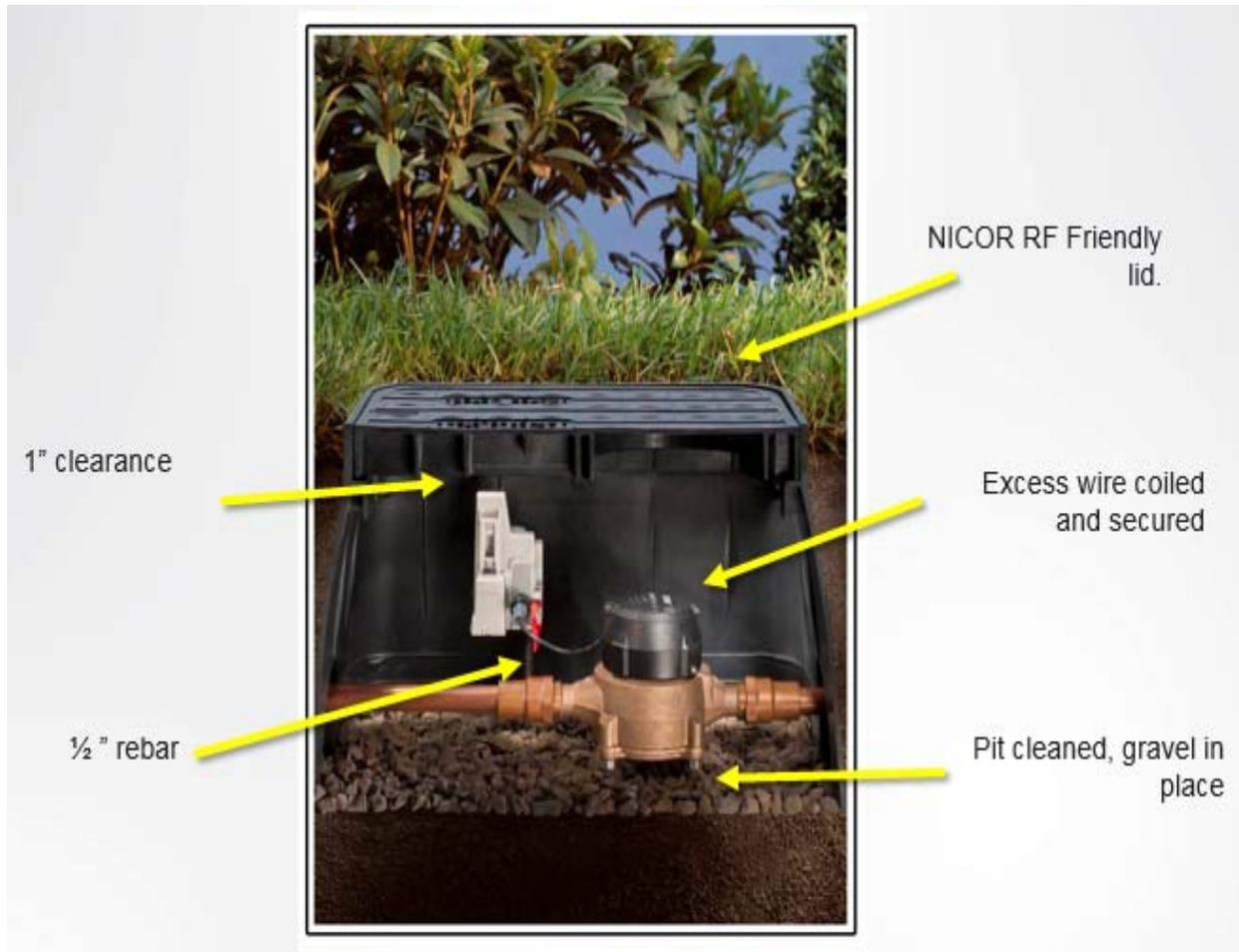
Network Devices, see Photo 3:

Photo 3



AMI endpoints transmit meter information to the AMI system and will soon be on the vast majority of meters in San Diego. These AMI devices provide interval consumption data to the PUD's Customer Support Division. If these devices are damaged or communication is interrupted, this Division will be alerted of the situation. The endpoints are installed in water meter boxes, coffins, and vaults adjacent to the meter. A separate flat round antenna may also be installed through the meter box lid. This antenna is connected to the endpoint via cable. The following proper installation shall be implemented when removing the lid to avoid damaging the antenna, cable, and/or endpoint. Photo 4 below demonstrates a diagram of the connection:

Photo 4



The AMI device ERT/Endpoint/Transmitter shall be positioned and installed as discussed in this Appendix. If the ERT/Endpoint/Transmitter is disturbed, it shall be re-installed and returned to its original installation with the end points pointed upwards as shown below in Photo 5.

The PUD's code compliance staff will issue citations and invoices to you for any damaged AMI devices that are not re-installed as discussed in the Contract Document

Photo 5 below shows a typical installation of an AMI endpoint on a water meter.

Photo 5

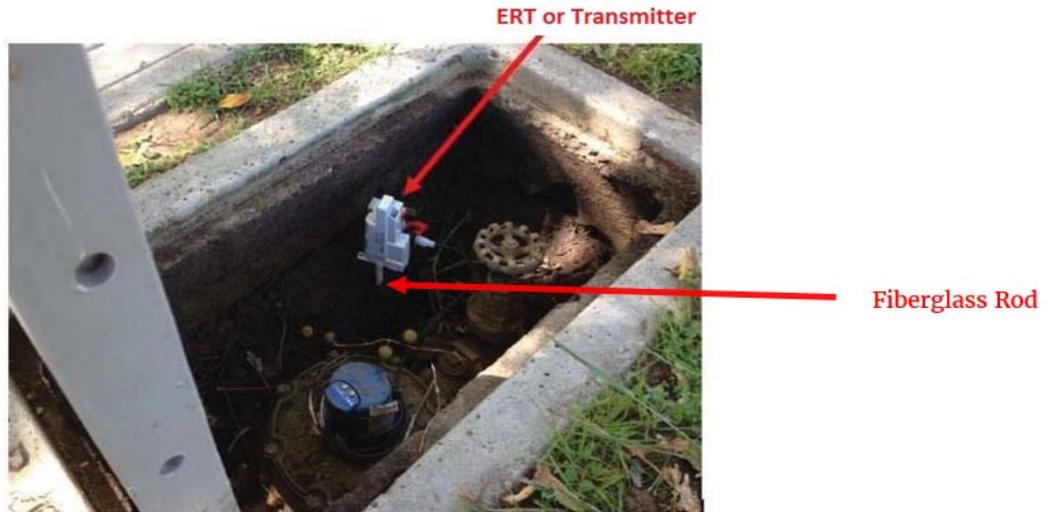


Photo 6 below is an example of disturbance that shall be avoided:

Photo 6



You are responsible when working in and around meter boxes. If you encounter these endpoints, use proper care and do not disconnect them from the registers on top of the water meter. If the lid has an antenna drilled through, do not change or tamper with the lid and inform the Resident Engineer immediately about the location of that lid. Refer to Photo 7 below:

Photo 7



Another component of the AMI system are the Network Devices. The Network Devices are strategically placed units (mainly on street light poles) that collect interval meter reading data from multiple meters for transmission to the Department Control Computer. **If you come across any of these devices on street lights that will be removed or replaced (refer to Photos 8 and 9 below), notify AMI Project Manager Arwa Sayed at (619) 362-0121 immediately.**

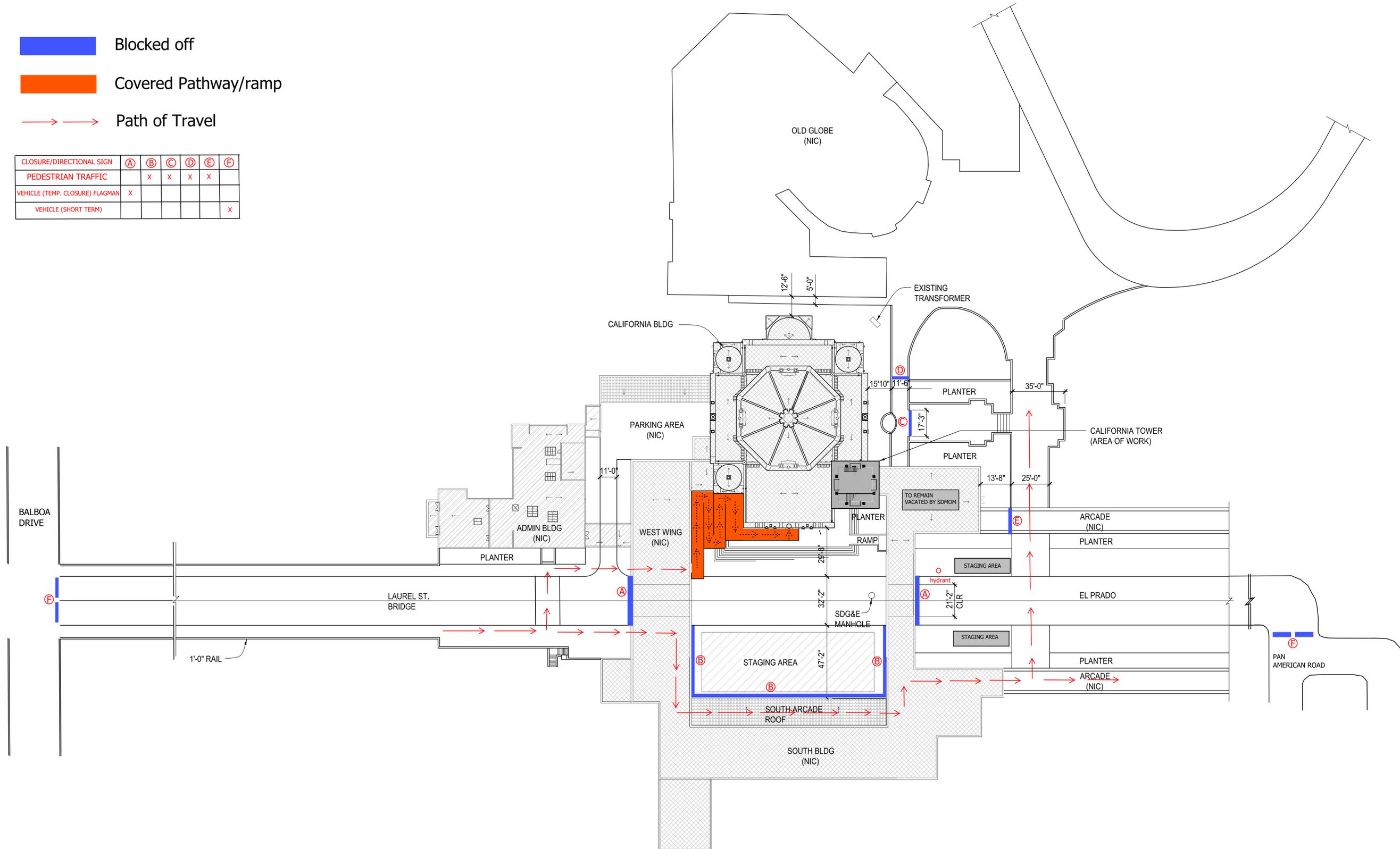
Photo 8 shows an installed network device on a street light. On the back of each Network Device is a sticker with contact information. See Photo 9. **Call PUD Water Emergency Repairs at 619-515-3525 if your work will impact these street lights.** These are assets that belong to the City of San Diego and you shall be responsible for any costs of disruption of this network.

APPENDIX K

PEDESTRIAN AND VEHICULAR TRAFFIC CONTROL/ACCESS PROPOSED LAYOUT

- Blocked off
- Covered Pathway/ramp
- Path of Travel

CLOSURE/DIRECTIONAL SIGN	(A)	(B)	(C)	(D)	(E)	(F)
PEDESTRIAN TRAFFIC		X	X	X	X	
VEHICLE (TEMP. CLOSURE) FLAGMAN	X					
VEHICLE (SHORT TERM)						X



SITE PLAN
 SCALE : 1/8" = 1'-0"

APPENDIX L

MODIFIED BALBOA PARK SPECIAL EVENTS LIST

Balboa Park Annual Events

Event Name	Location/Venue	Attendance	Set up day times	Day of Event times	Load out day times
Art Mart	Pan American Lawn	200+	same as DOE	2nd and 4th weekends of the month *every weekend in July-August 9am-4pm	same as DOE
HPR Lawn Program	International Lawn	200+	same as DOE	Jan-Dec. Every Sunday (*some Saturdays) 9am-4pm	same as DOE
Sunday Concerts	Spreckels Organ Pavilion	2000	same as DOE	Jan-Dec. Every Sunday 2pm-4pm	
Human Trafficking Awareness Rally	6th & Laurel Lawn North	300	same as DOE	3rd Saturday of January 10am-3:30pm	same as DOE
Pro Life Rally	6th & Laurel Lawn North	300	same as DOE	4th Saturday of January 8am-1:30pm	same as DOE
Martin Luther King Breakfast	Balboa Park Activity Center	1,500	Sunday before event 12pm	MLK Day 10am-12pm	same as DOE
Used Oil Recycling	Inspiration Point Parking Lot-Lower	500	same as DOE	3rd Saturday of February	same as DOE
Finish Chelsea's Run	6th & Laurel Lawn North to Quince	5,000	Friday before 8am	1st Saturday of March Race Starts @ 8am	same as DOE clear by 5pm
Cherry Blossom Festival	Spreckels Organ Pavilion/Japanese Friendship Garden	10,000	Day of event	March 5-6, 2016	same as DOE
St. Patricks Day Festival/Parade	6th & Laurel Lawn North to Quince South Lawn and Marston Loop used for parade staging	25,000	Friday before 7am	Saturday before or on 3/17 9am-6pm	Completed on Sunday by noon
Citywide Youth Basketball Tournament	Municipal Gymnasium	1,500	Day of event	Friday, March 11-12, 2016 Saturday, March 12, 2016	same as DOE
Annual Youth Fitness Expo	Spreckels Organ Pavilion	2,000	Day of event	10am-5pm	same as DOE
San Diego Race for Autism	6th & Laurel South Lawn	7,000	Friday before 12pm	3rd Saturday of March Race starts at 8am	same as DOE clear by 2pm
Hot Chocolate 15/5K	Golden Hill Park *Road closures on Pershing	3000	same as DOE	4th Sunday of March 5am-10am	same as DOE
Round Dance Festival	Federal Parking Lot North, Balboa Park Club, Recital Hall	1000	Last Friday of the March	Last Weekend of March Fri-Sun	Sunday
Tartan Day	International Lawn	250	same as DOE @ 8am	1st Saturday of April 10am-4pm	same as DOE clear by 6pm
San Diego Earth Day	Central Mesa	60,000	Friday before 7am	4th Sunday of April 10am-5pm	same as DOE clear by 10pm
Multi-Cultural Earth Day	Cultural Turf East	1,000	Day before 7am	4th Sunday of April 12pm-7pm	same as DOE clear by 10pm
March for Babies	6th & Laurel Lawn South	7,500	Friday before 9am	Last Saturday of April Walk starts @ 8am	same as DOE clear by noon
Student Shakespeare Festival	El Prado	1,000	same as DOE	Last Saturday of April @ 12pm	same as DOE
SD Mineral & Gem Picnic	Park & President's Way Lawn	250	same as DOE @ 7am	Last Saturday of April 9am-4pm	same as DOE clear by 5pm
Art Alive	Plaza de Panama	1,200	same as DOE	Last Friday of April 7pm-midnight	Immediately after the event
American Indian Days	Park & President's Way Lawn	1,100	same as DOE @ 6am	Same weekend as Mother's Day in May Sat-Sun 10am-6pm	same as DOE clear by 7pm

Girl Scout Bridging	Spreckels Organ Pavilion/6th Ave & Laurel South Lawn	1,000	same as DOE	2nd Saturday of May 8am-11:30am	same as DOE clear by 12:30pm
San Diego City College Graduation	Spreckels Organ Pavilion	500-1000 rehearsals 2400 graduation days	Day of event	May 19-20, 2016 May 26-27, 2016	day of event
Garden Party	El Prado/Village Place/Botanical Lawns/Cascades/Bea Evenson/Plaza de Panama	2,000	Day before 7am	Saturday of Memorial Day weekend 9am-3pm	same as DOE
Ethnic Food Fair	Palisades/Pan American/HPR/International Lawns	1,000	Saturday before @ 12pm	Last Sunday of May 10am-6pm	same as DOE clear by 10pm
*High School Graduations	Spreckels Organ Pavilion	2,400	Day of event	Every Saturday in June	day of event
Food Truck Friday	El Prado/Plaza de Panama	2,500	same as DOE	Every Friday June-September 4pm-8:30pm	same as DOE
Civic Dance Recital BBQ	Botanical Lawn West	200	same as DOE @ noon	1st 3 weekends in June 12pm-7pm	same as DOE clear by 7pm
Rock & Roll 5K	6th & Laurel Lawn North to Quince	5000	Friday before @ 8am	1st Saturday of June 7am	Load in stays up for Marathon the next day
Rock & Roll Marathon	6th & Laurel Lawn North to Quince	35,000	Saturday before @ 8am	1st Sunday of June @ 6am	Same as DOE clear by 3pm
Philippine Cultural Arts Festival	Park & President's Way Lawn	2,000	same as DOE	Last weekend of June 10am-5pm	same as DOE clear by 11am
Patrons of the Prado	Spreckels Organ Pavilion/Bea Evenson Fountain/Cascades	400	Friday before 12pm	2nd Saturday of July 6pm-midnight	Sunday by 9am
ESRI	Bea Evenson Fountain/Cascades/El Prado/Patio B/Botanical Lawns East and West	10,000	Wednesday 7pm day before	2nd Thursday of July 5-10pm	same as DOE by midnight
SD Pride Festival	6th Ave & Laurel Lawn South through Marston Loop	60,000	Wednesday before event	3rd weekend of July times vary for Friday, Saturday and Sunday event times	Clear by Monday evening
SD Pride Parade & 5K	6th & Quince/Balboa Drive	8,000	Day of event	3rd Saturday of July 5am-11am	same day DOE
BP 8 Miler	Palisades Parking Lot/Cabrillo Bridge/Balboa Drive/6th Ave/Village Place/Upas	3000	same as DOE 3am	1st Saturday of August 6:45am-9:30am	same as DOE
Spirit of '45	Veteran's Memorial Garden	900	same as DOE 7am	2nd Sunday of August 10am-3pm	same as DOE clear by 6pm
America's Finest City Half Marathon & 5K	Park & President's Way Lawn/Palisades Lot/Cabrillo Bridge	8000	Saturday before 8am	3rd Sunday of August 6:30am-10:30am	same as DOE clear by 2pm
BP 4 Miler	6th & Quince	250	same as DOE 5:30am	1st Saturday of September 7am-9:30am	same as DOE clear by 10am
Heart Walk	6th & Laurel South Lawn	10000	Friday before 8:30am	3rd Saturday of September 6-11am	same as DOE clear by 2:30pm
Bunnyfest	Park & President's Way Lawn	500	same as DOE 7am	9/18/16 10am-4pm	same as DOE clear by 6pm
Aids Walk	Village Place/El Prado/Cabrillo Bridge	6000	same as DOE 5:30am	4th Saturday of September 9:30am	same as DOE clear by 11am
Maker Faire	Bea Evenson/El Prado/Botanical Lawns/Plaza de Panama/Palisades South Lot	2000	varies at different venues but mainly Friday before at 7am	1st Saturday/Sunday of October 10am-6pm	Sunday by midnight

Diwali Festival	Spreckels Organ Pavilion/Organ Pavilion Lot	2400	same as DOE 2pm	3rd Saturday of October 3-9pm	same as DOE clear by 10pm
Alzheimer's Walk	Park & President's Way Lawn	3500	Friday before 7am	3rd Saturday of October 6:30am-11am	same as DOE clear by 3pm
Making Strides Against Breast Cancer	6th & Laurel South Lawn/Cabrillo Bridge/Park Blvd	20000	Saturday before 10am	4th Sunday of October 7am-2pm	same as DOE clear by 4pm
Halloween Family Day	El Prado/Cascades/Plaza de Panama	12000	same as DOE 9am	Saturday or day of Halloween 11am-4pm	same as DOE clear by 5pm
Fiesta de la Cuadrilla	Balboa Park Club/Municipal Gymnasium/Recital Hall/Federal Bldg. Parking Lot	1500	same as DOE	1st full weekend of November (Friday-Sunday)	Sunday of event weekend
Art San Diego	Balboa Park Activity Center	1000 each day	Monday before event	November 3-6, 2016	Monday after event
Race for the Cure	6th & Laurel North Lawn	15000	Saturday before 8am	1st Sunday of November 7am-11am	same as DOE clear by 3pm
JDRF One Walk	6th & Laurel North Lawn	3500	Friday before 8am	2nd Saturday of November 8am-12pm	same as DOE clear by 4pm
Save A Life Walk	6th & Laurel South Lawn	1500	Saturday before 1pm	2nd Sunday of November 8-10:30am	same as DOE clear by 11am
Father Joe's Thanksgiving Day 5K	Spreckels Organ Pavilion/Plaza de Panama/Cabrillo Bridge/Village Place/El Prado	7500	Wednesday before 6am	Thanksgiving Day 6:30am-11am	same as DOE clear by 1pm
December Nights	Entire Park	30000	Monday before	1st Friday and Saturday of December 3-11pm/12-11pm	Clear by Sunday 3pm
Jingle Bell Run	6th Ave & Laurel North Lawn	1500	Friday before 8am	2nd Saturday in December 7am- 12pm	same as DOE clear by 2pm

ATTACHMENT F
INTENTIONALLY LEFT BLANK

ATTACHMENT G
CONTRACT AGREEMENT

CONTRACT AGREEMENT

CONSTRUCTION CONTRACT

This contract is made and entered into between THE CITY OF SAN DIEGO, a municipal corporation, herein called "City", and SOLPAC Construction, Inc., herein called "Contractor" for construction of **California Tower Seismic Retrofit**; Bid No. **K-19-1560-DBB-3**; in the amount of **Four Million Seven Hundred Ten Thousand Five Hundred Dollars and Zero Cents (\$4,710,500.00)**, which is comprised of the Base Bid plus Additive Alternates A.

IN CONSIDERATION of the payments to be made hereunder and the mutual undertakings of the parties hereto, City and Contractor agree as follows:

1. The following are incorporated into this contract as though fully set forth herein:
 - (a) The attached Faithful Performance and Payment Bonds.
 - (b) The attached Proposal included in the Bid documents by the Contractor.
 - (c) Reference Standards listed in the Instruction to Bidders and the Supplementary Special Provisions (SSP).
 - (d) That certain documents entitled **California Tower Seismic Retrofit**, on file in the office of the City Clerk as Document No. **L-12003.2**, as well as all matters referenced therein.
2. The Contractor shall perform and be bound by all the terms and conditions of this contract and in strict conformity therewith shall perform and complete in a good and workmanlike manner **California Tower Seismic Retrofit, K-19-1560-DBB-3**, San Diego, California.
3. For such performances, the City shall pay to Contractor the amounts set forth at the times and in the manner and with such additions or deductions as are provided for in this contract, and the Contractor shall accept such payment in full satisfaction of all claims incident to such performances.
4. No claim or suit whatsoever shall be made or brought by Contractor against any officer, agent, or employee of the City for or on account of anything done or omitted to be done in connection with this contract, nor shall any such officer, agent, or employee be liable hereunder.
5. This contract is effective as of the date that the Mayor or designee signs the agreement.

CONTRACT AGREEMENT (continued)

IN WITNESS WHEREOF, this Agreement is signed by the City of San Diego, acting by and through its Mayor or designee, pursuant to Municipal Code 522.3102 authorizing such execution.

THE CITY OF SAN DIEGO

APPROVED AS TO FORM

Mara W. Elliott, City Attorney

By 

By 

Print Name: Stephen Samara
Principal Contract Specialist
Public Work Department

Print Name: Christina L. Rae
Deputy City Attorney

Date: 1/10/2018

Date: 1/22/19

CONTRACTOR

By 

Print Name: Stephen W. Thompson

Title: CEO

Date: 12/13/18

City of San Diego License No.: B2004002427

State Contractor's License No.: 886641

DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION NUMBER: 1000000370

CERTIFICATIONS AND FORMS

The Bidder / Proposer, by submitting its electronic bid or proposal, agrees to and certifies under penalty of perjury under the laws of the State of California, that the certifications, forms and affidavits submitted as part of this submission are true and correct.

BIDDER'S GENERAL INFORMATION

To the City of San Diego:

Pursuant to "Notice Inviting Bids", specifications, and requirements on file with the City Clerk, and subject to all provisions of the Charter and Ordinances of the City of San Diego and applicable laws and regulations of the United States and the State of California, the undersigned hereby proposes to furnish to the City of San Diego, complete at the prices stated herein, the items or services hereinafter mentioned. The undersigned further warrants that this bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

The undersigned bidder(s) further warrants that bidder(s) has thoroughly examined and understands the entire Contract Documents (plans and specifications) and the Bidding Documents therefore, and that by submitting said Bidding Documents as its bid proposal, bidder(s) acknowledges and is bound by the entire Contract Documents, including any addenda issued thereto, as such Contract Documents incorporated by reference in the Bidding Documents.

**NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID UNDER 23
UNITED STATES CODE 112 AND PUBLIC CONTRACT CODE 7106**

State of California

County of San Diego

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

CONTRACTOR CERTIFICATION

DRUG-FREE WORKPLACE

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-17 regarding Drug-Free Workplace as outlined in the WHITEBOOK, Section 7-13.3, "Drug-Free Workplace", of the project specifications, and that;

This company_has in place a drug-free workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of subdivisions a) through c) of the policy as outlined.

CONTRACTOR CERTIFICATION

AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANCE CERTIFICATION

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-4 regarding the Americans With Disabilities Act (ADA) outlined in the WHITEBOOK, Section 7-13.2, "Americans With Disabilities Act", of the project specifications, and that:

This company has in place workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of the policy as outlined.

CONTRACTOR CERTIFICATION

CONTRACTOR STANDARDS – PLEDGE OF COMPLIANCE

I declare under penalty of perjury that I am authorized to make this certification on behalf of the company submitting this bid/proposal, that as Contractor, I am familiar with the requirements of City of San Diego Municipal Code § 22.3004 regarding Contractor Standards as outlined in the WHITEBOOK, Section 7-13.4, ("Contractor Standards"), of the project specifications, and that Contractor has complied with those requirements.

I further certify that each of the Contractor's subcontractors has completed a Pledge of Compliance attesting under penalty of perjury of having complied with City of San Diego Municipal Code § 22.3004.

CONTRACTOR CERTIFICATION

EQUAL BENEFITS ORDINANCE CERTIFICATION

I declare under penalty of perjury that I am familiar with the requirements of and in compliance with the City of San Diego Municipal Code § 22.4300 regarding Equal Benefits Ordinance.

CONTRACTOR CERTIFICATION

EQUAL PAY ORDINANCE CERTIFICATION

Contractor shall comply with the Equal Pay Ordinance (EPO) codified in the San Diego Municipal Code (SDMC) at section 22.4801 through 22.4809, unless compliance is not required based on an exception listed in SDMC section 22.4804.

Contractor shall require all of its subcontractors to certify compliance with the EPO in their written subcontracts.

Contractor must post a notice informing its employees of their rights under the EPO in the workplace or job site.

By signing this Contract with the City of San Diego, Contractor acknowledges the EPO requirements and pledges ongoing compliance with the requirements of SDMC Division 48, section 22.4801 et seq., throughout the duration of this Contract.

AFFIDAVIT OF DISPOSAL

(To be submitted upon completion of Construction pursuant to the contracts Certificate of Completion)

WHEREAS, on the _____ DAY OF _____, 2____ the undersigned entered into and executed a contract with the City of San Diego, a municipal corporation, for:

California Tower Seismic Retrofit

(Name of Project)

as particularly described in said contract and identified as Bid No. **K-19-1560-DBB-3**; SAP No. (WBS/IO/CC) **L-12003.2**; and **WHEREAS**, the specification of said contract requires the Contractor to affirm that "all brush, trash, debris, and surplus materials resulting from this project have been disposed of in a legal manner"; and **WHEREAS**, said contract has been completed and all surplus materials disposed of:

NOW, THEREFORE, in consideration of the final payment by the City of San Diego to said Contractor under the terms of said contract, the undersigned Contractor, does hereby affirm that all surplus materials as described in said contract have been disposed of at the following location(s)

and that they have been disposed of according to all applicable laws and regulations.

Dated this _____ DAY OF _____, _____.

By: _____
Contractor

ATTEST:

State of _____ County of _____

On this _____ DAY OF _____, 2____, before the undersigned, a Notary Public in and for said County and State, duly commissioned and sworn, personally appeared _____ known to me to be the _____ Contractor named in the foregoing Release, and whose name is subscribed thereto, and acknowledged to me that said Contractor executed the said Release.

Notary Public in and for said County and State

LIST OF SUBCONTRACTORS

***** PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY *** TO BE SUBMITTED IN ELECTRONIC FORMAT ONLY *** SEE INSTRUCTIONS TO BIDDERS FOR FURTHER INFORMATION**

In accordance with the requirements of the "Subletting and Subcontracting Fair Practices Act", Section 4100, of the California Public Contract Code (PCC), the Bidder is to list below the name, address and license number of each Subcontractor who will perform work, labor, render services or specially fabricate and install a portion [type] of the work or improvement, in an amount of or in excess of 0.5% of the Contractor's total Bid. Failure to comply with this requirement may result in the Bid being rejected as non-responsive. The Contractor is to list only one Subcontractor for each portion of the Work. The Bidder's attention is directed to the Special Provisions - General; Paragraph 2-3 Subcontracts, which stipulates the percentage of the Work to be performed with the Bidder's own forces. The Bidder is to also list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, SDB, WoSB, HUBZone, and SDVOSB Subcontractors for which the Bidders are seeking recognition towards achieving any mandatory, voluntary, or both subcontracting participation percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONSTRUCTOR OR DESIGNER	DIR Registration Number	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB [Ⓞ]	WHERE CERTIFIED [Ⓢ]	CHECK IF JOINT VENTURE PARTNERSHIP
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____								
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____								

- Ⓢ As appropriate, Bidder shall identify Subcontractor as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disabled Veteran Owned Small Business	SDVOSB		
- Ⓢ As appropriate, Bidder shall indicate if Subcontractor is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC		
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.

NAMED EQUIPMENT/MATERIAL SUPPLIER LIST

***** PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY *** TO BE SUBMITTED IN ELECTRONIC FORMAT ONLY *** SEE INSTRUCTIONS TO BIDDERS FOR FURTHER INFORMATION**

NAME, ADDRESS AND TELEPHONE NUMBER OF VENDOR/SUPPLIER	MATERIALS OR SUPPLIES	DIR Registration Number	DOLLAR VALUE OF MATERIAL OR SUPPLIES	SUPPLIER (Yes/No)	MANUFACTURER (Yes/No)	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB ^①	WHERE CERTIFIED ^②
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____							
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____							

- ① As appropriate, Bidder shall identify Vendor/Supplier as one of the following and shall include a valid proof of certification (except for OBE,SLBE and ELBE):
- | | | | |
|-----------------------------------------------|--------|------------------------------------------------|---------|
| Certified Minority Business Enterprise | MBE | Certified Woman Business Enterprise | WBE |
| Certified Disadvantaged Business Enterprise | DBE | Certified Disabled Veteran Business Enterprise | DVBE |
| Other Business Enterprise | OBE | Certified Emerging Local Business Enterprise | ELBE |
| Certified Small Local Business Enterprise | SLBE | Small Disadvantaged Business | SDB |
| Woman-Owned Small Business | WoSB | HUBZone Business | HUBZone |
| Service-Disabled Veteran Owned Small Business | SDVOSB | | |
- ② As appropriate, Bidder shall indicate if Vendor/Supplier is certified by:
- | | | | |
|------------------------------------------------------|--------|--------------------------------------------------|----------|
| City of San Diego | CITY | State of California Department of Transportation | CALTRANS |
| California Public Utilities Commission | CPUC | | |
| State of California's Department of General Services | CADoGS | City of Los Angeles | LA |
| State of California | CA | U.S. Small Business Administration | SBA |

The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.

SUBCONTRACTORS ADDITIVE/DEDUCTIVE ALTERNATE (USE ONLY WHEN ADDITIVE ALTERNATES ARE REQUIRED)

***** PROVIDED FOR ILLUSTRATIVE PURPOSES ONLY *** TO BE SUBMITTED IN ELECTRONIC FORMAT ONLY *** SEE INSTRUCTIONS TO BIDDERS, FOR FURTHER INFORMATION**

ADDITIVE/ DEDUCTIVE ALTERNATE	NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONSTRUCTOR OR DESIGNER	DIR Registration Number	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB ^①	WHERE CERTIFIED ②	CHECK IF JOINT VENTURE PARTNER SHIP
	Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____								
	Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____								

- ① As appropriate, Bidder shall identify Subcontractor as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):
- | | | | |
|-----------------------------------------------|--------|------------------------------------------------|---------|
| Certified Minority Business Enterprise | MBE | Certified Woman Business Enterprise | WBE |
| Certified Disadvantaged Business Enterprise | DBE | Certified Disabled Veteran Business Enterprise | DVBE |
| Other Business Enterprise | OBE | Certified Emerging Local Business Enterprise | ELBE |
| Certified Small Local Business Enterprise | SLBE | Small Disadvantaged Business | SDB |
| Woman-Owned Small Business | WoSB | HUBZone Business | HUBZone |
| Service-Disabled Veteran Owned Small Business | SDVOSB | | |
- ② As appropriate, Bidder shall indicate if Subcontractor is certified by:
- | | | | |
|----------------------------------------|------|------------------------------------------------------|----------|
| City of San Diego | CITY | State of California Department of Transportation | CALTRANS |
| California Public Utilities Commission | CPUC | State of California's Department of General Services | CADoGS |
| City of Los Angeles | LA | State of California | CA |
| U.S. Small Business Administration | SBA | | |

The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification.

ELECTRONICALLY SUBMITTED FORMS

THE FOLLOWING FORMS MUST BE SUBMITTED IN PDF FORMAT WITH BID SUBMISSION

The following forms are to be completed by the bidder and submitted (uploaded) electronically with the bid in PlanetBids.

- A. BID BOND – See Instructions to Bidders, Bidders Guarantee of Good Faith (Bid Security) for further instructions**
- B. CONTRACTOR’S CERTIFICATION OF PENDING ACTIONS**
- C. MANDATORY DISCLOSURE OF BUSINESS INTERESTS FORM**
- D. SUBCONTRACTORS LISTING (OTHER THAN FIRST TIER)**
- E. LOBBY PROHIBITION, CERTIFICATION AND DISCLOSURE**
- F. DISCLOSURE OF LOBBYING ACTIVITIES**
- G. ABATEMENT REQUIREMENTS (SEE LEAD CONTAINING MATERIALS ABATEMENT SPECIFICATION, ITEM G “PERMITS AND LICENSES”)**

Bids will not be accepted until ALL the above-named forms are submitted as part of the bid submittal

BID BOND

**See Instructions to Bidders, Bidder Guarantee of Good Faith
(Bid Security)**

KNOW ALL MEN BY THESE PRESENTS,

That Solpac Construction, Inc. dba Sotek Pacific Construction Company as Principal, and Liberty Mutual Insurance Company as Surety, are held and firmly bound unto The City of San Diego hereinafter called "OWNER," in the sum of **10% OF THE TOTAL BID AMOUNT** 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.

WHEREAS, said Principal has submitted a Bid to said OWNER to perform the WORK required under the bidding schedule(s) of the OWNER's Contract Documents entitled

California Seismic Tower Retrofit

NOW THEREFORE, if said Principal is awarded a contract by said OWNER and, within the time and in the manner required in the "Notice Inviting Bids" enters into a written Agreement on the form of agreement bound with said Contract Documents, furnishes the required certificates of insurance, and furnishes the required Performance Bond and Payment Bond, then this obligation shall be null and void, otherwise it shall remain in full force and effect. In the event suit is brought upon this bond by said OWNER and OWNER prevails, said Surety shall pay all costs incurred by said OWNER in such suit, including a reasonable attorney's fee to be fixed by the court.

SIGNED AND SEALED, this 11th day of October, 2018

Solpac Construction, Inc. dba Sotek Pacific Construction Company (SEAL)
(Principal)

By:  (Signature)

Liberty Mutual Insurance Company (SEAL)
(Surety)

By:  (Signature) Sarah Myers
Attorney-in-Fact

(SEAL AND NOTARIAL ACKNOWLEDGEMENT OF SURETY)

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT Civil Code § 1189

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

STATE OF CALIFORNIA

County of San Diego

On OCT 11 2018 before me, Lilia De Loera, Notary Public,
Date Insert Name of Notary exactly as it appears on the official seal

personally appeared Sarah Myers

Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(##) whose name(##) is/## subscribed to the within instrument and acknowledged to me that Y##/she/##/##/ executed the same in ##/her/##/##/ authorized capacity(##/##), and that by Y##/her/##/##/ signature(##) on the instrument the person(##), or the entity upon behalf of which the person(##) acted, executed the instrument.

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

Witness my hand and official seal.

Signature

Signature of Notary Public Lilia De Loera, Notary Public



Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of the form to another document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

- Individual
- Corporate Officer — Title(s): _____
- Partner Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____

RIGHT THUMBPRINT OF SIGNER

Top of thumb here

Signer is Representing: Surety Company

Signer's Name: _____

- Individual
- Corporate Officer — Title(s): _____
- Partner Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____

RIGHT THUMBPRINT OF SIGNER

Top of thumb here

Signer is Representing: _____

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 7971399

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Christine Maestas; Janice Martin; Lawrence F. McMahon; Sarah Myers

all of the city of San Diego, state of CA, each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 2nd day of January, 2018.



The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By: David M. Carey
David M. Carey, Assistant Secretary

STATE OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

On this 2nd day of January, 2018, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Teresa Pastella, Notary Public
Upper Merion Twp., Montgomery County
My Commission Expires March 28, 2021
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts – SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this _____ day of _____, 2018.

OCT 11 2018



By: Renee C. Llewellyn
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

CONTRACTOR'S CERTIFICATION OF PENDING ACTIONS

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of all instances within the past 10 years where a complaint was filed or pending against the Bidder in a legal or administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.

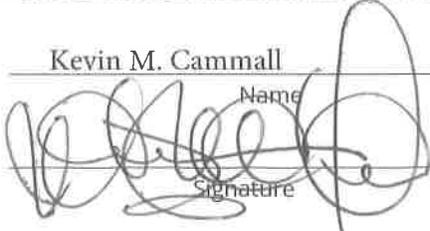
CHECK ONE BOX ONLY.

- The undersigned certifies that within the past 10 years the Bidder has NOT been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers.

- The undersigned certifies that within the past 10 years the Bidder has been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers. A description of the status or resolution of that complaint, including any remedial action taken and the applicable dates is as follows:

DATE OF CLAIM	LOCATION	DESCRIPTION OF CLAIM	LITIGATION (Y/N)	STATUS	RESOLUTION/REMEDIAL ACTION TAKEN

Contractor Name: SOLPAC Construction Inc., dba Soltek Pacific Construction Company

Certified By Kevin M. Cammall Title Vice President/Secretary
Name

Signature Date 10/16/18

USE ADDITIONAL FORMS AS NECESSARY

Mandatory Disclosure of Business Interests Form

BIDDER/PROPOSER INFORMATION

<u>SOLPAC Construction Inc.,</u>	<u>Soltek Pacific Construction Company</u>
Legal Name	DBA
<u>2424 Congress Street</u>	<u>San Diego CA 92110</u>
Street Address	City State Zip
<u>Stephen W. Thompson, Chief Executive Officer</u>	<u>619-296-6247</u>
Contact Person, Title	Phone Fax
	<u>619-296-4314</u>

Provide the name, identity, and precise nature of the interest* of all persons who are directly or indirectly involved** in this proposed transaction (SDMC § 21.0103).

* The precise nature of the interest includes:

- the percentage ownership interest in a party to the transaction,
- the percentage ownership interest in any firm, corporation, or partnership that will receive funds from the transaction,
- the value of any financial interest in the transaction,
- any contingent interest in the transaction and the value of such interest should the contingency be satisfied, and
- any philanthropic, scientific, artistic, or property interest in the transaction.

** Directly or indirectly involved means pursuing the transaction by:

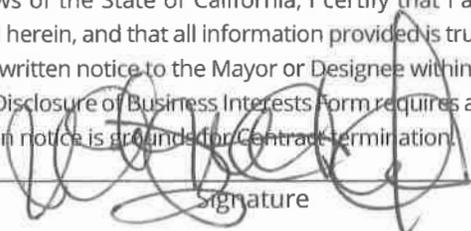
- communicating or negotiating with City officers or employees,
- submitting or preparing applications, bids, proposals or other documents for purposes of contracting with the City, or
- directing or supervising the actions of persons engaged in the above activity.

<u>Stephen W. Thompson</u>	<u>Chief Executive Officer</u>
Name	Title/Position
<u>San Diego, CA</u>	
City and State of Residence	Employer (if different than Bidder/Proposer)
<u>Corporate Shareholder - 39%</u>	
Interest in the transaction	

<u>Brandon Richie</u>	<u>President</u>
Name	Title/Position
<u>San Diego, CA</u>	
City and State of Residence	Employer (if different than Bidder/Proposer)
<u>Corporate Shareholder - 1.46%</u>	
Interest in the transaction	

* Use Additional Pages if Necessary *

Under penalty of perjury under the laws of the State of California, I certify that I am responsible for the completeness and accuracy of the responses contained herein, and that all information provided is true, full and complete to the best of my knowledge and belief. I agree to provide written notice to the Mayor or Designee within five (5) business days if, at any time, I learn that any portion of this Mandatory Disclosure of Business Interests Form requires an updated response. Failure to timely provide the Purchasing Agent with written notice is grounds for contract termination.

<u>Kevin M. Cammall, Vice President/Secretary</u>		<u>10/16/18</u>
Print Name, Title	Signature	Date

Failure to sign and submit this form with the bid/proposal shall make the bid/proposal non-responsive. In the case of an informal solicitation, the contract will not be awarded unless a signed and completed Mandatory Disclosure of Business Interests Form is submitted.

Mandatory Disclosure of Business Interests Form

BIDDER/PROPOSER INFORMATION

<u>SOLPAC Construction Inc.,</u>		<u>Soltek Pacific Construction Company</u>	
Legal Name		DBA	
<u>2424 Congress Street</u>	<u>San Diego</u>	<u>CA</u>	<u>92110</u>
Street Address	City	State	Zip
<u>Stephen W. Thompson, Chief Executive Officer</u>	<u>619-296-6247</u>	<u>619-296-4314</u>	
Contact Person, Title	Phone	Fax	

Provide the name, identity, and precise nature of the interest* of all persons who are directly or indirectly involved** in this proposed transaction (SDMC § 21.0103).

* The precise nature of the interest includes:

- the percentage ownership interest in a party to the transaction,
- the percentage ownership interest in any firm, corporation, or partnership that will receive funds from the transaction,
- the value of any financial interest in the transaction,
- any contingent interest in the transaction and the value of such interest should the contingency be satisfied, and
- any philanthropic, scientific, artistic, or property interest in the transaction.

** Directly or indirectly involved means pursuing the transaction by:

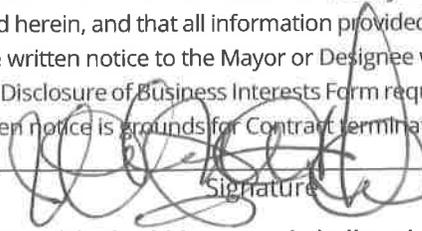
- communicating or negotiating with City officers or employees,
- submitting or preparing applications, bids, proposals or other documents for purposes of contracting with the City, or
- directing or supervising the actions of persons engaged in the above activity.

<u>John S. Myers</u>	<u>Senior Vice President</u>
Name	Title/Position
<u>San Diego, CA</u>	
City and State of Residence	Employer (if different than Bidder/Proposer)
<u>Corporate Shareholder - 39%</u>	
Interest in the transaction	

<u>Larry A. Richie</u>	<u>Principal</u>
Name	Title/Position
<u>La Mesa, CA</u>	
City and State of Residence	Employer (if different than Bidder/Proposer)
<u>Corporate Shareholder - 15.97%</u>	
Interest in the transaction	

*** Use Additional Pages if Necessary ***

Under penalty of perjury under the laws of the State of California, I certify that I am responsible for the completeness and accuracy of the responses contained herein, and that all information provided is true, full and complete to the best of my knowledge and belief. I agree to provide written notice to the Mayor or Designee within five (5) business days if, at any time, I learn that any portion of this Mandatory Disclosure of Business Interests Form requires an updated response. Failure to timely provide the Purchasing Agent with written notice is grounds for Contract termination.

<u>Kevin M. Cammall, Vice President/Secretary</u>		<u>10/16/18</u>
Print Name, Title	Signature	Date

Failure to sign and submit this form with the bid/proposal shall make the bid/proposal non-responsive. In the case of an informal solicitation, the contract will not be awarded unless a signed and completed Mandatory Disclosure of Business Interests Form is submitted.

Mandatory Disclosure of Business Interests Form

BIDDER/PROPOSER INFORMATION

<u>SOLPAC Construction Inc.,</u>		<u>Soltek Pacific Construction Company</u>	
Legal Name		DBA	
<u>2424 Congress Street</u>	<u>San Diego</u>	<u>CA</u>	<u>92110</u>
Street Address	City	State	Zip
<u>Stephen W. Thompson, Chief Executive Officer</u>	<u>619-296-6247</u>	<u>619-296-4314</u>	
Contact Person, Title	Phone	Fax	

Provide the name, identity, and precise nature of the interest* of all persons who are directly or indirectly involved** in this proposed transaction (SDMC § 21.0103).

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- the percentage ownership interest in a party to the transaction,
- the percentage ownership interest in any firm, corporation, or partnership that will receive funds from the transaction,
- the value of any financial interest in the transaction,
- any contingent interest in the transaction and the value of such interest should the contingency be satisfied, and
- any philanthropic, scientific, artistic, or property interest in the transaction.

** Directly or indirectly involved means pursuing the transaction by:

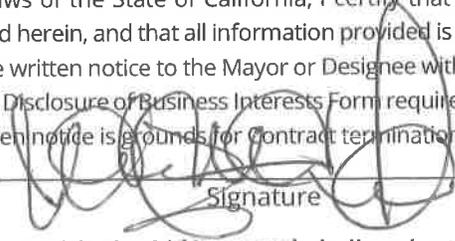
- communicating or negotiating with City officers or employees,
- submitting or preparing applications, bids, proposals or other documents for purposes of contracting with the City, or
- directing or supervising the actions of persons engaged in the above activity.

<u>Kevin M Cammall</u>	<u>Vice President/Secretary</u>
Name	Title/Position
<u>San Diego, CA</u>	
City and State of Residence	Employer (if different than Bidder/Proposer)
<u>Corporate Shareholder - 1.31%</u>	
Interest in the transaction	

<u>Ronald Hicks</u>	<u>Vice President</u>
Name	Title/Position
<u>Fresno, CA</u>	
City and State of Residence	Employer (if different than Bidder/Proposer)
<u>Corporate Shareholder - 2.61%</u>	
Interest in the transaction	

* Use Additional Pages if Necessary *

Under penalty of perjury under the laws of the State of California, I certify that I am responsible for the completeness and accuracy of the responses contained herein, and that all information provided is true, full and complete to the best of my knowledge and belief. I agree to provide written notice to the Mayor or Designee within five (5) business days if, at any time, I learn that any portion of this Mandatory Disclosure of Business Interests Form requires an updated response. Failure to timely provide the Purchasing Agent with written notice is grounds for contract termination.

<u>Kevin M. Cammall, Vice President/Secretary</u>		<u>10/16/18</u>
Print Name, Title	Signature	Date

Failure to sign and submit this form with the bid/proposal shall make the bid/proposal non-responsive. In the case of an informal solicitation, the contract will not be awarded unless a signed and completed Mandatory Disclosure of Business Interests Form is submitted.

SUBCONTRACTOR LISTING

(OTHER THAN FIRST TIER)

Pursuant to California Senate Bill 96 and in accordance with the requirements of Labor Code sections 1771.1 and 1725.5, by submitting a bid or proposal to the City, Contractor is certifying that he or she has verified that all subcontractors used on this public work project are registered with the California Department of Industrial Relations (DIR). **The Bidder is to list below the name, address, license number, DIR registration number of any (known tiered subcontractor) - who will perform work, labor, render services or specially fabricate and install a portion [type] of the work or improvement pursuant to the contract. If none are known at this time, mark the table below with non-applicable (N/A).**

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONSTRUCTOR OR DESIGNER	DIR REGISTRATION NUMBER	SUBCONTRACTOR LICENSE NUMBER	TYPE OF WORK
Name: _____ Address: _____ City: _____ State: _____ N/A _____ Zip: _____ Phone: _____ Email: _____				
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____				
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____				
Name: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone: _____ Email: _____				

**** USE ADDITIONAL FORMS AS NECESSARY ****

LOBBY PROHIBITION, CERTIFICATION AND DISCLOSURE

In acknowledgment that funds received under this agreement have been provided pursuant to a Federal grant, recipient hereby recognizes the prohibitions against lobbying the Federal government with any of these funds. Recipient agrees that it shall comply with the laws set forth at 31 U.S.C. § 1352 (1989) and 24 C.F.R. part 87, to wit:

A. Conditions on use of funds

Recipient shall not expend any funds received pursuant to this agreement to pay any person to influence an officer or employee of Federal agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with any of the following Covered Federal actions:

- (1) The awarding of any federal contract
- (2) The making of any Federal grant
- (3) The making of any Federal Loan
- (4) The entering into of any cooperative agreement
- (5) The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

For purposes of defining the terms of this part of the agreement, the definitions set forth in 24 C.F.R. § 87.105 are hereby adopted and incorporated herein by reference.

B. Certification and Disclosure

Each recipient at every tier under this agreement shall file a certification regarding lobbying, and a Disclosure Form-LLL, where required by 24 C.F.R. § 87.110. The certification form and Disclosure Form-LLL are attached to this agreement.

C. Certifications must be filed:

- (1) By any person upon each submission that initiates agency consideration for an award of a Federal contract, grant, or cooperative agreement exceeding \$100,000, or a Federal loan or loan guarantee exceeding \$150,000.
- (2) Upon receipt by any person of a Federal contract, grant, or cooperative agreement exceeding \$100,000, or upon receipt of a Federal loan or loan guarantee exceeding \$150,000.
- (3) By any person who requests or receives from a person referred to in subsections 1 and 2 of this paragraph:
 - a. A subcontract exceeding \$100,000 at any tier under a Federal contract;
 - b. A subgrant, contract or subcontract exceeding \$100,000 at any tier under a Federal grant;
 - c. A contract or subcontract exceeding \$100,000 at any tier under a Federal loan exceeding \$150,000;
 - d. A contract or subcontract exceeding \$100,000 at any tier under a Federal cooperative agreement.

D. Disclosure Forms-LLL must be filed in every instance when a person applies for, requests, or receives Federal appropriations exceeding \$100,000 pursuant to a contract, subcontract, grant, subgrant, loan, or cooperative agreement when such person has paid or expects to pay any sum, in cash or in kind, to influence or attempt to influence any officer or employee of an agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress. Further, Disclosure Form-LLL must be filed by recipients at any tier at the end of each calendar quarter in which there occurs any event that requires disclosure or materially affects information submitted in prior disclosures. Such events include:

- (1) 1. An increase of \$25,000 in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action;
- (2) 2. A change in the person(s) influencing or attempting to influence a covered action;
- (3) 3. A change in the officer(s), employee(s), or member(s) contacted to influence a covered action.

All disclosure Forms-LLL, but not certifications, shall be forwarded from tier to tier until received by the principal recipient, which in turn will file them with the appropriate Federal agency.

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Use the SF-LLLA Continuation Sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

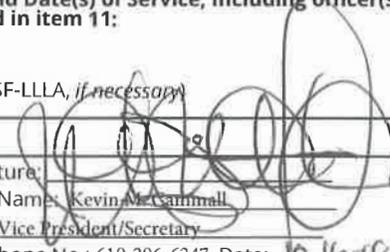
1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a follow up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing there port in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, State and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influence the covered Federal action.
(b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).
11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item4) to the lobbying entity (item10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material change report, enter the cumulative amount of payment made or planned to be made.
12. Check the appropriate box(es). Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.
13. Check the appropriate box(es). Check all boxes that apply. If other, specify nature.
14. Provide a specific and detailed description of the services that the lobbyist has performed, or will be expected to perform, and the date(s) of any services rendered. Include all preparatory and related activity, not just time spent in actual contact with Federal officials. Identify the Federal official(s) or employee(s) contacted or the officer(s), employee(s), or Member(s) of Congress that were contacted.
15. Check whether or not a SF-LLLA Continuation Sheet(s) is attached.
16. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing datasources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503.

Not Applicable - SOLPAC Construction Inc., dba Soltek Pacific Construction Company does not Participate in Lobbying Activities.

DISCLOSURE OF LOBBYING ACTIVITIES Approved by OMB
 Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
 (See reverse for public burden disclosure)

0348-0046

1. Type of Federal Action: <input checked="" type="checkbox"/> a. Contract a. Grant b. Cooperative agreement c. Loan d. Loan guarantee e. Loan insurance		2. Status of Federal Action: <input checked="" type="checkbox"/> a. bid/offer/application <input checked="" type="checkbox"/> b. initial award c. post-award		3. Report Type: <input checked="" type="checkbox"/> a. initial finding b. material change For Material Change Only year ____ quarter ____ date of last report ____	
4. Name and Address of Reporting Entity: <input checked="" type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, if known: SOLPAC Construction Inc., dba Soltek Pacific Construction Company 2424 Congress Street, San Diego, CA 92110 Congressional District, if known:			5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime: Congressional District, if known:		
6. Federal Department/Agency: FEMA- Federal Emergency Management Agency			7. Federal Program Name/Description: CFDA Number, if applicable: _____		
8. Federal Action Number, if known:			9. Award Amount, if known: \$		
10. a. Name and Address of Lobbying Entity (if individual, last name, first name, M) Not Applicable - SOLPAC Construction Inc., dba Soltek Pacific Construction Company does not participate in Lobbying Activities (attach Continuation Sheet(s) SF-LLL4, if necessary)			b. Individuals Performing Services (including address if different from No. 10a) (last name, first name, MI):		
11. Amount of Payment (check all that apply) \$ _____ <input type="checkbox"/> actual <input type="checkbox"/> planned			13. Type of Payment (check all that apply) <input type="checkbox"/> a. retainer <input type="checkbox"/> b. one-time fee <input type="checkbox"/> c. commission <input type="checkbox"/> d. contingent fee <input type="checkbox"/> e. deferral <input type="checkbox"/> f. other: specify: _____		
12. Form of Payment (check all that apply) <input type="checkbox"/> a. cash <input type="checkbox"/> b. in-kind: specify: nature _____ Value _____					
14. Brief Description of Services Performed or to be Performed and Date(s) of Service, Including officer(s), employee(s), or Member(s), contacted, for Payment indicated in item 11: (attach Continuation Sheet(s) SF-LLLA, if necessary)					
15. Continuation Sheet(s) SF-LLLA attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
16. Information requested through this for misauthorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.			Signature:  Print Name: Kevin McCallum Title: Vice President/Secretary Telephone No.: 619-296-6247 Date: 10-16-16		
Federal Use Only:				Authorized for Local Reproduction Standard Form LLL (Rev. 7-07)	

Not Applicable - SOLPAC Construction Inc., dba Soltek Pacific Construction Company does not Participate in Lobbying Activities.

DISCLOSURE OF LOBBYING ACTIVITIES Approved by
CONTINUATION SHEET

OMB0348-0046

Reporting Entity: _____ Page ____ of ____

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Authorized for Local Reproduction
Standard Form - LLL-A



CONTRACTORS STATE LICENSE BOARD

Pursuant to Chapter 9 of Division 3 of the Business and Professions Code
and the Rules and Regulations of the Contractors State License Board,
the Registrar of Contractors does hereby issue this license to:

GAMA CONTRACTING SERVICES INC

License Number 780316

to engage in the business or act in the capacity of a contractor in the following classifications:

C20 - WARM-AIR HEATING, VENTILATING AND AIR-CONDITIONING

C39 - ROOFING

C22 - ASBESTOS ABATEMENT

Witness my hand and seal this day,

September 10, 2015

Issued June 15, 2000

Reissued March 28, 2008

Eddie Lang, Jr., Board Chair

Cindi A. Christenson, Registrar of Contractors

This license is the property of the Registrar of Contractors,
is not transferable, and shall be returned to the Registrar
upon demand when suspended, revoked, or invalidated
for any reason. It becomes void if not renewed.



CONTRACTORS STATE LICENSE BOARD

Pursuant to Chapter 9 of Division 3 of the Business and Professions Code
and the Rules and Regulations of the Contractors State License Board,
the Registrar of Contractors does hereby issue this license to:

GAMA CONTRACTING SERVICES INC

License Number 780316

to engage in the business or act in the capacity of a contractor in the following classifications:

B - GENERAL BUILDING CONTRACTOR
C21 - BUILDING MOVING, DEMOLITION
ASB - ASBESTOS
HAZ - HAZARDOUS SUBSTANCES REMOVAL

Witness my hand and seal this day,
September 10, 2015

Issued June 15, 2000

Reissued March 28, 2008

Eddie Lang, Jr., Board Chair

Cindi A. Christenson, Registrar of Contractors

This license is the property of the Registrar of Contractors,
is not transferable, and shall be returned to the Registrar
upon demand when suspended, revoked, or invalidated
for any reason. It becomes void if not renewed.

State of California



Department of Industrial Relations

DIVISION OF OCCUPATIONAL SAFETY AND HEALTH

Certificate of Registration for Asbestos-related Work

Certificate No. 943

Expiration Date 1/12/2019

GAMA Contracting Services, Inc.

(Name of Employer)

is duly registered by the Division of Occupational Safety and Health in accordance with the California Administrative Code, Title 8, Article 2.5 for asbestos-related work.

Mary Smillie
Division of Occupational Safety and Health
for Jeff Ferrell

Effective Date 1/12/2018

Contractor's License No. 780316

This registration is valid only when the following requirements and conditions are met:

1. The registered employer shall safely perform asbestos-related work in compliance with relevant occupational safety and health regulations.
2. The registered employer shall notify the Division of changes in work locations or conditions as specified by Section 341.9 of Title 8 of the California Administrative Code.
3. The registered employer shall post a sign readable at 20 feet at the location of any asbestos-related work stating:

Danger - Asbestos
May Cause Cancer - Causes Damage to Lungs
Authorized Personnel Only

4. A copy of the registration shall be posted at the jobsite beside the Cal-OSHA poster.
5. The registered employer shall provide a copy of this registration certificate to the prime contractor and any other employers at the site before the commencement of any asbestos-related work.
6. The registered employer shall conduct a safety conference prior to the commencement of any asbestos-related work as specified by Section 341.11 of Title 8 of the California Administrative Code.
7. The registered employer acknowledges the Division's right to revoke or suspend this registration as provided by Section 341.14 of Title 8 of the California Administrative Code.

United States Environmental Protection Agency

This is to certify that



GAMA Contracting Services, Inc.

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint renovation, repair, and painting activities pursuant to 40 CFR Part 745.89

In the Jurisdiction of:

All EPA Administered States, Tribes, and Territories

This certification is valid from the date of issuance and expires July 13, 2020

NAT-69571-2

Certification #

April 09, 2015

Issued On



A handwritten signature in black ink that reads "Michelle Price".

Michelle Price, Chief

Lead, Heavy Metals, and Inorganics Branch

City of San Diego

CITY CONTACT: Angelica Gil, Contract Specialist, Email: AngelicaG@sandiego.gov
Phone No. (619) 533-3622

ADDENDUM A



FOR

CALIFORNIA TOWER SEISMIC RETROFIT

BID NO.: K-19-1560-DBB-3
SAP NO. (WBS/IO/CC): L-12003.2
CLIENT DEPARTMENT: 1714
COUNCIL DISTRICT: 3
PROJECT TYPE: BT
FEDERAL AID PROJECT NO.: CAL OES PROJECT ID# 073-66000

BID DUE DATE:

**2:00 PM
OCTOBER 17, 2018**

CITY OF SAN DIEGO'S ELECTRONIC BIDDING SITE, PLANETBIDS

<http://www.sandiego.gov/cip/bidopps/index.shtml>

ENGINEER OF WORK

The engineering Specifications and Special Provisions contained herein have been prepared by or under the direction of the following Registered Engineer:

Anthony B. Guit

9-26-2018

Seal:



1) Registered Engineer

Date

George Salim Freira

9-26-18

Seal:



2) For City Engineer

Date

A. CHANGES TO CONTRACT DOCUMENTS

The following changes to the Contract Documents are hereby made effective as though originally issued with the bid package. Bidders are reminded that all previous requirements to this solicitation remain in full force and effect.

THE SUBMITTAL DATE FOR THIS PROJECT HAS BEEN **EXTENDED AS STATED ON THE COVER PAGE.**

B. BIDDER'S QUESTIONS

- Q1. Please confirm that the allocated time of construction of 176 working days has taken into consideration possible shut downs and halts in the sequence of construction due to events days per appendix L. If not will further time be granted to the contractor.
- A1. No, the allocated time of construction of 176 working days has not taken into consideration for the possible shut downs in the sequence of construction due to events per Appendix L. Time will be granted to the contractor only if the shut-down falls within the working hours. Prior to shut down of work, contractor must get the Resident Engineer's approval of time extension.
- Q2. Who are the proprietary security, fire alarm and surveillance low voltage systems currently installed on the tower?
- A2. Stanley Security for security and surveillance. Johnson Controls for fire system
- Q3. Please confirm the location of where we are to test shotcrete panels.
- A3. Shotcrete panels can be constructed on site in lay down areas to be coordinated with Resident Engineer.
- Q4. In order to keep costs from escalating due to multiple mobilizations will the contractor be allowed to have a crane on site for an extended duration of time if properly secured.
- A4. Yes, as long as the staging area is fenced and protected.

- Q5. Please provide a location for where the crane can be erected.
- A5. Potential crane access points are limited to front plaza, grass space north of Prado and east of MoM adjacent to the arcade. Please refer to Sheet G-2 of the plans.
- Q6. Please provide a height for any temporary walls that will need to be placed within the museum of man. Additionally are these walls to be sound and/or fire rated?
- A6. Temporary walls at the first and second floor of the Tower are to be full height (floor to ceiling) and are to be sufficiently airtight to contain construction dust and sound proofed to mitigate construction noise.)
- Q7. Per spec section 07140 Elastomeric Membrane; "This work shall consist of providing the necessary labor, materials, equipment and supervision to prepare all surfaces and install a urethane elastomeric membrane system to designated surfaces of the cast stone façade on the museum of man, California Tower and Museum of Art."- Please confirm that the Museum of Art is not in the scope of work for this contract as described in the spec section 01010.
- A7. Museum of Art is not part of project scope.
- Q8. Per supplementary special conditions, your work hours are stated between 7am-5pm Mon-Friday. However, as mentioned at the job walk, off hour work will be needed for scope within the museum itself. Please provide specifications and/or work restrictions for these areas.
- A8. Please refer to Section 6-1.1 Construction Schedule, Item 23 B, sub c, of Attachment E-Supplementary Special Provisions.
- Q9. During the extensive craning of steel and/or other materials, there are safety concerns for the General populous within and adjacent to the museum and park in general. Is it the owners intent that the Contractor can commence hoisting while the building is occupied, or will this scope be restricted to off hour work?
- A9. Refer to Section 601-2.1.5 of Attachment E-Supplementary Special Provisions

- Q10. Please confirm that the Museum will be responsible for the relocation of any exhibits during the scope of work.
- A10. Refer to Section 4-1.2 Protection of Work and Materials of Attachment E – Supplementary Special Provisions.
- Q11. S2.4b notes that we need to ‘R/R E HCT W/ Metal Studs as required to complete work’, please confirm the existing construction of these walls and provide any as-builts available.
- A11. Per the abbreviations on S1.1, the note indicates to remove and replace the existing hollow clay tile wall with metal studs. See plans and detail 8/S1.2.
- Q12. The detail of the eighth floor on plan S3.3 calls out plan A/S3.7 for further details. We do not have this page in our plans. Please provide.
- A12. Refer to Sheet A/S3.4.
- Q13. It was verbally stated on the Job Walk that all Carillion Equipment on the third floor and Illuminated name plaques on the stairs throughout would be removed by the museum prior to the contractors arrival on site. Please confirm.
- A13. Refer to Section 4-1.2 of Attachment E- Supplementary Special Provision for the list of items to protect.
- Q14. In reference to the ‘Electronically Submitted Forms’ on page 333 of the Specifications, ‘G. Abatement requirements (See Lead Containing Materials Abatement Specification Item 6, Item G’ Permits and Licenses’). Please reconsider the submission of these documents during bid time. It is understood that it will be the contractors responsibility to provide permits and licenses for this scope of work. However, it seems counterproductive for an abatement contractor to provide these documents at the time of bid.
- A14. The submittals at the time of bid can show the supervisor’s certifications but we expect that personnel will be different by the time the job starts. At that point we would check for valid certifications and current dates on licenses. Any products used should be shown in the submittals. Any missing items can be addressed by adding a statement that it will be provided at a later date.

- Q15. It was verbally stated on the Job Walk that we were to stencil and repaint the water serpent painting on the 1st/2nd floor stairwell. The plans show that the painting is to be protected in place and it's supporting wall NOT damaged. Please confirm.
- A15. If the related wall is impacted with construction, The contractor has the responsibility to reproduce it, otherwise protect it in place. Refer to Note 1, Sheet S2.4b of the plans.
- Q16. I saw that this RFP is requiring a Protection Plan for historic features. Can you tell me if there is already an existing Protection Plan, or if this will be part of the scope of work for the RFP? Also, will a historic preservation monitor be needed during construction when work is impacting or close to any historic features?
- A16. Heritage is providing the historic preservation architectural services and will be monitoring the work during construction. The contractor will need to follow the relevant sections of the specifications and submit the required documentation for Heritage to review. The contractor is not required to hire a separate consultant.
- Q17. We are completing the Good Faith Effort for project K-19-1560-DBB-3, the specs state that we are to contact and post a solicitation on the mbda's website at www.mbda.gov. There is nowhere on this website to place an ad or no web portal as indicated in the specs. There is also no office listed in San Francisco as indicated in the specs. The closest office is Los Angeles, if you click the link for their website, the website does not exist.
- A17. Bidders are to utilize the assistance of the agencies identified in sections 12.8 and 12.9 of Attachment D, Funding Agency provisions. Subsequently, Note 3 under 12.9 states: 3. "Contractor may use MBDA web portal to post subcontracting opportunities. If utilized, the Contractor shall post subcontractor opportunities at least 15 Working Days prior to Bid opening...[emphasis added]" Bidders are not required to post solicitations on the MBDA website, however, they should make and document efforts made to reach out to the MBDA and request assistance. Please provide direction on how to comply with this posting requirement.

C. NOTICE INVITING BIDS

1. To Notice Inviting Bids, Item Number 3, Estimated Construction Cost, page 5, **DELETE** in its entirety and **SUBSTITUTE** with the following:
 3. **ESTIMATED CONSTRUCTION COST:** The City's estimated construction cost for this project is **\$2,630,000**.

D. ATTACHMENTS

1. To Attachment D, Funding Agency Provisions, Item 9, Wage Rates, pages 34 through 63, **DELETE** in their entirety and **SUBSTITUTE** with pages 10 through 38 of this Addendum.

E. SUPPLEMENTARY SPECIAL PROVISIONS

1. To Section 4 – Control of Materials, Sub-section 4-1.3.4, Inspection Paid For By the Contractor, page 91, **ADD** the following:
 - b) Structural Survey Monitor:
 - i. The contractor shall hire a surveyor to establish and execute a survey monitoring program as part of the quality control plan to monitor movement of the tower structure over the course of the construction contract.
 - ii. A survey monitoring plan shall be submitted as part of the quality control plan to the resident engineer for approval within three weeks of the issuance of a Notice to Proceed to clarify survey plan means and methods consistent with these notes.
 - iii. Survey Schedule: The monitoring program shall establish survey points on the tower and monitor their movements twice prior to beginning of construction or foundation excavation and subsequently on a monthly basis throughout the duration of the construction process or until indicated by the resident engineer.

- iv. Survey Point Locations: Survey points shall be established at four corners of the 8th level of the tower and at two 90 degree opposing faces or four corners of the 9th and 10th levels, or as approved by the resident engineer.
- v. Measurements: Each survey point shall be measured relative to a fixed reference point so as to record movements in horizontal and vertical directions (relative to an x, y, z coordinate system), and shall be accurate to within 1/8" to 1/4".
- vi. Survey data shall be reported in a clear tabular format unless otherwise approved by the resident engineer and shall be reported promptly after each measurement to the resident engineer and the engineer of record.

F. TECHNICAL SPECIFICATIONS

- 1. To Section 01400 – Quality Control, Part 1, General, Section 1.6, Inspection and Testing Laboratory Service, Items A, B, D and E, page 128, **DELETE** the word "OWNER" and **SUBSTITUTE** with the word "CONTRACTOR".
- 2. To Section 07140 – Elastomeric Membrane, Part 1, General, Sub-section 1.1, Description, Item A, page 208, **DELETE** words "and Museum of Art" at the end of the paragraph.

G. ADDITIONAL CHANGES

- 1. The following are additional changes to the Line Items in the PlanetBids Tab:

For clarity where applicable, **ADDITIONS**, if any, have been **Underlined** and **DELETIONS**, if any, have been **~~Stricken out.~~**

Section	Item Code	Description	UoM	Quantity	Payment Reference	Extension
Main Bid	236220	Inspection Paid for by the Contractor (EOC Type I)	AL <u>LS</u>	1	4-1.3.4.1	\$20,000

H. PLANS

1. To Drawings numbered **33996-01-D** and **33996-16-D**, **DELETE** in their entirety and **REPLACE** with pages 39 through 40 of this Addendum.

James Nagelvoort, Director
Public Works Department

Dated: *September 27, 2018*
San Diego, California

JN/AJ/lji

General Decision Number: CA180001 09/07/2018 CA1

Superseded General Decision Number: CA20170001

State: California

Construction Types: Building, Heavy (Heavy and Dredging),
Highway and Residential

County: San Diego County in California.

BUILDING CONSTRUCTION PROJECTS; DREDGING PROJECTS (does not include hopper dredge work); HEAVY CONSTRUCTION PROJECTS (does not include water well drilling); HIGHWAY CONSTRUCTION PROJECTS; RESIDENTIAL CONSTRUCTION PROJECTS (consisting of single family homes and apartments up to and including 4 stories)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.35 for calendar year 2018 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/05/2018
1	01/12/2018
2	01/19/2018
3	02/09/2018
4	03/02/2018
5	05/04/2018
6	06/29/2018
7	07/06/2018
8	07/13/2018
9	07/20/2018
10	08/17/2018
11	08/24/2018
12	08/31/2018
13	09/07/2018

ASBE0005-002 07/03/2017

	Rates	Fringes
Asbestos Workers/Insulator (Includes the application of all insulating materials, protective coverings, coatings, and finishes to all types of mechanical systems).....	\$ 39.72	20.81
Fire Stop Technician (Application of Firestopping Materials for wall openings and penetrations in walls, floors, ceilings and curtain walls).....	\$ 26.96	17.81

ASBE0005-004 07/03/2017

	Rates	Fringes
Asbestos Removal worker/hazardous material handler (Includes preparation, wetting, stripping, removal, scrapping, vacuuming, bagging and disposing of all insulation materials from mechanical systems, whether they contain asbestos or not)....	\$ 19.26	11.27

BOIL0092-003 03/01/2018

	Rates	Fringes
BOILERMAKER.....	\$ 44.07	33.52

BRCA0004-008 11/01/2017

	Rates	Fringes
BRICKLAYER; MARBLE SETTER.....	\$ 37.46	16.69

BRCA0018-004 07/01/2017

	Rates	Fringes
MARBLE FINISHER.....	\$ 30.93	12.95
TILE FINISHER.....	\$ 25.98	11.23
TILE LAYER.....	\$ 37.76	16.37

BRCA0018-010 09/01/2017

	Rates	Fringes
TERRAZZO FINISHER.....	\$ 29.75	12.91
TERRAZZO WORKER/SETTER.....	\$ 36.75	13.82

 CARP0409-002 07/01/2016

	Rates	Fringes
Diver		
(1) Wet.....	\$ 712.48	17.03
(2) Standby.....	\$ 356.24	17.03
(3) Tender.....	\$ 348.24	17.03
(4) Assistant Tender.....	\$ 324.24	17.03

Amounts in "Rates" column are per day

 CARP0409-008 08/01/2010

	Rates	Fringes
Modular Furniture Installer.....	\$ 17.00	7.41

 CARP0547-001 07/01/2016

	Rates	Fringes
CARPENTER		
(1) Bridge.....	\$ 40.33	17.03
(2) Commercial Building....	\$ 35.10	17.03
(3) Heavy & Highway.....	\$ 40.20	17.03
(4) Residential Carpenter..	\$ 28.08	17.03
(5) Residential		
Insulation Installer.....	\$ 18.00	8.16
MILLWRIGHT.....	\$ 46.70	17.03
PILEDRIVERMAN.....	\$ 40.33	17.03

 CARP0547-002 07/01/2017

	Rates	Fringes
Drywall		
(1) Work on wood framed construction of single family residences, apartments or condominiums under four stories		
Drywall Installer/Lather...	\$ 22.95	18.85
Drywall Stocker/Scrapper...	\$ 12.50	12.27
(2) All other work		
Drywall Installer/Lather...	\$ 32.00	17.63
Drywall Stocker/Scrapper...	\$ 12.50	12.27

 ELEC0569-001 06/04/2018

	Rates	Fringes
Electricians (Tunnel Work)		
Cable Splicer.....	\$ 50.81	3%+13.63
Electrician.....	\$ 50.06	3%+13.63
Electricians: (All Other Work, Including 4 Stories Residential)		
Cable Splicer.....	\$ 45.25	3%+13.63
Electrician.....	\$ 44.50	3%+13.63

ELEC0569-004 06/04/2018

	Rates	Fringes
ELECTRICIAN (Sound & Communications Sound Technician).....	\$ 31.75	3%+11.78
SCOPE OF WORK Assembly, installation, operation, service and maintenance of components or systems as used in closed circuit television, amplified master television distribution, CATV on private property, intercommunication, burglar alarm, fire alarm, life support and all security alarms, private and public telephone and related telephone interconnect, public address, paging, audio, language, electronic, background music system less than line voltage or any system acceptable for class two wiring for private, commercial, or industrial use furnished by leased wire, freuency modulation or other recording devices, electrical apparatus by means of which electricity is applied to the amplification, transmission, transference, recording or reproduction of voice, music, sound, impulses and video. Excluded from this Scope of Work - transmission, service and maintenance of background music. All of the above shall include the installation and transmission over fiber optics.		

ELEC0569-005 06/04/2018

	Rates	Fringes
Sound & Communications		
Sound Technician.....	\$ 31.75	3%+11.78
SCOPE OF WORK Assembly, installation, operation, service and maintenance of components or systems as used in closed circuit television, amplified master television distribution, CATV on private property, intercommunication, burglar alarm, fire alarm, life support and all security alarms, private and public telephone and related telephone interconnect, public address, paging, audio, language, electronic, background music system less than line voltage or any system acceptable for class two wiring for private, commercial, or industrial use furnished by leased wire, freuency modulation or other recording devices, electrical apparatus by means of which electricity is applied to the amplification, transmission, transference, recording or reproduction of voice, music, sound, impulses and video. Excluded from this Scope of Work -		

transmission, service and maintenance of background music.
 All of the above shall include the installation and
 transmission over fiber optics.

SOUND TECHNICIAN: Terminating, operating and performing
 final check-out

 ELEC0569-006 02/27/2017

Work on street lighting; traffic signals; and underground
 systems and/or established easements outside of buildings

	Rates	Fringes
Traffic signal, street light and underground work		
Utility Technician #1.....	\$ 30.48	3%+7.70
Utility Technician #2.....	\$ 25.45	3%+7.70

STREET LIGHT & TRAFFIC SIGNAL WORK:

UTILITY TECHNICIAN #1: Installation of street lights and
 traffic signals, including electrical circuitry,
 programmable controller, pedestal-mounted electrical meter
 enclosures and laying of pre-assembled cable in ducts. The
 layout of electrical systems and communication installation
 including proper position of trench depths, and radius at
 duct banks, location for manholes, street lights and
 traffic signals.

UTILITY TECHNICIAN #2: Distribution of material at jobsite,
 installation of underground ducts for electrical,
 telephone, cable TV land communication systems. The
 setting, leveling, grounding and racking of precast
 manholes, handholes and transformer pads.

 ELEC0569-008 06/04/2018

	Rates	Fringes
ELECTRICIAN (Residential, 1-3 Stories).....	\$ 33.38	3%+6.61

 ELEC1245-001 06/01/2018

	Rates	Fringes
LINE CONSTRUCTION		
(1) Lineman; Cable splicer..	\$ 56.79	17.91
(2) Equipment specialist (operates crawler tractors, commercial motor vehicles, backhoes,		

trenchers, cranes (50 tons and below), overhead & underground distribution line equipment).....\$ 45.36 16.74
 (3) Groundman.....\$ 34.68 16.36
 (4) Powderman.....\$ 49.55 3%+17.65

HOLIDAYS: New Year's Day, M.L. King Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day and day after Thanksgiving, Christmas Day

 ELEV0018-001 01/01/2018

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 53.85	32.645

FOOTNOTE:

PAID VACATION: Employer contributes 8% of regular hourly rate as vacation pay credit for employees with more than 5 years of service, and 6% for 6 months to 5 years of service.
 PAID HOLIDAYS: New Years Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.

 ENGI0012-003 07/01/2018

	Rates	Fringes
OPERATOR: Power Equipment (All Other Work)		
GROUP 1.....	\$ 45.30	25.25
GROUP 2.....	\$ 46.08	25.25
GROUP 3.....	\$ 46.37	25.25
GROUP 4.....	\$ 47.86	25.25
GROUP 5.....	\$ 48.96	25.25
GROUP 6.....	\$ 48.08	25.25
GROUP 8.....	\$ 48.19	25.25
GROUP 9.....	\$ 49.29	25.25
GROUP 10.....	\$ 48.31	25.25
GROUP 11.....	\$ 49.41	25.25
GROUP 12.....	\$ 48.48	25.25
GROUP 13.....	\$ 48.58	25.25
GROUP 14.....	\$ 48.61	25.25
GROUP 15.....	\$ 48.69	25.25
GROUP 16.....	\$ 48.81	25.25
GROUP 17.....	\$ 48.98	25.25
GROUP 18.....	\$ 49.08	25.25
GROUP 19.....	\$ 49.19	25.25
GROUP 20.....	\$ 49.31	25.25
GROUP 21.....	\$ 49.48	25.25
GROUP 22.....	\$ 49.58	25.25
GROUP 23.....	\$ 49.69	25.25
GROUP 24.....	\$ 49.81	25.25

GROUP 25.....	\$ 49.98	25.25
OPERATOR: Power Equipment (Cranes, Piledriving & Hoisting)		
GROUP 1.....	\$ 46.65	25.25
GROUP 2.....	\$ 47.43	25.25
GROUP 3.....	\$ 47.72	25.25
GROUP 4.....	\$ 47.86	25.25
GROUP 5.....	\$ 48.08	25.25
GROUP 6.....	\$ 48.19	25.25
GROUP 7.....	\$ 48.31	25.25
GROUP 8.....	\$ 48.48	25.25
GROUP 9.....	\$ 48.65	25.25
GROUP 10.....	\$ 49.65	25.25
GROUP 11.....	\$ 50.65	25.25
GROUP 12.....	\$ 51.65	25.25
GROUP 13.....	\$ 52.65	25.25
OPERATOR: Power Equipment (Tunnel Work)		
GROUP 1.....	\$ 47.15	25.25
GROUP 2.....	\$ 47.93	25.25
GROUP 3.....	\$ 48.22	25.25
GROUP 4.....	\$ 48.39	25.25
GROUP 5.....	\$ 48.58	25.25
GROUP 6.....	\$ 48.69	25.25
GROUP 7.....	\$ 48.81	25.25

PREMIUM PAY:

\$3.75 per hour shall be paid on all Power Equipment Operator work on the following Military Bases: China Lake Naval Reserve, Vandenberg AFB, Point Arguello, Seely Naval Base, Fort Irwin, Nebo Annex Marine Base, Marine Corp Logistics Base Yermo, Edwards AFB, 29 Palms Marine Base and Camp Pendleton

Workers required to suit up and work in a hazardous material environment: \$2.00 per hour additional. Combination mixer and compressor operator on gunite work shall be classified as a concrete mobile mixer operator.

SEE ZONE DEFINITIONS AFTER CLASSIFICATIONS

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Bargeman; Brakeman; Compressor operator; Ditch Witch, with seat or similar type equipment; Elevator operator-inside; Engineer Oiler; Forklift operator (includes loed, lull or similar types under 5 tons; Generator operator; Generator, pump or compressor plant operator; Pump operator; Signalman; Switchman

GROUP 2: Asphalt-rubber plant operator (nurse tank operator); Concrete mixer operator-skip type; Conveyor operator; Fireman; Forklift operator (includes loed, lull or similar types over 5 tons; Hydrostatic pump operator; oiler crusher (asphalt or concrete plant); Petromat laydown machine; PJU

side dum jack; Screening and conveyor machine operator (or similar types); Skiploader (wheel type up to 3/4 yd. without attachment); Tar pot fireman; Temporary heating plant operator; Trenching machine oiler

GROUP 3: Asphalt-rubber blend operator; Bobcat or similar type (Skid steer); Equipment greaser (rack); Ford Ferguson (with dragtype attachments); Helicopter radioman (ground); Stationary pipe wrapping and cleaning machine operator

GROUP 4: Asphalt plant fireman; Backhoe operator (mini-max or similar type); Boring machine operator; Boxman or mixerman (asphalt or concrete); Chip spreading machine operator; Concrete cleaning decontamination machine operator; Concrete Pump Operator (small portable); Drilling machine operator, small auger types (Texoma super economatic or similar types - Hughes 100 or 200 or similar types - drilling depth of 30' maximum); Equipment greaser (grease truck); Guard rail post driver operator; Highline cableway signalman; Hydra-hammer-aero stomper; Micro Tunneling (above ground tunnel); Power concrete curing machine operator; Power concrete saw operator; Power-driven jumbo form setter operator; Power sweeper operator; Rock Wheel Saw/Trencher; Roller operator (compacting); Screed operator (asphalt or concrete); Trenching machine operator (up to 6 ft.); Vacuum or much truck

GROUP 5: Equipment Greaser (Grease Truck/Multi Shift).

GROUP 6: Articulating material hauler; Asphalt plant engineer; Batch plant operator; Bit sharpener; Concrete joint machine operator (canal and similar type); Concrete planer operator; Dandy digger; Deck engine operator; Derrickman (oilfield type); Drilling machine operator, bucket or auger types (Calweld 100 bucket or similar types - Watson 1000 auger or similar types - Texoma 330, 500 or 600 auger or similar types - drilling depth of 45' maximum); Drilling machine operator; Hydrographic seeder machine operator (straw, pulp or seed), Jackson track maintainer, or similar type; Kalamazoo Switch tamper, or similar type; Machine tool operator; Maginnis internal full slab vibrator, Mechanical berm, curb or gutter (concrete or asphalt); Mechanical finisher operator (concrete, Clary-Johnson-Bidwell or similar); Micro tunnel system (below ground); Pavement breaker operator (truck mounted); Road oil mixing machine operator; Roller operator (asphalt or finish), rubber-tired earth moving equipment (single engine, up to and including 25 yds. struck); Self-propelled tar pipelining machine operator; Skiploader operator (crawler and wheel type, over 3/4 yd. and up to and including 1-1/2 yds.); Slip form pump operator (power driven hydraulic lifting device for concrete forms); Tractor operator-bulldozer, tamper-scraper (single engine, up to 100 h.p. flywheel and similar types, up to and including D-5 and similar types); Tugger hoist operator (1 drum); Ultra high pressure waterjet cutting tool system

operator; Vacuum blasting machine operator

GROUP 8: Asphalt or concrete spreading operator (tamping or finishing); Asphalt paving machine operator (Barber Greene or similar type); Asphalt-rubber distribution operator; Backhoe operator (up to and including 3/4 yd.), small ford, Case or similar; Cast-in-place pipe laying machine operator; Combination mixer and compressor operator (gunite work); Compactor operator (self-propelled); Concrete mixer operator (paving); Crushing plant operator; Drill Doctor; Drilling machine operator, Bucket or auger types (Calweld 150 bucket or similar types - Watson 1500, 2000 2500 auger or similar types - Texoma 700, 800 auger or similar types - drilling depth of 60' maximum); Elevating grader operator; Grade checker; Gradall operator; Grouting machine operator; Heavy-duty repairman; Heavy equipment robotics operator; Kalamazoo balliste regulator or similar type; Kolman belt loader and similar type; Le Tourneau blob compactor or similar type; Loader operator (Athey, Euclid, Sierra and similar types); Mobark Chipper or similar; Ozzie padder or similar types; P.C. slot saw; Pneumatic concrete placing machine operator (Hackley-Presswell or similar type); Pumpcrete gun operator; Rock Drill or similar types; Rotary drill operator (excluding caisson type); Rubber-tired earth-moving equipment operator (single engine, caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. up to and including 50 cu. yds. struck); Rubber-tired earth-moving equipment operator (multiple engine up to and including 25 yds. struck); Rubber-tired scraper operator (self-loading paddle wheel type-John Deere, 1040 and similar single unit); Self-propelled curb and gutter machine operator; Shuttle buggy; Skiploader operator (crawler and wheel type over 1-1/2 yds. up to and including 6-1/2 yds.); Soil remediation plant operator; Surface heaters and planer operator; Tractor compressor drill combination operator; Tractor operator (any type larger than D-5 - 100 flywheel h.p. and over, or similar-bulldozer, tamper, scraper and push tractor single engine); Tractor operator (boom attachments), Traveling pipe wrapping, cleaning and bending machine operator; Trenching machine operator (over 6 ft. depth capacity, manufacturer's rating); trenching Machine with Road Miner attachment (over 6 ft depth capacity): Ultra high pressure waterjet cutting tool system mechanic; Water pull (compaction) operator

GROUP 9: Heavy Duty Repairman

GROUP 10: Drilling machine operator, Bucket or auger types (Calweld 200 B bucket or similar types-Watson 3000 or 5000 auger or similar types-Texoma 900 auger or similar types-drilling depth of 105' maximum); Dual drum mixer, dynamic compactor LDC350 (or similar types); Monorail locomotive operator (diesel, gas or electric); Motor patrol-blade operator (single engine); Multiple engine tractor operator (Euclid and similar type-except Quad 9

cat.); Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Pneumatic pipe ramming tool and similar types; Prestressed wrapping machine operator; Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Rubber tired earth moving equipment operator (multiple engine, Euclid, caterpillar and similar over 25 yds. and up to 50 yds. struck), Tower crane repairman; Tractor loader operator (crawler and wheel type over 6-1/2 yds.); Woods mixer operator (and similar Pugmill equipment)

GROUP 11: Heavy Duty Repairman - Welder Combination, Welder - Certified.

GROUP 12: Auto grader operator; Automatic slip form operator; Drilling machine operator, bucket or auger types (Calweld, auger 200 CA or similar types - Watson, auger 6000 or similar types - Hughes Super Duty, auger 200 or similar types - drilling depth of 175' maximum); Hoe ram or similar with compressor; Mass excavator operator less tha 750 cu. yards; Mechanical finishing machine operator; Mobile form traveler operator; Motor patrol operator (multi-engine); Pipe mobile machine operator; Rubber-tired earth- moving equipment operator (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck); Rubber-tired self- loading scraper operator (paddle-wheel-auger type self-loading - two (2) or more units)

GROUP 13: Rubber-tired earth-moving equipment operator operating equipment with push-pull system (single engine, up to and including 25 yds. struck)

GROUP 14: Canal liner operator; Canal trimmer operator; Remote- control earth-moving equipment operator (operating a second piece of equipment: \$1.00 per hour additional); Wheel excavator operator (over 750 cu. yds.)

GROUP 15: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine-up to and including 25 yds. struck)

GROUP 16: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 17: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine, Euclid, Caterpillar and similar, over 50 cu. yds. struck); Tandem tractor operator (operating crawler type tractors in

tandem - Quad 9 and similar type)

GROUP 18: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, up to and including 25 yds. struck)

GROUP 19: Rotex concrete belt operator (or similar types); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 cu. yds. struck); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - multiple engine, up to and including 25 yds. struck)

GROUP 20: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps, and similar types in any combination, excluding compaction units - multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 21: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck)

GROUP 22: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, up to and including 25 yds. struck)

GROUP 23: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 yds. struck); Rubber-tired earth-moving equipment operator, operating with the tandem push-pull system (multiple engine, up to and including 25 yds. struck)

GROUP 24: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 25: Concrete pump operator-truck mounted; Rubber-tired

earth-moving equipment operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck)

CRANES, PILEDIVING AND HOISTING EQUIPMENT CLASSIFICATIONS

GROUP 1: Engineer oiler; Fork lift operator (includes loed, lull or similar types)

GROUP 2: Truck crane oiler

GROUP 3: A-frame or winch truck operator; Ross carrier operator (jobsite)

GROUP 4: Bridge-type unloader and turntable operator; Helicopter hoist operator

GROUP 5: Hydraulic boom truck; Stinger crane (Austin-Western or similar type); Tugger hoist operator (1 drum)

GROUP 6: Bridge crane operator; Cretor crane operator; Hoist operator (Chicago boom and similar type); Lift mobile operator; Lift slab machine operator (Vagtborg and similar types); Material hoist and/or manlift operator; Polar gantry crane operator; Self Climbing scaffold (or similar type); Shovel, backhoe, dragline, clamshell operator (over 3/4 yd. and up to 5 cu. yds. mrc); Tugger hoist operator

GROUP 7: Pedestal crane operator; Shovel, backhoe, dragline, clamshell operator (over 5 cu. yds. mrc); Tower crane repair; Tugger hoist operator (3 drum)

GROUP 8: Crane operator (up to and including 25 ton capacity); Crawler transporter operator; Derrick barge operator (up to and including 25 ton capacity); Hoist operator, stiff legs, Guy derrick or similar type (up to and including 25 ton capacity); Shovel, backhoe, dragline, clamshell operator (over 7 cu. yds., M.R.C.)

GROUP 9: Crane operator (over 25 tons and up to and including 50 tons mrc); Derrick barge operator (over 25 tons up to and including 50 tons mrc); Highline cableway operator; Hoist operator, stiff legs, Guy derrick or similar type (over 25 tons up to and including 50 tons mrc); K-crane operator; Polar crane operator; Self erecting tower crane operator maximum lifting capacity ten tons

GROUP 10: Crane operator (over 50 tons and up to and including 100 tons mrc); Derrick barge operator (over 50 tons up to and including 100 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 50 tons up to and including 100 tons mrc), Mobile tower crane operator (over 50 tons, up to and including 100 tons M.R.C.); Tower crane operator and tower gantry

GROUP 11: Crane operator (over 100 tons and up to and

including 200 tons mrc); Derrick barge operator (over 100 tons up to and including 200 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 100 tons up to and including 200 tons mrc); Mobile tower crane operator (over 100 tons up to and including 200 tons mrc)

GROUP 12: Crane operator (over 200 tons up to and including 300 tons mrc); Derrick barge operator (over 200 tons up to and including 300 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 200 tons, up to and including 300 tons mrc); Mobile tower crane operator (over 200 tons, up to and including 300 tons mrc)

GROUP 13: Crane operator (over 300 tons); Derrick barge operator (over 300 tons); Helicopter pilot; Hoist operator, stiff legs, Guy derrick or similar type (over 300 tons); Mobile tower crane operator (over 300 tons)

TUNNEL CLASSIFICATIONS

GROUP 1: Skiploader (wheel type up to 3/4 yd. without attachment)

GROUP 2: Power-driven jumbo form setter operator

GROUP 3: Dinkey locomotive or motorperson (up to and including 10 tons)

GROUP 4: Bit sharpener; Equipment greaser (grease truck); Slip form pump operator (power-driven hydraulic lifting device for concrete forms); Tugger hoist operator (1 drum); Tunnel locomotive operator (over 10 and up to and including 30 tons)

GROUP 5: Backhoe operator (up to and including 3/4 yd.); Small Ford, Case or similar; Drill doctor; Grouting machine operator; Heading shield operator; Heavy-duty repairperson; Loader operator (Athey, Euclid, Sierra and similar types); Mucking machine operator (1/4 yd., rubber-tired, rail or track type); Pneumatic concrete placing machine operator (Hackley-Presswell or similar type); Pneumatic heading shield (tunnel); Pumpcrete gun operator; Tractor compressor drill combination operator; Tugger hoist operator (2 drum); Tunnel locomotive operator (over 30 tons)

GROUP 6: Heavy Duty Repairman

GROUP 7: Tunnel mole boring machine operator

ENGINEERS ZONES

\$1.00 additional per hour for all of IMPERIAL County and the portions of KERN, RIVERSIDE & SAN BERNARDINO Counties as defined below:

That area within the following Boundary: Begin in San

Bernardino County, approximately 3 miles NE of the intersection of I-15 and the California State line at that point which is the NW corner of Section 1, T17N, R14E, San Bernardino Meridian. Continue W in a straight line to that point which is the SW corner of the northwest quarter of Section 6, T27S, R42E, Mt. Diablo Meridian. Continue North to the intersection with the Inyo County Boundary at that point which is the NE corner of the western half of the northern quarter of Section 6, T25S, R42E, MDM. Continue W along the Inyo and San Bernardino County boundary until the intersection with Kern County, as that point which is the SE corner of Section 34, T24S, R40E, MDM. Continue W along the Inyo and Kern County boundary until the intersection with Tulare County, at that point which is the SW corner of the SE quarter of Section 32, T24S, R37E, MDM. Continue W along the Kern and Tulare County boundary, until that point which is the NW corner of T25S, R32E, MDM. Continue S following R32E lines to the NW corner of T31S, R32E, MDM. Continue W to the NW corner of T31S, R31E, MDM. Continue S to the SW corner of T32S, R31E, MDM. Continue W to SW corner of SE quarter of Section 34, T32S, R30E, MDM. Continue S to SW corner of T11N, R17W, SBM. Continue E along south boundary of T11N, SBM to SW corner of T11N, R7W, SBM. Continue S to SW corner of T9N, R7W, SBM. Continue E along south boundary of T9N, SBM to SW corner of T9N, R1E, SBM. Continue S along west boundary of R1E, SBM to Riverside County line at the SW corner of T1S, R1E, SBM. Continue E along south boundary of T1S, SBM (Riverside County Line) to SW corner of T1S, R10E, SBM. Continue S along west boundary of R10E, SBM to Imperial County line at the SW corner of T8S, R10E, SBM. Continue W along Imperial and Riverside county line to NW corner of T9S, R9E, SBM. Continue S along the boundary between Imperial and San Diego Counties, along the west edge of R9E, SBM to the south boundary of Imperial County/California state line. Follow the California state line west to Arizona state line, then north to Nevada state line, then continuing NW back to start at the point which is the NW corner of Section 1, T17N, R14E, SBM

\$1.00 additional per hour for portions of SAN LUIS OBISPO, KERN, SANTA BARBARA & VENTURA as defined below:

That area within the following Boundary: Begin approximately 5 miles north of the community of Cholame, on the Monterey County and San Luis Obispo County boundary at the NW corner of T25S, R16E, Mt. Diablo Meridian. Continue south along the west side of R16E to the SW corner of T30S, R16E, MDM. Continue E to SW corner of T30S, R17E, MDM. Continue S to SW corner of T31S, R17E, MDM. Continue E to SW corner of T31S, R18E, MDM. Continue S along West side of R18E, MDM as it crosses into San Bernardino Meridian numbering area and becomes R30W. Follow the west side of R30W, SBM to the SW corner of T9N, R30W, SBM. Continue E along the south edge of T9N, SBM to the Santa Barbara County and Ventura County boundary at that point which is the SW corner of Section 34, T9N, R24W, SBM, continue S along the Ventura County line to that point which is the SW corner of the SE quarter of Section 32, T7N, R24W, SBM. Continue E

along the south edge of T7N, SBM to the SE corner to T7N, R21W, SBM. Continue N along East side of R21W, SBM to Ventura County and Kern County boundary at the NE corner of T8N, R21W. Continue W along the Ventura County and Kern County boundary to the SE corner of T9N, R21W. Continue North along the East edge of R21W, SBM to the NE corner of T12N, R21W, SBM. Continue West along the north edge of T12N, SBM to the SE corner of T32S, R21E, MDM. [T12N SBM is a thin strip between T11N SBM and T32S MDM]. Continue North along the East side of R21E, MDM to the Kings County and Kern County border at the NE corner of T25S, R21E, MDM, continue West along the Kings County and Kern County Boundary until the intersection of San Luis Obispo County. Continue west along the Kings County and San Luis Obispo County boundary until the intersection with Monterey County. Continue West along the Monterey County and San Luis Obispo County boundary to the beginning point at the NW corner of T25S, R16E, MDM.

\$2.00 additional per hour for INYO and MONO Counties and the Northern portion of SAN BERNARDINO County as defined below:

That area within the following Boundary: Begin at the intersection of the northern boundary of Mono County and the California state line at the point which is the center of Section 17, T10N, R22E, Mt. Diablo Meridian. Continue S then SE along the entire western boundary of Mono County, until it reaches Inyo County at the point which is the NE corner of the Western half of the NW quarter of Section 2, T8S, R29E, MDM. Continue SSE along the entire western boundary of Inyo County, until the intersection with Kern County at the point which is the SW corner of the SE 1/4 of Section 32, T24S, R37E, MDM. Continue E along the Inyo and Kern County boundary until the intersection with San Bernardino County at that point which is the SE corner of section 34, T24S, R40E, MDM. Continue E along the Inyo and San Bernardino County boundary until the point which is the NE corner of the Western half of the NW quarter of Section 6, T25S, R42E, MDM. Continue S to that point which is the SW corner of the NW quarter of Section 6, T27S, R42E, MDM. Continue E in a straight line to the California and Nevada state border at the point which is the NW corner of Section 1, T17N, R14E, San Bernardino Meridian. Then continue NW along the state line to the starting point, which is the center of Section 18, T10N, R22E, MDM.

REMAINING AREA NOT DEFINED ABOVE RECEIVES BASE RATE

 ENGI0012-004 08/01/2015

	Rates	Fringes
OPERATOR: Power Equipment (DREDGING)		
(1) Leverman.....	\$ 49.50	23.60

(2) Dredge dozer.....	\$ 43.53	23.60
(3) Deckmate.....	\$ 43.42	23.60
(4) Winch operator (stern winch on dredge).....	\$ 42.87	23.60
(5) Fireman-Oiler, Deckhand, Bargeman, Leveehand.....	\$ 42.33	23.60
(6) Barge Mate.....	\$ 42.94	23.60

* IRON0377-002 07/01/2018

	Rates	Fringes
Ironworkers:		
Fence Erector.....	\$ 31.58	22.41
Ornamental, Reinforcing and Structural.....	\$ 38.00	31.05

PREMIUM PAY:

\$6.00 additional per hour at the following locations:

China Lake Naval Test Station, Chocolate Mountains Naval Reserve-Niland, Edwards AFB, Fort Irwin Military Station, Fort Irwin Training Center-Goldstone, San Clemente Island, San Nicholas Island, Susanville Federal Prison, 29 Palms - Marine Corps, U.S. Marine Base - Barstow, U.S. Naval Air Facility - Sealey, Vandenberg AFB

\$4.00 additional per hour at the following locations:

Army Defense Language Institute - Monterey, Fallon Air Base, Naval Post Graduate School - Monterey, Yermo Marine Corps Logistics Center

\$2.00 additional per hour at the following locations:

Port Hueneme, Port Mugu, U.S. Coast Guard Station - Two Rock

LABO0089-001 07/01/2018

	Rates	Fringes
LABORER (BUILDING and all other Residential Construction)		
Group 1.....	\$ 31.31	19.29
Group 2.....	\$ 31.99	19.29
Group 3.....	\$ 32.70	19.29
Group 4.....	\$ 33.50	19.29
Group 5.....	\$ 35.43	19.29

LABORER (RESIDENTIAL
CONSTRUCTION - See definition
below)

(1) Laborer.....	\$ 27.32	18.11
(2) Cleanup, Landscape, Fencing (Chain Link & Wood).	\$ 26.03	18.11

RESIDENTIAL DEFINITION: Wood or metal frame construction of single family residences, apartments and condominiums - excluding (a) projects that exceed three stories over a garage level, (b) any utility work such as telephone, gas, water, sewer and other utilities and (c) any fine grading work, utility work or paving work in the future street and public right-of-way; but including all rough grading work at the job site behind the existing right of way

LABORER CLASSIFICATIONS

GROUP 1: Cleaning and handling of panel forms; Concrete Screeding for Rought Strike-off; Concrete, water curing; Demolition laborer; Flagman; Gas, oil and/or water pipeline laborer; General Laborer; General clean-up laborer; Landscape laborer; Jetting laborer; Temporary water and air lines laborer; Material hoseman (walls, slabs, floors and decks); Plugging, filling of Shee-bolt holes; Dry packing of concrete; Railroad maintenance, Repair Trackman and road beds, Streetcar and railroad construction trac laborers; Slip form raisers; Slurry seal crews (mixer operator, applicator operator, squeegee man, Shuttle man, top man), filling of cracks by any method on any surface; Tarman and mortar man; Tool crib or tool house laborer; Window cleaner; Wire Mesh puling-all concrete pouring operations

GROUP 2: Asphalt Shoveler; Cement Dumper (on 1 yard or larger mixer and handling bulk cement); Cesspool digger and installer; Chucktender; Chute man, pouring concrete, the handling of the cute from ready mix trucks, such as walls, slabs, decks, floors, foundations, footings, curbs, gutters and sidewalks; Concrete curer-impervious membrane and form oiler; Cutting torch operator (demoliton); Guinea chaser; Headboard man-asphlt; Laborer, packing rod steel and pans; membrane vapor barrier installer; Power broom sweepers (small); Riiprap, stonepaver, placing stone or wet sacked concrete; Roto scraper and tiller; Tank sealer and cleaner; Tree climber, faller, chain saw operator, Pittsburgh Chipper and similar type brush shredders; Underground laborers, including caisson bellower

GROUP 3: Buggymobile; Concrete cutting torch; Concrete cutting torch; Concrete pile cutter; Driller, jackhammer, 2 1/2 feet drill steel or longer; Dri Pak-it machine; High sealer (including drilling of same); Hydro seeder and similar type; Impact wrench, mult-plate; Kettleman, potmen and mean applying asphalt, lay-kold, creosote, line caustic and similar type materials (applying means applying, dipping, brushing or handling of such materials for pipe wrapping and waterproofing); Operators of pneumatic, gas, electric tools, vibratring machines, pavement breakers, air

blasting, come-along, and similar mechanical tools not separately classified herein; Pipelayers back up man coating, grouting, making of joints, sealing, caulking, diapering and including rubber gasket joints, pointing and any and all other services; Rotary Scarifier or multiple head concrete chipping scarifier; Steel header board man and guideline setter; Tampers, Barko, Wacker and similar type; Trenching machine, handpropelled

GROUP 4: Asphalt raker, luterman, ironer, asphalt dumpman and asphalt spreader boxes (all types); Concrete core cutter (walls, floors or ceilings), Grinder or sander; Concrete saw man; cutting walls or flat work, scoring old or new concrete; Cribber, shorer, lagging, sheeting and trench bracing, hand-guided lagging hammer; Laser beam in connection with laborer's work; Oversize concrete vibrator operator 70 pounds and over; Pipelayer performing all services in the laying, installation and all forms of connection of pipe from the point of receiving pipe in the ditch until completion of operation, including any and all forms of tubular material, whether pipe, metallic or non-metallic, conduit, and any other stationary type of tubular device used for the conveying of any substance or element, whether water, sewage, solid, gas, air or other product whatsoever and without regard to the nature of material from which the tubular material is fabricated; No joint pipe and stripping of same; Prefabricated manhole installer; Sandblaster (nozzleman), Porta shot-blast, water blasting

GROUP 5: Blasters Powderman-All work of loading holes, placing and blasting of all powder and explosives of whatever type, regardless of method used for such loading and placing; Driller-all power drills, excluding jackhammer, whether core, diamond, wagon, track, multiple unit, and any and all other types of mechanical drills without regard to the form of motive power.

LABO0089-002 11/01/2017

	Rates	Fringes
LABORER (MASON TENDER).....	\$ 30.00	16.47

LABO0089-004 07/01/2017

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes
Laborers:		
Group 1.....	\$ 31.63	18.58
Group 2.....	\$ 32.09	18.58
Group 3.....	\$ 32.50	18.58
Group 4.....	\$ 33.34	18.58

Group 5.....\$ 37.46

18.58

LABORER CLASSIFICATIONS

GROUP 1: Laborer: General or Construction Laborer, Landscape Laborer. Asphalt Rubber Material Loader. Boring Machine Tender (outside), Carpenter Laborer (cleaning, handling, oiling & blowing of panel forms and lumber), Concrete Laborer, Concrete Screeding for rough strike-off, Concrete water curing. Concrete Curb & Gutter laborer, Certified Confined Space Laborer, Demolition laborer & Cleaning of Brick and lumber, Expansion Joint Caulking; Environmental Remediation, Monitoring Well, Toxic waste and Geotechnical Drill tender, Fine Grader, Fire Watcher, Limbers, Brush Loader, Pilers and Debris Handlers. flagman. Gas Oil and Water Pipeline Laborer. Material Hoseman (slabs, walls, floors, decks); Plugging, filling of shee bolt holes; Dry packing of concrete and patching; Post Holer Digger (manual); Railroad maintenance, repair trackman, road beds; Rigging & signaling; Scaler, Slip-Form Raisers, Filling cracks on any surface, tool Crib or Tool House Laborer, Traffic control (signs, barriers, barricades, delineator, cones etc.), Window Cleaner

GROUP 2: Asphalt abatement; Buggymobile; Cement dumper (on 1 yd. or larger mixers and handling bulk cement); Concrete curer, impervious membrane and form oiler; Chute man, pouring concrete; Concrete cutting torch; Concrete pile cutter; driller/Jackhammer, with drill steel 2 1/2 feet or longer; Dry pak-it machine; Fence erector; Pipeline wrapper, gas, oil, water, pot tender & form man; Grout man; Installation of all asphalt overlay fabric and materials used for reinforcing asphalt; Irrigation laborer; Kettleman-Potman hot mop, includes applying asphalt, lay-klold, creosote, lime caustic and similar tyhpes of materials (dipping, brushing, handling) and waterproofing; Membrane vapor barrier installer; Pipelayer backup man (coating, grouting, making of joints, sealing caulkiing, diapering including rubber basket joints, pointing); Rotary scarifier, multiple head concrete chipper; Rock slinger; Roto scraper & tiller; Sandblaster pot tender; Septic tank digger/installer; Tamper/wacker operator; Tank scaler & cleaner; Tar man & mortar man; Tree climber/faller, chainb saw operator, Pittsburgh chipper & similar type brush shredders.

GROUP 3: Asphalt, installation of all frabrics; Buggy Mobile Man, Bushing hammer; Compactor (all types), Concrete Curer - Impervious membrane, Form Oiler, Concrete Cutting Torch, Concrete Pile Cutter, Driller/Jackhammer with drill steel 2 1/2 ft or longer, Dry Pak-it machine, Fence erector including manual post hole digging, Gas oil or water Pipeline Wrapper - 6 ft pipe and over, Guradrail erector, Hydro seeder, Impact Wrench man (multi plate), kettleman-Potman Hot Mop includes applying Asphalt, Lay-Kold, Creosote, lime caustic and similar types of

materials (dipping, brushing or handling) and waterproofing. Laser Beam in connection with Laborer work. High Scaler, Operators of Pneumatic Gas or Electric Tools, Vibrating Machines, Pavement Breakers, Air Blasting, Come-Alongs and similar mechanical tools, Remote-Controlled Robotic Tools in connection with Laborers work. Pipelayer Backup Man (Coating, grouting, making of joints, sealing, caulking, diapering including rubber gasket joints, pointing and other services). Power Post Hole Digger, Rotary Scarifier (multiple head concrete chipper scarifier), Rock Slinger, Shot Blast equipment (8 to 48 inches), Steel Headerboard Man and Guideline Setter, Tamper/Wacker operator and similar types, Trenching Machine hand propelled.

GROUP 4: Any worker exposed to raw sewage. Asphalt Raker, Luteman, Asphalt Dumpman, Asphalt Spreader Boxes, Concrete Core Cutter, Concrete Saw Man, Cribber, Shorer, Head Rock Slinger. Installation of subsurface instrumentation, monitoring wells or points, remediation system installer; Laborer, asphalt-rubber distributor bootman; Oversize concrete vibrator operators, 70 pounds or over. Pipelayer, Prefabricated Manhole Installer, Sandblast Nozzleman (Water Blasting-Porta Shot Blast), Traffic Lane Closure.

GROUP 5: Blasters Powderman-All work of loading holes, placing and blasting of all powder and explosives of whatever type, regardless of method used for such loading and placing; Horizontal directional driller, Boring system, Electronic tracking, Driller: all power drills excluding jackhammer, whether core, diamond, wagon, track, multiple unit, and all other types of mechanical drills without regard to form of motive power. Environmental remediation, Monitoring well, Toxic waste and Geotechnical driller, Toxic waste removal. Welding in connection with Laborer's work.

LABO0300-005 01/01/2018

	Rates	Fringes
Asbestos Removal Laborer.....	\$ 33.19	17.78

SCOPE OF WORK: Includes site mobilization, initial site cleanup, site preparation, removal of asbestos-containing material and toxic waste, encapsulation, enclosure and disposal of asbestos- containing materials and toxic waste by hand or with equipment or machinery; scaffolding, fabrication of temporary wooden barriers and assembly of decontamination stations.

LABO0345-001 07/01/2018

	Rates	Fringes
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LABORER (GUNITE)

GROUP 1.....	\$ 42.18	18.27
GROUP 2.....	\$ 41.23	18.27
GROUP 3.....	\$ 37.69	18.27

FOOTNOTE: GUNITE PREMIUM PAY: Workers working from a Bosn'n's Chair or suspended from a rope or cable shall receive 40 cents per hour above the foregoing applicable classification rates. Workers doing gunite and/or shotcrete work in a tunnel shall receive 35 cents per hour above the foregoing applicable classification rates, paid on a portal-to-portal basis. Any work performed on, in or above any smoke stack, silo, storage elevator or similar type of structure, when such structure is in excess of 75'-0" above base level and which work must be performed in whole or in part more than 75'-0" above base level, that work performed above the 75'-0" level shall be compensated for at 35 cents per hour above the applicable classification wage rate.

GUNITE LABORER CLASSIFICATIONS

GROUP 1: Rodmen, Nozzlemen

GROUP 2: Gunmen

GROUP 3: Reboundmen

LABO1184-001 07/01/2018

	Rates	Fringes
Laborers: (HORIZONTAL DIRECTIONAL DRILLING)		
(1) Drilling Crew Laborer...	\$ 35.70	14.03
(2) Vehicle Operator/Hauler.	\$ 35.87	14.03
(3) Horizontal Directional Drill Operator.....	\$ 37.72	14.03
(4) Electronic Tracking Locator.....	\$ 39.72	14.03
Laborers: (STRIPING/SLURRY SEAL)		
GROUP 1.....	\$ 35.86	16.21
GROUP 2.....	\$ 37.16	16.21
GROUP 3.....	\$ 39.17	16.21
GROUP 4.....	\$ 40.91	16.21

LABORERS - STRIPING CLASSIFICATIONS

GROUP 1: Protective coating, pavement sealing, including repair and filling of cracks by any method on any surface in parking lots, game courts and playgrounds; carstops; operation of all related machinery and equipment; equipment repair technician

GROUP 2: Traffic surface abrasive blaster; pot tender - removal of all traffic lines and markings by any method (sandblasting, waterblasting, grinding, etc.) and preparation of surface for coatings. Traffic control person: controlling and directing traffic through both conventional and moving lane closures; operation of all related machinery and equipment

GROUP 3: Traffic delineating device applicator: Layout and application of pavement markers, delineating signs, rumble and traffic bars, adhesives, guide markers, other traffic delineating devices including traffic control. This category includes all traffic related surface preparation (sandblasting, waterblasting, grinding) as part of the application process. Traffic protective delineating system installer: removes, relocates, installs, permanently affixed roadside and parking delineation barricades, fencing, cable anchor, guard rail, reference signs, monument markers; operation of all related machinery and equipment; power broom sweeper

GROUP 4: Striper: layout and application of traffic stripes and markings; hot thermo plastic; tape traffic stripes and markings, including traffic control; operation of all related machinery and equipment

LABO1414-003 08/08/2018

	Rates	Fringes
LABORER		
PLASTER CLEAN-UP LABORER....	\$ 33.82	19.40
PLASTER TENDER.....	\$ 36.37	19.40

Work on a swing stage scaffold: \$1.00 per hour additional.

Work at Military Bases - \$3.00 additional per hour:
 Coronado Naval Amphibious Base, Fort Irwin, Marine Corps Air Station-29 Palms, Imperial Beach Naval Air Station, Marine Corps Logistics Supply Base, Marine Corps Pickle Meadows, Mountain Warfare Training Center, Naval Air Facility-Seeley, North Island Naval Air Station, Vandenberg AFB.

PAIN0036-001 07/01/2018

	Rates	Fringes
Painters: (Including Lead Abatement)		
(1) Repaint (excludes San Diego County).....	\$ 27.59	14.92
(2) All Other Work.....	\$ 31.12	15.04

REPAINT of any previously painted structure. Exceptions: work involving the aerospace industry, breweries, commercial recreational facilities, hotels which operate commercial establishments as part of hotel service, and sports facilities.

 PAIN0036-010 10/01/2017

	Rates	Fringes
DRYWALL FINISHER/TAPER		
(1) Building & Heavy Construction.....	\$ 30.24	16.95
(2) Residential Construction (Wood frame apartments, single family homes and multi-duplexes up to and including four stories).....	\$ 23.50	15.96

 PAIN0036-012 10/01/2017

	Rates	Fringes
GLAZIER.....	\$ 42.55	18.57

 PAIN0036-019 01/01/2018

	Rates	Fringes
SOFT FLOOR LAYER.....	\$ 30.02	13.68

 * PLAS0200-005 08/01/2018

	Rates	Fringes
PLASTERER.....	\$ 36.86	18.00

NORTH ISLAND NAVAL AIR STATION, COLORADO NAVAL AMPHIBIOUS BASE, IMPERIAL BEACH NAVAL AIR STATION: \$3.00 additional per hour.

 PLAS0500-001 07/01/2018

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
GROUP 1.....	\$ 26.34	21.12
GROUP 2.....	\$ 27.99	21.12
GROUP 3.....	\$ 30.07	21.12

CEMENT MASONS - work inside the building line, meeting the following criteria:

GROUP 1: Residential wood frame project of any size; work classified as Type III, IV or Type V construction; interior tenant improvement work regardless the size of the project; any wood frame project of four stories or less.

GROUP 2: Work classified as type I and II construction

GROUP 3: All other work

 * PLUM0016-006 09/01/2018

	Rates	Fringes
PLUMBER, PIPEFITTER, STEAMFITTER		
Camp Pendleton.....	\$ 54.63	22.16
Plumber and Pipefitter All other work except work on new additions and remodeling of bars, restaurant, stores and commercial buildings not to exceed 5,000 sq. ft. of floor space and work on strip malls, light commercial, tenant improvement and remodel work.....	\$ 50.13	22.16
Work ONLY on new additions and remodeling of commercial buildings, bars, restaurants, and stores not to exceed 5,000 sq. ft. of floor space.....	\$ 48.58	21.18
Work ONLY on strip malls, light commercial, tenant improvement and remodel work.....	\$ 37.10	19.51

 * PLUM0016-011 09/01/2018

	Rates	Fringes
PLUMBER/PIPEFITTER		
Residential.....	\$ 40.23	18.08

 PLUM0078-001 07/01/2016

	Rates	Fringes
PLUMBER		
Landscape/Irrigation Fitter..	\$ 44.16	25.19
Sewer & Storm Drain Work....	\$ 44.16	25.19

ROOF0045-001 07/01/2018

	Rates	Fringes
ROOFER.....	\$ 31.00	8.62

SFCA0669-001 04/01/2017

	Rates	Fringes
SPRINKLER FITTER.....	\$ 39.17	15.84

SHEE0206-001 07/01/2017

	Rates	Fringes
SHEET METAL WORKER		
Camp Pendleton.....	\$ 38.88	26.52
Except Camp Pendleton.....	\$ 36.88	26.52
Sheet Metal Technician.....	\$ 27.70	8.43

SHEET METAL TECHNICIAN - SCOPE:

a. Existing residential buildings, both single and multi-family, where each unit is heated and/or cooled by a separate system b. New single family residential buildings including tracts. c. New multi-family residential buildings, not exceeding five stories of living space in height, provided each unit is heated or cooled by a separate system. Hotels and motels are excluded. d. LIGHT COMMERCIAL WORK: Any sheet metal, heating and air conditioning work performed on a project where the total construction cost, excluding land, is under \$1,000,000 e. TENANT IMPROVEMENT WORK: Any work necessary to finish interior spaces to conform to the occupants of commercial buildings, after completion of the building shell

TEAM0166-001 07/03/2017

	Rates	Fringes
Truck drivers:		
GROUP 1.....	\$ 15.90	34.69
GROUP 2.....	\$ 23.49	34.69
GROUP 3.....	\$ 23.69	34.69
GROUP 4.....	\$ 23.89	34.69
GROUP 5.....	\$ 24.09	34.69
GROUP 6.....	\$ 24.59	34.69
GROUP 7.....	\$ 26.09	34.69

FOOTNOTE: HAZMAT PAY: Work on a hazmat job, where hazmat certification is required, shall be paid, in addition to the classification working in, as follows: Levels A, B and C - +\$1.00 per hour. Workers shall be paid hazmat pay in increments of four (4) and eight (8) hours.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Fuel Man, Swamper

GROUP 2: 2-axle Dump Truck, 2-axle Flat Bed, Concrete Pumping Truck, Industrial Lift Truck, Motorized Traffic Control, Pickup Truck on Jobsite

GROUP 3: 2-axle Water Truck, 3-axle Dump Truck, 3-axle Flat Bed, Erosion Control Nozzleman, Dump Crete Truck under 6.5 yd, Forklift 15,000 lbs and over, Prell Truck, Pipeline Work Truck Driver, Road Oil Spreader, Cement Distributor or Slurry Driver, Bootman, Ross Carrier

GROUP 4: Off-road Dump Truck under 35 tons 4-axles but less than 7-axles, Low-Bed Truck & Trailer, Transit Mix Trucks under 8 yd, 3-axle Water Truck, Erosion Control Driver, Grout Mixer Truck, Dump Crete 6.5yd and over, Dumpster Trucks, DW 10, DW 20 and over, Fuel Truck and Dynamite, Truck Greaser, Truck Mounted Mobile Sweeper 2-axle Winch Truck

GROUP 5: Off-road Dump Truck 35 tons and over, 7-axles or more, Transit Mix Trucks 8 yd and over, A-Frame Truck, Swedish Cranes

GROUP 6: Off-Road Special Equipment (including but not limited to Water Pull Tankers, Athey Wagons, DJB, B70 Wuclids or like Equipment)

GROUP 7: Repairman

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator

U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

CALIFORNIA TOWER SEISMIC UPGRADES

(MUSEUM OF MAN) BALBOA PARK, SAN DIEGO

LIST OF ADDITIVE ALTERNATE BID ITEMS

NOTE: ADDITIVE ALTERNATES ARE SELECTED ITEMS ON SHEETS CALLED OUT, NOT THE ENTIRE SHEET, UNLESS SPECIFICALLY NOTED OTHERWISE.

ITEM A - POST TENSIONING RODS AT LEVEL 9 AND 10 (DRWG S4.6)

QUALIFIED HISTORICAL BUILDINGS

AS QUALIFIED HISTORICAL BUILDINGS, THE USE OF THE STATE HISTORICAL BUILDING CODE IS MANDATORY FOR CODE MITIGATION MEASURES. ALL WORK IN THESE PLANS IS INTENDED TO CONFORM TO THESE STANDARDS AND SHALL BE PERFORMED FOLLOWING THE SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES WITH THE EMPHASIS PLACED ON RESTORATION AND REHABILITATION, UNITED STATES DEPARTMENT OF THE INTERIOR, NATIONAL PARKS SERVICE. ALL WORK SHALL BE APPROVED BY THE CITY BUILDING OFFICIAL AND LOCAL HISTORIC RESOURCES BOARD.

NATIONAL REGISTER OF HISTORIC PLACES
NO. 1974-05-17 BALBOA PARK EL PRADO AREA

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF VOLUNTARY SEISMIC RETROFIT OF THE CALIFORNIA TOWER. THE TOWER PROJECT IS PLANNED AS PHASE 1 OF A MULTI-PHASED PROJECT TO SEISMICALLY UPGRADE THE ENTIRE CALIFORNIA QUADRANGLE INCLUDING THE TOWER, THE CENTRAL PORTION (NORTH WING), EAST WING, SOUTH WING AND WEST WING OF THE CALIFORNIA BUILDING. THE FUTURE PHASE 2 IS ANTICIPATED TO INCLUDE SEISMIC UPGRADE OF THE CENTRAL DOMED BUILDING (NORTH WING). THE FUTURE PHASE 3 IS ANTICIPATED TO INCLUDE SEISMIC UPGRADE OF THE EAST, SOUTH AND WEST WINGS OF THE CALIFORNIA BUILDING.

THE SEISMIC UPGRADE OF THE TOWER IS DESIGNED BASED ON THE CALIFORNIA HISTORICAL BUILDING CODE AND IS INTENDED TO BE IN GENERAL CONFORMANCE WITH THE ASCE41 BASIC PERFORMANCE OBJECTIVE FOR EXISTING BUILDINGS. THE SEISMIC UPGRADE PLAN AS DEFINED IN THE CALIFORNIA TOWER SEISMIC STUDY REPORT BY A. B. COURT & ASSOCIATES DATED AUGUST 7, 2009, REQUIRES COMPLETION OF PHASES 1 AND 2 TO BE EFFECTIVE. COMPLETION OF PHASE 1 ALONE CAN BE EXPECTED TO IMPROVE THE SEISMIC SAFETY IN THE TOWER AND ADJACENT BUILDING BUT CAN NOT BE EXPECTED TO ACHIEVE THE ABOVE REFERENCED ASCE41 BASIC PERFORMANCE OBJECTIVE FOR EXISTING BUILDINGS.

TEMPORARY LATERAL BRACING AND INTERNAL SCAFFOLDING ARE ANTICIPATED TO INSTALL STEEL BRACING. EXTERNAL SCAFFOLDING OR CRANE ACCESS IS ANTICIPATED TO INSTALL THE POST-TENSIONING RODS AT THE UPPER LEVELS OF THE TOWER. SHORING IS ANTICIPATED AT SOME LOCATIONS TO COMPLETE THE WORK IN THE LOWER LEVELS OF THE TOWER. EXTERNAL SCAFFOLDING MAY BE REQUIRED TO PROVIDE ALTERNATIVE CONSTRUCTION ACCESS TO 3RD FLOOR OF TOWER AND MATERIAL UNLOADING AND OFF LOADING FOR THE TOWER. CONTRACTOR IS RESPONSIBLE FOR ALL SHORING, SCAFFOLDING DESIGN, PERMITTING AND INSTALLATION.

SCOPE OF WORK

THE SEISMIC UPGRADE WORK INCLUDES UPGRADE OF THE STEEL BRACING AT THE UPPER THREE LEVELS OF THE TOWER, INSTALLATION OF POST-TENSIONING RODS AT THE UPPER TWO LEVELS, ADDITION OF CONCRETE OR SHOTCRETE SHEAR WALLS AT THE LOWER 7 LEVELS OF THE TOWER, LIMITED UPGRADE OF THE EXISTING WALL FOOTINGS, AND INSTALLATION OF DRAG BARS BETWEEN THE TOWER AND THE BUILDING.

THE WORK WILL ALSO INCLUDE SELECTED DEMOLITION OF EXISTING WALLS TO ACCESS THE AREAS OF WORK, REPLACEMENT OR REPAIR OF AFFECTED EXISTING ELEMENTS, FINISHES, WATERPROOFING SYSTEMS, UTILITIES AND SERVICES, AND PROTECTION OF EXISTING HISTORICALLY SIGNIFICANT FEATURES AND FABRIC.

APPLICABLE STANDARDS AND SPECS

"WHITEBOOK - STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2015 EDITION".

CITY SAN DIEGO STD. DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, 2016 EDITION

2013 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 1 AND PART 2, "AMERICANS WITH DISABILITIES ACT" ACCESSIBILITY GUIDELINES.

2013 CALIFORNIA HISTORICAL BUILDING CODE, CCR TITLE 24, PART 8.

"THE SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES", 36 CFR PART 68, JULY 12, 1995.

DESIGN/BUILD ITEMS

1. INTERIOR & EXTERIOR SCAFFOLDING-IF REQUIRED.
2. SHORING
3. TEMPORARY SHORING & BRACING

DEFERRED APPROVAL ITEMS

TRAFFIC CONTROL PLANS & PERMITS

SHEET INDEX

1-D	G-1	TITLE SHEET
2-D	G-2	SITE PLAN
3-D	G-3	GENERAL NOTES
4-D	A1.0	ACCESSIBILITY PLANS
5-D	S1.0	STRUCTURAL GENERAL NOTES
6-D	S1.1	STRUCTURAL GENERAL NOTES
7-D	S1.2	TYPICAL DETAILS
8-D	S2.1	FIRST FLOOR PLAN
9-D	S2.2	SECOND FLOOR PLAN
10-D	S2.3	ROOF PLAN
11-D	S2.4a	TOWER FOUNDATION PLAN
12-D	S2.4b	TOWER PLANS - 1 THROUGH 4
13-D	S2.5	TOWER PLANS - 5 THROUGH 10
14-D	S3.1	NORTH & SOUTH ELEVATIONS
15-D	S3.2	EAST & WEST ELEVATIONS
16-D	S3.3	TOWER SECTIONS A
17-D	S3.4	TOWER SECTIONS B
18-D	S4.1	STRUCTURAL DETAILS
19-D	S4.2	STRUCTURAL DETAILS
20-D	S4.3	STRUCTURAL DETAILS
21-D	S4.4	STRUCTURAL DETAILS
22-D	S4.5	STRUCTURAL DETAILS
23-D	S4.6	STRUCTURAL DETAILS
24-D	S4.7	ARCHITECTURAL DETAILS

BUILDING DATA

BUILDING NAME	CALIFORNIA TOWER (MUSEUM OF MAN)
CONSTRUCTION TYPE	TYPE II-B (NON-CONFORMING) (NON-SPRINKLERED)
OCCUPANCY	A-3 (MUSEUM)
OCCUPANT LOAD	15 (1ST & 2ND FLOOR OF TOWER)
AREA OF RETROFIT	INTERIOR OF TOWER STRUCTURE
SCOPE OF WORK	STRICTLY VOLUNTARY SEISMIC RETROFIT
ORIGINAL CONSTRUCTION	CONSTRUCTED IN 1914
ORIGINAL CODE BASIS	NONE
BASIS OF RETROFIT	CALIFORNIA HISTORICAL BUILDING CODE & ASCE 41 (BASIC PERFORMANCE OBJECTIVE). PROPOSED RETROFIT DOES NOT BRING STRUCTURE INTO CONFORMANCE WITH 2013 CBC FOR NEW BUILDINGS.

PROJECT DIRECTORY

OWNER'S REPRESENTATIVE

CITY OF SAN DIEGO
PUBLIC WORKS DEPT.
ARCHITECTURAL, ENGINEERING
& PARKS DIVISION
525 B STREET
SAN DIEGO, CA 92101

CONTACT: GEORGE FREIHA
MICHELLE GARCIA-QUILLICO
PHONE: (619) 533-7449
FAX: (619) 533-5278
E MAIL: gfreiha@sandiego.gov
MGarciaQuill@sanidiego.gov

STRUCTURAL ENGINEER - PRIME DESIGN PROFESSIONAL

A.B. COURT & ASSOCIATES
4340 HAWK STREET
SAN DIEGO, CA 92103

CONTACT: ANTHONY B. COURT
PHONE: (619) 546-7050
E MAIL: abcourt@abcourtse.com

ARCHITECT

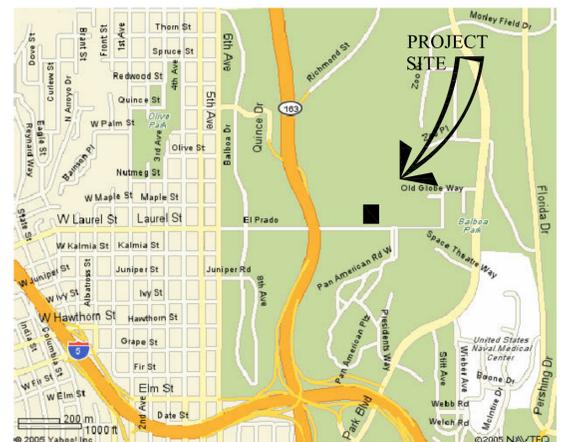
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curt@heritagearchitecture.com

BUILDING ADDRESS

MUSEUM OF MAN: 1350 EL PRADO, BALBOA PARK

VICINITY MAP



TRUCK CONTROL NOTES

THE CONTRACTOR SHALL, PER SECTION 601-2 OF THE 2015 WHITEBOOK, PREPARE A TRUCK ROUTE PLAN AND TRAFFIC CONTROL PLAN AND SUBMIT THEM TO THE RESIDENT ENGINEER. THE TCP WILL BE SENT TO THE ENGINEERING TRAFFIC CONTROL SECTION FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL ALLOW A MINIMUM OF TWENTY (20) WORKING DAYS FOR REVIEW. UPON APPROVAL OF THE TCP, THE ENGINEERING TRAFFIC CONTROL SECTION WILL ISSUE A TRAFFIC CONTROL (TCP) PERMIT AND PARK AND RECREATION DEPARTMENT AUTHORIZATION. WORK SHALL NOT BEGIN WITHOUT THE TCP PERMIT AND PARK AND REC AUTHORIZATION.

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6705 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.	A. B. COURT & ASSOCIATES FIRM ANTHONY B. COURT ENGINEER 4340 HAWK STREET, SAN DIEGO, CA. 92103 ADDRESS (619) 546-7050 PHONE <i>Anthony B. Court</i> SIGNATURE DATE 4-5-2017
I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF SAN DIEGO IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS STRUCTURAL ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.	

G-1

PLANS FOR THE CONSTRUCTION OF
CALIFORNIA TOWER
SEISMIC UPGRADES
BALBOA PARK, SAN DIEGO, CA 92101
COVER SHEET

SPEC. NO. 1560	CITY OF SAN DIEGO, CALIFORNIA PUBLIC WORKS DEPARTMENT SHEET 1 OF 24 SHEETS	WBS L-12003.2
APPROVED: FOR CITY ENGINEER DATE PRINT NAME RCE#	DATE APPROVED DATE FILMED RESUBMITTAL DESCRIPTION BY APPROVED DATE RESUBMITTAL DESCRIPTION BY APPROVED DATE	SUBMITTED BY: PROJECT MANAGER CHECKED BY: PROJECT ENGINEER 206-1719 CC827 COORDINATE 6280407-1846444 CC583 COORDINATE 33996-1-D
CONTRACTOR INSPECTOR	DATE STARTED DATE COMPLETED	

CONSTRUCTION CHANGE / ADDENDUM			
CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.
A	9-27-18	Sheet 16	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.



CONSULTANT
A. B. COURT & ASSOCIATES
STRUCTURAL & SEISMIC ENGINEERING
5340 HAWK STREET
SAN DIEGO, CA 92103
619-546-7050
abcourt@abcourtse.com



CALIFORNIA TOWER - SEISMIC UPGRADES

A. CHANGES TO CONTRACT DOCUMENTS

The following changes to the Contract Documents are hereby made effective as though originally issued with the bid package. Bidders are reminded that all previous requirements to this solicitation remain in full force and effect.

B. BIDDER'S QUESTIONS

Q1. Appendix K, Pedestrian and Vehicular Traffic Control/Access proposed layout shows the ability to block off access to the Laurel St bridge with letter F. Letter F states – Vehicle (short term). Please define short term.

A1. Refer to Attachment E, Supplementary Special Provisions, Section 601-2.1.5, Traffic Control for Street Closures and Detours, Item 9.

Q2. Can you confirm if there are any mandatory participation requirements for this project like SBE/DVBE etc.?

A2. The project is subject to fair share objectives identified in the Notice Inviting Bids, section 7.5. These fair share objectives are for designated small and disadvantaged businesses as identified by the US Small Business Administration. These designations are not interchangeable with the State of California, Department of General Services, certifications for small business (SBE) and disabled veteran business enterprises (DVBE).

C. ADDENDUM

1. To Addendum A, dated September 27, 2018, Item D, Attachments, pages 10 through 38, **DELETE** in their entirety and **SUBSTITUTE** with pages 3 through 30 of this Addendum.

James Nagelvoort, Director
Public Works Department

Dated: *October 9, 2018*
San Diego, California

JN/AJ/ss

General Decision Number: CA180001 10/05/2018 CA1

Superseded General Decision Number: CA20170001

State: California

Construction Types: Building, Heavy (Heavy and Dredging),
Highway and Residential

County: San Diego County in California.

BUILDING CONSTRUCTION PROJECTS; DREDGING PROJECTS (does not include hopper dredge work); HEAVY CONSTRUCTION PROJECTS (does not include water well drilling); HIGHWAY CONSTRUCTION PROJECTS; RESIDENTIAL CONSTRUCTION PROJECTS (consisting of single family homes and apartments up to and including 4 stories)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.35 for calendar year 2018 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/05/2018
1	01/12/2018
2	01/19/2018
3	02/09/2018
4	03/02/2018
5	05/04/2018
6	06/29/2018
7	07/06/2018
8	07/13/2018
9	07/20/2018
10	08/17/2018
11	08/24/2018
12	08/31/2018
13	09/07/2018
14	09/28/2018
15	10/05/2018

ASBE0005-002 07/01/2018

	Rates	Fringes
Asbestos Workers/Insulator (Includes the application of all insulating materials, protective coverings, coatings, and finishes to all types of mechanical systems).....	\$ 39.72	20.81
Fire Stop Technician (Application of Firestopping Materials for wall openings and penetrations in walls, floors, ceilings and curtain walls).....	\$ 27.92	18.31

ASBE0005-004 07/02/2018

	Rates	Fringes
Asbestos Removal worker/hazardous material handler (Includes preparation, wetting, stripping, removal, scrapping, vacuuming, bagging and disposing of all insulation materials from mechanical systems, whether they contain asbestos or not)....	\$ 19.93	11.72

BOIL0092-003 03/01/2018

	Rates	Fringes
BOILERMAKER.....	\$ 44.07	33.52

BRCA0004-008 11/01/2017

	Rates	Fringes
BRICKLAYER; MARBLE SETTER.....	\$ 37.46	16.69

BRCA0018-004 07/01/2017

	Rates	Fringes
MARBLE FINISHER.....	\$ 30.93	12.95
TILE FINISHER.....	\$ 25.98	11.23
TILE LAYER.....	\$ 37.76	16.37

BRCA0018-010 09/01/2017

	Rates	Fringes
TERRAZZO FINISHER.....	\$ 29.75	12.91

	Rates	Fringes
TERRAZZO WORKER/SETTER.....	\$ 36.75	13.82

 CARP0409-002 07/01/2016

	Rates	Fringes
Diver		
(1) Wet.....	\$ 712.48	17.03
(2) Standby.....	\$ 356.24	17.03
(3) Tender.....	\$ 348.24	17.03
(4) Assistant Tender.....	\$ 324.24	17.03

Amounts in "Rates" column are per day

 CARP0409-008 08/01/2010

	Rates	Fringes
Modular Furniture Installer.....	\$ 17.00	7.41

 CARP0547-001 07/01/2016

	Rates	Fringes
CARPENTER		
(1) Bridge.....	\$ 40.33	17.03
(2) Commercial Building....	\$ 35.10	17.03
(3) Heavy & Highway.....	\$ 40.20	17.03
(4) Residential Carpenter..	\$ 28.08	17.03
(5) Residential Insulation Installer.....	\$ 18.00	8.16
MILLWRIGHT.....	\$ 46.70	17.03
PILEDRIVERMAN.....	\$ 40.33	17.03

 CARP0547-002 07/01/2017

	Rates	Fringes
Drywall		
(1) Work on wood framed construction of single family residences, apartments or condominiums under four stories		
Drywall Installer/Lather...	\$ 22.95	18.85
Drywall Stocker/Scrapper...	\$ 12.50	12.27
(2) All other work		
Drywall Installer/Lather...	\$ 32.00	17.63
Drywall Stocker/Scrapper...	\$ 12.50	12.27

 ELEC0569-001 06/04/2018

	Rates	Fringes
Electricians (Tunnel Work)		
Cable Splicer.....	\$ 50.81	3%+13.63

	Rates	Fringes
Electrician.....	\$ 50.06	3%+13.63
Electricians: (All Other Work, Including 4 Stories Residential)		
Cable Splicer.....	\$ 45.25	3%+13.63
Electrician.....	\$ 44.50	3%+13.63

ELEC0569-004 06/04/2018

	Rates	Fringes
ELECTRICIAN (Sound & Communications Sound Technician).....	\$ 31.75	3%+11.78
SCOPE OF WORK Assembly, installation, operation, service and maintenance of components or systems as used in closed circuit television, amplified master television distribution, CATV on private property, intercommunication, burglar alarm, fire alarm, life support and all security alarms, private and public telephone and related telephone interconnect, public address, paging, audio, language, electronic, background music system less than line voltage or any system acceptable for class two wiring for private, commercial, or industrial use furnished by leased wire, freuency modulation or other recording devices, electrical apparatus by means of which electricity is applied to the amplification, transmission, transference, recording or reproduction of voice, music, sound, impulses and video. Excluded from this Scope of Work - transmission, service and maintenance of background music. All of the above shall include the installation and transmission over fiber optics.		

ELEC0569-005 06/04/2018

	Rates	Fringes
Sound & Communications Sound Technician.....	\$ 31.75	3%+11.78
SCOPE OF WORK Assembly, installation, operation, service and maintenance of components or systems as used in closed circuit television, amplified master television distribution, CATV on private property, intercommunication, burglar alarm, fire alarm, life support and all security alarms, private and public telephone and related telephone interconnect, public address, paging, audio, language, electronic, background music system less than line voltage or any system acceptable for class two wiring for private, commercial, or industrial use furnished by leased wire, freuency modulation or other recording devices, electrical apparatus by means of which electricity is applied to the amplification, transmission, transference, recording or reproduction of voice, music, sound, impulses and video. Excluded from this Scope of Work - transmission, service and maintenance of background music. All of the above shall include the installation and transmission over fiber optics.		

SOUND TECHNICIAN: Terminating, operating and performing final check-out

 ELEC0569-006 02/27/2017

Work on street lighting; traffic signals; and underground systems and/or established easements outside of buildings

	Rates	Fringes
Traffic signal, street light and underground work		
Utility Technician #1.....	\$ 30.48	3%+7.70
Utility Technician #2.....	\$ 25.45	3%+7.70

STREET LIGHT & TRAFFIC SIGNAL WORK:

UTILITY TECHNICIAN #1: Installation of street lights and traffic signals, including electrical circuitry, programmable controller, pedestal-mounted electrical meter enclosures and laying of pre-assembled cable in ducts. The layout of electrical systems and communication installation including proper position of trench depths, and radius at duct banks, location for manholes, street lights and traffic signals.

UTILITY TECHNICIAN #2: Distribution of material at jobsite, installation of underground ducts for electrical, telephone, cable TV land communication systems. The setting, leveling, grounding and racking of precast manholes, handholes and transformer pads.

 ELEC0569-008 06/04/2018

	Rates	Fringes
ELECTRICIAN (Residential, 1-3 Stories).....	\$ 33.38	3%+6.61

 ELEC1245-001 06/01/2018

	Rates	Fringes
LINE CONSTRUCTION		
(1) Lineman; Cable splicer..	\$ 56.79	17.91
(2) Equipment specialist (operates crawler tractors, commercial motor vehicles, backhoes, trenchers, cranes (50 tons and below), overhead & underground distribution line equipment).....	\$ 45.36	16.74
(3) Groundman.....	\$ 34.68	16.36

	Rates	Fringes
(4) Powderman.....	\$ 49.55	3%+17.65

HOLIDAYS: New Year's Day, M.L. King Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day and day after Thanksgiving, Christmas Day

ELEV0018-001 01/01/2018

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 53.85	32.645

FOOTNOTE:

PAID VACATION: Employer contributes 8% of regular hourly rate as vacation pay credit for employees with more than 5 years of service, and 6% for 6 months to 5 years of service.
PAID HOLIDAYS: New Years Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.

ENGI0012-003 07/01/2018

	Rates	Fringes
OPERATOR: Power Equipment (All Other Work)		
GROUP 1.....	\$ 45.30	25.25
GROUP 2.....	\$ 46.08	25.25
GROUP 3.....	\$ 46.37	25.25
GROUP 4.....	\$ 47.86	25.25
GROUP 5.....	\$ 48.96	25.25
GROUP 6.....	\$ 48.08	25.25
GROUP 8.....	\$ 48.19	25.25
GROUP 9.....	\$ 49.29	25.25
GROUP 10.....	\$ 48.31	25.25
GROUP 11.....	\$ 49.41	25.25
GROUP 12.....	\$ 48.48	25.25
GROUP 13.....	\$ 48.58	25.25
GROUP 14.....	\$ 48.61	25.25
GROUP 15.....	\$ 48.69	25.25
GROUP 16.....	\$ 48.81	25.25
GROUP 17.....	\$ 48.98	25.25
GROUP 18.....	\$ 49.08	25.25
GROUP 19.....	\$ 49.19	25.25
GROUP 20.....	\$ 49.31	25.25
GROUP 21.....	\$ 49.48	25.25
GROUP 22.....	\$ 49.58	25.25
GROUP 23.....	\$ 49.69	25.25
GROUP 24.....	\$ 49.81	25.25
GROUP 25.....	\$ 49.98	25.25
OPERATOR: Power Equipment (Cranes, Piledriving & Hoisting)		
GROUP 1.....	\$ 46.65	25.25

	Rates	Fringes
GROUP 2.....	\$ 47.43	25.25
GROUP 3.....	\$ 47.72	25.25
GROUP 4.....	\$ 47.86	25.25
GROUP 5.....	\$ 48.08	25.25
GROUP 6.....	\$ 48.19	25.25
GROUP 7.....	\$ 48.31	25.25
GROUP 8.....	\$ 48.48	25.25
GROUP 9.....	\$ 48.65	25.25
GROUP 10.....	\$ 49.65	25.25
GROUP 11.....	\$ 50.65	25.25
GROUP 12.....	\$ 51.65	25.25
GROUP 13.....	\$ 52.65	25.25
OPERATOR: Power Equipment		
(Tunnel Work)		
GROUP 1.....	\$ 47.15	25.25
GROUP 2.....	\$ 47.93	25.25
GROUP 3.....	\$ 48.22	25.25
GROUP 4.....	\$ 48.39	25.25
GROUP 5.....	\$ 48.58	25.25
GROUP 6.....	\$ 48.69	25.25
GROUP 7.....	\$ 48.81	25.25

PREMIUM PAY:

\$3.75 per hour shall be paid on all Power Equipment Operator work on the following Military Bases: China Lake Naval Reserve, Vandenberg AFB, Point Arguello, Seely Naval Base, Fort Irwin, Nebo Annex Marine Base, Marine Corp Logistics Base Yermo, Edwards AFB, 29 Palms Marine Base and Camp Pendleton

Workers required to suit up and work in a hazardous material environment: \$2.00 per hour additional. Combination mixer and compressor operator on gunite work shall be classified as a concrete mobile mixer operator.

SEE ZONE DEFINITIONS AFTER CLASSIFICATIONS

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Bargeman; Brakeman; Compressor operator; Ditch Witch, with seat or similar type equipment; Elevator operator-inside; Engineer Oiler; Forklift operator (includes loed, lull or similar types under 5 tons; Generator operator; Generator, pump or compressor plant operator; Pump operator; Signalman; Switchman

GROUP 2: Asphalt-rubber plant operator (nurse tank operator); Concrete mixer operator-skip type; Conveyor operator; Fireman; Forklift operator (includes loed, lull or similar types over 5 tons; Hydrostatic pump operator; oiler crusher (asphalt or concrete plant); Petromat laydown machine; PJU side dum jack; Screening and conveyor machine operator (or similar types); Skiploader (wheel type up to 3/4 yd. without attachment); Tar pot fireman; Temporary heating plant operator; Trenching machine oiler

GROUP 3: Asphalt-rubber blend operator; Bobcat or similar type (Skid steer); Equipment greaser (rack); Ford Ferguson (with dragtype attachments); Helicopter radioman (ground); Stationary pipe wrapping and cleaning machine operator

GROUP 4: Asphalt plant fireman; Backhoe operator (mini-max or similar type); Boring machine operator; Boxman or mixerman (asphalt or concrete); Chip spreading machine operator; Concrete cleaning decontamination machine operator; Concrete Pump Operator (small portable); Drilling machine operator, small auger types (Texoma super economatic or similar types - Hughes 100 or 200 or similar types - drilling depth of 30' maximum); Equipment greaser (grease truck); Guard rail post driver operator; Highline cableway signalman; Hydra-hammer-aero stomper; Micro Tunneling (above ground tunnel); Power concrete curing machine operator; Power concrete saw operator; Power-driven jumbo form setter operator; Power sweeper operator; Rock Wheel Saw/Trencher; Roller operator (compacting); Screed operator (asphalt or concrete); Trenching machine operator (up to 6 ft.); Vacuum or much truck

GROUP 5: Equipment Greaser (Grease Truck/Multi Shift).

GROUP 6: Articulating material hauler; Asphalt plant engineer; Batch plant operator; Bit sharpener; Concrete joint machine operator (canal and similar type); Concrete planer operator; Dandy digger; Deck engine operator; Derrickman (oilfield type); Drilling machine operator, bucket or auger types (Calweld 100 bucket or similar types - Watson 1000 auger or similar types - Texoma 330, 500 or 600 auger or similar types - drilling depth of 45' maximum); Drilling machine operator; Hydrographic seeder machine operator (straw, pulp or seed), Jackson track maintainer, or similar type; Kalamazoo Switch tamper, or similar type; Machine tool operator; Maginnis internal full slab vibrator, Mechanical berm, curb or gutter (concrete or asphalt); Mechanical finisher operator (concrete, Clary-Johnson-Bidwell or similar); Micro tunnel system (below ground); Pavement breaker operator (truck mounted); Road oil mixing machine operator; Roller operator (asphalt or finish), rubber-tired earth moving equipment (single engine, up to and including 25 yds. struck); Self-propelled tar pipelining machine operator; Skiploader operator (crawler and wheel type, over 3/4 yd. and up to and including 1-1/2 yds.); Slip form pump operator (power driven hydraulic lifting device for concrete forms); Tractor operator-bulldozer, tamper-scraper (single engine, up to 100 h.p. flywheel and similar types, up to and including D-5 and similar types); Tugger hoist operator (1 drum); Ultra high pressure waterjet cutting tool system operator; Vacuum blasting machine operator

GROUP 8: Asphalt or concrete spreading operator (tamping or finishing); Asphalt paving machine operator (Barber Greene or similar type); Asphalt-rubber distribution operator; Backhoe operator (up to and including 3/4 yd.), small ford,

Case or similar; Cast-in-place pipe laying machine operator; Combination mixer and compressor operator (gunite work); Compactor operator (self-propelled); Concrete mixer operator (paving); Crushing plant operator; Drill Doctor; Drilling machine operator, Bucket or auger types (Calweld 150 bucket or similar types - Watson 1500, 2000 2500 auger or similar types - Texoma 700, 800 auger or similar types - drilling depth of 60' maximum); Elevating grader operator; Grade checker; Gradall operator; Grouting machine operator; Heavy-duty repairman; Heavy equipment robotics operator; Kalamazoo balliste regulator or similar type; Kolman belt loader and similar type; Le Tourneau blob compactor or similar type; Loader operator (Athey, Euclid, Sierra and similar types); Mobark Chipper or similar; Ozzie padder or similar types; P.C. slot saw; Pneumatic concrete placing machine operator (Hackley-Presswell or similar type); Pumpcrete gun operator; Rock Drill or similar types; Rotary drill operator (excluding caisson type); Rubber-tired earth-moving equipment operator (single engine, caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. up to and including 50 cu. yds. struck); Rubber-tired earth-moving equipment operator (multiple engine up to and including 25 yds. struck); Rubber-tired scraper operator (self-loading paddle wheel type-John Deere, 1040 and similar single unit); Self-propelled curb and gutter machine operator; Shuttle buggy; Skiploader operator (crawler and wheel type over 1-1/2 yds. up to and including 6-1/2 yds.); Soil remediation plant operator; Surface heaters and planer operator; Tractor compressor drill combination operator; Tractor operator (any type larger than D-5 - 100 flywheel h.p. and over, or similar-bulldozer, tamper, scraper and push tractor single engine); Tractor operator (boom attachments), Traveling pipe wrapping, cleaning and bending machine operator; Trenching machine operator (over 6 ft. depth capacity, manufacturer's rating); trenching Machine with Road Miner attachment (over 6 ft depth capacity); Ultra high pressure waterjet cutting tool system mechanic; Water pull (compaction) operator

GROUP 9: Heavy Duty Repairman

GROUP 10: Drilling machine operator, Bucket or auger types (Calweld 200 B bucket or similar types-Watson 3000 or 5000 auger or similar types-Texoma 900 auger or similar types-drilling depth of 105' maximum); Dual drum mixer, dynamic compactor LDC350 (or similar types); Monorail locomotive operator (diesel, gas or electric); Motor patrol-blade operator (single engine); Multiple engine tractor operator (Euclid and similar type-except Quad 9 cat.); Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Pneumatic pipe ramming tool and similar types; Prestressed wrapping machine operator; Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Rubber tired earth moving equipment operator (multiple engine, Euclid, caterpillar and similar over 25 yds. and up to 50 yds. struck), Tower

crane repairman; Tractor loader operator (crawler and wheel type over 6-1/2 yds.); Woods mixer operator (and similar Pugmill equipment)

GROUP 11: Heavy Duty Repairman - Welder Combination, Welder - Certified.

GROUP 12: Auto grader operator; Automatic slip form operator; Drilling machine operator, bucket or auger types (Calweld, auger 200 CA or similar types - Watson, auger 6000 or similar types - Hughes Super Duty, auger 200 or similar types - drilling depth of 175' maximum); Hoe ram or similar with compressor; Mass excavator operator less than 750 cu. yards; Mechanical finishing machine operator; Mobile form traveler operator; Motor patrol operator (multi-engine); Pipe mobile machine operator; Rubber-tired earth-moving equipment operator (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck); Rubber-tired self-loading scraper operator (paddle-wheel-auger type self-loading - two (2) or more units)

GROUP 13: Rubber-tired earth-moving equipment operator operating equipment with push-pull system (single engine, up to and including 25 yds. struck)

GROUP 14: Canal liner operator; Canal trimmer operator; Remote-control earth-moving equipment operator (operating a second piece of equipment: \$1.00 per hour additional); Wheel excavator operator (over 750 cu. yds.)

GROUP 15: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine-up to and including 25 yds. struck)

GROUP 16: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 17: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine, Euclid, Caterpillar and similar, over 50 cu. yds. struck); Tandem tractor operator (operating crawler type tractors in tandem - Quad 9 and similar type)

GROUP 18: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, up to and including 25 yds. struck)

GROUP 19: Rotex concrete belt operator (or similar types);

Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 cu. yds. struck); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - multiple engine, up to and including 25 yds. struck)

GROUP 20: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps, and similar types in any combination, excluding compaction units - multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 21: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck)

GROUP 22: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, up to and including 25 yds. struck)

GROUP 23: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 yds. struck); Rubber-tired earth-moving equipment operator, operating with the tandem push-pull system (multiple engine, up to and including 25 yds. struck)

GROUP 24: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 25: Concrete pump operator-truck mounted; Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck)

CRANES, PILEDIVING AND HOISTING EQUIPMENT CLASSIFICATIONS

GROUP 1: Engineer oiler; Fork lift operator (includes load, lull or similar types)

GROUP 2: Truck crane oiler

GROUP 3: A-frame or winch truck operator; Ross carrier operator (jobsite)

GROUP 4: Bridge-type unloader and turntable operator; Helicopter hoist operator

GROUP 5: Hydraulic boom truck; Stinger crane (Austin-Western or similar type); Tugger hoist operator (1 drum)

GROUP 6: Bridge crane operator; Cretor crane operator; Hoist operator (Chicago boom and similar type); Lift mobile operator; Lift slab machine operator (Vagtborg and similar types); Material hoist and/or manlift operator; Polar gantry crane operator; Self Climbing scaffold (or similar type); Shovel, backhoe, dragline, clamshell operator (over 3/4 yd. and up to 5 cu. yds. mrc); Tugger hoist operator

GROUP 7: Pedestal crane operator; Shovel, backhoe, dragline, clamshell operator (over 5 cu. yds. mrc); Tower crane repair; Tugger hoist operator (3 drum)

GROUP 8: Crane operator (up to and including 25 ton capacity); Crawler transporter operator; Derrick barge operator (up to and including 25 ton capacity); Hoist operator, stiff legs, Guy derrick or similar type (up to and including 25 ton capacity); Shovel, backhoe, dragline, clamshell operator (over 7 cu. yds., M.R.C.)

GROUP 9: Crane operator (over 25 tons and up to and including 50 tons mrc); Derrick barge operator (over 25 tons up to and including 50 tons mrc); Highline cableway operator; Hoist operator, stiff legs, Guy derrick or similar type (over 25 tons up to and including 50 tons mrc); K-crane operator; Polar crane operator; Self erecting tower crane operator maximum lifting capacity ten tons

GROUP 10: Crane operator (over 50 tons and up to and including 100 tons mrc); Derrick barge operator (over 50 tons up to and including 100 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 50 tons up to and including 100 tons mrc), Mobile tower crane operator (over 50 tons, up to and including 100 tons M.R.C.); Tower crane operator and tower gantry

GROUP 11: Crane operator (over 100 tons and up to and including 200 tons mrc); Derrick barge operator (over 100 tons up to and including 200 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 100 tons up to and including 200 tons mrc); Mobile tower crane operator (over 100 tons up to and including 200 tons mrc)

GROUP 12: Crane operator (over 200 tons up to and including 300 tons mrc); Derrick barge operator (over 200 tons up to and including 300 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 200 tons, up to and

including 300 tons mrc); Mobile tower crane operator (over 200 tons, up to and including 300 tons mrc)

GROUP 13: Crane operator (over 300 tons); Derrick barge operator (over 300 tons); Helicopter pilot; Hoist operator, stiff legs, Guy derrick or similar type (over 300 tons); Mobile tower crane operator (over 300 tons)

TUNNEL CLASSIFICATIONS

GROUP 1: Skiploader (wheel type up to 3/4 yd. without attachment)

GROUP 2: Power-driven jumbo form setter operator

GROUP 3: Dinkey locomotive or motorperson (up to and including 10 tons)

GROUP 4: Bit sharpener; Equipment greaser (grease truck); Slip form pump operator (power-driven hydraulic lifting device for concrete forms); Tugger hoist operator (1 drum); Tunnel locomotive operator (over 10 and up to and including 30 tons)

GROUP 5: Backhoe operator (up to and including 3/4 yd.); Small Ford, Case or similar; Drill doctor; Grouting machine operator; Heading shield operator; Heavy-duty repairperson; Loader operator (Athey, Euclid, Sierra and similar types); Mucking machine operator (1/4 yd., rubber-tired, rail or track type); Pneumatic concrete placing machine operator (Hackley-Presswell or similar type); Pneumatic heading shield (tunnel); Pumpcrete gun operator; Tractor compressor drill combination operator; Tugger hoist operator (2 drum); Tunnel locomotive operator (over 30 tons)

GROUP 6: Heavy Duty Repairman

GROUP 7: Tunnel mole boring machine operator

ENGINEERS ZONES

\$1.00 additional per hour for all of IMPERIAL County and the portions of KERN, RIVERSIDE & SAN BERNARDINO Counties as defined below:

That area within the following Boundary: Begin in San Bernardino County, approximately 3 miles NE of the intersection of I-15 and the California State line at that point which is the NW corner of Section 1, T17N,m R14E, San Bernardino Meridian. Continue W in a straight line to that point which is the SW corner of the northwest quarter of Section 6, T27S, R42E, Mt. Diablo Meridian. Continue North to the intersection with the Inyo County Boundary at that point which is the NE corner of the western half of the northern quarter of Section 6, T25S, R42E, MDM. Continue W along the Inyo and San Bernardino County boundary until the intersection with Kern County, as that point which is the SE corner of Section 34,

T24S, R40E, MDM. Continue W along the Inyo and Kern County boundary until the intersection with Tulare County, at that point which is the SW corner of the SE quarter of Section 32, T24S, R37E, MDM. Continue W along the Kern and Tulare County boundary, until that point which is the NW corner of T25S, R32E, MDM. Continue S following R32E lines to the NW corner of T31S, R32E, MDM. Continue W to the NW corner of T31S, R31E, MDM. Continue S to the SW corner of T32S, R31E, MDM. Continue W to SW corner of SE quarter of Section 34, T32S, R30E, MDM. Continue S to SW corner of T11N, R17W, SBM. Continue E along south boundary of T11N, SBM to SW corner of T11N, R7W, SBM. Continue S to SW corner of T9N, R7W, SBM. Continue E along south boundary of T9N, SBM to SW corner of T9N, R1E, SBM. Continue S along west boundary of R1E, SBM to Riverside County line at the SW corner of T1S, R1E, SBM. Continue E along south boundary of T1S, SBM (Riverside County Line) to SW corner of T1S, R10E, SBM. Continue S along west boundary of R10E, SBM to Imperial County line at the SW corner of T8S, R10E, SBM. Continue W along Imperial and Riverside county line to NW corner of T9S, R9E, SBM. Continue S along the boundary between Imperial and San Diego Counties, along the west edge of R9E, SBM to the south boundary of Imperial County/California state line. Follow the California state line west to Arizona state line, then north to Nevada state line, then continuing NW back to start at the point which is the NW corner of Section 1, T17N, R14E, SBM

\$1.00 additional per hour for portions of SAN LUIS OBISPO, KERN, SANTA BARBARA & VENTURA as defined below:

That area within the following Boundary: Begin approximately 5 miles north of the community of Cholame, on the Monterey County and San Luis Obispo County boundary at the NW corner of T25S, R16E, Mt. Diablo Meridian. Continue south along the west side of R16E to the SW corner of T30S, R16E, MDM. Continue E to SW corner of T30S, R17E, MDM. Continue S to SW corner of T31S, R17E, MDM. Continue E to SW corner of T31S, R18E, MDM. Continue S along West side of R18E, MDM as it crosses into San Bernardino Meridian numbering area and becomes R30W. Follow the west side of R30W, SBM to the SW corner of T9N, R30W, SBM. Continue E along the south edge of T9N, SBM to the Santa Barbara County and Ventura County boundary at that point which is the SW corner of Section 34. T9N, R24W, SBM, continue S along the Ventura County line to that point which is the SW corner of the SE quarter of Section 32, T7N, R24W, SBM. Continue E along the south edge of T7N, SBM to the SE corner to T7N, R21W, SBM. Continue N along East side of R21W, SBM to Ventura County and Kern County boundary at the NE corner of T8N, R21W. Continue W along the Ventura County and Kern County boundary to the SE corner of T9N, R21W. Continue North along the East edge of R21W, SBM to the NE corner of T12N, R21W, SBM. Continue West along the north edge of T12N, SBM to the SE corner of T32S, R21E, MDM. [T12N SBM is a thin strip between T11N SBM and T32S MDM]. Continue North along the East side of R21E, MDM to the Kings County and Kern County border at the NE corner of T25S, R21E, MDM, continue West along the Kings County and Kern County Boundary until the intersection of San Luis Obispo

County. Continue west along the Kings County and San Luis Obispo County boundary until the intersection with Monterey County. Continue West along the Monterey County and San Luis Obispo County boundary to the beginning point at the NW corner of T25S, R16E, MDM.

\$2.00 additional per hour for INYO and MONO Counties and the Northern portion of SAN BERNARDINO County as defined below:

That area within the following Boundary: Begin at the intersection of the northern boundary of Mono County and the California state line at the point which is the center of Section 17, T10N, R22E, Mt. Diablo Meridian. Continue S then SE along the entire western boundary of Mono County, until it reaches Inyo County at the point which is the NE corner of the Western half of the NW quarter of Section 2, T8S, R29E, MDM. Continue SSE along the entire western boundary of Inyo County, until the intersection with Kern County at the point which is the SW corner of the SE 1/4 of Section 32, T24S, R37E, MDM. Continue E along the Inyo and Kern County boundary until the intersection with San Bernardino County at that point which is the SE corner of section 34, T24S, R40E, MDM. Continue E along the Inyo and San Bernardino County boundary until the point which is the NE corner of the Western half of the NW quarter of Section 6, T25S, R42E, MDM. Continue S to that point which is the SW corner of the NW quarter of Section 6, T27S, R42E, MDM. Continue E in a straight line to the California and Nevada state border at the point which is the NW corner of Section 1, T17N, R14E, San Bernardino Meridian. Then continue NW along the state line to the starting point, which is the center of Section 18, T10N, R22E, MDM.

REMAINING AREA NOT DEFINED ABOVE RECIEVES BASE RATE

 ENGI0012-004 08/01/2015

	Rates	Fringes
OPERATOR: Power Equipment		
(DREDGING)		
(1) Leverman.....	\$ 49.50	23.60
(2) Dredge dozer.....	\$ 43.53	23.60
(3) Deckmate.....	\$ 43.42	23.60
(4) Winch operator (stern winch on dredge).....	\$ 42.87	23.60
(5) Fireman-Oiler, Deckhand, Bargeman, Leveehand.....	\$ 42.33	23.60
(6) Barge Mate.....	\$ 42.94	23.60

IRON0377-002 07/01/2018

	Rates	Fringes
Ironworkers:		
Fence Erector.....	\$ 31.58	22.41
Ornamental, Reinforcing and Structural.....	\$ 38.00	31.05

PREMIUM PAY:

\$6.00 additional per hour at the following locations:

China Lake Naval Test Station, Chocolate Mountains Naval Reserve-Niland, Edwards AFB, Fort Irwin Military Station, Fort Irwin Training Center-Goldstone, San Clemente Island, San Nicholas Island, Susanville Federal Prison, 29 Palms - Marine Corps, U.S. Marine Base - Barstow, U.S. Naval Air Facility - Sealey, Vandenberg AFB

\$4.00 additional per hour at the following locations:

Army Defense Language Institute - Monterey, Fallon Air Base, Naval Post Graduate School - Monterey, Yermo Marine Corps Logistics Center

\$2.00 additional per hour at the following locations:

Port Hueneme, Port Mugu, U.S. Coast Guard Station - Two Rock

LABO0089-001 07/01/2018

	Rates	Fringes
LABORER (BUILDING and all other Residential Construction)		
Group 1.....	\$ 31.31	19.29
Group 2.....	\$ 31.99	19.29
Group 3.....	\$ 32.70	19.29
Group 4.....	\$ 33.50	19.29
Group 5.....	\$ 35.43	19.29
LABORER (RESIDENTIAL CONSTRUCTION - See definition below)		
(1) Laborer.....	\$ 27.32	18.11
(2) Cleanup, Landscape, Fencing (Chain Link & Wood).\$	26.03	18.11

RESIDENTIAL DEFINITION: Wood or metal frame construction of single family residences, apartments and condominiums - excluding (a) projects that exceed three stories over a garage level, (b) any utility work such as telephone, gas, water, sewer and other utilities and (c) any fine grading work, utility work or paving work in the future street and

public right-of-way; but including all rough grading work at the job site behind the existing right of way

LABORER CLASSIFICATIONS

GROUP 1: Cleaning and handling of panel forms; Concrete Screeding for Rought Strike-off; Concrete, water curing; Demolition laborer; Flagman; Gas, oil and/or water pipeline laborer; General Laborer; General clean-up laborer; Landscape laborer; Jetting laborer; Temporary water and air lines laborer; Material hoseman (walls, slabs, floors and decks); Plugging, filling of Shee-bolt holes; Dry packing of concrete; Railroad maintenance, Repair Trackman and road beds, Streetcar and railroad construction trac laborers; Slip form raisers; Slurry seal crews (mixer operator, applicator operator, squeegee man, Shuttle man, top man), filling of cracks by any method on any surface; Tarman and mortar man; Tool crib or tool house laborer; Window cleaner; Wire Mesh puling-all concrete pouring operations

GROUP 2: Asphalt Shoveler; Cement Dumper (on 1 yard or larger mixer and handling bulk cement); Cesspool digger and installer; Chucktender; Chute man, pouring concrete, the handling of the cute from ready mix trucks, such as walls, slabs, decks, floors, foundations, footings, curbs, gutters and sidewalks; Concrete curer-impervious membrane and form oiler; Cutting torch operator (demoliton); Guinea chaser; Headboard man-asphlt; Laborer, packing rod steel and pans; membrane vapor barrier installer; Power broom sweepers (small); Riiprap, stonepaver, placing stone or wet sacked concrete; Roto scraper and tiller; Tank sealer and cleaner; Tree climber, faller, chain saw operator, Pittsburgh Chipper and similar type brush shredders; Underground laborers, including caisson bellower

GROUP 3: Buggymobile; Concrete cutting torch; Concrete cutting torch; Concrete pile cutter; Driller, jackhammer, 2 1/2 feet drill steel or longer; Dri Pak-it machine; High sealer (including drilling of same); Hydro seeder and similar type; Impact wrench, mult-plate; Kettleman, potmen and mean applying asphalt, lay-kold, creosote, line caustic and similar type materials (applying means applying, dipping, brushing or handling of such materials for pipe wrapping and waterproofing); Operators of pneumatic, gas, electric tools, vibratring machines, pavement breakers, air blasting, come-along, and similar mechanical tools not separately classified herein; Pipelayers back up man coating, grouting, making of joints, sealing, caulking, diapering and inlcuding rubber gasket joints, pointing and any and all other services; Rotary Scarifier or multiple head concrete chipping scaarifier; Steel header board man and guideline setter; Tampers, Barko, Wacker and similar type; Trenching machine, handpropelled

GROUP 4: Asphalt raker, luterman, ironer, apshalt dumpman and asphalt spreader boxes (all types); Concrete core cutter

(walls, floors or ceilings), Grinder or sander; Concrete saw man; cutting walls or flat work, scoring old or new concrete; Cribber, shorer, lagging, sheeting and trench bracing, hand-guided lagging hammer; Laser beam in connection with laborer's work; Oversize concrete vibrator operator 70 pounds and over; Pipelayer performing all services in the laying, installation and all forms of connection of pipe from the point of receiving pipe in the ditch until completion of operation, including any and all forms of tubular material, whether pipe, metallic or non-metallic, conduit, and any other stationary type of tubular device used for the conveying of any substance or element, whether water, sewage, solid, gas, air or other product whatsoever and without regard to the nature of material from which the tubular material is fabricated; No joint pipe and stripping of same; Prefabricated manhole installer; Sandblaster (nozzleman), Porta shot-blast, water blasting

GROUP 5: Blasters Powderman-All work of loading holes, placing and blasting of all powder and explosives of whatever type, regardless of method used for such loading and placing; Driller-all power drills, excluding jackhammer, whether core, diamond, wagon, track, multiple unit, and any and all other types of mechanical drills without regard to the form of motive power.

LABO0089-002 11/01/2017

	Rates	Fringes
LABORER (MASON TENDER).....	\$ 30.00	16.47

LABO0089-004 07/01/2017

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes
Laborers:		
Group 1.....	\$ 31.63	18.58
Group 2.....	\$ 32.09	18.58
Group 3.....	\$ 32.50	18.58
Group 4.....	\$ 33.34	18.58
Group 5.....	\$ 37.46	18.58

LABORER CLASSIFICATIONS

GROUP 1: Laborer: General or Construction Laborer, Landscape Laborer. Asphalt Rubber Material Loader. Boring Machine Tender (outside), Carpenter Laborer (cleaning, handling, oiling & blowing of panel forms and lumber), Concrete Laborer, Concrete Screeding for rough strike-off, Concrete water curing. Concrete Curb & Gutter laborer, Certified Confined Space Laborer, Demolition laborer & Cleaning of Brick and lumber, Expansion Joint Caulking; Environmental

Remediation, Monitoring Well, Toxic waste and Geotechnical Drill tender, Fine Grader, Fire Watcher, Limbers, Brush Loader, Pilers and Debris Handlers. flagman. Gas Oil and Water Pipeline Laborer. Material Hoseman (slabs, walls, floors, decks); Plugging, filling of shee bolt holes; Dry packing of concrete and patching; Post Holer Digger (manual); Railroad maintenance, repair trackman, road beds; Rigging & signaling; Scaler, Slip-Form Raisers, Filling cracks on any surface, tool Crib or Tool House Laborer, Traffic control (signs, barriers, barricades, delineator, cones etc.), Window Cleaner

GROUP 2: Asphalt abatement; Buggymobile; Cement dumper (on 1 yd. or larger mixers and handling bulk cement); Concrete curer, impervious membrane and form oiler; Chute man, pouring concrete; Concrete cutting torch; Concrete pile cutter; driller/Jackhammer, with drill steel 2 1/2 feet or longer; Dry pak-it machine; Fence erector; Pipeline wrapper, gas, oil, water, pot tender & form man; Grout man; Installation of all asphalt overlay fabric and materials used for reinforcing asphalt; Irrigation laborer; Kettleman-Potman hot mop, includes applying asphalt, lay-klold, creosote, lime caustic and similar tyhpes of materials (dipping, brushing, handling) and waterproofing; Membrane vapor barrier installer; Pipelayer backup man (coating, grouting, making of joints, sealing caulkiing, diapering including rubber basket joints, pointing); Rotary scarifier, multiple head concrete chipper; Rock slinger; Roto scraper & tiller; Sandblaster pot tender; Septic tank digger/installer; Tamper/wacker operator; Tank scaler & cleaner; Tar man & mortar man; Tree climber/faller, chainb saw operator, Pittsburgh chipper & similar type brush shredders.

GROUP 3: Asphalt, installation of all frabrics; Buggy Mobile Man, Bushing hammer; Compactor (all types), Concrete Curer - Impervious membrane, Form Oiler, Concrete Cutting Torch, Concrete Pile Cutter, Driller/Jackhammer with drill steel 2 1/2 ft or longer, Dry Pak-it machine, Fence erector including manual post hole digging, Gas oil or water Pipeline Wrapper - 6 ft pipe and over, Guradrail erector, Hydro seeder, Impact Wrench man (multi plate), kettleman-Potman Hot Mop includes applying Asphalt, Lay-Kold, Creosote, lime caustic and similar types of materials (dipping, brushing or handling) and waterproofing. Laser Beam in connection with Laborer work. High Scaler, Operators of Pneumatic Gas or Electric Tools, Vibrating Machines, Pavement Breakers, Air Blasting, Come-Alongs and similar mechanical tools, Remote-Controlled Robotic Tools in connection with Laborers work. Pipelayer Backup Man (Coating, grouting, m makeing of joints, sealing, caulking, diapering including rubber gasket joints, pointing and other services). Power Post Hole Digger, Rotary Scarifier (multiple head concrete chipper scarifier), Rock Slinger, Shot Blast equipment (8 to 48 inches), Steel Headerboard Man and Guideline Setter, Tamper/Wacker operator and similar types, Trenching Machine hand propelled.

GROUP 4: Any worker exposed to raw sewage. Asphalt Raker, Luteman, Asphalt Dumpman, Asphalt Spreader Boxes, Concrete Core Cutter, Concrete Saw Man, Cribber, Shorer, Head Rock Slinger. Installation of subsurface instrumentation, monitoring wells or points, remediation system installer; Laborer, asphalt-rubber distributor bootman; Oversize concrete vibrator operators, 70 pounds or over. Pipelayer, Prefabricated Manhole Installer, Sandblast Nozzleman (Water Blasting-Porta Shot Blast), Traffic Lane Closure.

GROUP 5: Blasters Powderman-All work of loading holes, placing and blasting of all powder and explosives of whatever type, regardless of method used for such loading and placing; Horizontal directional driller, Boring system, Electronic tracking, Driller: all power drills excluding jackhammer, whether core, diamond, wagon, track, multiple unit, and all other types of mechanical drills without regard to form of motive power. Environmental remediation, Monitoring well, Toxic waste and Geotechnical driller, Toxic waste removal. Welding in connection with Laborer's work.

LABO0300-005 01/01/2018

	Rates	Fringes
Asbestos Removal Laborer.....	\$ 33.19	17.78

SCOPE OF WORK: Includes site mobilization, initial site cleanup, site preparation, removal of asbestos-containing material and toxic waste, encapsulation, enclosure and disposal of asbestos- containing materials and toxic waste by hand or with equipment or machinery; scaffolding, fabrication of temporary wooden barriers and assembly of decontamination stations.

LABO0345-001 07/01/2018

	Rates	Fringes
LABORER (GUNITE)		
GROUP 1.....	\$ 42.18	18.27
GROUP 2.....	\$ 41.23	18.27
GROUP 3.....	\$ 37.69	18.27

FOOTNOTE: GUNITE PREMIUM PAY: Workers working from a Bosn'n's Chair or suspended from a rope or cable shall receive 40 cents per hour above the foregoing applicable classification rates. Workers doing gunitite and/or shotcrete work in a tunnel shall receive 35 cents per hour above the foregoing applicable classification rates, paid on a portal-to-portal basis. Any work performed on, in or above any smoke stack, silo, storage elevator or similar type of structure, when such structure is in excess of

75'-0" above base level and which work must be performed in whole or in part more than 75'-0" above base level, that work performed above the 75'-0" level shall be compensated for at 35 cents per hour above the applicable classification wage rate.

GUNITE LABORER CLASSIFICATIONS

GROUP 1: Rodmen, Nozzlemen

GROUP 2: Gunmen

GROUP 3: Reboundmen

LABO1184-001 07/01/2018

	Rates	Fringes
Laborers: (HORIZONTAL DIRECTIONAL DRILLING)		
(1) Drilling Crew Laborer...	\$ 35.70	14.03
(2) Vehicle Operator/Hauler.	\$ 35.87	14.03
(3) Horizontal Directional Drill Operator.....	\$ 37.72	14.03
(4) Electronic Tracking Locator.....	\$ 39.72	14.03
Laborers: (STRIPING/SLURRY SEAL)		
GROUP 1.....	\$ 35.86	16.21
GROUP 2.....	\$ 37.16	16.21
GROUP 3.....	\$ 39.17	16.21
GROUP 4.....	\$ 40.91	16.21

LABORERS - STRIPING CLASSIFICATIONS

GROUP 1: Protective coating, pavement sealing, including repair and filling of cracks by any method on any surface in parking lots, game courts and playgrounds; carstops; operation of all related machinery and equipment; equipment repair technician

GROUP 2: Traffic surface abrasive blaster; pot tender - removal of all traffic lines and markings by any method (sandblasting, waterblasting, grinding, etc.) and preparation of surface for coatings. Traffic control person: controlling and directing traffic through both conventional and moving lane closures; operation of all related machinery and equipment

GROUP 3: Traffic delineating device applicator: Layout and application of pavement markers, delineating signs, rumble and traffic bars, adhesives, guide markers, other traffic delineating devices including traffic control. This category includes all traffic related surface preparation (sandblasting, waterblasting, grinding) as part of the application process. Traffic protective delineating system

installer: removes, relocates, installs, permanently affixed roadside and parking delineation barricades, fencing, cable anchor, guard rail, reference signs, monument markers; operation of all related machinery and equipment; power broom sweeper

GROUP 4: Striper: layout and application of traffic stripes and markings; hot thermo plastic; tape traffic stripes and markings, including traffic control; operation of all related machinery and equipment

LABO1414-003 08/08/2018

	Rates	Fringes
LABORER		
PLASTER CLEAN-UP LABORER.....	\$ 33.82	19.40
PLASTER TENDER.....	\$ 36.37	19.40

Work on a swing stage scaffold: \$1.00 per hour additional.

Work at Military Bases - \$3.00 additional per hour:
 Coronado Naval Amphibious Base, Fort Irwin, Marine Corps Air Station-29 Palms, Imperial Beach Naval Air Station, Marine Corps Logistics Supply Base, Marine Corps Pickle Meadows, Mountain Warfare Training Center, Naval Air Facility-Seeley, North Island Naval Air Station, Vandenberg AFB.

PAIN0036-001 07/01/2018

	Rates	Fringes
Painters: (Including Lead Abatement)		
(1) Repaint (excludes San Diego County).....	\$ 27.59	14.92
(2) All Other Work.....	\$ 31.12	15.04

REPAINT of any previously painted structure. Exceptions: work involving the aerospace industry, breweries, commercial recreational facilities, hotels which operate commercial establishments as part of hotel service, and sports facilities.

PAIN0036-010 10/01/2017

	Rates	Fringes
DRYWALL FINISHER/TAPER		
(1) Building & Heavy Construction.....	\$ 30.24	16.95
(2) Residential Construction (Wood frame		

	Rates	Fringes
apartments, single family homes and multi-duplexes up to and including four stories).....	\$ 23.50	15.96

PAIN0036-012 10/01/2017		
	Rates	Fringes
GLAZIER.....	\$ 42.55	18.57

PAIN0036-019 01/01/2018		
	Rates	Fringes
SOFT FLOOR LAYER.....	\$ 30.02	13.68

PLAS0200-005 08/01/2018		
	Rates	Fringes
PLASTERER.....	\$ 36.86	18.00
<p>NORTH ISLAND NAVAL AIR STATION, COLORADO NAVAL AMPHIBIOUS BASE, IMPERIAL BEACH NAVAL AIR STATION: \$3.00 additional per hour.</p>		

PLAS0500-001 07/01/2018		
	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
GROUP 1.....	\$ 26.34	21.12
GROUP 2.....	\$ 27.99	21.12
GROUP 3.....	\$ 30.07	21.12
<p>CEMENT MASONS - work inside the building line, meeting the following criteria:</p> <p>GROUP 1: Residential wood frame project of any size; work classified as Type III, IV or Type V construction; interior tenant improvement work regardless the size of the project; any wood frame project of four stories or less.</p> <p>GROUP 2: Work classified as type I and II construction</p> <p>GROUP 3: All other work</p>		

PLUM0016-006 09/01/2018		
	Rates	Fringes
PLUMBER, PIPEFITTER, STEAMFITTER Camp Pendleton.....	\$ 54.63	22.16

	Rates	Fringes
Plumber and Pipefitter		
All other work except		
work on new additions and		
remodeling of bars,		
restaurant, stores and		
commercial buildings not		
to exceed 5,000 sq. ft.		
of floor space and work		
on strip malls, light		
commercial, tenant		
improvement and remodel		
work.....	\$ 50.13	22.16
Work ONLY on new additions		
and remodeling of		
commercial buildings,		
bars, restaurants, and		
stores not to exceed 5,000		
sq. ft. of floor space.....	\$ 48.58	21.18
Work ONLY on strip malls,		
light commercial, tenant		
improvement and remodel		
work.....	\$ 37.10	19.51

PLUM0016-011 09/01/2018		
	Rates	Fringes
PLUMBER/PIPEFITTER		
Residential.....	\$ 40.23	18.08

PLUM0078-001 07/01/2016		
	Rates	Fringes
PLUMBER		
Landscape/Irrigation Fitter..	\$ 44.16	25.19
Sewer & Storm Drain Work....	\$ 44.16	25.19

ROOF0045-001 07/01/2018		
	Rates	Fringes
ROOFER.....	\$ 31.00	8.62

* SFCA0669-001 04/01/2018		
	Rates	Fringes
SPRINKLER FITTER.....	\$ 40.57	21.18

SHEE0206-001 07/01/2017		
	Rates	Fringes
SHEET METAL WORKER		
Camp Pendleton.....	\$ 38.88	26.52

	Rates	Fringes
Except Camp Pendleton.....	\$ 36.88	26.52
Sheet Metal Technician.....	\$ 27.70	8.43

SHEET METAL TECHNICIAN - SCOPE:

a. Existing residential buildings, both single and multi-family, where each unit is heated and/or cooled by a separate system b. New single family residential buildings including tracts. c. New multi-family residential buildings, not exceeding five stories of living space in height, provided each unit is heated or cooled by a separate system. Hotels and motels are excluded. d. LIGHT COMMERCIAL WORK: Any sheet metal, heating and air conditioning work performed on a project where the total construction cost, excluding land, is under \$1,000,000 e. TENANT IMPROVEMENT WORK: Any work necessary to finish interior spaces to conform to the occupants of commercial buildings, after completion of the building shell

TEAM0166-001 07/03/2017

	Rates	Fringes
Truck drivers:		
GROUP 1.....	\$ 15.90	34.69
GROUP 2.....	\$ 23.49	34.69
GROUP 3.....	\$ 23.69	34.69
GROUP 4.....	\$ 23.89	34.69
GROUP 5.....	\$ 24.09	34.69
GROUP 6.....	\$ 24.59	34.69
GROUP 7.....	\$ 26.09	34.69

FOOTNOTE: HAZMAT PAY: Work on a hazmat job, where hazmat certification is required, shall be paid, in addition to the classification working in, as follows: Levels A, B and C - +\$1.00 per hour. Workers shall be paid hazmat pay in increments of four (4) and eight (8) hours.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Fuel Man, Swamper

GROUP 2: 2-axle Dump Truck, 2-axle Flat Bed, Concrete Pumping Truck, Industrial Lift Truck, Motorized Traffic Control, Pickup Truck on Jobsite

GROUP 3: 2-axle Water Truck, 3-axle Dump Truck, 3-axle Flat Bed, Erosion Control Nozzleman, Dump Crete Truck under 6.5 yd, Forklift 15,000 lbs and over, Prell Truck, Pipeline Work Truck Driver, Road Oil Spreader, Cement Distributor or Slurry Driver, Bootman, Ross Carrier

GROUP 4: Off-road Dump Truck under 35 tons 4-axles but less than 7-axles, Low-Bed Truck & Trailer, Transit Mix Trucks under 8 yd, 3-axle Water Truck, Erosion Control Driver,

Grout Mixer Truck, Dump Crete 6.5yd and over, Dumpster Trucks, DW 10, DW 20 and over, Fuel Truck and Dynamite, Truck Greaser, Truck Mounted Mobile Sweeper 2-axle Winch Truck

GROUP 5: Off-road Dump Truck 35 tons and over, 7-axles or more, Transit Mix Trucks 8 yd and over, A-Frame Truck, Swedish Cranes

GROUP 6: Off-Road Special Equipment (including but not limited to Water Pull Tankers, Athey Wagons, DJB, B70 Wuclids or like Equipment)

GROUP 7: Repairman

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were

prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.
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END OF GENERAL DECISION

Bid Results

Bidder Details

Vendor Name SOLPAC Construction, Inc.
Address 2424 Congress Street
 San Diego, CA 92110
 United States
Respondee Kevin M. Cammall
Respondee Title Vice President/Secretary
Phone 619-296-6247 Ext.
Email kcammall@soltekpacific.com
Vendor Type PQUAL,Local
License # 886641
CADIR

Bid Detail

Bid Format Electronic
Submitted October 17, 2018 1:55:02 PM (Pacific)
Delivery Method
Bid Responsive
Bid Status Submitted
Confirmation # 156622
Ranking 0

Respondee Comment

Buyer Comment

Attachments

File Title	File Name	File Type
Contractors Certification of Pending Actions	Contractors Cert of Pending Actions.pdf	Contractor's Certification of Pending Actions
Mandatory Disclosure of Business Interests	Mandatory Disclosure of Business Interests Form.pdf	Mandatory Disclosure of Business Interest Form
Subcontractors Listing	Subcontractors Listing.pdf	Subcontractors Listing (Other than First Tier)
Lobby Prohibition, Cert and Disclosure	Lobby Prohibition, Cert and Disclosure.pdf	Lobby Prohibition, Certification and Disclosure
Disclosure of Lobbying Acitivites	Disclosure of Lobbying Activities.pdf	Disclosure of Lobbying Activities
Abatement Cert	Asbestos Cert.pdf	Abatement Requirements
Alternate A	Alternate A.pdf	Alternate A
Bid Bond	Bid Bond.pdf	Bid Bond

Line Items

Type	Item Code	UOM	Qty	Unit Price	Line Total	Comment
Main Bid						
1	Bonds (Payment and Performance)					
	524126	LS	1	\$45,000.00	\$45,000.00	
2	Building Permits (EOC Type I)					
	236220	AL	1	\$15,000.00	\$15,000.00	

Bid Results

Type	Item Code	UOM	Qty	Unit Price	Line Total	Comment
3	WPCP Development					
	541330	LS	1	\$5,000.00	\$5,000.00	
4	WPCP Implementation					
	237990	LS	1	\$20,000.00	\$20,000.00	
5	Mobilization					
	238120	LS	1	\$150,000.00	\$150,000.00	
6	Field Orders (EOC Type II)					
		AL	1	\$70,000.00	\$70,000.00	
7	Inspection Paid for by the Contractor (EOC Type I)					
	236220	LS	1	\$47,500.00	\$47,500.00	
8	Lead Paint Handling, Removal, Transportation and Disposal (EOC Type I)					
	238990	AL	1	\$86,300.00	\$86,300.00	
9	Construction of California Tower Seismic Upgrades					
	238120	LS	1	\$4,037,500.00	\$4,037,500.00	
10	Traffic Control					
	237310	LS	1	\$20,000.00	\$20,000.00	
				Subtotal	\$4,496,300.00	
	Alternate A Items					
11	Construction and Installation of Post Tensioning Rods at Level 9 and 10					
	238120	LS	1	\$203,300.00	\$203,300.00	
12	Bonds (Payment and Performance)					
	524126	LS	1	\$4,900.00	\$4,900.00	
13	Field Orders (EOC Type II)					
		AL	1	\$6,000.00	\$6,000.00	
				Subtotal	\$214,200.00	
				Total	\$4,710,500.00	

Subcontractors

Name & Address	Description	License Num	CADIR	Amount	Type
Concrete Building Systems 3485 Live Oak Creek Circle, Fallbrook, CA, 92028 Fallbrook, CA 92028 United States	Constructor, Concrete & Rebar	484842	100000942	\$1,328,000.00	CAU,FEM,SLBE,CAD IR,WBE
Burch Construction PO Box 395 Ramona, CA 92065 United States	Constructor, Plaster	431673	1000006017	\$150,000.00	
Penhall Company 5775 Eastgate Drive San Diego, CA 92121 United States	Constructor, Demolition	568673	1000000860	\$275,000.00	
San Diego Steel Solutions 579 Enterprise St Escondido, CA 92029 United States	Constructor, Structural Steel	932783	1000009468	\$560,000.00	LAT,FEM,SLBE,DBE, MBE,CADIR,SDB,W BE

PlanetBids, Inc.

Bid Results

Name & Address	Description	License Num	CADIR	Amount	Type
SJ Electric Co 10911 Wheatlands Ave. #D Santee, CA 92071 United States	Constructor, Electrical	994033	1000006133	\$32,500.00	CAU,MALE,ELBE
Naval Coating, Inc. 3475 E Street San Diego, CA 92102 United States	Constructor, Painting	1022673	1000046274	\$25,000.00	SLBE,DVBE,CADIR, SDVSB
Commercial Scaffolding of CA, Inc 8131 Wing Ave El Cajon, CA 92020 United States	Supplier, Shoring & Scaffolding	835630	1000001499	\$355,000.00	

Line Totals (Unit Price * Quantity)										
Item Num	Section	Item Code	Description	Reference	Unit of Measure	Quantity	Nuera Contracting LP - Unit Price	Nuera Contracting LP - Line Total		
1	Main Bid	524126	Bonds (Payme	2-4.1	LS	1	\$23,290.00	\$23,290.00		
2	Main Bid	236220	Building Perm	7-5.3	AL	1	\$15,000.00	\$15,000.00		
3	Main Bid	541330	WPCP Develo	7-8.6.4.2	LS	1	\$5,000.00	\$5,000.00		
4	Main Bid	237990	WPCP Implem	7-8.6.4.2	LS	1	\$600.00	\$600.00		
5	Main Bid	238120	Mobilization	9-3.4.1	LS	1	\$805,026.00	\$805,026.00		
6	Main Bid		Field Orders (9-3.5	AL	1	\$70,000.00	\$70,000.00		
7	Main Bid	236220	Inspection Pa	4-1.3.4.1	LS	1	\$27,654.00	\$27,654.00		
8	Main Bid	238990	Lead Paint Ha	9-3.1	AL	1	\$86,300.00	\$86,300.00		
9	Main Bid	238120	Construction	9-3.1	LS	1	\$1,246,049.00	\$1,246,049.00		
10	Main Bid	237310	Traffic Contro	601-6	LS	1	\$105,977.00	\$105,977.00		
							Subtotal	\$2,384,896.00		
11	Alternate A	238120	Construction	9-3.1	LS	1	\$263,500.00	\$263,500.00		
12	Alternate A	524126	Bonds (Payme	2-4.1	LS	1	\$4,034.00	\$4,034.00		
13	Alternate A Items		Field Orders (9-3.5	AL	1	\$6,000.00	\$6,000.00		
							Subtotal	\$273,534.00		
							Total	\$2,658,430.00		