



CITY OF LOS ANGELES

# HARBOR DEPARTMENT



## SPECIFICATIONS FOR

### 2026-2028 SITE IMPROVEMENTS

SPECIFICATION NO. 2852

APPL. PORT. PERMITS NO. \_\_\_\_\_

CONTRACT NO. \_\_\_\_\_

CONTRACTOR El Capitan Environmental Svcs

AMOUNT \$ 23,602,280.00

TIME TO COMMENCE Notice to Proceed

TIME TO COMPLETE 900 Calendar Days

BOARD OF HARBOR COMMISSIONERS

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- 01 The HARBOR DEPARTMENT of the CITY OF LOS ANGELES, California, invites electronic bids in accordance with Specification No. 2852 for 2026-2028 SITE IMPROVEMENTS.
- 02 Project consists of nonexclusive on-call general maintenance and site improvements throughout the San Pedro, Wilmington, and Terminal Island districts, as directed by Engineer. Work includes but is not limited to removal of pavement and other improvements, pipelines, and substructures; earthwork; construction of fencing, parking barriers, and traffic controls; construction of pavements, pavement markings, and other improvements; relocation of substructures and utilities; and site clearing. Work also includes trenching and backfilling, preparing soil, landscaping, planting, hardscaping, irrigation systems, site furnishings, and plant establishment and maintenance.
- 03 Contract Documents are available in Department's Web-based Bid Management System called "Construction Division Business Opportunity Network (CDBON)" utilizing an online bid management system at <https://www.portoflosangeles.org/business/contracting-opportunities/construction-bids>. Bidders shall be required to register to download Drawings, Specifications, Addenda, and other important documents. A plan holders list can be accessed without registering. For information concerning bids, call Department at (310) 732-3522.
- 04 A virtual pre-bid conference shall be held on October 14, 2025 at 10 a.m. via Microsoft Teams. Please RSVP to Willie Alvarez if you plan to attend. The agenda and related materials shall be posted to CDBON and shall be discussed in detail at the meeting.
- 05 Bids must be submitted online via Port of Los Angeles CDBON system on or before 2:45:00 p.m. (PST/PDT) on November 13, 2025 at which time, bid results shall be available for viewing.
- 06 Each bid must be accompanied by a scanned copy of the following: a check certified by a responsible financial institution, or a cashier's check issued by a responsible financial institution, or by a satisfactory bid bond, payable to the order of City of Los Angeles Harbor Department, for an amount not less than 10 percent of the aggregate sum of the bid, as a guarantee that Bidder shall enter into Contract if awarded, and furnish the required bonds. Bid bond shall be placed with insurance carriers which are rated VII, A- or better in Best's Insurance Guide. If a Best's Insurance Guide rating is not available, then the proposed carrier must meet comparable standards in another rating service satisfactory to City.

- 07 The provisions of Sections 10.8 through 10.11 and 10.13 of Los Angeles Administrative Code pertaining to nondiscrimination and affirmative action shall be a part of said Contract. Portions of these provisions are summarized in Subsections 00030.03 and 00030.04 of BIDDING DOCUMENTS Section which set forth requirements Bidder must acknowledge.
- 08 City of Los Angeles Harbor Department is committed to creating an environment that provides all individuals and businesses open access to the business opportunities available at Port of Los Angeles in a manner that reflects the diversity of City of Los Angeles. Port of Los Angeles Small Business Enterprise Program (SBEP or "Program") as defined in Subsection 00030.06 of BIDDING DOCUMENTS Section was created to provide additional opportunities for small businesses to participate in any and all contracts. It has been determined that based on Work to be performed in Contract, Small Business Enterprise participation shall be a minimum of 10%, of which 3% shall be Very Small Business Enterprise participation.
- 09 The first 3 apparent low Bidders shall submit the following documents with original signatures within 4 Business Days after bids are closed. Information from other Bidders shall be requested only if they are being considered for an Award of Contract. Other Bidders shall submit this information within 4 Business Days of receiving a written request from Engineer.
- a Original of a check certified by a responsible financial institution, or a cashier's check, or bid bond in conformance with Subsection 06 above.
  - b Affidavit of Noncollusion.
  - c Contractor/Subcontractor/Supplier Information Form, refer to Subsection 00660.01.
  - d Subcontractor/Supplier Ownership and Local Business Enterprise Affidavit for each listed subcontractor and supplier, refer to Subsection 00660.02.
  - e Electrical Safety Policy form.
  - f CEC Form 50, prime contractor's certification.
  - g CEC Form 55 with subcontractor's and principals of subcontractor's information (if subcontractor and principal of subcontractor information were not submitted at time of bid). Failure to submit the information within 4 Business Days after bids are closed or within 4 Business Days after receiving written request from Engineer shall be cause to deem bid nonresponsive. Refer to BIDDING DOCUMENTS Section, Subsection 00030.07, Contract Solicitations Charter Section 470 (c) (12) Subsection, Paragraph C.

- h Bidders, subcontractors, and suppliers identified in the bid submittal as SBE or VSBE must be certified at time of bid, as applicable. Bidders, subcontractors, and suppliers must submit a copy of SBE certificate or VSBE certificate from the agency utilized to obtain certification as SBE or as VSBE to Engineer within 4 Business Days of close of bids in order to be acknowledged within the bid as SBE or VSBE. Refer to <https://kentico.portoflosangeles.org/getmedia/aea536e1-5d48-440a-8857-c55907e3dc74/contracting-proprietary-sbe-cert-application> for certification instructions.
- 10 At time of bid, Bidders must be registered on City's Contracts Management and Opportunities Database, Regional Alliance Marketplace for Procurement (RAMP) – a free service provided by the Mayor's Office of Economic Development and the Minority Business Opportunity Committee. RAMP is accessible at <https://www.rampla.org/s/>.
- 11 Within 30 Calendar Days after close of bids, subcontractors and suppliers must be registered on RAMP. In addition, within 30 Calendar Days after close of bids, Bidders, subcontractors, and suppliers identified in the bid submittals as SBE or VSBE must be verified on RAMP as SBE (Proprietary) or VSBE (Harbor), as applicable.
- Bidders, subcontractors, and suppliers are advised that there is an application process required to become certified as SBE (Proprietary) and as VSBE (Harbor), and that time is of the essence.
- 12 Contract may be awarded at any time during a period of 90 Calendar Days after date of close of bids. The right is reserved to reject any and all bids.
- 13 At the time of Award, the successful Bidder shall possess an active Class A California Contractor's License and subcontractors shall possess active, applicable licenses necessary to perform Work that corresponds to the description of Work as provided in CONTRACTOR/SUBCONTRACTOR/SUPPLIER INFORMATION Section.
- 14 The successful Bidder shall, within 14 Calendar Days after Notice of Award, provide acceptable bonds and insurance on the forms provided as required in CONTRACT Section and GENERAL CONDITIONS Section.
- 15 The successful Bidder shall, within 30 Calendar Days after Notice of Award, enter into the written Contract.



- 16 A performance bond in the amount of the full Contract price shall be provided. A payment bond in the amount of 100 percent of Contract price shall also be provided in case of an award in excess of \$25,000. Performance bond and payment bond shall be placed with insurance carriers which are rated VII, A- or better in Best's Insurance Guide. If a Best's Insurance Guide rating is not available, then the proposed carrier must meet comparable standards in another rating service satisfactory to City. Bidders may be eligible for participation in City's Bond Assistance Program referenced in Subsection 00022.18.
- 17 The prevailing rate of per diem wages and rates for legal holidays and overtime work for each craft, classification or type of workers needed in the execution of any contract to let under Specifications has been determined by the Director of the Department of Industrial Relations of the State of California pursuant to the provisions of the Labor Code of the State of California. Copies of the applicable Determinations by the said Director are on file in Construction Division and are hereby incorporated and made a part hereof as though the same were fully set forth in this Section. The State of California has approved City's Labor Compliance Program of enforcement of State prevailing wage laws and shall allow City to retain all penalty assessments for violation of these laws.
- 18 Pursuant to notice requirements effective January 1, 2015, all contractors and subcontractors must register with and meet requirements of the State of California Department of Industrial Relations using the online application before bidding on public works contracts in California. For the online application, visit <http://www.dir.ca.gov/Public-Works/PublicWorks.html>.
- a No contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 (with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1[a]).
  - b No contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.
  - c Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.
- 19 In accordance with Board of Harbor Commissioners' Resolution No. 6315, Electrical Safety Policy, adopted October 27, 2004, the successful Bidder shall comply with the required qualifications for jobsite workers, as specified in BASIC ELECTRICAL MATERIALS AND METHODS Section (PART 1, Quality Assurance Article, Paragraph B, Jobsite Workers and subparagraphs).

- 20 Board of Harbor Commissioners of City of Los Angeles adopted Resolution No. 6328 on January 12, 2005, agreeing to adopt the provisions of Los Angeles City Ordinance 172,908, as amended, relating to Equal Benefits (Section 10.8.2.1. et seq. of Los Angeles Administrative Code) as a policy of Harbor Department. Contractor shall comply with the policy detailed in Subsection 00030.05 Equal Benefits Ordinance Compliance Affidavit of BIDDING DOCUMENTS Section.
- 21 In accordance with Board of Harbor Commissioners' Resolution No. 17-8164, Approval of Port-Wide Project Labor Agreement (PLA), adopted September 7, 2017, and in accordance with Board of Harbor Commissioners' Resolution Nos. 18-8319 and 18-8320, approval of Construction Careers Policy, adopted July 17, 2018, included as Appendix "A" of Specifications, Contractor and all subcontractors, prior to start of Work, shall sign a Letter of Assent (Attachment A of Appendix "A") agreeing to the terms of PLA. Contractor shall further comply with the terms of Attachment "B" (Drug and Alcohol Testing Policy) and fill out Attachment "C" (Request/Verification for Craft Employees) during the course of Project.
- 22 Iran Contracting Act of 2010: Harbor Department shall enforce Iran Contracting Act of 2010 requirement provisions included as Subsection 00030.08 of BIDDING DOCUMENTS Section of Specifications. Bidder shall fill out and submit at time of bid Iran Contracting Act of 2010 Compliance Affidavit included as Subsection 00030.09 of BIDDING DOCUMENTS Section of Specifications.
- 23 Local Business Preference Program (LBPP) shall apply to Project. Refer to Subsection 00030.10 of BIDDING DOCUMENTS Section.
- 24 Submit questions to <https://www.portoflosangeles.org/business/contracting-opportunities/construction-bids>. Questions submitted less than 2 Business Days before close of bids may or may not be answered as time permits. Responses to questions shall be posted on Construction Division Business Opportunity Network (CDBON) at <https://www.portoflosangeles.org/business/contracting-opportunities/construction-bids>. The responses to questions may be updated at any time prior to the day bids are due. This shall be the only means used to communicate with Bidders other than by addendum. Department assumes no liability for Bidder's failure to attend the pre-bid conference or to review Construction Division Business Opportunity Network to obtain responses to Bidder's questions.

EUGENE D. SEROKA

Executive Director

Dated September 24, 2025

## 01 GENERAL

- a Information in this Section supplements or further explains information in NOTICE INVITING BIDS Section.

## 02 FORM OF PROPOSAL

- a Bids shall be tendered online via CDBON, in conformance with Subsection 00012.03, of NOTICE INVITING BIDS Section.
- b All required fields in Bid Proposal Line Items shall be filled in on the forms provided online.
- c All documents listed in Subsection 00022.21, "Bidder's Check List", shall be submitted in conformance with the instructions provided in Subsection 00022.21.

## 03 PROPOSAL IRREGULARITIES AND ALTERATIONS

- a Bidders are prohibited from altering BIDDING DOCUMENTS Section. Any alterations or changes made to BIDDING DOCUMENTS Section shall render the bid informal and subject to rejection.

## 04 PROPOSAL SIGNATURE(S)

- a If the bid is made by an individual, the signature must be the full name of Bidder, whose address must be given.
- b If the bid is made by a partnership, it must be signed by each partner or accompanied by proof that the persons signing the bid are authorized to bind the partnership. The name and address of the partnership and the address of the persons signing must be provided.
- c If the bid is made by a corporation, it must be signed by a person authorized to do so by bylaw or resolution of that corporation.
- d A corporation submitting a bid may be required, before Contract is finally awarded, to furnish a certificate as to its corporate existence, and satisfactory evidence as to the officers or officer authorized to execute the bid on behalf of the corporation.

## 05 PROPOSAL GUARANTY

- a The bid shall be accompanied by a scanned copy of the following documents: A certified check or a cashier's check issued by a responsible financial institution, payable to the order of City of Los Angeles Harbor Department, or by a satisfactory bond, for an amount equal to at least 10 percent of the total amount of the bid, as a guaranty that the Bidder shall, within thirty (30) Calendar Days after Notice of Award, enter into Contract with City and furnish all required bonds for Work contemplated. The originals shall be submitted with the documents listed in Subsection 00012.09 of NOTICE INVITING BIDS Section.
- b If a certified or cashier's check is tendered as a proposal guaranty, Bid Bond form may be disregarded. In all other instances, the bond form provided with BIDDING DOCUMENTS Section shall be signed by the Bidder and its surety(ies).
- c Upon execution of Contract and provision of the necessary bond(s) and insurance by the successful Bidder, the check or the amounts thereof and the bonds of the unsuccessful Bidders shall be returned or released.

## 06 AFFIDAVIT OF NONCOLLUSION

- a Affidavit of Noncollusion form provided with BIDDING DOCUMENTS Section, properly executed, a scanned copy must be submitted with the bid. The signature on the affidavit must be subscribed and sworn to before a notary public.
- b Any bid made without such affidavit, shall not be considered. Any Bidder making a false affidavit may be excluded from future bidding on contracts with City.
- c If at any time it is found that the person, firm, or corporation, to whom Award of Contract has been made, did, in submitting the bid, collude with any other party or parties, then Contract shall be voided. Work shall be re-advertised. Contractor and Contractor's bondspersons shall be held liable to City for all loss or damage which it may suffer thereby.
- d The original shall be submitted with the documents listed in Specifications as Subsection 00012.09 of NOTICE INVITING BIDS Section.

**07 FEDERAL EXCISE TAX**

- a Prices quoted by Bidder shall be exclusive of federal excise taxes pursuant to exemption of political subdivisions of a State under federal law.
- b City, when requested, shall furnish Contractor a Certificate of Exemption from federal excise tax covering materials and equipment to be furnished pursuant to Specifications.

**08 RETAIL SALES OR USE TAX**

- a Purchases under Specifications are subject to the full application of California State and Los Angeles City and County sales or use tax.
- b Prices quoted in BIDDING DOCUMENTS Section shall be construed as including all applicable taxes regardless of whether or not sales or use tax is stated separately by Bidder.

**09 DUTIES**

- a Prices quoted by Bidder shall include all applicable duties, including import duties.

**10 WITHDRAWAL OF BID**

- a A Bidder may withdraw a bid, without prejudice, at any time prior to bid closing. The Withdraw button on CDBON online system shall become available from the time a bid is submitted to any time prior to the close of bids.

**11 INTERPRETATIONS AND ADDENDA**

- a Should a prospective Bidder find discrepancies in or omissions from Specifications or other Contract Documents, or should there be doubt as to their intended meaning, Bidder may submit to Engineer a written request for an interpretation and clarification. Bidder submitting the request is responsible for the prompt delivery and timeliness of any such request.
- b Any interpretation of or change in Contract Documents shall be made only by addendum issued to each person or entity to whom Specifications have been issued, and shall become a part of any contract awarded. City shall not be responsible for any oral or other explanations or interpretations. Receipt of any such addenda by Bidder must be acknowledged on Proposal form in the space provided.

## 12 BIDDERS TO INVESTIGATE

- a Bidder's submittal of a bid constitutes its acknowledgement that Bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality and quantities of Work to be performed and materials to be furnished, and as to the requirements of Specifications. The submission of the bid shall constitute prima facie evidence that Bidder has made such examination.

## 13 EXISTING INFORMATION

- a Engineer shall make available to all prospective Bidders, prior to the receipt of bids, all information in possession of Department as to subsoil conditions in the vicinity of Work, topographical maps, or other information that might assist Bidder in properly evaluating the amount and character of Work that may be required. Any additional subsurface exploration shall be done at Bidder's sole cost and expense.

## 14 SUBCONTRACTS

- a Section 10.14 (as amended) of Los Angeles Administrative Code requires each Bidder to submit with the bid the names and addresses of subcontractors whose Work shall be in excess of one-half of 1 percent of Bidder's total bid or \$10,000, whichever is greater, and shall indicate that portion of Work which shall be done by each subcontractor so listed. The successful Bidder shall make no substitutions of subcontractors so listed except as provided for in said ordinance. For the purpose of this Article, the terms and definitions of Section 10.14 (as amended) of Los Angeles Administrative Code shall apply.
- b Not more than 50 percent of the monetary value of Work shall be subcontracted. The listing of more than 50 percent may result in the rejection of the bid.
- c Bidder shall be fully responsible to City for its acts and/or omissions and for the acts and/or omissions of persons directly employed by Bidder. Additionally, Bidder shall be fully responsible to City for the acts and/or omissions of subcontractors and of persons or entities either directly or indirectly employed by subcontractors. Nothing contained in Contract Documents shall create or be construed as creating a contractual relationship between any subcontractor of Bidder and City.
- d Each Bidder must complete, sign, notarize, and submit as part of the bid Contractor Ownership / RAMP Outreach / Local Business Enterprise Affidavit included in Specifications as Subsection 00030.11 of BIDDING DOCUMENTS Section. Each Bidder shall also submit with the bid the subcontractor list entered online as provided on CDBON.

## 00022.14 Cont'd.

- e Failure of Bidder to specify a subcontractor for any portion of Work or specifying a subcontractor that does not possess active, applicable licenses necessary to perform Work that corresponds to the description of Work provided in CONTRACTOR/SUBCONTRACTOR/SUPPLIER INFORMATION Section shall constitute agreement by said Bidder that it is fully qualified to perform Work and shall perform with its own forces.

15 MANDATORY PROVISIONS PERTAINING TO NON-DISCRIMINATION IN EMPLOYMENT

Unless otherwise exempt, this Contract is subject to the applicable non-discrimination, equal benefits, equal employment practices, and affirmative action program provisions in Los Angeles Administrative Code (LACC) Section 10.8 et seq., as amended from time to time.

- a Contractor shall comply with the applicable non-discrimination and affirmative action provisions of the laws of the United States of America, the State of California, and City. In performing this Contract, Contractor shall not discriminate in any of its hiring or employment practices against any employee or applicant for employment because of such person's race, color, religion, national origin, ancestry, sex, sexual orientation, gender, gender identity, age, disability, domestic partner status, marital status or medical condition.
- b The requirements of Section 10.8.2.1 of LAAC, Equal Benefits Ordinance, and the provisions of Section 10.8.2.1(f) are incorporated and made a part of this Contract by reference.
- c The provisions of Section 10.8.3 of LAAC are incorporated and made a part of this Contract by reference and shall be known as the "Equal Employment Practices" provisions of this Contract.
- d The provisions of Section 10.8.4 of LAAC are incorporated and made a part of this Contract by reference and shall be known as the "Affirmative Action Program" provisions of this Contract.

- 16 SMALL, VERY SMALL, MINORITY, WOMEN, DISABLED VETERAN, AND OTHER BUSINESS ENTERPRISE (SBE/VSBE/MBE/WBE/DVBE/OBE)
- a It is the policy of City of Los Angeles to provide Small Business Enterprises (SBE) and Very Small Business Enterprises (VSBE), including Minority Business Enterprises (MBEs), Women Business Enterprises (WBEs), Disabled Veteran Business Enterprise (DVBE), and Other Business Enterprises (OBEs) an equal opportunity to participate in the provision of goods and services under Contract. Department strongly encourages Contractor to include MBE, WBE, and DVBE participation to the fullest extent possible.
  - b To be eligible for an award of contract, each Bidder shall complete, sign, notarize, and submit as part of the bid Contractor Ownership / RAMP Outreach / Local Business Enterprise Affidavit included in Specifications as Subsection 00030.11 of BIDDING DOCUMENTS Section.
  - c As part of the bid, each Bidder shall complete and submit subcontractor list in CDBON. As part of the bid, each Bidder shall complete and upload into CDBON the Supplier List in Subsection 00660.03 of CONTRACTOR/SUBCONTRACTOR/SUPPLIER INFORMATION Section listing suppliers necessary to meet SBE/VSBE participation requirements in conformance with Subsection 00030.06 of BIDDING DOCUMENTS Section.
  - d Within 4 Business Days after bids are closed, each Bidder shall submit Contractor/Subcontractor/Supplier Information Form included in Specifications as Subsection 00660.01 of CONTRACTOR/SUBCONTRACTOR/SUPPLIER INFORMATION Section for prime contractor and subcontractors. Submit Contractor/Subcontractor/Supplier Information Form included in Specifications as Subsection 00660.01 of CONTRACTOR/SUBCONTRACTOR/SUPPLIER INFORMATION Section for suppliers necessary to meet SBE/VSBE participation requirements in conformance with Subsection 00030.06 of BIDDING DOCUMENTS Section.
  - e Contractor Ownership / RAMP Outreach / Local Business Enterprise Affidavit and Contractor/Subcontractor/Supplier Information Form when signed, shall signify Bidder's intent to comply with Small Business Enterprise Program described in Specifications.
  - f In accordance with Section 4104 of the Public Contracting Code of the State of California, as amended, information is required to be entered in CDBON for each subcontractor who shall perform Work (including Contingency and Allowance Item Work) amounting to more than one half of one percent (0.5%) of the Total Base Bid or \$10,000 (whichever is greater).



**17 AWARD OF CONTRACT**

- a Award of Contract shall be in accordance with the provisions of this Subsection.
  - 1 Award of Contract, if award is to be made, shall be to the lowest and best regular, responsible Bidder furnishing satisfactory security for its performance and complying with Small Business Requirement taking into account Local Business Preference, if applicable.
  - 2 The right is reserved to reject any and all bids, or to reject any item or items therein and to waive any informality in the bid.
- b Bidder to be awarded Contract must be capable of performing the various items of Work bid upon. Bidders may be required to submit, before Award of Contract, satisfactory evidence covering experience on similar Work, a list of machinery, plant and other equipment available for the proposed Work, and such statements of their financial resources as may be deemed necessary. If the available evidence of competency of any Bidder is not satisfactory, the bid of such Bidder shall be rejected.
- c City may reject bids which have prices shown on Bid Proposal Line Items that are obviously unbalanced.
- d The bid of any party who has been delinquent or unfaithful in the performance of any former contract with City may be rejected.

**18 BOND ASSISTANCE PROGRAM**

- a Bond Assistance Program (BAP) is designed to assist small, local, minority, women, and disadvantaged businesses in removing potential barriers of surety bonding by providing technical, administrative assistance, and other resources to these companies. For information on BAP, please contact Tricia Carey at (310) 732-7656 or email [tcarey@portla.org](mailto:tcarey@portla.org).

**19 RELEASE OF PUBLIC RECORDS**

- a City seeks to conduct its business publicly. The law generally provides that information given to City is a public record. In limited circumstances, information such as trade secrets and certain financial data may be treated confidentially. Bidder should be aware that the information provided to City may be available for public review. Therefore, information which Bidder desires to retain as confidential should not be produced unless expressly requested by City. If City receives a request to produce such information, it shall notify Bidder of such request. If Bidder instructs that the information not be released, City shall withhold the information provided Bidder expeditiously seeks and successfully obtains a court protective order to prevent such a release.

## 20 BUSINESS TAX

- a In accordance with City of Los Angeles Municipal Code, a Business Tax Registration Certificate (BTRC) must be obtained and a business tax must be paid by every person engaged in business as a contractor in City of Los Angeles. Contractor shall obtain a BTRC number and pay tax due to City of Los Angeles Office of Finance, (844) 663-4411. BTRC number must be clearly shown on all invoices submitted for payment.

## 21 BIDDERS CHECK LIST

- a Bidders may use the following checklist to verify BIDDING DOCUMENTS Section has been completed.
- b Please check under the appropriate column:  
\*Upload: Complete included document, attach supporting documents as indicated, scan, and upload to CDBON online system. Hard copies are to be submitted within 4 Business Days of bid closing.  
\*\*Online: Enter information directly into online form in CDBON online system.

|   |                                                                                                                                                                                                                                | <u>Upload*</u> | <u>Online**</u> |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------|
| 1 | PROPOSAL GUARANTY*                                                                                                                                                                                                             |                |                 |
|   | (a) Is the amount at least 10% of the total bid?                                                                                                                                                                               | _____          |                 |
|   | (b) If surety bond, is it properly filled in and signed by surety?                                                                                                                                                             | _____          |                 |
|   | (c) If certified or cashier's check, is it enclosed with bid?                                                                                                                                                                  | _____          |                 |
| 2 | AFFIDAVIT OF NONCOLLUSION*                                                                                                                                                                                                     |                |                 |
|   | (a) Is affidavit properly filled in and signed?                                                                                                                                                                                | _____          |                 |
|   | (b) Is affidavit notarized?                                                                                                                                                                                                    | _____          |                 |
| 3 | EQUAL BENEFITS ORDINANCE COMPLIANCE AFFIDAVIT*                                                                                                                                                                                 |                |                 |
|   | (a) Is the affidavit completed and signed?                                                                                                                                                                                     | _____          |                 |
|   | (b) Are the forms enclosed with the bid?                                                                                                                                                                                       | _____          |                 |
| 4 | CONTRACT SOLICITATIONS CHARTER SECTION 470 (c) (12)*                                                                                                                                                                           |                |                 |
|   | (a) Are City Ethics Commission (CEC) Forms 50 and 55 completed and signed? (If CEC Form 55 is submitted without subcontractor information, Bidder shall submit updated CEC Form 55 as stated in NOTICE INVITING BIDS Section.) | _____          |                 |
|   | (b) Are the forms enclosed with the bid?                                                                                                                                                                                       | _____          |                 |
| 5 | IRAN CONTRACTING ACT OF 2010 COMPLIANCE AFFIDAVIT*                                                                                                                                                                             |                |                 |
|   | (a) Is the affidavit completed and signed?                                                                                                                                                                                     | _____          |                 |
|   | (b) Is the affidavit enclosed with the bid?                                                                                                                                                                                    | _____          |                 |

000022.21 Cont'd.

|     |                                                                                             | <u>Upload*</u> | <u>Online**</u> |
|-----|---------------------------------------------------------------------------------------------|----------------|-----------------|
| 6   | CONTRACTOR OWNERSHIP / RAMP OUTREACH/<br>LOCAL BUSINESS ENTERPRISE AFFIDAVIT*               |                |                 |
| (a) | Is affidavit properly filled in and signed?                                                 | _____          |                 |
| (b) | Is affidavit notarized?                                                                     | _____          |                 |
| 7   | SUBCONTRACTOR/SUPPLIER INFORMATION*/**                                                      |                |                 |
| (a) | Has Bidder listed the name and business<br>address of each applicable subcontractor?        |                | _____           |
| (b) | Has Bidder included the dollar amount in the<br>appropriate column for each subcontractor?  |                | _____           |
| (c) | Has Bidder accurately described Work to be<br>done by said subcontractor(s)?                |                | _____           |
| (d) | Has Bidder completed Supplier List in<br>Subsection 00660.03?                               | _____          |                 |
| 8   | PROPOSAL **/*                                                                               |                |                 |
| (a) | Has Bidder acknowledged receipt of<br>addendum/addenda?                                     |                | _____           |
| (b) | Is Bidder's contractor's license number and<br>expiration date provided?                    | _____          |                 |
| (c) | Is proposal properly signed and dated?                                                      | _____          |                 |
| (d) | Has Bidder inserted its Tax Identification<br>Number?                                       | _____          |                 |
| (e) | Has Bidder identified the type of business and<br>named the Partners or Corporate Officers? | _____          |                 |
| (f) | Has Bidder completed and signed the<br>Headquarters Location Form?                          | _____          |                 |
| 9   | BID PROPOSAL LINE ITEMS**                                                                   |                |                 |
| (a) | Has Bidder filled in a price for each bid item?                                             |                | _____           |

END OF SECTION

## 01 BID BOND

\*Bond portion of form need not be executed when bid is accompanied by a certified check or a cashier's check issued by a responsible financial institution.

WE, the undersigned principal and surety El Capitan Environmental Services, Inc. and Philadelphia Indemnity Insurance Company acknowledge ourselves jointly and severally bound to City of Los Angeles, in the sum of Ten percent of the total bid amount dollars (\$ 10%) to be paid to said City if the foregoing bid shall be accepted and the proposed contract awarded to said Bidder, and said Bidder shall fail to execute Contract and furnish and execute such bond(s) as are specified in the foregoing NOTICE INVITING BIDS Section; otherwise, this obligation be void.

Dated: October 21, 2025.

Bidder's Name El Capitan Environmental Services, Inc.

By 

HARRY BOYAJIAN

PRESIDENT

(Surety) Philadelphia Indemnity Insurance Company

(Surety) 

Ryan Butterfas, Attorney-in-Fact

NOTE: Surety must be in the form of a certified check, cashier's check, or a corporate surety bond. A personal surety bond is not acceptable. Annual bidder's bonds are acceptable. Cash is acceptable although not recommended.

If a check is submitted, state number \_\_\_\_\_

and amount \$ \_\_\_\_\_.

If an annual bid bond is used, state name of company \_\_\_\_\_

bond number N/A \_\_\_\_\_

and unencumbered amount \_\_\_\_\_.

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT****CIVIL CODE § 1189**

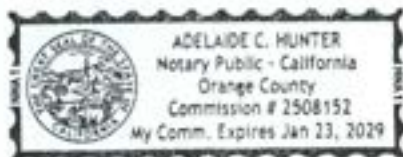
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California )  
County of Orange )  
On OCT 21 2025 before me, Adelaide C. Hunter, Notary Public,  
Date Here Insert Name and Title of the Officer  
personally appeared Ryan Butterfas  
Name(s) of Signer(s)

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 A. Hunter  
Signature of Notary Public

Place Notary Seal Above

**OPTIONAL**

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended 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: \_\_\_\_\_

☐ Corporate Officer — Title(s): \_\_\_\_\_

☐ Partner — ☐ Limited ☐ General

☐ Individual ☐ Attorney in Fact

☐ Trustee ☐ Guardian or Conservator

☐ Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_

Signer's Name: \_\_\_\_\_

☐ Corporate Officer — Title(s): \_\_\_\_\_

☐ Partner — ☐ Limited ☐ General

☐ Individual ☐ Attorney in Fact

☐ Trustee ☐ Guardian or Conservator

☐ Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_



**PHILADELPHIA INDEMNITY INSURANCE COMPANY**

One Bala Plaza, Suite 100  
Bala Cynwyd, PA 19004-0950

**Power of Attorney**

KNOW ALL PERSONS BY THESE PRESENTS: That **PHILADELPHIA INDEMNITY INSURANCE COMPANY** (the Company), a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, does hereby constitute and appoint **Linda D. Coats, Matthew J. Coats, Summer Reyes and Ryan Butterfas of Coats Surety Insurance Services, Inc.**, its true and lawful Attorney-in-fact with full authority to execute on its behalf bonds, undertakings, recognizances and other contracts of indemnity and writings obligatory in the nature thereof, issued in the course of its business and to bind the Company thereby, in an amount not to exceed **\$50,000,000**.

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of **PHILADELPHIA INDEMNITY INSURANCE COMPANY** on the 14<sup>th</sup> of November 2016.

**RESOLVED:** That the Board of Directors hereby authorizes the President or any Vice President of the Company: (1) Appoint Attorney(s) in Fact and authorize the Attorney(s) in Fact to execute on behalf of the Company bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof and to attach the seal of the Company thereto; and (2) to remove, at any time, any such Attorney-in-Fact and revoke the authority given. And, be it

**FURTHER RESOLVED:** That the signatures of such officers and the seal of the Company may be affixed to any such Power of Attorney or certificate relating thereto by facsimile, and any such Power of Attorney so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached.

IN TESTIMONY WHEREOF, **PHILADELPHIA INDEMNITY INSURANCE COMPANY** HAS CAUSED THIS INSTRUMENT TO BE SIGNED AND ITS CORPORATE SEAL TO BE AFFIXED BY ITS AUTHORIZED OFFICE THIS 5TH DAY OF OCTOBER 2024.

(Seal)



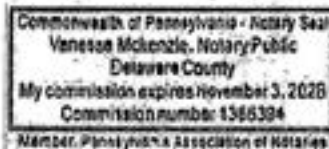
*John Glomb*

John Glomb, President & CEO  
Philadelphia Indemnity Insurance Company

On this 5<sup>th</sup> day of October, 2024 before me came the individual who executed the preceding instrument, to me personally known, and being by me duly sworn said that he is the therein described and authorized officer of the **PHILADELPHIA INDEMNITY INSURANCE COMPANY**; that the seal affixed to said instrument is the Corporate seal of said Company; that the said Corporate Seal and his signature were duly affixed.

Notary Public:

*Vanessa McKenzie*



residing at:

Linwood, PA

My commission expires:

November 3, 2028

I, Edward Sayago, Corporate Secretary of **PHILADELPHIA INDEMNITY INSURANCE COMPANY**, do hereby certify that the foregoing resolution of the Board of Directors and the Power of Attorney issued pursuant thereto on the 5<sup>th</sup> day October 2024 are true and correct and are still in full force and effect. I do further certify that John Glomb, who executed the Power of Attorney as President, was on the date of execution of the attached Power of Attorney the duly elected President of **PHILADELPHIA INDEMNITY INSURANCE COMPANY**.

In Testimony Whereof I have subscribed my name and affixed the facsimile seal of each Company this 21st day of October, 2025.



*Edward Sayago*

Edward Sayago, Corporate Secretary  
**PHILADELPHIA INDEMNITY INSURANCE COMPANY**

## 02 AFFIDAVIT OF NONCOLLUSION

STATE OF CaliforniaCOUNTY OF Los Angeles

Harry Boyajian, being first duly sworn,  
composes and says that Bidder is President

(insert "sole owner", "partner", "president", "secretary", or other proper title) of \_\_\_\_\_  
El Capitan Environmental Services

(insert name of Bidder)

who submits herewith to City of Los Angeles the attached bid:

(1) That Bidder is the person whose name is signed to the hereto attached Proposal form; that said bid is genuine; that the same is not sham or collusive; that all statements of fact therein are true; that such proposal was not made in the interest of or behalf of any person, partnership, company, association, organization or corporation not therein named or disclosed.

(2) That Bidder has not directly or indirectly by agreement, communication, or conference with anyone attempted to induce action prejudicial to the interests of the public body which is to award Contract or any other bidder, or anyone else interested in the proposed Contract; that Bidder has not in any manner sought by collusion to secure an advantage over any other bidder.

(3) That prior to the date and time of deadline for bid submittal the said Bidder:

- (a) did not, directly or indirectly, induce or solicit anyone else to submit a false or sham bid;
- (b) did not, directly or indirectly, collude, conspire, connive or agree with anyone else that said Bidder or anyone else would submit a false or sham bid, or that anyone should refrain from bidding or withdraw bid;
- (c) did not, directly or indirectly, submit the bid price entered on the attached Bid Proposal Line Items form or any breakdown thereof, or the contents thereof, or divulge information or data relative thereto, to any corporations, partnership, company, association, organization, bid depository, or to any member or agent thereof, or to any individual or group of individuals, except to the awarding authority or to any person or persons who have a partnership or other financial interest in the business of said Bidder.

Signed: *[Signature]*

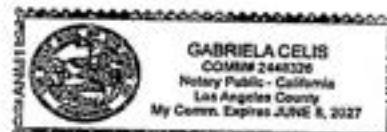
PRESIDENT  
(Title)

Subscribed and sworn to before me

this 4<sup>th</sup> day of November, 2025

*[Signature]* (Seal of Notary)  
Gabriela Celis Notary Public  
Signature of Notary

*See Attached  
Jurat*





**CALIFORNIA JURAT WITH AFFIANT STATEMENT**

GOVERNMENT CODE § 8202

- ☒ See Attached Document (Notary to cross out lines 1-6 below)  
☐ See Statement Below (Lines 1-6 to be completed only by document signer[s], not Notary)

1 \_\_\_\_\_  
2 \_\_\_\_\_  
3 \_\_\_\_\_  
4 \_\_\_\_\_  
5 \_\_\_\_\_  
6 *[Signature]* \_\_\_\_\_  
Signature of Document Signer No. 1      Signature of Document Signer No. 2 (if any)

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 Los Angeles

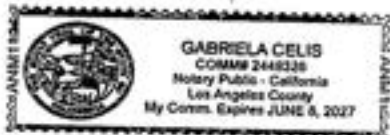
Subscribed and sworn to (or affirmed) before me  
on this 4<sup>th</sup> day of November, 2025  
by \_\_\_\_\_  
Date      Month      Year

(1) Harry Boyajian

(and (2) \_\_\_\_\_),  
Name(s) of Signer(s)

proved to me on the basis of satisfactory evidence  
to be the person(s) who appeared before me.

Signature *[Signature]*  
Signature of Notary Public



Place Notary Seal Above

**OPTIONAL**

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

**Description of Attached Document**

Title or Type of Document: Affidavit of Noncollusion Document Date: 11/04/2025

Number of Pages: \_\_\_\_\_ Signer(s) Other Than Named Above: N/A

03 MANDATORY PROVISIONS PERTAINING TO NON-DISCRIMINATION IN EMPLOYMENT

Pursuant to Los Angeles Charter and Administrative Code, Division 10 Chapter 1, Article 1, Section 10.8 et seq. it is the policy of City of Los Angeles to require each person or entity contracting for goods or services to comply with the Non-discrimination, Equal Employment practices, and Affirmative Action Program provisions of City of Los Angeles.

Sec. 10.8 Mandatory Provisions Pertaining to Non-discrimination in Employment in the Performance of City Contracts.

The City of Los Angeles, in letting and awarding contracts for the provision to it or on its behalf of goods or services of any kind or nature, intends to contract only with those contractors that comply with the non-discrimination and affirmative action provisions of the laws of the United States of America, the State of California and the City of Los Angeles. The City and each of its awarding authorities shall therefore require that any person, firm, corporation, partnership or combination thereof that contracts with the City for services, materials or supplies, shall not discriminate in any of its hiring or employment practices, shall comply with all provisions pertaining to non-discrimination in hiring and employment, and shall require Affirmative Action Programs in contracts in accordance with the provisions of this Code. The awarding authority and/or Office of Contract Compliance of the Department of Public Works shall monitor and inspect the activities of each contractor to determine that they are in compliance with the provisions of this chapter.

Although in accordance with Section 22.359 of this Code, the Board of Public Works, Office of Contract Compliance, is responsible for the administration of the City's Contract Compliance Program, accomplishing the intent of the City in contract compliance and achieving non-discrimination in contractor employment shall be the continuing responsibility of each awarding authority. Each awarding authority shall use only the rules, regulations, and forms provided by the Office of Contract Compliance to monitor, inspect, or investigate contractor compliance with the provisions of this chapter.

## 00030.03 Cont'd.

Each awarding authority shall provide immediate notification upon award of each contract by that awarding authority to the Office of Contract Compliance. Each awarding authority shall call upon the Office of Contract Compliance to review, evaluate, and recommend on any contractual dispute or issue of noncompliance under the provisions of this chapter. The Office of Contract Compliance shall be notified by each awarding authority of any imminent announcement to bid, to allow the Office of Contract Compliance the opportunity to participate with the awarding authority in the monitoring, review, evaluation, investigation, audit and enforcement of the provisions of this chapter in accordance with the rules, regulations and forms promulgated to implement the City's Contract Compliance, Equal Employment Practices Program.

Sec. 10.8.1. Definitions.

Except for Section 10.8.2.1, the following definitions shall apply to the following terms used in this article:

"Awarding Authority" means any Board or Commission of the City of Los Angeles, or any authorized employee or officer of the City of Los Angeles, including the Purchasing Agent of the City of Los Angeles, who makes or enters into any contract or agreement for the provision of any goods or services of any kind or nature whatsoever for, or on behalf of, the City of Los Angeles.

"Contract" means any agreement, franchise, lease or concession, including agreements for any occasional professional or technical personal services, for the performance of any work or service, the provision of any materials or supplies, or the rendition of any service to the City of Los Angeles or to the public, which is let, awarded or entered into with, or on behalf of, the City of Los Angeles or any Awarding Authority thereof. Contracts where the provisions of this article would conflict with federal or state grant funded contracts, or conflict with the terms of the grant or subvention, as determined by the DAA, are exempt.

"Contractor" means any person, firm, corporation, partnership, or any combination thereof, who enters into a contract with any Awarding Authority of the City of Los Angeles.

"Designated Administrative Agency (DAA)" means the Department of Public Works, Office of Contract Compliance created by Article X of Chapter 13 of Division 22 of the Los Angeles Administrative Code. That office is also known as the Department of Public Works, Bureau of Contract Administration.

## 00030.03 Cont'd.

"Domestic Partners" means, for purposes of this article, any two adults, of the same or different sex, who have registered with a governmental entity pursuant to state or local law authorizing this registration or with an internal registry maintained by an employer of at least one of the domestic partners.

"Employment Practices" means any solicitation of, or advertisement for, employees, employment, change in grade or work assignment, assignment or change in place or location of work, layoff, suspension or termination of employees, rate of pay or other form of compensation including vacation, sick and compensatory time, selection for training, including apprenticeship programs, any and all employee benefits and activities, promotion and upgrading, and any and all actions taken to discipline employees for infractions of work rules or employer requirements.

"Minority" is defined to mean "minority person" as the phrase is defined in Subsection (f) of Section 2000 of the California Public Contract Code, as amended from time to time.

"Subcontractor" means any person, firm or corporation or partnership, or any combination thereof, who enters into a contract with a Contractor to perform or provide a portion or part of any Contract with the City.

Sec. 10.8.1.1. Summary of Thresholds.

The following thresholds will be used to determine the non-discrimination and affirmative action requirements set forth in this chapter for each type of contract.

Non-discrimination Practices as outlined in Section 10.8.2 of this Code apply to all contracts.

Equal Employment Practices as outlined in Section 10.8.3 of this Code apply to all construction contracts of \$1,000 or more and all non-construction contracts of \$1,000 or more.

Affirmative Action Program as outlined in Sections 10.8.4 and 10.13 of this Code applies to all Construction Contracts of \$25,000 or more and all non-Construction Contracts of \$25,000 or more.

## 00030.03 Cont'd.

## Sec. 10.8.2. All Contracts: Non-discrimination Clause.

Notwithstanding any other provision of any ordinance of the City of Los Angeles to the contrary, every Contract which is let, awarded or entered into with or on behalf of the City of Los Angeles, shall contain by insertion therein a provision obligating the Contractor in the performance of such Contract not to discriminate in his or her Employment Practices against any employee or applicant for employment because of the applicant's race, color, religion, national origin, ancestry, sex, sexual orientation, age, disability, marital status, domestic partner status or medical condition. All Contractors who enter into such Contracts with the City shall include a like provision in all subcontracts awarded for work to be performed under the Contract with the City. Failure of the Contractor to comply with this requirement or to obtain the compliance of its Subcontractors with such obligations shall subject the Contractor to the imposition of any and all sanctions allowed by law, including, but not limited to, termination of the Contractor's Contract with the City. Nothing contained in this Contract shall be construed in any manner so as to require or permit any act which is prohibited by law.

## Sec. 10.8.2.1. Equal Benefits Ordinance.

- (a) Legislative Findings. The City awards many contracts to private firms to provide services to the public and to City government. Many City contractors and subcontractors perform services that affect the proprietary interests of City government in that their performance impacts the success of City operations. The City holds a proprietary interest in the work performed by many employees employed by City contractors and subcontractors. In a very real sense, the success or failure of City operations may turn on the success or failure of these enterprises, for the City has a genuine stake in how the public perceives the services rendered for them by these businesses.

Discrimination in the provision of employee benefits between employees with domestic partners and employees with spouses results in unequal pay for equal work. Los Angeles law prohibits entities doing business with the City from discriminating in employment practices based on marital status and/or sexual orientation. The City's departments and contracting agents are required to place in all City contracts a provision that the company choosing to do business with the City agrees to comply with the City's nondiscrimination laws.

## 00030.03 Cont'd.

It is the City's intent, through the contracting practices outlined in this Ordinance, to assure that those companies wanting to do business with the City will equalize the total compensation between similarly situated employees with spouses and with domestic partners. The provisions of this Ordinance are designed to ensure that the City's contractors will maintain a competitive advantage in recruiting and retaining capable employees, thereby improving the quality of the goods and services the City and its people receive, and ensuring protection of the City's property.

- (b) Definitions. For purposes of the Equal Benefits Ordinance only, the following shall apply.
- (1) Awarding Authority means any Board or Commission of the City, or any employee or officer of the City, that is authorized to award or enter into any Contract, as defined in this ordinance, on behalf of the City, and shall include departments having control of their own funds and which adopt policies consonant with the provisions of the Equal Benefits Ordinance.
  - (2) Benefits means any plan, program, or policy provided or offered by a Contractor to its employees as part of the employer's total compensation package. This includes but is not limited to the following types of benefits: bereavement leave, family medical leave, health benefits, membership or membership discounts, moving expenses, pension and retirement benefits, and travel benefits.
  - (3) Cash Equivalent means the amount of money paid to an employee with a Domestic Partner (or spouse, if applicable) in lieu of providing Benefits to the employee's Domestic Partner (or spouse, if applicable). The Cash Equivalent is equal to the direct expense to the employer of providing Benefits to an employee for his or her Domestic Partner (or spouse, if applicable) or the direct expense to the employer of providing Benefits for the dependents and family members of an employee with a Domestic Partner (or spouse, if applicable).
  - (4) City means the City of Los Angeles.
  - (5) Contract means an agreement the value of which exceeds \$25,000. It includes agreements for work or services to or for the City; for public works or improvements to be performed; agreements for the purchase of goods, equipment, materials, or supplies; or grants to be provided, at the expense of the City or to be paid out of monies under the control of the City. The term also includes a Lease or License, as defined in the Equal Benefits Ordinance.

## 00030.03 Cont'd.

- (6) Contractor means any person or persons, firm, partnership, corporation, joint venture, or any combination of these, or any governmental entity acting in its proprietary capacity that enters into a Contract with any Awarding Authority of the City. The term does not include Subcontractors.
  - (7) Designated Administrative Agency (DAA) means the Department of Public Works, Bureau of Contract Administration.
  - (8) Domestic Partner means any two adults, of the same or different sex, who have registered as domestic partners with a governmental entity pursuant to state or local law authorizing this registration or with an internal registry maintained by the employer of at least one of the domestic partners.
  - (9) Equal Benefits Ordinance means Los Angeles Administrative Code Section 10.8.2.1, *et seq.*, as amended from time to time.
  - (10) Equal Benefits means the equality of benefits between employees with spouses and employees with Domestic Partners, between spouses of employees and Domestic Partners of employees, and between dependents and family members of spouses and dependents and family members of Domestic Partners.
  - (11) Lease or License means any agreement allowing others to use property owned or controlled by the City, any agreement allowing others the use of City property in order to provide services to or for the City, such as for concession agreements, and any agreement allowing the City to use property owned or controlled by others.
  - (12) Subcontractor means any person or persons, firm, partnership, corporation, joint venture, or any combination of these, and any governmental entity, that assists the Contractor in performing or fulfilling the terms of the Contract. Subcontractors are not subject to the requirements of the Equal Benefits Ordinance unless they otherwise have a Contract directly with the City.
- (c) Equal Benefits Requirements.
- (1) No Awarding Authority of the City shall execute or amend any Contract with any Contractor that discriminates in the provision of Benefits between employees with spouses and employees with Domestic Partners, between spouses of employees and Domestic Partners of employees, and between dependents and family members of spouses and dependents and family members of Domestic Partners.

## 00030.03 Cont'd.

- (2) A Contractor must permit access to, and upon request, must provide certified copies of all of its records pertaining to its Benefits policies and its employment policies and practices to the DAA, for the purpose of investigation or to ascertain compliance with the Equal Benefits Ordinance.
- (3) A Contractor must post a copy of the following statement in conspicuous places at its place of business available to employees and applicants for employment: "During the performance of a Contract with the City of Los Angeles, the Contractor will provide equal benefits to its employees with spouses and its employees with domestic partners." The posted statement must also include a City contact telephone number which will be provided each Contractor when the Contract is executed.
- (4) A Contractor must not set up or use its contracting entity for the purpose of evading the requirements imposed by the Equal Benefits Ordinance.
- (d) Other Options for Compliance. Provided that the Contractor does not discriminate in the provision of Benefits, a Contractor may also comply with the Equal Benefits Ordinance in the following ways:
  - (1) A Contractor may provide an employee with the Cash Equivalent only if the DAA determines that either:
    - a. The Contractor has made a reasonable, yet unsuccessful effort to provide Equal Benefits; or
    - b. Under the circumstances, it would be unreasonable to require the Contractor to provide Benefits to the Domestic Partner (or spouse, if applicable).
  - (2) Allow each employee to designate a legally domiciled member of the employee's household as being eligible for spousal equivalent Benefits.
  - (3) Provide Benefits neither to employees' spouses nor to employees' Domestic Partners.
- (e) Applicability.
  - (1) Unless otherwise exempt, a Contractor is subject to and shall comply with all applicable provisions of the Equal Benefits Ordinance.



## 00030.03 Cont'd.

- (2) The requirements of the Equal Benefits Ordinance shall apply to a Contractor's operations as follows:
  - a. A Contractor's operations located within the City limits, regardless of whether there are employees at those locations performing work on the Contract.
  - b. A Contractor's operations on real property located outside of the City limits if the property is owned by the City or the City has a right to occupy the property, and if the Contractor's presence at or on that property is connected to a Contract with the City.
  - c. The Contractor's employees located elsewhere in the United States but outside of the City limits if those employees are performing work on the City Contract.
- (3) The requirements of the Equal Benefits Ordinance do not apply to collective bargaining agreements ("CBA") in effect prior to January 1, 2000. The Contractor must agree to propose to its union that the requirements of the Equal Benefits Ordinance be incorporated into its CBA upon amendment, extension, or other modification of a CBA occurring after January 1, 2000.
- (f) Mandatory Contract Provisions Pertaining to Equal Benefits. Unless otherwise exempted, every Contract shall contain language that obligates the Contractor to comply with the applicable provisions of the Equal Benefits Ordinance. The language shall include provisions for the following:
  - (1) During the performance of the Contract, the Contractor certifies and represents that the Contractor will comply with the Equal Benefits Ordinance.
  - (2) The failure of the Contractor to comply with the Equal Benefits Ordinance will be deemed to be a material breach of the Contract by the Awarding Authority.
  - (3) If the Contractor fails to comply with the Equal Benefits Ordinance the Awarding Authority may cancel, terminate or suspend the Contract, in whole or in part, and all monies due or to become due under the Contract may be retained by the City. The City may also pursue any and all other remedies at law or in equity for any breach.

## 00030.03 Cont'd.

- (4) Failure to comply with the Equal Benefits Ordinance may be used as evidence against the Contractor in actions taken pursuant to the provisions of Los Angeles Administrative Code Section 10.40, *et seq.*, Contractor Responsibility Ordinance.
- (5) If the DAA determines that a Contractor has set up or used its Contracting entity for the purpose of evading the intent of the Equal Benefits Ordinance, the Awarding Authority may terminate the Contract on behalf of the City. Violation of this provision may be used as evidence against the Contractor in actions taken pursuant to the provisions of Los Angeles Administrative Code Section 10.40, *et seq.*, Contractor Responsibility Ordinance.

(g) Administration.

- (1) The DAA is responsible for the enforcement of the Equal Benefits Ordinance for all City Contracts. Each Awarding Authority shall cooperate to the fullest extent with the DAA in its enforcement activities.
- (2) In enforcing the requirements of the Equal Benefits Ordinance, the DAA may monitor, inspect, and investigate to ensure that the Contractor is acting in compliance with the Equal Benefits Ordinance. Contractor's failure to cooperate with the DAA may result in a determination by the DAA that the Contractor is not in compliance with the Equal Benefits Ordinance, which may subject the Contractor to enforcement measures set forth in Section 10.8.2.1(h).
- (3) The DAA shall promulgate rules and regulations and forms for the implementation of the Equal Benefits Ordinance. No other rules, regulations, or forms may be used by an Awarding Authority of the City to accomplish this contract compliance program.

(h) Enforcement.

- (1) If the Contractor fails to comply with the Equal Benefits Ordinance:
  - a. The failure to comply may be deemed to be a material breach of the Contract by the Awarding Authority; or
  - b. The Awarding Authority may cancel, terminate or suspend, in whole or in part, the contract; or
  - c. Monies due or to become due under the Contract may be retained by the City until compliance is achieved;

## 00030.03 Cont'd.

- d. The City may also pursue any and all other remedies at law or in equity for any breach.
  - e. The City may use failure to comply with the Equal Benefits Ordinance as evidence against the Contractor in actions taken pursuant to the provisions of Los Angeles Administrative Code Section 10.40, et seq., Contractor Responsibility Ordinance.
- (i) Non-applicability, Exceptions, and Waivers.
- (1) Upon request of the Awarding Authority, the DAA may waive compliance with the Equal Benefits Ordinance under the following circumstances:
- a. The Contract is for the use of City property, and there is only one prospective Contractor willing to enter into the Contract; or
  - b. The Contract is for needed goods, services, construction of a public work or improvement, or interest in or right to use real property that is available only from a single prospective Contractor, and that prospective Contractor is otherwise qualified and acceptable to the City; or
  - c. The Contract is necessary to respond to an emergency that endangers the public health or safety, and no entity which complies with the requirements of the Equal Benefits Ordinance capable of responding to the emergency is immediately available; or
  - d. The City Attorney certifies in writing that the Contract involves specialized litigation requirements such that it would be in the best interests of the City to waive the requirements of the Equal Benefits Ordinance; or
  - e. The Contract is (i) with a public entity; (ii) for goods, services, construction of a public work or improvement, or interest in or right to use real property; and (iii) that is either not available from another source, or is necessary to serve a substantial public interest. A Contract for interest in or the right to use real property shall not be considered as not being available from another source unless there is no other site of comparable quality or accessibility available from another source; or

## 00030.03 Cont'd.

- f. The requirements of the Equal Benefits Ordinance will violate or are inconsistent with the terms or conditions of a grant, subvention or agreement with a public agency or the instructions of an authorized representative of the agency with respect to the grant, subvention or agreement, provided that the Awarding Authority has made a good faith attempt to change the terms or conditions of the grant, subvention or agreement to authorize application of the Equal Benefits Ordinance; or
  - g. The Contract is for goods, a service or a project that is essential to the City or City residents and there are no qualified responsive bidders or prospective Contractors who could be certified as being in compliance with the requirements of the Equal Benefits Ordinance; or
  - h. The Contract involves bulk purchasing arrangements through City, federal, state or regional entities that actually reduce the City's purchasing costs and would be in the best interests of the City.
- (2) The Equal Benefits Ordinance does not apply to contracts which involve:
- a. The investment of trust monies, bond proceeds or agreements relating to the management of these funds, indentures, security enhancement agreements (including, but not limited to, liquidity agreements, letters of credit, bond insurance) for City tax-exempt and taxable financings, deposits of City's surplus funds in financial institutions, the investment of City monies in competitively bid investment agreements, the investment of City monies in securities permitted under the California State Government Code and/or the City's investment policy, investment agreements, repurchase agreements, City monies invested in U.S. government securities or pre-existing investment agreements;
  - b. Contracts involving City monies in which the Treasurer or the City Administrative Officer finds that either:
    - (i) No person, entity or financial institution doing business in the City, which is in compliance with the Equal Benefits Ordinance, is capable of performing the desired transaction(s); or
    - (ii) The City will incur a financial loss or forego a financial benefit which in the opinion of the Treasurer or City Administrative Officer would violate his or her fiduciary duties.

## 00030.03 Cont'd.

- (3) The Equal Benefits Ordinance does not apply to contracts for gifts to the City.
- (4) Nothing in this Subsection shall limit the right of the City to waive the provisions of the Equal Benefits Ordinance.
- (5) The provisions of this Subsection shall apply to the Equal Benefits Ordinance only. The Equal Benefits Ordinance is not subject to the exemptions provided in Section 10.9 of this Code.
- (j) Consistency with Federal or State Law. The provisions of the Equal Benefits Ordinance do not apply where the application of these provisions would violate or be inconsistent with the laws, rules or regulations federal or state law, or where the application would violate or be inconsistent with the terms or conditions of a grant or contract with the United States of America, the State of California, or the instruction of an authorized representative of any of these agencies with respect to any grant or contract.
- (k) Severability. If any provision of the Equal Benefits Ordinance is declared legally invalid by any court of competent jurisdiction, the remaining provisions shall remain in full force and effect.
- (l) Timing of Application.
  - (1) The requirements of the Equal Benefits Ordinance shall not apply to Contracts executed or amended prior to January 1, 2000, or to bid packages advertised and made available to the public, or any bids received by the City, prior to January 1, 2000, unless and until those Contracts are amended after January 1, 2000 and would otherwise be subject to the Equal Benefits Ordinance.
  - (2) The requirements of the Equal Benefits Ordinance shall apply to competitively bid Contracts that are amended after April 1, 2003, and to competitively bid Contracts that result from bid packages advertised and made available to the public after May 1, 2003.
  - (3) Unless otherwise exempt, the Equal Benefits Ordinance applies to any agreement executed or amended after January 1, 2000, that meets the definition of a Contract as defined within Subsection 10.8.2.1(b).

## 00030.03 Cont'd.

## Sec. 10.8.3. Equal Employment Practices Provisions.

Every non-construction and construction Contract with, or on behalf of, the City of Los Angeles for which the consideration is \$1,000 or more shall contain the following provisions, which shall be designated as the Equal Employment Practices provision of such contract:

- A. During the performance of this Contract, the Contractor agrees and represents that it will provide Equal Employment Practices and the Contractor and each Subcontractor hereunder will ensure that in his or her Employment Practices persons are employed and employees are treated equally and without regard to, or because of, race, color, religion, national origin, ancestry, sex, sexual orientation, age, disability, marital status or medical condition.
  - 1. This provision applies to work or service performed or materials manufactured or assembled in the United States.
  - 2. Nothing in this section shall require or prohibit the establishment of new classifications of employees in any given craft, work or service category.
  - 3. The Contractor agrees to post a copy of Paragraph A., hereof, in conspicuous places at its place of business available to employees and applicants for employment.
- B. The Contractor will, in all solicitations or advertisements for employees placed by, or on behalf of, the Contractor, state that all qualified applicants will receive consideration for employment without regard to their race, color, religion, national origin, ancestry, sex, sexual orientation, age, disability, marital status or medical condition.
- C. At the request of the Awarding Authority or the DAA, the Contractor shall certify in the specified format that he or she has not discriminated in the performance of City Contracts against any employee or applicant for employment on the basis or because of race, color, religion, national origin, ancestry, sex, sexual orientation, age, disability, marital status, or medical condition.
- D. The Contractor shall permit access to, and may be required to provide certified copies of, all of his or her records pertaining to employment and to employment practices by the awarding authority or the DAA for the purpose of investigation to ascertain compliance with the Equal Employment Practices provisions of City Contracts. Upon request, the Contractor shall provide evidence that he or she has or will comply therewith.

## 00030.03 Cont'd.

- E. The failure of any Contractor to comply with the Equal Employment Practices provisions of this contract may be deemed to be a material breach of City Contracts. The failure shall only be established upon a finding to that effect by the Awarding Authority, on the basis of its own investigation or that of the DAA. No such finding shall be made or penalties assessed except upon a full and fair hearing after notice and an opportunity to be heard has been given to the Contractor.
- F. Upon a finding duly made that the Contractor has failed to comply with the Equal Employment Practices provisions of a City Contract, the Contract may be forthwith cancelled, terminated or suspended, in whole or in part, by the Awarding Authority, and all monies due or to become due hereunder may be forwarded to, and retained by, the City of Los Angeles. In addition thereto, the failure to comply may be the basis for a determination by the Awarding Authority or the DAA that the said Contractor is a non-responsible bidder or proposer pursuant to the provisions of Section 10.40 of this Code. In the event of such a determination, the Contractor shall be disqualified from being awarded a Contract with the City of Los Angeles for a period of two years, or until the Contractor shall establish and carry out a program in conformance with the provisions hereof.
- G. Notwithstanding any other provision of this contract, the City of Los Angeles shall have any and all other remedies at law or in equity for any breach hereof.
- H. The Board of Public Works shall promulgate rules and regulations through the DAA, and provide necessary forms and required language to the Awarding Authorities to be included in City Request for Bids or Request for Proposal packages or in supplier registration requirements for the implementation of the Equal Employment Practices provisions of this Contract, and such rules and regulations and forms shall, so far as practicable, be similar to those adopted in applicable Federal Executive orders. No other rules, regulations, or forms may be used by an Awarding Authority of the City to accomplish the contract compliance program.
- I. Nothing contained in this Contract shall be construed in any manner so as to require or permit any act which is prohibited by law.
- J. By affixing its signature on a Contract that is subject to this article, the Contractor shall agree to adhere to the Equal Employment Practices specified herein during the performance or conduct of City Contracts.

## 00030.03 Cont'd.

- K. Equal Employment Practices shall, without limitation as to the subject or nature of employment activity, be concerned with employment practices, including, but not limited to:
  - 1. hiring practices;
  - 2. apprenticeships where approved programs are functioning and other on-the-job training for non-apprenticeable occupations;
  - 3. training and promotional opportunities; and
  - 4. reasonable accommodations for persons with disabilities.
- L. All Contractors subject to the provisions of this section shall include a similar provision in all subcontracts awarded for work to be performed under the Contract with the City, and shall impose the same obligations including, but not limited to, filing and reporting obligations, on the Subcontractors as are applicable to the Contractor. Subcontracts shall follow the same thresholds specified in Section 10.8.1.1. Failure of the Contractor to comply with this requirement or to obtain the compliance of its Subcontractors with all such obligations shall subject the Contractor to the imposition of any and all sanctions allowed by law, including, but not limited to, termination of the Contractor's Contract with the City.

## Sec. 10.8.4. Affirmative Action Program Provisions.

Every non-construction and construction Contract with, or on behalf of, the City of Los Angeles for which the consideration is \$25,000 or more shall contain the following provisions which shall be designated as the Affirmative Action Program provisions of such Contract:

- A. During the performance of a City Contract, the Contractor certifies and represents that the Contractor and each Subcontractor hereunder will adhere to an Affirmative Action Program to ensure that in its employment practices, persons are employed and employees are treated equally and without regard to or because of race, color, religion, national origin, ancestry, sex, sexual orientation, age, disability, marital status, domestic partner status or medical condition.
  - 1. This section applies to work or services performed or materials manufactured or assembled in the United States.
  - 2. Nothing in this section shall require or prohibit the establishment of new classifications of employees in any given craft, work or service category.



## 00030.03 Cont'd.

3. The Contractor shall post a copy of Paragraph A., hereof, in conspicuous places at its place of business available to employees and applicants for employment.
- B. The Contractor shall, in all solicitations or advertisements for employees placed, by or on behalf of, the Contractor, state that all qualified applicants will receive consideration for employment without regard to their race, color, religion, national origin, ancestry, sex, sexual orientation, age, disability, marital status, domestic partner status or medical condition.
- C. At the request of the Awarding Authority or the DAA, the Contractor shall certify on an electronic or hard copy form to be supplied, that the Contractor has not discriminated in the performance of City Contracts against any employee or applicant for employment on the basis or because of race, color, religion, national origin, ancestry, sex, sexual orientation, age, disability, marital status, domestic partner status or medical condition.
- D. The Contractor shall permit access to, and may be required to provide certified copies of, all of its records pertaining to employment and to its employment practices by the Awarding Authority or the DAA for the purpose of investigation to ascertain compliance with the Affirmative Action Program provisions of City Contracts and, upon request, to provide evidence that it has or will comply therewith.
- E. The failure of any Contractor to comply with the Affirmative Action Program provisions of City Contracts may be deemed to be a material breach of a City Contract. The failure shall only be established upon a finding to that effect by the Awarding Authority, on the basis of its own investigation or that of the DAA. No finding shall be made except upon a full and fair hearing after notice and an opportunity to be heard has been given to the Contractor.
- F. Upon a finding duly made that the Contractor has breached the Affirmative Action Program provisions of a City Contract, the Contract may be forthwith cancelled, terminated or suspended, in whole or in part, by the Awarding Authority, and all monies due or to become due hereunder may be forwarded to and retained by the City of Los Angeles. In addition thereto, the breach may be the basis for a determination by the Awarding Authority or the Board of Public Works that the Contractor is a non-responsible bidder or proposer pursuant to the provisions of Section 10.40 of this Code. In the event of such determination, the Contractor shall be disqualified from being awarded a contract with the City of Los Angeles for a period of two years, or until he or she shall establish and carry out a program in conformance with the provisions hereof.

## 00030.03 Cont'd.

- G. In the event of a finding by the Fair Employment and Housing Commission of the State of California, or the Board of Public Works of the City of Los Angeles, or any court of competent jurisdiction, that the Contractor has been guilty of a willful violation of the California Fair Employment and Housing Act, or the Affirmative Action Program provisions of a City Contract, there may be deducted from the amount payable to the Contractor by the City of Los Angeles under the contract, a penalty of ten dollars for each person for each calendar day on which the person was discriminated against in violation of the provisions of a City Contract.
- H. Notwithstanding any other provisions of a City Contract, the City of Los Angeles shall have any and all other remedies at law or in equity for any breach hereof.
- I. The Public Works Board of Commissioners shall promulgate rules and regulations through the DAA and provide to the Awarding Authorities electronic and hard copy forms for the implementation of the Affirmative Action Program provisions of City contracts, and rules and regulations and forms shall, so far as practicable, be similar to those adopted in applicable Federal Executive Orders. No other rules, regulations or forms may be used by an Awarding Authority of the City to accomplish this contract compliance program.
- J. Nothing contained in City Contracts shall be construed in any manner so as to require or permit any act which is prohibited by law.
- K. By affixing its signature to a Contract that is subject to this article, the Contractor shall agree to adhere to the provisions in this article for the duration of the Contract. The Awarding Authority may also require Contractors and suppliers to take part in a pre-registration, pre-bid, pre-proposal, or pre-award conference in order to develop, improve or implement a qualifying Affirmative Action Program.
  - 1. The Contractor certifies and agrees to immediately implement good faith effort measures to recruit and employ minority, women, and other potential employees in a non-discriminatory manner including, but not limited to, the following actions as appropriate and available to the Contractor's field of work. The Contractor shall:
    - (a) Recruit and make efforts to obtain employees through:
      - (i) Advertising employment opportunities in minority and other community news media or other publications.

## 00030.03 Cont'd.

- (ii) Notifying minority, women, and other community organizations of employment opportunities.
  - (iii) Maintaining contact with schools with diverse populations of students to notify them of employment opportunities.
  - (iv) Encouraging existing employees, including minorities and women, to refer their friends and relatives.
  - (v) Promoting after school and vacation employment opportunities for minority, women, and other youth.
  - (vi) Validating all job specifications, selection requirements, tests, etc.
  - (vii) Maintaining a file of the names and addresses of each worker referred to the Contractor and what action was taken concerning the worker.
  - (viii) Notifying the appropriate Awarding Authority and the DAA in writing when a union, with whom the Contractor has a collective bargaining agreement, has failed to refer a minority, woman, or other worker.
- (b) Continually evaluate personnel practices to assure that hiring, upgrading, promotions, transfers, demotions and layoffs are made in a non-discriminatory manner so as to achieve and maintain a diverse work force.
  - (c) Utilize training programs and assist minority, women, and other employees in locating, qualifying for and engaging in the training programs to enhance their skills and advancement.
  - (d) Secure cooperation or compliance from the labor referral agency to the Contractor's contractual Affirmative Action Program obligations.
  - (e) Establish a person at the management level of the Contractor to be the Equal Employment Practices officer. Such individual shall have the authority to disseminate and enforce the Contractor's Equal Employment and Affirmative Action Program policies.
  - (f) Maintain records as are necessary to determine compliance with Equal Employment Practices and Affirmative Action Program obligations and make the records available to City, State and Federal authorities upon request.

## 00030.03 Cont'd.

- (g) Establish written company policies, rules, and procedures which shall be encompassed in a company-wide Affirmative Action Program for all its operations and Contracts. The policies shall be provided to all employees, Subcontractors, vendors, unions and all others with whom the Contractor may become involved in fulfilling any of its Contracts.
  - (h) Document its good faith efforts to correct any deficiencies when problems are experienced by the Contractor in complying with its obligations pursuant to this article. The Contractor shall state:
    - (i) What steps were taken, how and on what date.
    - (ii) To whom those efforts were directed.
    - (iii) The responses received, from whom and when.
    - (iv) What other steps were taken or will be taken to comply and when.
    - (v) Why the Contractor has been or will be unable to comply.
- 2. Every contract of \$25,000 or more which may provide construction, demolition, renovation, conservation, or major maintenance of any kind shall also comply with the requirements of Section 10.13 of the Los Angeles Administrative Code.
- L. The Affirmative Action Program required to be submitted hereunder and the pre-registration, pre-bid, pre-proposal or pre-award conference which may be required by the Awarding Authority shall, without limitation as to the subject or nature of employment activity, be concerned with such employment practices as:
  - 1. Apprenticeship where approved programs are functioning, and other on-the-job training for non-apprenticeable occupations;
  - 2. Classroom preparation for the job when not apprenticeable;
  - 3. Pre-apprenticeship education and preparation;
  - 4. Upgrading training and opportunities;

## 00030.03 Cont'd.

5. Encouraging the use of Contractors, Subcontractors and suppliers of all racial and ethnic groups; provided, however, that any contract subject to this ordinance shall require the Contractor, Subcontractor or supplier to provide not less than the prevailing wage, working conditions and practices generally observed in private industries in the Contractor's, Subcontractor's or supplier's geographical area for such work;
  6. The entry of qualified women, minority and all other journeymen into the industry; and
  7. The provision of needed supplies or job conditions to permit persons with disabilities to be employed, and minimize the impact of any disability.
- M. Any adjustments which may be made in the Contractor's work force to achieve the requirements of the City's Affirmative Action Program in purchasing and construction shall be accomplished by either an increase in the size of the work force or replacement of those employees who leave the work force by reason of resignation, retirement or death and not by termination, layoff, demotion or change in grade.
- N. This ordinance shall not confer upon the City of Los Angeles or any Agency, Board or Commission thereof any power not otherwise provided by law to determine the legality of any existing collective bargaining agreement and shall have application only to discriminatory employment practices by Contractors engaged in the performance of City Contracts.
- O. All Contractors subject to the provisions of this article shall include a similar provision in all subcontracts awarded for work to be performed under the Contract with the City and shall impose the same obligations including, but not limited to, filing and reporting obligations, on the Subcontractors as are applicable to the Contractor. Failure of the Contractor to comply with this requirement or to obtain the compliance of its Subcontractors with all such obligations shall subject the Contractor to the imposition of any and all sanctions allowed by law, including, but not limited to, termination of the Contractor's Contract with the City.

04 MANDATORY PROVISIONS PERTAINING TO NON-DISCRIMINATION IN EMPLOYMENT AND AFFIRMATIVE ACTION IN HIRING EMPLOYEES

Sec. 10.13. Mandatory Provisions Pertaining to Non-discrimination in Employment and Affirmative Action in Hiring Employees in the Performance of Work on Certain City Construction Contracts.

- A. Notwithstanding any other provision of this division to the contrary, every construction Contract involving an expenditure of \$25,000 or more of City funds, except in cases of urgent necessity, as provided in Section 371 of the Charter of the City of Los Angeles and except as provided in Section 10.9 of this Code, shall contain these provisions as part of the Contract. By affixing its signature on a Contract, the Contractor shall agree to adhere to these provisions for the duration of the Contract.
- B. Anticipated Utilization. At the request of the Awarding Authority or DAA, the Contractor must set forth anticipated minority, women, and all other staffing utilization by the Contractor and all Subcontractors on each project constructed by the City using those trades within the area of jurisdiction of the Los Angeles Building and Construction Trades Council within the City of Los Angeles in each work class and at all levels in terms of staff hours. The anticipated levels of minority, women and other staffing utilization shall be the levels at which each of those groups are represented in the relevant work force in the Greater Los Angeles Area as determined by the U.S. Bureau of the Census and made available by the DAA. Attainment of the anticipated levels of utilization may only be used as an indicia of whether the Contractor has complied with the requirements of this section and has applied its Affirmative Action Program in good faith and in a non-discriminatory manner. Failure to attain the anticipated levels of utilization shall not, by itself, disqualify the Contractor for award of a Contract or subject the Contractor to any sanctions or penalties.

In no event may a Contractor utilize the requirements of this section in such a manner as to cause or result in discrimination against any person on account of race, color, religion, national origin, ancestry, sex, sexual orientation, age, disability, marital status, domestic partner status or medical condition.

- C. The Contractor shall make a good faith effort with respect to apprenticeship and training programs to:
1. Recruit and refer minority, women and other employees to such programs;
  2. Establish training programs within the company and/or its affiliates that will prepare minority, women and other employees for advancement opportunities; and

## 00030.04 Cont'd.

3. Abide by the requirements of the Labor Code of the State of California with respect to the provision of apprenticeship job opportunities.
- D. No contract shall be executed until the appropriate Awarding Authority of the City of Los Angeles, and the Federal funding agency (if Federal funds are involved), has determined in writing that the Contractor has executed and filed with the Awarding Authority and the DAA any federal or state requirements.
- E. It shall be no excuse that the union with which the Contractor has a collective bargaining agreement providing for referral, exclusive or otherwise, failed to refer minority, women, or other employees.
- F. Subject to this subsection, the Contractor shall execute further forms and documentation at times and as may be required by the appropriate Awarding Authority.
- G. Where the Contractor has failed to comply with the requirements contained in this section, any and all sanctions allowed by law may be imposed upon the Contractor.
- H. The DAA shall be responsible for administering the City's Contract Compliance Program in the manner described in Sections 22.359 through 22.359.2 of this Code.
- I. All Contractors subject to the provisions of this section shall include a similar provision in all subcontracts awarded for work to be performed under the Contract with the City and shall impose the same obligations, including, but not limited to, filing and reporting obligations, on the Subcontractors as are applicable to the Contractor. Failure of the Contractor to comply with this requirement or to obtain the compliance of its Subcontractors with all such obligations shall subject the Contractor to the imposition of any and all sanctions allowed by law including, but not limited to, termination of the Contractor's Contract with the City.

## 05 EQUAL BENEFITS ORDINANCE COMPLIANCE AFFIDAVIT

- A Administered by City of Los Angeles Department of Public Works, Bureau of Contract Administration, Office of Contract Compliance, located at 1149 S. Broadway, Suite 300, Los Angeles, CA 90015, Phone; (213) 847-2625, email address: [bca.eeoe@lacity.org](mailto:bca.eeoe@lacity.org).
- B Contractor must be certified as complying with Los Angeles Code Section 10.8.2.1, Equal Benefits Ordinance, prior to the execution of a City agreement. This form must be returned to City department awarding the agreement.



00030.05 Cont'd.

**EBO COMPLIANCE****City of Los Angeles**

Department of Public Works Bureau of  
Contract Administration Office of Contract  
Compliance

1149 S. Broadway, Suite 300, Los Angeles, CA 90015

Phone: (213) 847-2625 E-mail: [bca.eeoe@lacity.org](mailto:bca.eeoe@lacity.org)**EQUAL BENEFITS ORDINANCE COMPLIANCE AFFIDAVIT**

Prime contractors must certify compliance with Los Angeles Administrative Code (LAAC) Section 10.8.2.1 et seq. prior to the execution of a City agreement subject to the Equal Benefits Ordinance (EBO).

**SECTION 1. CONTACT INFORMATION**Company Name: El Capitan Environmental Services RAMP Company ID 20114Company Address: 11080 Tuxford StreetCity: Sun Valley State: CA Zip: 91352Contact Person: Harry Boyajan Phone: 818-768-9222 E-mail: hboyajian@elcapenv.comApproximate Number of Employees in the United States: 15Approximate Number of Employees in the City of Los Angeles: 10**SECTION 2. EBO REQUIREMENTS**

The EBO requires City Contractors who provide benefits to employees with spouses to provide the same benefits to employees with domestic partners. Domestic Partner means any two adults, of the same or different sex, who have registered as domestic partners with a governmental entity pursuant to state or local law authorizing this registration, or with an internal registry maintained by the employer of at least one of the domestic partners.

Unless otherwise exempt, the contractor is subject to and shall comply with the EBO as follows:

- A. Contractor's operations located within City limits, regardless of whether there are employees at those locations performing Work on City Contract; and
- B. Contractor's operations located outside of City limits if the property is owned by City or City has a right to occupy the property, and if Contractor's presence at or on the property is connected to a Contract with City; and
- C. Contractor's employees located elsewhere in the United States, but outside of City Limits, if those employees are performing Work on City Contract.

Contractor must post a copy of the following statement in conspicuous places at its place of business available to employees and applicants for employment:

"During the performance of a Contract with City of Los Angeles, Contractor shall provide equal benefits to its employees with spouses and its employees with domestic partners."

00030.05 Cont'd.

**SECTION 3. COMPLIANCE OPTIONS**

I have read and understand the provisions of Equal Benefits Ordinance and have determined that this company shall comply as indicated below:

- ☐..... I have no employees.
- ☐..... I provide no benefits.
- ☐..... I provide benefits to employees only. Employees are prohibited from enrolling their spouse or domestic partner.
- ☒..... I provide equal benefits as required by City of Los Angeles EBO.
- ☐..... I provide employees with a "Cash Equivalent." Note: The "Cash Equivalent" is the amount of money equivalent to what your company pays for spousal benefits that are unavailable for domestic partners, or vice versa.
- ☐..... All or some employees are covered by a collective bargaining agreement (CBA) or union trust fund. Consequently, I shall provide Equal Benefits to all non-union represented employees, subject to the EBO, and shall propose to the affected unions that they incorporate the requirements of the EBO into their CBA upon amendment, extension, or other modification of the CBA.
- ☐..... Health benefits currently provided do not comply with the EBO. However, I shall make the necessary changes to provide Equal Benefits upon my next Open Enrollment period which begins on (Date) \_\_\_\_\_.
- ☐..... Our current company policies, i.e., family leave, bereavement leave, etc., do not comply with the provisions of the EBO. However, I shall make the necessary modifications within three (3) months from the date of this affidavit.

**SECTION 4. DECLARATION UNDER PENALTY OF PERJURY**

I understand that I am required to permit City of Los Angeles access to and upon request, must provide certified copies of all company records pertaining to benefits, policies and practices for the purpose of investigation or to ascertain compliance with Equal Benefits Ordinance. Furthermore, I understand that failure to comply with LAAC Section 10.8.2.1 et seq., Equal Benefits Ordinance may be deemed a material breach of any City contract by Awarding Authority. Awarding Authority may cancel, terminate or suspend in whole or in part, the contract; monies due or to become due under a contract may be retained by City until compliance is achieved. City may also pursue any and all other remedies at law or in equity for any breach. City may use the failure to comply with Equal Benefits Ordinance as evidence against Contractor in actions taken pursuant to the provisions of the LAAC Section 10.40, et seq., Contractor Responsibility Ordinance.

El Capitan Environmental Services shall comply with Equal Benefits Ordinance requirements

Company Name  
as indicated above prior to executing a contract with City of Los Angeles and shall comply for the entire duration of the contract(s).

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that I am authorized to bind this entity contractually.

Executed this 11 day of November, in the year 2025, at Sun Valley, CA  
 \_\_\_\_\_  
 Signature  
Harry Boyajian  
 Name of Signatory (please print)  
President  
 Title

\_\_\_\_\_  
 11080 Tuxford Street  
 Mailing Address  
Sun Valley, CA 91352  
 City, State, Zip Code  
95-4351849  
 EIN/TIN

Form OCC/EBO-Affidavit (Rev 6/21/12)



## 06 SMALL BUSINESS ENTERPRISE PROGRAM (SBEP)

## A POLICY STATEMENT

City of Los Angeles Harbor Department is committed to creating an environment that provides all individuals and businesses open access to the business opportunities available at Port of Los Angeles in a manner that reflects the diversity of City of Los Angeles. Port of Los Angeles Small Business Enterprise Program (SBEP or the "Program") was created to provide additional opportunities for small businesses to participate in any and all contracts.

It is the policy of Harbor Department to solicit participation in the performance of all service contracts by all individuals and businesses, including but not limited to, small business enterprises (SBEs), very small business enterprises (VSBEs), women-owned businesses (WBEs), minority-owned businesses (MBEs), and disabled veterans business enterprises (DVBE). Program shall allow Department to target more effectively small and very small business participation (including MBEs, WBEs, and DVBEs). It is also the intent of Department to make it easier for small and very small businesses to participate in Department contracts by providing education and assistance on how to do business with City, including, but not limited to, ensuring that payments to small and very small businesses are processed in a timely manner.

City's Contracts Management and Opportunities Database, Regional Alliance Marketplace for Procurement (RAMP) is a free service provided by the Mayor's Office of Economic Development and the Minority Business Opportunity Committee. In order to ensure the highest participation of SBE/VSBE/MBE/WBE/DVBEs, all Bidders shall utilize RAMP, at <https://www.rampla.org/s/>, to outreach to potential subcontractors and suppliers. Bidders shall go on RAMP and notify subcontractors and suppliers that they shall be bidding and are looking for subcontractors and suppliers.

Bidders must be registered on RAMP at time of bid. Subcontractors and suppliers must be registered on RAMP within 30 Calendar Days after bids are closed.

## 00030.06 Cont'd.

Bidders, subcontractors, and suppliers identified in the bid submittal as SBE or VSBE must be certified at time of bid, as applicable. Bidders, subcontractors, and suppliers must submit a copy of SBE certificate or VSBE certificate from the agency utilized to obtain certification as SBE or VSBE to Engineer within 4 Business Days of close of bids in order to be acknowledged within the bid as SBE or VSBE. Refer to <https://kentico.portoflosangeles.org/getmedia/aea536e1-5d48-440a-8857-c55907e3dc74/contracting-proprietary-sbe-cert-application> for certification instructions.

Within 30 Calendar Days after close of bids, Bidders, subcontractors, and suppliers identified in the bid submittal as SBE or VSBE must be verified on RAMP as SBE (Proprietary) or VSBE (Harbor), as applicable.

**B SMALL BUSINESS REQUIREMENT**

SBEP, which has a very small business enterprise component, is a results-oriented program, requiring contractors who receive contracts from Department to perform outreach and utilize certified small and very small businesses.

Any bid submitted which fails to meet the small and very small business requirement as shown in NOTICE INVITING BIDS Section shall result in rejection of the bid. If no bids are submitted that meet the small and very small business participation identified above, all bids shall be rejected by Department.

For purposes of calculating small and very small business participation in order to meet the requirement, the following shall apply:

- 1 At the time of bid, SBE and VSBE participation levels shall be based on the percentage of total Contract amount (including Allowance Items) to be paid to SBE and VSBE subcontractors and suppliers.
- 2 If the prime contractor is an SBE, or VSBE, small or very small business participation is shown as 100%.
- 3 100% of payments to SBE or VSBE truckers and suppliers.
- 4 Final SBE and VSBE participation levels shall be based on the percentage of final Contract amount, including the utilized Allowance Item amounts.

## 00030.06 Cont'd.

Definitions:

Small Business Enterprise (SBE): Harbor Department, and other City of Los Angeles Proprietary Departments, defines an SBE as an independently owned and operated business that is not dominant in its field and meets criteria set forth by the Small Business Administration in Title 13, Code of Federal Regulations, Part 121, generally meeting SBA established size standards for most industries in the economy. Size standards can be accessed on the SBA Website at [www.sba.gov/ca/la](http://www.sba.gov/ca/la).

Very Small Business Enterprise (VSBE): Harbor Department, and other City of Los Angeles Proprietary Departments, defines a VSBE based on the State of California's micro-business definition which is (1) a small business that has average annual gross receipts of \$5,000,000 or less within the previous 3 years, or (2) a small business manufacturer with 25 or fewer employees.

A Minority Business Enterprise (MBE) is defined as a business in which a minority owns and controls at least 51% of the business. A Woman Business Enterprise (WBE) is defined as a business in which a woman owns and controls at least 51% of the business. For the purpose of this Project, a minority includes:

- (1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
- (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
- (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, The Indian Subcontinent, or the Pacific Islands); and
- (4) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

A Disabled Veteran Business Enterprise (DVBE) is defined as a business in which a disabled veteran owns at least 51 percent of the business, and the daily business operations are managed and controlled by one or more disabled veterans.

## 00030.06 Cont'd.

An OBE (Other Business Enterprise) is any enterprise that is not a SBE, VSBE, DVBE, MBE, or WBE.

Bidder shall be responsible for determining SBE and VSBE status of its subcontractors and suppliers for purposes of meeting the small and very small business requirements. Bidders, subcontractors, and suppliers identified in the bid submittal as SBE or VSBE must be certified at time of bid, as applicable Bidders, subcontractors, and suppliers must submit a copy of SBE certificate or VSBE certificate from the agency utilized to obtain certification as SBE or VSBE to Engineer within 4 Business Days of close of bids in order to be acknowledged within the bid as SBE or VSBE. All business participation shall be determined by the percentage paid to SBEs and VSBEs of the total amount of compensation under Agreement.

Contract Requirements:

Bidder shall complete, sign, notarize, and submit as part of the bid Contractor Ownership/RAMP Outreach/Local Business Enterprise Affidavit form included in Specifications as Subsection 00030.11 with a complete description of Work or supplies to be provided by each and the dollar amount of each such transaction entered in the online subcontractor list provided on CDBON and on the Supplier List in Subsection 00660.03 of CONTRACTOR/SUBCONTRACTOR/SUPPLIER INFORMATION Section. Subcontractors and suppliers shall complete, sign, notarize, and submit Subcontractor/Subcontractor/Supplier Ownership and Local Business Enterprise Affidavit and Contractor/Supplier Information Form included in Subsection 00660.01 of CONTRACTOR/SUBCONTRACTOR/SUPPLIER INFORMATION Section for each subcontractor and supplier by the time required in Subsection 00012.10 of NOTICE INVITING BIDS Section with a complete description of Work or supplies to be provided by each and the dollar amount of each such transaction. Contractor/Subcontractor/Supplier Information Form, when signed, shall signify Contractor's intent to comply with SBE requirement. Within 30 Calendar Days after bids are closed, Harbor Department shall verify SBE and VSBE status of Bidders, subcontractors, and suppliers.

Contractor shall not substitute an SBE or VSBE firm without obtaining prior approval of City and amending its Contract. A request for substitution must be based upon demonstrated good cause. If substitution is permitted, Contractor shall endeavor to make an in-kind substitution for the substituted SBE or VSBE.

## 00030.06 Cont'd.

During the performance of Contract, Contractor shall complete and submit to Engineer, a Monthly Subcontractor/Supplier Monitoring Report included in Specifications as Subsection 00030.11A. Engineer shall make the report available to Contractor in electronic/digital format. The completed report shall be submitted to Engineer on the form provided in Subsection 00030.11A of this Section. Among other information, the completed form shall reflect payments made to all (SBE/VSBE/MBE/WBE/DVBE/OBE) subcontractors and suppliers to date. The subcontractors or suppliers listed in Monthly Subcontractor/Supplier Monitoring Report shall be the same as those entered in the online subcontractor list provided on CDBON and submitted as part of the bid. All subcontractors/ suppliers shall be listed on the report, regardless of level of activity to date (even if payment to date is zero). The correctly completed report shall be submitted by Contractor at the beginning of each month.

In the event of Contractor's noncompliance during the performance of Contract, Contractor shall be considered in material breach of Contract. In addition to any other remedy available to City under Contract or by operation of law, City may:

- 1 Withhold invoice payments to Contractor until noncompliance is corrected, and assess the costs of City's audit of books and records of Contractor and its subcontractors and suppliers.
- 2 Disqualify Contractor from participation in City contracts for a period of up to five (5) years in the event Contractor falsifies or misrepresents information contained in any form or other willful noncompliance as determined by City.

## 07 CONTRACT SOLICITATIONS CHARTER SECTION 470 (c) (12)

- A Persons who submit a bid for this solicitation (Bidders) are subject to Charter Section 470 (c) (12) and related ordinances. As a result, Bidders may not make campaign contributions to and or engage in fundraising for certain elected City officials or candidates for elected City office from the time they submit the bid until either the contract is signed by City of Los Angeles, or the bid is withdrawn by Bidder, or City rejects all bids, whichever is earlier. The prohibitions continue for 12 months after Contract is signed by City for successful Bidder, and principals, subcontractors of at least \$100,000, and principals of such subcontractors.
- B Bidders must submit signed CEC Form 50 through CDBON at the time of bid. Bids submitted without signed CEC Form 50 shall be deemed nonresponsive. The original signature copy shall be submitted with the 4-day documents in conformance with NOTICE INVITING BIDS Section, Subsection 09.
- C Bidders must submit signed CEC Form 55 (which requires bidders to identify their principals) through CDBON at the time of bid. The original signature copy shall be submitted with the 4-day documents in conformance with NOTICE INVITING BIDS Section, Subsection 09. Bidders shall notify their principals and subcontractors in writing of the restrictions and include the notice in contracts with subcontractors. Bidders shall also identify their subcontractors performing \$100,000 or more in Work on Contract, and the principals of these subcontractors. Bidders are only required to identify vendors or suppliers who provide additional services and \$100,000 or more in materials or equipment. Bidders are not required to identify vendors or suppliers if no services are provided. Bids submitted without signed CEC Form 55 that, at a minimum, contains required information for Bidder and its principals shall be deemed nonresponsive. If required information for any subcontractors and principals of subcontractors is not included on CEC Form 55 at the time of bid, updated CEC Form 55 containing all required information shall be submitted by apparent low Bidder, or other Bidders when requested by Engineer, within 4 Business Days of the date and time of deadline for bid submittal or the bid shall be deemed nonresponsive.
- D Bidders who fail to comply with City law may be subject to penalties, termination of Contract, and debarment. Additional information regarding these restrictions and requirements may be obtained from City Ethics Commission at (213) 978-1960 or <https://ethics.lacity.org/>.
- E CEC Forms 50 and 55 may be obtained from City Ethics Commission at <https://ethics.lacity.org/contracts/bidders/>.



## 08 IRAN CONTRACTING ACT OF 2010

- A California Legislature adopted the Iran Contracting Act of 2010 to respond to policies of Iran in a uniform fashion (PCC § 2201(q)). Iran Contracting Act prohibits Bidders engaged in investment activities in Iran from submitting bids for, or entering into or renewing contracts with public entities for goods and services of one million dollars (\$1,000,000) or more (PCC § 2203(a)). In accordance with California Public Contract Code Sections 2200-2208, Bidders submitting bids for, entering into, or renewing contracts with Harbor Department for goods and services estimated at \$1,000,000 or more are required to complete, sign, and submit Iran Contracting Act of 2010 Compliance Affidavit included as Subsection 00030.09 of this Section.

09 IRAN CONTRACTING ACT OF 2010 COMPLIANCE AFFIDAVIT  
(California Public Contract Code Sections 2200-2208)

California Legislature adopted Iran Contracting Act of 2010 to respond to policies of Iran in a uniform fashion (PCC § 2201(q)). Iran Contracting Act prohibits Bidders engaged in investment activities in Iran from submitting bids for, or entering into or renewing contracts with public entities for goods and services of one million dollars (\$1,000,000) or more (PCC § 2203(a)). A Bidder who "engages in investment activities in Iran" is defined as either:

- A Bidder providing goods or services of twenty million dollars (\$20,000,000) or more in the energy sector of Iran, including provision of oil or liquefied natural gas tankers, or products used to construct or maintain pipelines used to transport oil or liquefied natural gas, for the energy sector of Iran; or
- A Bidder that is a financial institution (as that term is defined in 50 U.S.C. § 1701) that extends twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that person shall use the credit to provide goods or services in the energy sector in Iran and is identified on a list created by the California Department of General Services (DGS) pursuant to PCC § 2203(b) as a person engaging in the investment activities in Iran.

Bidder shall certify that at the time of submitting a bid for a new contract or for the renewal of an existing contract, he or she is not identified on the DGS list of ineligible businesses or persons and that Bidder is not engaged in investment activities in Iran in violation of Iran Contracting Act of 2010.

California law establishes penalties for providing false certifications, including civil penalties equal to the greater of \$250,000 or twice the amount of the contract for which the false certification was made; contract termination; and three-year ineligibility to bid on contracts (PCC § 2205).

To comply with Iran Contracting Act of 2010, Bidder shall complete and sign ONE of the options shown below and submit with the bid.

### OPTION #1: CERTIFICATION

I, the official named below, certify that I am duly authorized to execute this certification on behalf of Bidder or financial institution identified below, and that Bidder or financial institution identified below is not on the current DGS list of persons engaged in investment activities in Iran and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person or vendor, for 45 days or more, if that other person or vendor shall use the credit to provide goods or services in the energy sector in Iran and is identified on the current DGS list of persons engaged in investment activities in Iran.

Name of Bidder/Financial Institution (Printed): El Capitan Environmental Services

Signed by: \_\_\_\_\_  
 \_\_\_\_\_ (Authorized Signature)  
 Harry Boyajian  
 \_\_\_\_\_ (Printed Name)  
 President  
 \_\_\_\_\_ (Title of Person Signing)

### OPTION #2: EXEMPTION

Pursuant to PCC § 2203(c) and (d), a public entity may permit a Bidder or financial institution engaged in investment activities in Iran, on a case-by-case basis, to be eligible for, or to submit a bid for, or enter into, or renew, a contract for services. If Bidder or financial institution identified below has obtained an exemption from the certification requirement under Iran Contracting Act of 2010, Bidder or financial institution shall complete and sign below and attach documentation demonstrating the exemption approval.

Name of Bidder/Financial Institution (Printed): \_\_\_\_\_  
 Signed by: \_\_\_\_\_ (Authorized Signature)  
 \_\_\_\_\_ (Printed Name)  
 \_\_\_\_\_ (Title of Person Signing)

## 10 LOCAL BUSINESS PREFERENCE PROGRAM (LBPP)

- A LBPP is based on findings that significant benefits are associated with local business preference programs. These benefits include an increase in local jobs and expenditures in the local private sector. Recognizing that (1) Harbor Department operations impact the five regional counties, especially the movement of goods throughout the southland; (2) Harbor Department conducts business with companies in all 5 counties; (3) having these businesses in close proximity to Port of Los Angeles, makes port operations more efficient; (4) these counties are currently experiencing high commercial real estate vacancy rates and high unemployment rates, LBPP aims to encourage businesses to compete for City contracting opportunities, to locate operations in the area, to encourage existing Local Business Enterprises (LBEs) to refrain from relocating to less expensive areas, and to increase local jobs and expenditures.
- B Exemption:
- 1 Any contracts that involve an expenditure of state or federal grant funds, or contracts with any funds not entirely within the control of Harbor Department are exempt from LBPP, as well as any other contract when it is in the best interest of Harbor Department to exempt such contract prior to the date and time of deadline for bid submittal. Refer to NOTICE INVITING BIDS Section for information on whether LBPP applies to Project.
- C Local Business Preference Program (LBPP): The following sets forth the specific requirements of LBPP:
- 1 Los Angeles Harbor Department defines an LBE as:
- a A business headquartered within Los Angeles, Orange, Riverside, San Bernardino, or Ventura Counties. "Headquartered" shall mean that the business physically conducts and manages all of its operations from a location in the above-named counties; or
- b A business that has at least 50 full-time employees, or 25 full-time employees for specialty marine contracting firms, working within the boundaries of Los Angeles, Orange, Riverside, San Bernardino, or Ventura Counties. A specialty marine contracting firm is a firm whose work is marine improvements, which is defined as work over, under or adjacent to water, such as dredging, installing wharves, piles, electrical above water, water systems above water, and the like.

## 00030.10 Cont'd.

## 2 Local Business Preference:

- a LBPP allows LBE bidders to receive an 8 percent preference for any contract opportunity that is competitively awarded. The local preference is applicable to all construction contracts greater than \$150,000. When applying the preference to construction contracts awarded based on low bid, the total price bid by an LBE shall be reduced by 8 percent. The reduced bid amount shall be deemed the amount bid by that bidder; however, the resulting contract price shall be the amount bid by the successful bidder prior to allocating the local preference percentage. The maximum preference shall not exceed \$1,000,000.
- b Below is an example of how the local preference is applied to contracts awarded on a low-bid basis:

|               | Non-local Firm | Local Firm A | Local Firm B    |  |
|---------------|----------------|--------------|-----------------|--|
| Original Bid  | \$10,500,000   | \$11,000,000 | \$12,750,000    |  |
| 8% Preference | N/A            | (\$880,000)  | (\$1,000,000) * |  |
| Final Bid     | \$10,500,000   | \$10,120,000 | \$11,750,000    |  |

\*Maximum Preference

In the example above, Local Firm A was the lowest bidder after applying the local preference. Although the final bid amount is \$10,120,000, Harbor Department would award a contract based on the original bid in the amount of \$11,000,000. Harbor Department would have expended \$500,000 more on the project as a result of the local preference, when compared to the bid submitted by the non-local firm.

## 3 Local Subcontractor/ Supplier Preference:

- a LBPP allows non-local bidders to receive up to a maximum 5 percent preference if the bidder identifies local subcontractors or suppliers that shall perform Work under Contract. LBPP allows for 1 percent preference, up to a maximum of 5 percent, for every 10 percent of Work that is subcontracted to or supplied by LBEs. The maximum preference shall not exceed \$1,000,000.

00030.10 Cont'd.

- b LBPP applies only to first tier local subcontractors. LBPP applies also to local suppliers if they are first tier.
- c The following is an example of non-local bidders with LBE subcontractors as applied to contracts awarded on a low bid basis.

## 00030.10 Cont'd.

|              | <u>Non-Local Firm A</u> | <u>Non-Local Firm B</u> | <u>Non-Local Firm C</u> | <u>Local Firm D</u> |
|--------------|-------------------------|-------------------------|-------------------------|---------------------|
| Original Bid | \$13,900,000            | \$13,600,000            | \$14,200,000            | \$14,500,000        |
| Preference % | 3%                      | 0%                      | 5%*                     | 8%                  |
| Preference   | (\$417,000)             | \$0                     | (\$710,000)             | (\$1,000,000)*      |
| Final Bid    | \$13,483,000            | \$13,600,000            | \$13,490,000            | \$13,500,000        |

\*Maximum preference

|                      |                | <u>Sub-bid</u> | <u>Percent of bid</u> | <u>Percent Preference</u> |
|----------------------|----------------|----------------|-----------------------|---------------------------|
| <u>Firm A's Subs</u> | LBE Sub A1     | \$1,500,000    | 10.79%                |                           |
|                      | LBE Sub A2     | \$2,000,000    | 14.39%                |                           |
|                      | LBE Sub A3     | \$1,600,000    | 11.51%                |                           |
|                      | Subtotal       | \$5,100,000    | 36.69%                | 3%                        |
|                      | Non LBE Sub A4 | \$1,150,000    | 8.27%                 |                           |
|                      | Non LBE Sub A5 | \$700,000      | 5.04%                 |                           |
|                      | Subtotal       | \$1,850,000    | 13.31%                |                           |
| portion by prime     |                | \$6,950,000    | 50.00%                |                           |
|                      | TOTAL          | \$13,900,000   | 100.00%               |                           |
|                      | Adjusted Bid   | \$13,483,000   |                       |                           |

|                      |                | <u>Sub-bid</u> | <u>Percent of bid</u> | <u>Percent Preference</u> |
|----------------------|----------------|----------------|-----------------------|---------------------------|
| <u>Firm B's Subs</u> | Non LBE Sub B1 | \$1,020,000    | 7.50%                 |                           |
|                      | Non LBE Sub B2 | \$1,110,000    | 8.16%                 |                           |
|                      | Non LBE Sub B3 | \$990,000      | 7.28%                 |                           |
|                      | Non LBE Sub B4 | \$3,680,000    | 27.06%                |                           |
|                      | Subtotal       | \$6,800,000    | 50.00%                | 0%                        |
| portion by prime     |                | \$6,800,000    | 50.00%                |                           |
|                      | TOTAL          | \$13,600,000   | 100.00%               |                           |
|                      | Adjusted Bid   | \$13,600,000   |                       |                           |

|                      |              | <u>Sub-bid</u> | <u>Percent of bid</u> | <u>Percent Preference</u> |
|----------------------|--------------|----------------|-----------------------|---------------------------|
| <u>Firm C's Subs</u> | LBE Sub C1   | \$900,000      | 6.34%                 |                           |
|                      | LBE Sub C2   | \$1,000,000    | 7.04%                 |                           |
|                      | LBE Sub C3   | \$2,390,000    | 16.83%                |                           |
|                      | LBE Sub C4   | \$4,230,000    | 29.79%                |                           |
|                      | Subtotal     | \$8,520,000    | 60.00%                | 5%                        |
| portion by prime     |              | \$5,680,000    | 40.00%                |                           |
|                      | TOTAL        | \$14,200,000   | 100.00%               |                           |
|                      | Adjusted Bid | \$13,490,000   |                       |                           |

## 00030.10 Cont'd.

- d In the previous example, Non-Local Firm A was the lowest bidder after applying the preference for local subcontractors. Although the final bid amount is \$13,483,000, Harbor Department would award a contract based on the original bid in the amount of \$13,900,000. Harbor Department would have expended \$300,000 more on the project as a result of the local preference, when compared to Non-Local Firm B. Note that fractions of a percent are rounded down when calculating percent preference.
- D In order for Harbor Department staff to determine the appropriate LBE preference, Bidders shall complete, sign, notarize and submit Contractor Ownership/RAMP Outreach/Local Business Enterprise Affidavit in Subsection 00030.11 of BIDDING DOCUMENTS Section, fill out subcontractor list online provided on CDBON, fill out Contractor/Subcontractor/Supplier Information Form in Subsection 00660.01 and complete, sign, notarize and submit Subcontractor/Supplier Ownership and Local Business Enterprise Affidavit in Subsection 00660.02.

In the event Contractor claims a Local Business or local subcontractor/supplier preference in its bid and is awarded Contract, if at any time during the term of Contract, Contractor fails to remain in compliance with the requirements of the claimed preference, Contractor shall be considered in material breach of Contract. In addition to any other remedy available to Department under Contract or by operation of law, Department may withhold payments to Contractor or recover previous payments in the amount of the preference claimed in Contractor's bid and assess the costs of Department's audit of books and records of Contractor and its subcontractors/suppliers. In the event Contractor falsifies or misrepresents information contained in any form or other willful noncompliance as determined by Department, Department may disqualify Contractor from participation in Department contracts for a period of up to five years.



## 11 CONTRACTOR OWNERSHIP / RAMP OUTREACH / LOCAL BUSINESS ENTERPRISE AFFIDAVIT

## AFFIDAVIT

"The undersigned declares under penalty of perjury pursuant to the laws of the State of California that the following is true and correct and include all material information necessary to identify and explain the operations of

**El Capitan Environmental Services**

Name of Firm

as well as the ownership thereof. Further, the undersigned agrees to provide Harbor Department, upon request, complete and accurate information regarding ownership in the named firm, and all of its domestic and foreign affiliates, any proposed changes of the ownership and to permit the audit and examination of firm ownership documents, and the ownership documents of all of its domestic and foreign affiliates, in association with this Contract."

Furthermore, the undersigned certifies that it has utilized RAMP to outreach to potential SBE/VSBE/MBE/WBE/DVBEs for potential subcontracting opportunities associated with this bid.

Please indicate the ownership of your company as defined in Subsection 00030.06 of BIDDING DOCUMENTS Section:

| Small Business Enterprise (SBE) ☒ Yes ☐ No (Circle One)

| Very Small Business Enterprise (VSBE) | Yes ☒ No (Circle One)

Is Your Firm an MBE Yes ☒ No ☐ WBE Yes ☒ No ☐ DVBE Yes ☒ No ☐ OBE Yes ☒ No ☐ (Circle as appropriate)

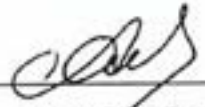
Local Business Preference Program: Please indicate the local business enterprise (LBE) status of your company as defined in Subsection 00030.10 of BIDDING DOCUMENTS Section:

☒ LBE (Circle One)  
Non-LBE (Circle One)

If you are a non-LBE, please indicate below whether you are claiming a Local Subcontractor Preference (as defined in Subsection 00030.10 of BIDDING DOCUMENTS Section) and, if so, the preference percentage claimed (maximum preference of 5 percent).

Local Subcontractor Preference: \_\_\_\_\_ percent preference (enter percent claimed)

\_\_\_\_\_ Not claiming Local Subcontractor Preference (check if not claiming preference)

Signature  \_\_\_\_\_

Title President

Printed Name Harry Boyajian

Date Signed November 04, 2025

NOTARY

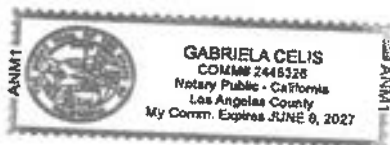
(State of California)

County of Los Angeles



00030.11 Cont'd.

On 11/04/2025 before me, Gabriela Celis Notary Public  
 Date Here insert Name and Title of the Officer  
 personally appeared Harry Boyajian  
 Name(s) of Signer(s)



Place Notary Seal Above

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 Gabriela Celis Gabriela Celis Notary Public  
 Signature of Notary Public

# CALIFORNIA 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 Los Angeles

On 11/04/2025 before me, Gabriela Celis Notary Public

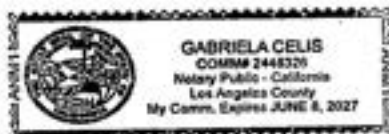
Date Here Insert Name and Title of the Officer

personally appeared Harry Bayajian Name(s) of Signer(s)

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

[Signature]  
Signature of Notary Public

Place Notary Seal and/or Stamp Above

## OPTIONAL

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

### Description of Attached Document

Title or Type of Document: Affidavit

Document Date: 11/04/2025 Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: N/A

### Capacity(ies) Claimed by Signer(s)

Signer's Name: \_\_\_\_\_

☐ Corporate Officer – Title(s): \_\_\_\_\_

☐ Partner – ☐ Limited ☐ General

☐ Individual ☐ Attorney in Fact

☐ Trustee ☐ Guardian or Conservator

☐ Other: \_\_\_\_\_

Signer is Representing: \_\_\_\_\_

Signer's Name: \_\_\_\_\_

☐ Corporate Officer – Title(s): \_\_\_\_\_

☐ Partner – ☐ Limited ☐ General

☐ Individual ☐ Attorney in Fact

☐ Trustee ☐ Guardian or Conservator

☐ Other: \_\_\_\_\_

Signer is Representing: \_\_\_\_\_

11A MONTHLY SUBCONTRACTOR / SUPPLIER MONITORING REPORT

SAMPLE MONTHLY SUBCONTRACTOR/SUPPLIER MONITORING REPORT

Instructions: Please indicate the SBE/VSBE/MBE/WBE/OBE/DVBE participation levels achieved for the month of \_\_\_\_\_ covered by the referenced contract number.

|                            |                 |                     |                        |
|----------------------------|-----------------|---------------------|------------------------|
| Contract No.               | Spec. No.       | Division            | Contract Administrator |
| Contractor                 | Group*          |                     | Contract Title/Project |
| Original Contract Amount   | \$10,000,000.00 | Contract Start Date | Contract End Date      |
| Total Earned Value to Date | \$ 6,000,000.00 |                     |                        |

Original Proposed Subcontractor Percentages SBE 22.00% VSBE 7.00% MBE 20.00% WBE 20.00% OBE 60.00% DVBE 0.00%  
Contract-required minimum percentages (in parentheses) (21%) (6%)  
The VSBE and Total SBE min-required percentages above, are not additive. The Total SBE percentage includes VSBE participation.

|                                   |                       |                        |           |                      | PROPOSED                    |                                 | ACTUALS                    |                                          |                                     |
|-----------------------------------|-----------------------|------------------------|-----------|----------------------|-----------------------------|---------------------------------|----------------------------|------------------------------------------|-------------------------------------|
|                                   | Name of Subcontractor | Type of Work Performed | SBE/VSBE  | MBE/WBE/OBE/<br>DVBE | Original Proposed<br>Amount | Original Proposed<br>Percentage | Earned<br>Value to<br>Date | Earned<br>Value to<br>Date<br>Percentage | Total Earned<br>Value<br>Percentage |
| 1                                 | Construction Firm A   | Asphalt Paving         | VSBE, SBE | MBE, WBE             | \$300,000.00                | 3.00%                           | \$150,000.00               | 50.00%                                   | 2.50%                               |
| 2                                 | Construction Firm B   | Demolition             | VSBE, SBE | OBE                  | \$200,000.00                | 2.00%                           | \$25,000.00                | 12.50%                                   | 0.42%                               |
| 3                                 | Supplier No. 1        | Concrete Piles         | VSBE, SBE | OBE                  | \$200,000.00                | 2.00%                           | \$75,000.00                | 37.50%                                   | 1.25%                               |
| VSBE Subtotal:                    |                       |                        |           |                      | \$700,000.00                | 7.00%                           | \$250,000.00               | 35.71%                                   | 4.17%                               |
| 1                                 | Construction Firm C   | Low Voltage Electrical | SBE       | WBE, DVBE            | \$500,000.00                | 5.00%                           | \$100,000.00               | 20.00%                                   | 1.67%                               |
| 2                                 | Supplier No. 2        | Precast Concrete Pipe  | SBE       | MBE                  | \$1,000,000.00              | 10.00%                          | \$250,000.00               | 25.00%                                   | 4.17%                               |
| 3                                 |                       |                        | SBE       |                      |                             | 0.00%                           |                            | #DIV/0!                                  | 0.00%                               |
| SBE Subtotal (Exclusive of VSBE): |                       |                        |           |                      | \$1,500,000.00              | 15.00%                          | \$350,000.00               | 23.33%                                   | 5.83%                               |
| Total SBE (Inclusive of VSBE):    |                       |                        |           |                      | \$2,200,000.00              | 22.00%                          | \$600,000.00               | 27.27%                                   | 10.00%                              |
| 1                                 | Construction Firm D   | Concrete Pumping       | No        | OBE                  | \$500,000.00                | 5.00%                           | \$400,000.00               | 80.00%                                   | 6.67%                               |
| 2                                 | Construction Firm F   | Concrete Sawing        | No        | MBE                  | \$500,000.00                | 5.00%                           | \$500,000.00               | 100.00%                                  | 8.33%                               |
| 3                                 |                       |                        | No        |                      |                             | 0.00%                           |                            | #DIV/0!                                  | 0.00%                               |
| 4                                 |                       |                        | No        |                      |                             | 0.00%                           |                            | #DIV/0!                                  | 0.00%                               |
| 5                                 |                       |                        | No        |                      |                             | 0.00%                           |                            | #DIV/0!                                  | 0.00%                               |
| Non-SBE Total:                    |                       |                        |           |                      | \$1,000,000.00              | 10.00%                          | \$900,000.00               | 90.00%                                   | 15.00%                              |

Directions:  
Original Proposed Percentage =  
Earned Value to Date Percentage =  
Total Earned Value Percentage =

Original Proposed Amount / Original Contract Amount  
Earned Value to Date / Original Proposed Amount  
Earned Value to Date / Total Earned Value to Date

00030.11A Cont'd.

MONTHLY SUBCONTRACTOR/SUPPLIER MONITORING REPORT

Instructions: Please indicate the SBE/VSBE/MBE/WBE/OBE/DVBE participation levels achieved for the month of \_\_\_\_\_ covered by the referenced contract number.

|                            |           |                     |                        |
|----------------------------|-----------|---------------------|------------------------|
| Contract No.               | Spec. No. | Division            | Contract Administrator |
| Contractor                 |           | Group*              | Contract Title/Project |
| Original Contract Amount   |           | Contract Start Date | Contract End Date      |
| Total Earned Value to Date |           |                     |                        |

|                                                                                                                                |           |            |           |           |           |            |
|--------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|-----------|-----------|------------|
| Original Proposed Subcontractor Percentages                                                                                    | SBE 0.00% | VSBE 0.00% | MBE 0.00% | WBE 0.00% | OBE 0.00% | DVBE 0.00% |
| Contract-required minimum percentages (in parentheses)                                                                         | (0%)      | (0%)       |           |           |           |            |
| The VSBE and Total SBE min-required percentages above, are not additive. The Total SBE percentage includes VSBE participation. |           |            |           |           |           |            |

|                |                       |                        |           |                   | PROPOSED                 |                              | ACTUALS              |                                 |                               |
|----------------|-----------------------|------------------------|-----------|-------------------|--------------------------|------------------------------|----------------------|---------------------------------|-------------------------------|
|                | Name of Subcontractor | Type of Work Performed | SBE/VSBE  | MBE/WBE/OBE /DVBE | Original Proposed Amount | Original Proposed Percentage | Earned Value to Date | Earned Value to Date Percentage | Total Earned Value Percentage |
| 1              |                       |                        | VSBE, SBE |                   |                          |                              |                      |                                 |                               |
| 2              |                       |                        | VSBE, SBE |                   |                          |                              |                      |                                 |                               |
| 3              |                       |                        | VSBE, SBE |                   |                          |                              |                      |                                 |                               |
| VSBE Subtotal: |                       |                        |           |                   |                          |                              |                      |                                 |                               |

|   |  |  |     |  |  |  |  |  |  |
|---|--|--|-----|--|--|--|--|--|--|
| 1 |  |  | SBE |  |  |  |  |  |  |
| 2 |  |  | SBE |  |  |  |  |  |  |
| 3 |  |  | SBE |  |  |  |  |  |  |

SBE Subtotal (Exclusive of VSBE):

Total SBE (Inclusive of VSBE):

|   |  |  |    |  |  |  |  |  |  |
|---|--|--|----|--|--|--|--|--|--|
| 1 |  |  | No |  |  |  |  |  |  |
| 2 |  |  | No |  |  |  |  |  |  |
| 3 |  |  | No |  |  |  |  |  |  |
| 4 |  |  | No |  |  |  |  |  |  |
| 5 |  |  | No |  |  |  |  |  |  |

Non-SBE Total:

Directions:  
Original Proposed Percentage =  
Earned Value to Date Percentage =  
Total Earned Value Percentage =  
\*Group = SBE / VSBE / MBE / WBE / OBE / DVBE

Original Proposed Amount / Original Contract Amount  
Earned Value to Date / Original Proposed Amount  
Earned Value to Date / Total Earned Value to Date

## 12 PROPOSAL

Los Angeles, California

To Board of Harbor Commissioners:

The undersigned, having carefully examined Contract Documents for Specification No. 2852 at Port of Los Angeles, and having personally visited the site of Work and having become familiar with the conditions based upon the site visit and review of the reference materials, hereby proposes to furnish all materials and perform all Work required to complete Project in accordance with Contract Documents, within the time set forth in Contract for the Grand Total stated in CDBON's bid item online form.

The undersigned represents all Work indicated in Contract Documents is included within the scope of Work of Contract, is included in the Grand Total for the item(s) stated in the online form, and shall not be construed to be extra Work for which extra compensation can be claimed.

The undersigned has carefully checked all figures inserted in the online form and understands that Board shall not be responsible for any errors or omissions on the part of the undersigned in making the bid.

The undersigned agrees upon acceptance of the bid for all Work indicated on Contract Documents, to enter into and execute an agreement, of which the documents listed in the table of contents of said Specification No. 2852 shall be made a part, at the Grand Total stated in the online form, and to furnish and execute such bonds and insurance as required.

The undersigned furthermore agrees that in case of default in execution of such agreement, or in furnishing the required bonds, the security accompanying this Proposal and the money payable thereon shall be forfeited and remain the property of Department. Such forfeiture shall not preclude recovery of any sum over and above the amount posted or guaranteed to which Department sustains damage by reason of such default or failure to contract.

The undersigned agrees that Board reserves the right, in its sole discretion, to accept or reject the bid, without price escalation, at any time within ninety (90) days after date and time of deadline to submit bids.

00030.12 Cont'd.

The undersigned acknowledges receipt of all addenda and accepts all conditions contained therein.

Contractor's License No. 640045 Expiration Date 03/31/2026

By Harry Boyajian  
Signature

 11/11/2025  
Signature

Address 11080 Tuxford Street, Sun Valley, CA 91352

Contractor declares that its authorized Taxpayer Identification Number (TIN) is 95-4351849. The above signed understands no payments shall be made under Contract without a valid TIN number.

Bidder Is\* Corporation  
\_\_\_\_\_

If a partnership, state names of partners. If a corporation, state names of president and secretary.

Harry Boyajian - President

Harry Boyajian - Secretary

The representations made herein are made under penalty of perjury.

\*Corporation, Partnership, Limited Partnership, Individual

\*If Bidder is a corporation, bid must be signed by a person authorized to do so by bylaw or resolution of that corporation.

\*If Bidder is a partnership, bid must be signed by all partners unless bid is accompanied by proof that signing partner(s) is (are) authorized to bind partnership.

00030.12 Cont'd.

LOS ANGELES HARBOR DEPARTMENT  
HEADQUARTERS LOCATION FORM

AT THE REQUEST OF A LOS ANGELES CITY COUNCIL MOTION, ALL BIDDERS SHALL SUBMIT THE FOLLOWING INFORMATION AT THE TIME OF BID OR PROPOSAL SUBMITTAL. THIS IS FOR INFORMATION ONLY AND SHALL IN NO WAY AFFECT CONTRACT SELECTION PROCESS.

DATE: November 11, 2025 SPECIFICATION NO. 2852PROJECT TITLE: 2026-2028 SITE IMPROVEMENTSCOMPANY NAME: El Capitan Environmental ServicesCONTACT PERSON: Harry BoyajianCOMPANY HEADQUARTERS ADDRESS: 11080 Tuxford StreetCITY: Sun Valley STATE: California ZIP CODE: 91352COMPANY LOCATION ADDRESS 11080 Tuxford StreetCITY: Sun Valley STATE: California ZIP CODE: 91352PHONE NUMBER: 818-768-9222 NUMBER OF EMPLOYEES: 15PERCENTAGE OF EMPLOYEES WHO RESIDE IN THE CITY OF LOS ANGELES 67%Harry Boyajian / President

NAME/TITLE





### 13 BID PROPOSAL LINE ITEMS

The bid proposal line items are located on Construction Division Business Opportunities Network (CDBON) online system. Enter bidder's unit prices in the online form. The extended prices for each bid item are automatically calculated by CDBON's online system based on unit prices entered. The Grand Total is automatically summed from the extended prices. A printed version of the bid proposal line items is included at the end of this Subsection of BIDDING DOCUMENTS Section of Specifications for information only.

#### CONTINGENCY ITEM(S)

Work described in the contingency item(s) in the online form may or may not be necessary depending on conditions discovered in the field after Contract award. If Engineer determines that field conditions justify Work listed in the contingency items, the prices for the contingency items shall be used to adjust Contract amount for Work ordered by Engineer.

#### ALLOWANCE ITEM(S)

Work described in the allowance item(s) in the online form may or may not be necessary depending on conditions discovered in the field after Contract Award. If field conditions justify Work listed in the allowance items, Engineer shall issue a written authorization to proceed with Work item(s) described in the online form. Work under allowance items is exclusive of Work required elsewhere in Contract Documents unless specifically referenced. All Work performed under these allowance items shall be performed either on a negotiated cost basis prior to performing Work in accordance with the provisions of Subsection 01000.35 "Authority for Adjustments", or on a Time and Material basis in accordance with the provisions of Subsection 01000.34 "Cost-Plus Change Order Work (Change Orders)" of GENERAL CONDITIONS Section. Upon completion of Contract, any unused allowance remaining under each allowance bid item shall be credited back to Department.

Award: Award, if made, shall be made to a single Contractor. The lowest bidder shall be based on the sum of all the items for which a bid is requested, including all contingency items regardless of whether all of those items are actually awarded, and Local Business Preference indicated below. The awarded Contractor's bid results provided in CDBON online system shall be inserted at the end of Subsection 00030.13 and shall become part of any Contract awarded.



00030.13 Cont'd.

LOCAL BUSINESS PREFERENCE (Not to Exceed \$1,000,000. Reduction amount shall be applied, if necessary, by Harbor Department)

Prime is Local Business (8 percent preference)  
OR

Prime is not a Local Business but subcontractor(s) or supplier(s)  
is(are) Local Business(es) (up to 5 percent preference. Not to Exceed  
\$1,000,000)

The subcontractor percent preference shall be applied by Department as  
described in Subsection 00030.10.

REDUCED BID AMOUNT (The reduced bid amount shall be used for Award purposes)

| Section  | ItemCode | ItemDesc                                                                                                                                                                                                                                                                                                                                                                                                     | UnitOfMeasure | Quantity | UnitPrice |
|----------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|-----------|
| Main Bid | 1        | Asphalt Concrete Pavement (Less Than Equal To 250 Tons Per Order): For furnishing transportation, labor, materials, and equipment to furnish and place asphalt concrete pavement (including tack coat) including installation adjacent to railroad tracks, excluding equipment move-in and move-out costs, including additions to or deductions from the approximate quantity stipulated                     | Tons          | 1000     | \$ 210.00 |
| Main Bid | 2        | Asphalt Concrete Pavement (Greater Than 250 Tons and Less Than 1,000 Tons Per Order): For furnishing transportation, labor, materials, and equipment to furnish and place asphalt concrete pavement (including tack coat) including installation adjacent to railroad tracks, excluding equipment move-in and move-out costs, including additions to or deductions from the approximate quantity stipulated  | Tons          | 5000     | \$ 190.00 |
| Main Bid | 3        | Asphalt Concrete Pavement (1,000 Tons or Greater and Less Than 10,000 Tons Per Order): For furnishing transportation, labor, materials, and equipment to furnish and place asphalt concrete pavement (including tack coat) including installation adjacent to railroad tracks, excluding equipment move-in and move-out costs, including additions to or deductions from the approximate quantity stipulated | Tons          | 5000     | \$ 190.00 |
| Main Bid | 4        | Asphalt Concrete Pavement Between Railroad Tracks: For furnishing transportation, labor, materials, and equipment to furnish and place asphalt concrete pavement between railroad tracks where ordinary paving equipment cannot be used, including additions to or deductions from the approximate quantity stipulated                                                                                       | Tons          | 500      | \$ 225.00 |

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| Main Bid | 5  | Move-In and Move-Out Paving Machine: For furnishing transportation, labor, materials, and equipment to move-in and move-out paving machine required for placing asphalt concrete pavement, including additions to or deductions from the approximate quantity stipulated                                                                                           | Move-Ins and Move-Outs | 15     | \$ 4,500.00 |
| Main Bid | 6  | Concrete Sidewalk: For furnishing transportation, labor, materials, and equipment to construct 4 inches thick concrete sidewalk, including additions to or deductions from the approximate quantity stipulated                                                                                                                                                     | Square Feet            | 2500   | \$ 29.00    |
| Main Bid | 7  | Integral Curb and Gutter: For furnishing transportation, labor, materials, and equipment to construct Type "C" integral concrete curb and gutter in accordance with City of Los Angeles Bureau of Engineering Department of Public Works Standard Plan S-410-2, including additions to or deductions from the approximate quantity stipulated                      | Linear Feet            | 250    | \$ 150.00   |
| Main Bid | 8  | Concrete Gutter: For furnishing transportation, labor, materials, and equipment to construct 2 feet wide concrete gutter in accordance with City of Los Angeles Bureau of Engineering Department of Public Works Standard Plan S-410-2, including additions to or deductions from the approximate quantity stipulated                                              | Linear Feet            | 250    | \$ 115.00   |
| Main Bid | 9  | Furnish Asphalt Concrete: For furnishing transportation, labor, materials, and equipment to load Department vehicles with asphalt concrete at Contractor's supplying plant, including additions to or deductions from the approximate quantity stipulated                                                                                                          | Tons                   | 200    | \$ 138.00   |
| Main Bid | 10 | Cold Milling: For furnishing transportation, labor, materials, and equipment to remove existing asphalt concrete pavement by cold milling with machines over 48 inches wide, haul away, and dispose cuttings off Department property excluding equipment move-in and move-out costs, including additions to or deductions from the approximate quantity stipulated | Square Yard Inches     | 100000 | \$ 6.50     |

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| Main Bid | 11 | Move-In and Move-Out Cold Milling Equipment: For furnishing transportation, labor, materials, and equipment to move-in and move-out equipment required for cold milling, including additions to or deductions from the approximate quantity stipulated                                                                                                                                                      | Move-Ins and Move-Outs | 10    | \$ 4,250.00 |
| Main Bid | 12 | Mini Cold Milling: For furnishing transportation, labor, materials, and equipment to remove existing asphalt concrete pavement by mini cold milling with machines 48 inches or less wide, haul away, and dispose of cuttings off Department property excluding move-in and move-out costs, including additions to or deductions from the approximate quantity stipulated                                    | Square Yard Inches     | 50000 | \$ 7.50     |
| Main Bid | 13 | Move-In and Move-Out Mini Cold Milling Equipment: For furnishing transportation, labor, materials, and equipment to move-in and move-out equipment required for mini cold milling, including additions to or deductions from the approximate quantity stipulated                                                                                                                                            | Move-Ins and Move-Outs | 10    | \$ 3,000.00 |
| Main Bid | 14 | Slurry Seal: For furnishing transportation, labor, materials, and equipment to furnish and place slurry seal, including additions to or deductions from the approximate quantity stipulated                                                                                                                                                                                                                 | Square Yards           | 15000 | \$ 3.25     |
| Main Bid | 15 | Department-Furnished Crushed Miscellaneous Base (Less than or Equal to 250 Cubic Yards Per Order): For furnishing transportation, labor, and equipment to load, haul, place, and compact Department-furnished crushed miscellaneous base, not adjacent to railroad tracks, in minimum quantities of 10 cubic yards per order, including additions to or deductions from the approximate quantity stipulated | Cubic Yards            | 1000  | \$ 48.00    |

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| Main Bid | 16 | Department-Furnished Crushed Miscellaneous Base (Greater than 250 Cubic Yards Per Order): For furnishing transportation, labor, and equipment to load, haul, place, and compact Department-furnished crushed miscellaneous base, not adjacent to railroad tracks, in minimum quantities of 251 cubic yards per order, including additions to or deductions from the approximate quantity stipulated                 | Cubic Yards | 10000 | \$ 42.00  |
| Main Bid | 17 | Contractor-Furnished Crushed Miscellaneous Base (Less Than or Equal to 250 Cubic Yards Per Order): For furnishing transportation, labor, materials, and equipment to furnish, place, and compact Contractor-furnished crushed miscellaneous base, not adjacent to railroad tracks, in minimum quantities of 10 cubic yards per order, including additions to or deductions from the approximate quantity stipulated | Cubic Yards | 250   | \$ 118.00 |
| Main Bid | 18 | Contractor-Furnished Crushed Miscellaneous Base (Greater Than 250 Cubic Yards Per Order): For furnishing transportation, labor, materials, and equipment to furnish, place, and compact Contractor-furnished crushed miscellaneous base, not adjacent to railroad tracks, in minimum quantities of 251 cubic yards per order, including additions to or deductions from the approximate quantity stipulated         | Cubic Yards | 1000  | \$ 73.00  |
| Main Bid | 19 | Excavate, Stockpile, and Dispose of Soil Material (Less Than or Equal to 1,000 Cubic Yards Per Order): For furnishing transportation, labor, materials, and equipment to excavate, stockpile, haul away, and dispose of off Department property soil material, including additions to or deductions from the approximate quantity stipulated                                                                        | Cubic Yards | 5000  | \$ 76.00  |
| Main Bid | 20 | Excavate, Stockpile, and Dispose of Soil Material (Greater Than 1,000 Cubic Yards Per Order): For furnishing transportation, labor, materials, and equipment to excavate, stockpile, haul away, and dispose of off Department property soil material, including additions to or deductions from the approximate quantity stipulated                                                                                 | Cubic Yards | 3000  | \$ 76.00  |

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| Main Bid | 21 | Excavate, Stockpile, and Dispose of Non-Hazardous Waste Soil: For furnishing transportation, labor, materials, and equipment to excavate, stockpile, characterize, haul away, and dispose of off Department property non-hazardous waste soil, including additions to or deductions from the approximate quantity stipulated                                                                                                       | Tons | 8000 | \$ 112.00 |
| Main Bid | 22 | Excavate, Stockpile, and Dispose of Non-Hazardous Waste Soil with PCBs Less than 50 PPM: For furnishing transportation, labor, materials, and equipment to excavate, stockpile, characterize, haul away, and dispose of off Department property non-hazardous waste soil with polychlorinated biphenyls (PCBs) less than 50 parts per million (PPM), including additions to or deductions from the approximate quantity stipulated | Tons | 2000 | \$ 120.00 |
| Main Bid | 23 | Excavate, Stockpile, and Dispose of Resource Conservation and Recovery Act (RCRA) Hazardous Waste Soil: For furnishing transportation, labor, materials, and equipment to excavate, stockpile, characterize, haul away, and dispose of RCRA hazardous waste soil at a licensed Class I lined landfill acceptable to Department, including additions to or deductions from the approximate quantity stipulated                      | Tons | 8300 | \$ 212.00 |
| Main Bid | 24 | Excavate, Stockpile, and Dispose of California Hazardous (Non-RCRA) Waste Soil: For furnishing transportation, labor, materials, and equipment to excavate, stockpile, characterize, haul away, and dispose of California hazardous waste soil non-RCRA at a licensed Class I lined landfill acceptable to Department, including additions to or deductions from the approximate quantity stipulated                               | Tons | 8000 | \$ 174.00 |

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| Main Bid | 25 | Excavate and Dispose of Crushed Miscellaneous Base Below Pavement Section: For furnishing transportation, labor, materials, and equipment to excavate, haul away, and dispose of off Department property crushed miscellaneous base below pavement section, including additions to or deductions from the approximate quantity stipulated                                                                                                            | Cubic Yards | 2000 | \$ 74.00 |
| Main Bid | 26 | Excavate, Stockpile, and Reuse Crushed Miscellaneous Base: For furnishing transportation, labor, materials, and equipment to excavate, stockpile, and reuse crushed miscellaneous base, including additions to or deductions from the approximate quantity stipulated                                                                                                                                                                                | Cubic Yards | 2000 | \$ 48.00 |
| Main Bid | 27 | Demolish and Dispose of Pavement 2 Inches to 6 Inches Thick: For furnishing transportation, labor, materials, and equipment to demolish and dispose of off Department property existing asphalt concrete and unreinforced concrete pavement 2 inches to 6 inches thick, not adjacent to railroad tracks, including additions to or deductions from the approximate quantity stipulated                                                               | Cubic Yards | 2000 | \$ 77.00 |
| Main Bid | 28 | Demolish and Dispose of Pavement Over 6 Inches but Less Than 12 Inches Thick: For furnishing transportation, labor, materials, and equipment to demolish and dispose of off Department property existing asphalt concrete and unreinforced concrete pavement over 6 inches but less than 12 inches thick including curbs and gutters, not adjacent to railroad tracks, including additions to or deductions from the approximate quantity stipulated | Cubic Yards | 2000 | \$ 90.00 |

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| Main Bid | 29 | Demolish and Dispose of Pavement Adjacent to Railroad Tracks (Per Pair of Tracks): For furnishing transportation, labor, materials, and equipment to demolish and dispose of off Department property existing asphalt concrete pavement, less than 5 feet from the centerline of the railroad tracks, including 2 inches deep saw cutting, including additions to or deductions from the approximate quantity stipulated | Cubic Yards | 500   | \$ 120.00 |
| Main Bid | 30 | Demolish and Dispose of Reinforced Concrete Pavement 12 Inches Thick or Less: For furnishing transportation, labor, materials, and equipment to demolish and dispose of reinforced concrete pavement 12 inches thick or less off Department property, including additions to or deductions from the approximate quantity stipulated                                                                                      | Cubic Yards | 200   | \$ 195.00 |
| Main Bid | 31 | Dispose of Railroad Tracks: For furnishing transportation, labor, materials, and equipment to remove and dispose of railroad tracks off Department property including rails, ties, and ballast, dispose of creosote-treated ties and creosote contaminated ballast to a licensed off-site disposal site, including additions to or deductions from the approximate quantity stipulated                                   | Track Feet  | 2000  | \$ 75.00  |
| Main Bid | 32 | Dispose of Chain Link Fencing: For furnishing transportation, labor, materials, and equipment to remove and dispose of chain link fencing including barbed wire extension, posts, and footings off Department property, including additions to or deductions from the approximate quantity stipulated                                                                                                                    | Linear Feet | 2000  | \$ 9.00   |
| Main Bid | 33 | Clear and Grub: For furnishing transportation, labor, materials, and equipment to clear and grub, including additions to or deductions from the approximate quantity stipulated                                                                                                                                                                                                                                          | Square Feet | 20000 | \$ 1.25   |



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| Main Bid | 34 | Mobilization and Demobilization for Excavation: For furnishing transportation, labor, materials, and equipment for 1 mobilization and 1 demobilization for each excavation project, including additions to or deductions from the approximate quantity stipulated                                                     | Mob and Demob | 6     | \$ 5,550.00 |
| Main Bid | 35 | Excavate and Reuse Soil as Fill: For furnishing transportation, labor, materials, and equipment to excavate and reuse soil as fill, including additions to or deductions from the approximate quantity stipulated                                                                                                     | Cubic Yards   | 10000 | \$ 19.50    |
| Main Bid | 36 | Mobilization and Demobilization for Excavation and Reuse of Soil as Fill: For furnishing transportation, labor, materials, and equipment for 1 mobilization and 1 demobilization for each excavation and reuse of soil as fill project, including additions to or deductions from the approximate quantity stipulated | Mob and Demob | 5     | \$ 7,800.00 |
| Main Bid | 37 | Import Fill Soil: For furnishing transportation, labor, materials, and equipment to furnish, place, grade, and compact Contractor-furnished fill soil, including additions to or deductions from the approximate quantity stipulated                                                                                  | Cubic Yards   | 10000 | \$ 43.00    |
| Main Bid | 38 | Department-Furnished Fill Soil (Less Than or Equal to 200 Cubic Yards Per Order): For furnishing transportation, labor, materials, and equipment to load, haul, place, grade, and compact Department-furnished fill soil, including additions to or deductions from the approximate quantity stipulated               | Cubic Yards   | 500   | \$ 38.00    |
| Main Bid | 39 | Department-Furnished Fill Soil (Greater Than 200 Cubic Yards Per Order): For furnishing transportation, labor, materials, and equipment to load, haul, place, grade, and compact Department-furnished fill soil, including additions to or deductions from the approximate quantity stipulated                        | Cubic Yards   | 1000  | \$ 32.00    |

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| Main Bid | 40 | Class "A" Imported Topsoil: For furnishing transportation, labor, materials, and equipment to furnish, place, and grade yard mixed Class "A" imported topsoil, including additions to or deductions from the approximate quantity stipulated                                                                               | Cubic Yards | 1000  | \$ 48.00    |
| Main Bid | 41 | Grade and Compact On-Site Earth Material (Less Than or Equal to 250 Cubic Yards Per Order): For furnishing transportation, labor, materials, and equipment to rough grade, fine grade, and compact on-site earth material, including additions to or deductions from the approximate quantity stipulated                   | Cubic Yards | 1000  | \$ 34.00    |
| Main Bid | 42 | Grade and Compact On-Site Earth Material (Greater Than 250 Cubic Yards Per Order): For furnishing transportation, labor, materials, and equipment to rough grade, fine grade, and compact on-site earth material, including additions to or deductions from the approximate quantity stipulated                            | Cubic Yards | 10000 | \$ 14.00    |
| Main Bid | 43 | Standard Grade Chain Link Fencing: For furnishing transportation, labor, materials, and equipment to furnish and install standard grade chain link fencing 8 feet high with 1-foot high barbed wire extension including associated footings, including additions to or deductions from the approximate quantity stipulated | Linear Feet | 1500  | \$ 93.00    |
| Main Bid | 44 | Temporary Fencing (10 Feet Per Panel): For furnishing transportation, labor, materials, and equipment to furnish and install temporary fencing 8 feet high, including additions to or deductions from the approximate quantity stipulated                                                                                  | Linear Feet | 1500  | \$ 26.00    |
| Main Bid | 45 | Standard Grade Chain Link Gate: For furnishing transportation, labor, materials, and equipment to furnish and install 20 feet wide by 8 feet high with 1-foot high barbed wire extension chain link gate, including additions to or deductions from the approximate quantity stipulated                                    | Each        | 2     | \$ 5,800.00 |

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| Main Bid | 46 | Standard Grade Chain Link Fencing Double Swing Gate: For furnishing transportation, labor, materials, and equipment to furnish and install double swing gate 8 feet high by 30 feet wide with 1-foot high barbed wire extension chain link gate, including additions to or deductions from the approximate quantity stipulated     | Each        | 4    | \$ 6,500.00 |
| Main Bid | 47 | Filler Strips: For furnishing transportation, labor, materials, and equipment to furnish and install 1-inch wide filler strips in chain link fencing, including additions to or deductions from the approximate quantity stipulated                                                                                                | Linear Feet | 500  | \$ 20.00    |
| Main Bid | 48 | Open Mesh Woven Windscreen: For furnishing transportation, labor, materials, and equipment to furnish and install open mesh woven windscreen, including additions to or deductions from the approximate quantity stipulated                                                                                                        | Linear Feet | 2000 | \$ 4.25     |
| Main Bid | 49 | Water Filled Barriers (Plastic K-Rails): For furnishing transportation, labor, materials, and equipment to furnish and install water filled barriers (plastic K-rails), including additions to or deductions from the approximate quantity stipulated                                                                              | Each        | 100  | \$ 790.00   |
| Main Bid | 50 | Concrete Barrier Units (K-Rails): For furnishing transportation, labor, materials, and equipment to load from Department property, transport to Project Site, unload, and install precast concrete barrier units (K-rails) in 20-foot lengths, including additions to or deductions from the approximate quantity stipulated       | Each        | 100  | \$ 200.00   |
| Main Bid | 51 | Purchase Precast Concrete Barrier Units (K-Rails): For furnishing transportation, labor, materials, and equipment to purchase, deliver to Project Site, and install Caltrans Type K T3A precast concrete barrier units (K-rails) in 20-foot lengths, including additions to or deductions from the approximate quantity stipulated | Each        | 100  | \$ 1,690.00 |

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| Main Bid | 52 | Per Week Rental of Precast Concrete Barrier Units (K-Rails): For furnishing transportation, labor, materials, and equipment to rent, deliver, install, and remove upon completion of Project Site Caltrans Type K T3A precast concrete barrier units (K-rails) in 20 feet lengths per week, including additions to or deductions from the approximate quantity stipulated | Each         | 100    | \$ 350.00 |
| Main Bid | 53 | Auto Wheel Stops (Appendix "H"): For furnishing transportation, labor, materials, and equipment to furnish and install precast concrete auto wheel stops in accordance with Standard Plan H-204-01 on paved surfaces, including additions to or deductions from the approximate quantity stipulated                                                                       | Each         | 50     | \$ 155.00 |
| Main Bid | 54 | Truck Wheel Stops (Appendix "H"): For furnishing transportation, labor, materials, and equipment to furnish and install precast concrete truck wheel stops in accordance with Standard Plan H-203-01 on paved surfaces, including additions to or deductions from the approximate quantity stipulated                                                                     | Each         | 50     | \$ 475.00 |
| Main Bid | 55 | Reinforcement Steel: For furnishing transportation, labor, materials, and equipment to furnish and install reinforcing steel for concrete placement, including additions to or deductions from the approximate quantity stipulated                                                                                                                                        | Pounds       | 100000 | \$ 1.75   |
| Main Bid | 56 | Reinforcement Bar Dowels (Appendix "H"): For furnishing transportation, labor, materials, and equipment to furnish and install dowels to join new concrete pavement with existing concrete pavement in accordance with detail provided in Appendix "H" of Specifications, including additions to or deductions from the approximate quantity stipulated                   | Each         | 100    | \$ 48.00  |
| Main Bid | 57 | Biaxial Geogrid: For furnishing transportation, labor, materials, and equipment to furnish and install geogrid, including additions to or deductions from the approximate quantity stipulated                                                                                                                                                                             | Square Yards | 3000   | \$ 5.75   |

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| Main Bid | 58 | Multi-Axial Geogrid: For furnishing transportation, labor, materials, and equipment to furnish and install multi-axial geogrid, including additions to or deductions from the approximate quantity stipulated              | Square Yards | 2000  | \$ 12.45  |
| Main Bid | 59 | Composite Paving Geogrid: For furnishing transportation, labor, materials, and equipment to furnish and install composite paving geogrid, including additions to or deductions from the approximate quantity stipulated    | Square Yards | 2500  | \$ 7.90   |
| Main Bid | 60 | Concrete Slurry: For furnishing transportation, labor, materials, and equipment to furnish and place concrete slurry, including additions to or deductions from the approximate quantity stipulated                        | Cubic Yards  | 1500  | \$ 229.00 |
| Main Bid | 61 | Silt Fence: For furnishing transportation, labor, materials, and equipment to furnish, install, and remove silt fence, including additions to or deductions from the approximate quantity stipulated                       | Linear Feet  | 1000  | \$ 7.95   |
| Main Bid | 62 | Sandbag Barrier: For furnishing transportation, labor, materials, and equipment to furnish, install, and remove sandbag barrier, including additions to or deductions from the approximate quantity stipulated             | Each         | 2000  | \$ 7.50   |
| Main Bid | 63 | Fiber Rolls: For furnishing transportation, labor, materials, and equipment to furnish, install, and remove fiber rolls, including additions to or deductions from the approximate quantity stipulated                     | Linear Feet  | 10000 | \$ 5.50   |
| Main Bid | 64 | Crack Filler: For furnishing transportation, labor, materials, and equipment to furnish and place crack filler in cracks 1/4 inch and wider, including additions to or deductions from the approximate quantity stipulated | Linear Feet  | 1000  | \$ 5.95   |

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| Main Bid | 65 | Crack Seal: For furnishing transportation, labor, materials, and equipment to furnish and place crack seal in cracks 1/4 inch and wider, including additions to or deductions from the approximate quantity stipulated                                                          | Linear Feet  | 1000  | \$ 4.75     |
| Main Bid | 66 | Sealcoat: For furnishing transportation, labor, materials, and equipment to furnish and apply sealcoat, including additions to or deductions from the approximate quantity stipulated                                                                                           | Square Yards | 80000 | \$ 3.00     |
| Main Bid | 67 | Saw Cut Asphalt Concrete Pavement (Up to 3 Inches Thick): For furnishing transportation, labor, materials, and equipment to saw cut asphalt concrete pavement up to 3 inches thick, including additions to or deductions from the approximate quantity stipulated               | Linear Feet  | 5000  | \$ 4.25     |
| Main Bid | 68 | Saw Cut Asphalt Concrete Pavement (Greater Than 3 Inches Thick): For furnishing transportation, labor, materials, and equipment to saw cut asphalt concrete pavement greater than 3 inches thick, including additions to or deductions from the approximate quantity stipulated | Linear Feet  | 3000  | \$ 5.45     |
| Main Bid | 69 | Saw Cut Concrete Pavement (Up to 3 Inches Thick): For furnishing transportation, labor, materials, and equipment to saw cut concrete pavement up to 3 inches thick, including additions to or deductions from the approximate quantity stipulated                               | Linear Feet  | 3000  | \$ 6.25     |
| Main Bid | 70 | Saw Cut Concrete Pavement (Greater Than 3 Inches Thick): For furnishing transportation, labor, materials, and equipment to saw cut concrete pavement greater than 3 inches thick, including additions to or deductions from the approximate quantity stipulated                 | Linear Feet  | 3000  | \$ 7.00     |
| Main Bid | 71 | Water Truck (4,000-Gallon Capacity) and Operator: For furnishing transportation, labor, materials, and equipment to furnish and operate a 4,000-gallon capacity water truck, including additions to or deductions from the approximate quantity stipulated                      | Shifts       | 1000  | \$ 1,425.00 |

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| Main Bid | 72 | Traffic Control Flag Person(s): For furnishing transportation, labor, materials, and equipment to provide traffic control flag person(s), including additions to or deductions from the approximate quantity stipulated                                                                                                                              | 8 Hour Days            | 100  | \$ 1,500.00 |
| Main Bid | 73 | Concrete Pavement (Less Than or Equal to 50 Cubic Yards Per Order): For furnishing transportation, labor, materials, and equipment to furnish and install 4,000 pounds per square inch (psi) concrete pavement excluding reinforcement and move-in and move-out costs, including additions to or deductions from the approximate quantity stipulated | Cubic Yards            | 1000 | \$ 525.00   |
| Main Bid | 74 | Concrete Pavement (Greater Than 50 Cubic Yards Per Order): For furnishing transportation, labor, materials, and equipment to furnish and install 4,000 psi concrete pavement excluding reinforcement and move-in and move-out costs, including additions to or deductions from the approximate quantity stipulated                                   | Cubic Yards            | 2000 | \$ 420.00   |
| Main Bid | 75 | Move-In and Move-Out Concrete Paving Machine: For furnishing transportation, labor, materials, and equipment to move-in and move-out pavement machine required for placing concrete pavement, including additions to or deductions from the approximate quantity stipulated                                                                          | Move-Ins and Move-Outs | 10   | \$ 9,575.00 |
| Main Bid | 76 | 4 Inch PVC Conduits: For furnishing transportation, labor, materials, and equipment to furnish and install 4 inch PVC conduits and fittings, including additions to or deductions from the approximate quantity stipulated                                                                                                                           | Linear Feet            | 2500 | \$ 30.00    |
| Main Bid | 77 | Trench Subgrade Stabilization: For furnishing transportation, labor, materials, and equipment to furnish and install trench subgrade stabilization material, including additions to or deductions from the approximate quantity stipulated                                                                                                           | Cubic Yards            | 1000 | \$ 112.00   |

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| Main Bid | 78 | Dust and Erosion Control Agent: For furnishing transportation, labor, materials, and equipment to furnish and apply dust and erosion control agent, including additions to or deductions from the approximate quantity stipulated                                                                                                                                                                                                              | Gallons     | 1045 | \$ 14.00    |
| Main Bid | 79 | Geotechnically Unsuitable Subgrade Soil: For furnishing transportation, labor, materials, and equipment to excavate, remove, and dispose of geotechnically unsuitable subgrade soil off Department property and replace with suitable subgrade soil, including additions to or deductions from the approximate quantity stipulated                                                                                                             | Cubic Yards | 500  | \$ 125.00   |
| Main Bid | 80 | Demolish and Dispose of Asphalt Concrete Pavement Containing Paving Geotextile 3 Inches to 4 Inches Thick: For furnishing transportation, labor, materials, and equipment to saw cut, demolish, and dispose existing asphalt concrete pavement containing paving geotextile 3 inches to 4 inches thick off Department property, not adjacent to railroad tracks, including additions to or deductions from the approximate quantity stipulated | Cubic Yards | 2000 | \$ 95.00    |
| Main Bid | 81 | Street Sweeping and Vacuuming (California Stormwater Best Management Practices Handbook, SE-7): For furnishing transportation, labor, materials, and equipment to furnish and operate street sweeping and vacuuming services, including additions to or deductions from the approximate quantity stipulated                                                                                                                                    | Shifts      | 400  | \$ 1,475.00 |
| Main Bid | 82 | Storm Drain Inlet Protection (California Stormwater Best Management Practices Handbook, SE-10): For furnishing transportation, labor, materials, and equipment to furnish and install storm drain inlet protection, including additions to or deductions from the approximate quantity stipulated                                                                                                                                              | Each        | 30   | \$ 450.00   |



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| Main Bid | 83 | Stormwater Pollution Prevention Plan: For furnishing transportation, labor, materials, and equipment to prepare a stormwater pollution prevention plan, including additions to or deductions from the approximate quantity stipulated                                                                                                                                                                                                                     | Each        | 5    | \$ 4,500.00 |
| Main Bid | 84 | Crushed Aggregate Base (Greater Than 100 Cubic Yards Per Order): For furnishing transportation, labor, materials, and equipment to furnish, place, and compact crushed aggregate base, including additions to or deductions from the approximate quantity stipulated                                                                                                                                                                                      | Cubic Yards | 3000 | \$ 130.00   |
| Main Bid | 85 | 12 Inch Ductile Iron Pipe: For furnishing transportation, labor, materials, and equipment to furnish and install 12 inch diameter ductile iron pipe, including additions to or deductions from the approximate quantity stipulated                                                                                                                                                                                                                        | Linear Feet | 1000 | \$ 325.00   |
| Main Bid | 86 | 6 Inch Ductile Iron Pipe: For furnishing transportation, labor, materials, and equipment to furnish and install 6 inch diameter ductile iron pipe, including additions to or deductions from the approximate quantity stipulated                                                                                                                                                                                                                          | Linear Feet | 100  | \$ 295.00   |
| Main Bid | 87 | Light Non-Aqueous Phase Liquid (LNAPL)/Water Mix Skimming, Removal, and Disposal: For furnishing transportation, labor, materials, and equipment to skim, remove, and dispose of light non-aqueous phase liquid (LNAPL) floating on the groundwater in excavation areas, and convey the recovered LNAPL/water mixture to LNAPL holding tank located onsite or vacuum truck, including additions to or deductions from the approximate quantity stipulated | Gallons     | 200  | \$ 25.00    |
| Main Bid | 88 | 24 Inch Reinforced Concrete Pipe (RCP): For furnishing transportation, labor, materials, and equipment to furnish and install 24 inch Reinforced Concrete Pipe (RCP), including additions to or deductions from the approximate quantity stipulated                                                                                                                                                                                                       | Linear Feet | 400  | \$ 275.00   |
| Main Bid | 89 | Steel Tire Cleaner (Rumble Plates): For furnishing transportation, labor, materials, and equipment to furnish and install 8 feet by 10 feet steel tire cleaner (rumble plates), including additions to or deductions from the approximate quantity stipulated                                                                                                                                                                                             | Each        | 8    | \$ 2,700.00 |

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| Main Bid       | 90 | Mobilization and Demobilization to Stockpile Site: For furnishing transportation, labor, materials, and equipment for 1 mobilization and 1 demobilization for each crushing event at the stockpile site, including additions to or deductions from the approximate quantity stipulated                      | Each        | 10     | \$ 19,500.00  |
| Main Bid       | 91 | Crush Rubble: For furnishing transportation, labor, materials, and equipment to crush and stockpile rubble, including additions to or deductions from the approximate quantity stipulated                                                                                                                   | Cubic Yards | 100000 | \$ 25.50      |
| Main Bid       | 92 | Break and Crush Oversized Rubble: For furnishing transportation, labor, materials, and equipment to break and crush oversized rubble, including additions to or deductions from the approximate quantity stipulated                                                                                         | Cubic Yards | 20000  | \$ 45.00      |
| Main Bid       | 93 | Dispose of Trash Generated by Crushing Rock: For furnishing transportation, labor, materials, and equipment to dispose of trash generated by crushing rock, including additions to or deductions from the approximate quantity stipulated                                                                   | Tons        | 400    | \$ 165.00     |
| Main Bid       | 94 | Loader and Operator: For furnishing transportation, labor, materials, and equipment to provide loader and operator, including additions to or deductions from the approximate quantity stipulated                                                                                                           | Shifts      | 500    | \$ 1,950.00   |
| Allowance Item | 95 | Existing Underground Utilities and Substructures Investigation: Bidder shall include in the bid the listed allowance to perform existing underground utilities and substructures investigation including but not limited to ground penetration radar and potholing of Project Site, as directed by Engineer | Lump Sum    | 1      | \$ 100,000.00 |
| Allowance Item | 96 | Perform Work Associated with Regulatory Agency Changes and Additional Requirements: Bidder shall include in the bid the listed allowance to perform Work as required by agencies due to regulatory changes and additional requirements as directed by Engineer                                              | Lump Sum    | 1      | \$ 75,000.00  |

|                |     |                                                                                                                                                                                                                                                                                                                                              |          |   |               |
|----------------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---|---------------|
| Allowance Item | 97  | Unforeseen Contaminated and Hazardous Soil and Groundwater: Bidder shall include in the bid the listed allowance to remove and dispose of contaminated and hazardous soil and groundwater generated as directed by Engineer                                                                                                                  | Lump Sum | 1 | \$ 100,000.00 |
| Allowance Item | 98  | Miscellaneous Demolition and Removals: Bidder shall include in the bid the listed allowance to perform miscellaneous demolition and removals as directed by Engineer exclusive of Bid Items 17 through 33 of Bid Proposal Line Items                                                                                                         | Lump Sum | 1 | \$ 200,000.00 |
| Allowance Item | 99  | Pavement Markings and Signage: Bidder shall include in the bid the listed allowance to perform pavement markings and fabricate and install signage as directed by Engineer                                                                                                                                                                   | Lump Sum | 1 | \$ 50,000.00  |
| Allowance Item | 100 | Perform Unforeseen Above Ground and Below Ground Utility and Substructure Modifications, Abandonment, Removals, and Additions: Bidder shall include in the bid the listed allowance to perform unforeseen above ground and below ground utility and substructure modifications, abandonment, removals, and additions as directed by Engineer | Lump Sum | 1 | \$ 200,000.00 |
| Allowance Item | 101 | Railroad Work: Bidder shall include in the bid the listed allowance to perform railroad Work as directed by Engineer                                                                                                                                                                                                                         | Lump Sum | 1 | \$ 50,000.00  |
| Allowance Item | 102 | Landscaping and Irrigation System: Bidder shall include in the bid the listed allowance to construct landscaping and irrigation system as directed by Engineer                                                                                                                                                                               | Lump Sum | 1 | \$ 50,000.00  |
| Allowance Item | 103 | Stormwater Pollution Prevention Plan Implementation: Bidder shall include in the bid the listed allowance to implement a Stormwater Pollution Prevention Plan, exclusive of unit price items as directed by Engineer                                                                                                                         | Lump Sum | 1 | \$ 50,000.00  |

|                |     |                                                                                                                                                                                                                          |          |   |               |
|----------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---|---------------|
| Allowance Item | 104 | Structural Improvements: Bidder shall include in the bid the listed allowance to perform structural improvements as directed by Engineer                                                                                 | Lump Sum | 1 | \$ 50,000.00  |
| Allowance Item | 105 | Miscellaneous Utility Systems: Bidder shall include in the bid the listed allowance to perform miscellaneous utility improvements as directed by Engineer                                                                | Lump Sum | 1 | \$ 200,000.00 |
| Allowance Item | 106 | Marine Improvements: Bidder shall include in the bid the listed allowance to perform marine improvements as directed by Engineer                                                                                         | Lump Sum | 1 | \$ 50,000.00  |
| Allowance Item | 107 | Additives for Asphalt Concrete and Early Strength Concrete: Bidder shall include in the bid the listed allowance to furnish and apply additives for asphalt concrete and early strength concrete as directed by Engineer | Lump Sum | 1 | \$ 25,000.00  |
| Allowance Item | 108 | Premium Time for Schedule Acceleration/Overtime: Bidder shall include in the bid the listed allowance to account for labor premium time pay differential for schedule acceleration or overtime as directed by Engineer   | Lump Sum | 1 | \$ 50,000.00  |
| Allowance Item | 109 | Railroad Flag Person(s): Bidder shall include in the bid the listed allowance to provide railroad flag person(s) as required by Pacific Harbor Line (PHL) as directed by Engineer                                        | Lump Sum | 1 | \$ 50,000.00  |
| Allowance Item | 110 | Asbestos Abatement: Bidder shall include in the bid the listed allowance to abate asbestos containing materials as directed by Engineer                                                                                  | Lump Sum | 1 | \$ 50,000.00  |

|                |     |                                                                                                                                                                                                                                                            |          |   |               |
|----------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---|---------------|
| Allowance Item | 111 | Lead Remediation, PCB Abatement, and Universal Waste Removal: Bidder shall include in the bid the listed allowance to remediate lead containing materials, abate PCB containing materials, and to remove universal waste (e-waste) as directed by Engineer | Lump Sum | 1 | \$ 100,000.00 |
|----------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---|---------------|

END OF SECTION

THIS CONTRACT (hereinafter referred to as "Contract") is made and entered into by and between City of Los Angeles, a Municipal Corporation (herein called "City"), acting by and through its Board of Harbor Commissioners (hereinafter called "Board"), and \_\_\_\_ El Capitan Environmental Services

\_\_\_\_ (hereinafter referred to as "Contractor"). The effective date of this Contract (hereinafter referred to as "Effective Date") is the date of execution by Executive Director upon authorization of Board, subject to the provisions of Charter Section 245 of City of Los Angeles. Unless terminated as herein provided, the term of this Contract shall not exceed three (3) years commencing on Effective Date.

### WITNESSETH

In consideration of the covenants and conditions hereinafter contained, IT IS MUTUALLY AGREED BETWEEN CONTRACTOR AND CITY AS FOLLOWS:

## ARTICLE 1. CONTRACTOR'S OBLIGATIONS

### Section 1.1 CONTRACT DOCUMENTS

- A This written agreement executed by Contractor and City together with the documents listed in Section 1.1B are Contract. Contractor has read and understands each and every provision of Contract Documents and its assent to and signature of this written agreement shall be deemed to constitute assent to and signature of all Contract Documents.
- B Specification No. 2852, together with documents listed in Table of Contents and defined in GENERAL CONDITIONS Section of said Specifications shall constitute Contract Documents.
- C Contract Documents are complementary and require complete and finished Work. Anything shown or required of Contractor, in any one or more of said documents, shall be as binding as if contained in all said documents.

### Section 1.2 WORK TO BE DONE

Contractor, with full knowledge of the kind, quantity and quality of Work, materials, and services required, at Contractor's sole cost and expense, except as may be herein otherwise expressly specified, and in strict conformity with Specification No. 2852, for 2026-2028 SITE IMPROVEMENTS shall carry out Contract as awarded. Contractor shall complete Work in accordance with Section 1.3 Contract Time of this Section.

### Section 1.3 CONTRACT TIME

- A Contract Time for performance of Work under Contract shall be 900 Calendar Days commencing on the date stated in the first Notice to Proceed (NTP) issued under Contract. Engineer shall issue a separate NTP for each item of Work assigned to Contractor. Each separate NTP shall define the scope, cost, and time for the item of Work. Work shall be completed within the times specified in the individual NTP. Notify Engineer when the time required for an item of Work shall exceed Contract Time. A mutually agreeable schedule shall be negotiated with Contractor for each NTP. If negotiations between Engineer and Contractor fail to reach agreement, Engineer shall set the schedule.

### Section 1.4 LIQUIDATED DAMAGES

- A Contractor and City agree that, in the event that Work contemplated hereunder is not completed within the time required, it shall be impracticable and extremely difficult to determine or fix City's actual damage and therefore City shall be entitled to liquidated damages in the amount of \$2,500 for each and every Calendar Day the execution of said Work exceeds the time allowed for that purpose for each separate NTP. In the event of concurrent Work not completed within concurrent times required for multiple NTP, a maximum of 4 liquidated damages totaling \$10,000 shall be assessed for each and every Calendar Day the execution of said concurrent Work may exceed the concurrent times allowed. Contractor agrees to all of the other terms of the liquidated damages provision set forth in GENERAL CONDITIONS Section of Specifications.

## ARTICLE 2. COMPENSATION

### Section 2.1 PAYMENTS TO CONTRACTOR

In consideration for all labor, materials, and equipment furnished hereunder, and subject to Contractor's full compliance with the terms and conditions of Contract Documents, City shall pay Contractor the amount set forth in the "Bid Proposal Line Items," which is attached hereto and by this reference incorporated herein. Payments shall be made as set forth in GENERAL CONDITIONS Section.

## ARTICLE 3. OPERATIONS

### Section 3.1 QUALITY OF SERVICES

Work performed by Contractor shall be strictly in accordance with Drawings and Specifications, copies of which are on file in the office of Engineer. Said Work shall be performed in a manner which is consistent with Applicable Laws as defined in GENERAL CONDITIONS Section of Specifications in the construction industry.

## Section 3.2 INDEMNIFICATION

- A Except as may arise from the sole or active negligence or willful misconduct of City, Contractor shall at all times relieve, indemnify, defend, protect, and save harmless City and any and all of its boards, officers, agents, and employees from any and all claims and demands, actions, proceedings, losses, liens, costs and judgments of any kind and nature whatsoever, including cost of litigation (including all actual litigation costs incurred by City, including but not limited to costs of experts and consultants), for death of or injury to persons or damage to property including property owned by or under the care and custody of City, and for civil fines and penalties, that may arise from or be caused directly or indirectly by:
- 1 Any dangerous, hazardous, unsafe or defective condition of, in or on Project Site(s) and any Laydown Area(s), of any nature whatsoever, which may exist by reason of any act, omission, neglect, or any use or occupation of such premises by Contractor, its officers, agents, employees, subcontractors, or invitees;
  - 2 Any undertaking of Work, or operation conducted upon or any use or occupation of Project Site(s) and any Laydown Area(s) by Contractor, its officers, agents, employees, subcontractors, or invitees under or pursuant to the provisions of Contract or otherwise;
  - 3 Any act, error, omission, willful misconduct, or negligence of Contractor, its officers, agents, employees, subcontractors, or invitees, arising from the use, operation, or occupancy of Project Site(s) and any Laydown Area(s).
  - 4 Any failure of Contractor, its officers, agents, employees, subcontractors, or invitees to comply with any of the terms or conditions of this Contract or any Applicable Laws; or
  - 5 The conditions, operations, uses, occupations, acts, omissions or negligence referred to in Subdivisions (1), (2), (3), and (4) above, existing or conducted upon or arising from the undertaking of Work or use or occupation of Project Site(s) and any Laydown Area(s) by Contractor on any other area within the Harbor District, as defined in Charter of City, including the approaches, channels, turning basins, and other waters.
- B Contractor also agrees to indemnify City and pay for all damage or loss suffered by City and Department, including but not limited to damage to or loss of property, to the extent not insured by City, and loss of City revenue from any source, caused by or arising out of the conditions, operations, uses, occupations, acts, omissions or negligence referred to in Section 3.2 of this Section. The term "persons" as used in this Section shall include, but not be limited to, officers and employees of Contractor.



- C Contractor shall also indemnify, defend, and hold City harmless from any and all claims, judgments, damages, penalties, fines, costs, liabilities, or losses which arise during or after the term of this Contract as a result of Contamination for which Contractor is otherwise responsible for under the terms of this Contract. This indemnification of City by Contractor includes, without limitation, costs incurred in connection with any investigation of site conditions or any clean up, remedial, removal, or restoration work required by any federal, state, or local governmental agency because of Contamination present in the soil or groundwater on or under Project Site(s) and any Laydown Area(s).
- D The indemnity obligations under Section 3.2 shall survive the expiration date of this Contract.
- E Notwithstanding the provisions of Section 3.2, nothing contained herein shall be interpreted or enforced in violation of California Civil Code Section 2782.

### Section 3.3 INSURANCE

- A In addition to, and not as a substitute for, or limitation of, any of the indemnity obligations imposed by Section 3.2 of this Section, Contractor shall procure and maintain at its sole cost and expense and keep in force at all times during the term of this Contract the following insurance requirements of this Section.

- B Commercial general liability or marine general liability insurance, including contractual liability and property damage insurance, written by an insurance company authorized to do business in the State of California, or approved by the California Department of Insurance as a surplus lines insurer eligible to do business in California, rated VII, A- or better in Best's Insurance Guide (or an alternate guide acceptable to City if a Best's Rating is not available) with Contractor's normal limits of liability but not less than Five Million Dollars (\$5,000,000) for injury or death to one or more persons out of each accident or occurrence and Five Million Dollars (\$5,000,000) for bodily injury and property damage for each occurrence / Five Million Dollars (\$5,000,000) general aggregate. Additionally, each policy shall include an additional insured endorsement (CG 2010) naming City of Los Angeles Harbor Department, its officers, agents, and employees as Primary additional insureds. Contractor shall further procure and maintain, either by an endorsement thereto or by a separate policy, fire legal liability insurance with a minimum limit of Five Hundred Thousand Dollars (\$500,000) covering legal liability of Contractor for damage or destruction to the works, buildings, and improvements owned by City provided that said minimum limits of liability shall be subject to adjustments by Executive Director to conform with the deductible amount of the fire insurance policy maintained by Board, with waiver of subrogation in favor of Contractor so long as permitted by Board's fire insurance policy, upon thirty (30) days' prior written notice thereof to Contractor at any time during the term of this Contract. Contractor shall delete railroad exclusion when Work is within 50 feet of railroad tracks.
- C Contractor shall procure and maintain fire and extended coverage insurance covering One Hundred percent (100%) of the replacement value of the works, buildings, and improvements erected or owned by Contractor on Project Site(s) and any Laydown Area(s), with such provision in the policies issued to cover the same, or in riders attached thereto, as shall provide for all losses to be payable to Board to be held in trust for reconstruction. In the event of loss or damage by fire to any of such works, buildings, or improvements, Contractor shall undertake replacement or reconditioning of such items within ninety (90) days following any such loss. As Contractor undertakes such replacement or reconditioning, such proceeds shall be released by Board to Contractor as payments are required for said purpose. Upon the completion of such replacement or reconditioning to the reasonable satisfaction of Executive Director, any balance thereof remaining shall be paid to said Contractor forthwith.

- D Where Contractor utilizes any vehicles, Contractor shall procure and maintain at its sole cost and expense, and keep in force at all times during the term of this Contract, automobile insurance with limits of liability not less than One Million Dollars (\$1,000,000) covering injuries or death resulting from each accident or claim arising out of any one claim or accident. This insurance shall cover all owned, non- owned, and/or hired automobiles. Additionally, each policy shall include an additional insured endorsement (CG 2010) naming City of Los Angeles Harbor Department, its officers, agents, and employees as Primary additional insureds.
- E Where Contractor operates watercraft, Contractor shall procure and maintain protection and indemnity coverage with limits of One Million Dollars (\$1,000,000) per occurrence for bodily injury, illness, death, loss of or damage to the property of another including masters and members of the vessel crew, and Jones Act risks or equivalent thereto internationally. City shall be named as an additional insured. Additionally, each policy shall include an additional insured endorsement (CG 2010) naming City of Los Angeles Harbor Department, its officers, agents, and employees as Primary additional insureds.
- F Where Contractor's operations involve the storage or use of any type of hazardous materials or pollutants, Contractor shall procure and maintain environmental impairment liability insurance which shall include coverage for bodily injury, property damage, including third-party claims for on-site and off-site bodily injury and property damage, clean-up, and defense of suits, with a limit of at least Two Million Dollars (\$2,000,000) per occurrence, which is to remain in effect at least five (5) years after Termination Date. Additionally, each policy shall include an additional insured endorsement (CG 2010) naming City of Los Angeles Harbor Department, its officers, agents, and employees as Primary additional insureds.
- G Contractor shall secure the payment of compensation to any employees injured while performing work or labor necessary for and incidental to performance under this Contract in conformance with Section 3700 of the California Labor Code. Contractor shall file with City one of the following:
- 1 A certificate of consent to self-insure issued by the Director of Industrial Relations, State of California;
  - 2 A certificate of Workers' Compensation insurance issued by an admitted carrier; or
  - 3 An exact copy or duplicate thereof of the policy certified by the Director of Industrial Relations or the insurer.

- 4 Prior to first NTP, such documents shall be filed prior to Contractor's occupancy of Project Site(s) and any Laydown Area(s). Where Contractor has employees who are covered by the United States Longshore and Harbor Workers' Compensation Act ("USLHWC Act"), Contractor shall furnish proof of such coverage to City. It is suggested that Contractor consult with its insurance professional of its choosing to determine whether its proposed operation methods shall render its employees subject to coverage under the USLHWC Act. All Workers' Compensation insurance submitted to City shall include an endorsement providing that any carrier paying benefits agrees to waive any right of subrogation it may have against City.
- H Except as provided in Paragraph 1 below, Contractor shall, at Contractor's sole cost and expense, provide all risk builder's risk insurance covering loss, damage or destruction of property, including material in transit and stored on and off Project Site(s) and any Laydown Area(s), satisfactory to City, in an amount at least equal to the value of the construction and materials on hand. Contractor's insurance broker or agent shall submit for approval said insurance to City's online insurance compliance system KwikComply™ <https://kwikcomply.org/>. Acceptable evidence of coverage shall name City as an additional named insured and as loss payee as its interest may appear.
- 1 Contractor need not provide all risk builder's risk insurance for fills; excavations; rock work; concrete or masonry walls and bulkheads retaining earth; foundations entirely below ground or in earth fill; pipe, sewer systems, conduit, and electric light and power systems entirely below ground or submerged; ballast and grading for railroad tracks on or in earth; pavements, sidewalks and pits on solid earth or in fill outside of buildings; incombustible poles, area lighting and metal fencing not attached to exterior or interior of buildings. Contractor is not relieved of the obligation to rebuild these improvements when damaged.
  - 2 An installation risk or "floater" policy, written to cover only specific types of equipment during construction, may be provided to cover damage to work or high valued equipment or materials.

- I Limits for coverage required under Section 3.3 of this Section shall provide first dollar coverage except that Executive Director may permit a self-insured retention or self-insurance in those cases where, in his or her sole judgment, such retention or self-insurance is justified by the net worth of Contractor. The self-insured retention or self-insurance shall provide that any other insurance maintained by City's Harbor Department shall be excess of Contractor's insurance and shall not contribute to it. In all cases, regardless of any deductible, retention, or self-insurance, Contractor shall have all the obligations of an "insurer" under the California Insurance Code and said insurance shall be deemed to include a defense of suits provision and a severability of interest clause.
- J If Contractor maintains higher limits than the minimums shown above, City requires and shall be entitled to coverage for the higher limits maintained by Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to City.
- K Policies submitted pursuant to Section 3.3 of this Section shall, in addition, provide the following coverage either in the original policy or by endorsement substantially as follows:
  - 1 "Notwithstanding any inconsistent statement in the policy to which this endorsement is attached, or any endorsement or certificate now or hereafter attached hereto, it is agreed that City of Los Angeles, acting by and through its Harbor Department, Board of Harbor Commissioners, and its officers, agents, and employees, are additional insureds hereunder, except to the extent prohibited by Applicable Laws, and that coverage is provided for contractual obligations, operations, uses, occupations, acts, and activities of all the insureds under this Specification, and under any amendments, modifications, extensions, or renewals of said Contract regardless of whether such contractual obligations, operations, uses, occupations, acts, and activities occur on Project Site(s) and any Laydown Area(s) or elsewhere."
  - 2 "The coverage provided by the policy to which this endorsement is attached is primary coverage and any other insurance carried by City is excess coverage."
  - 3 "In the event of one of the named insureds incurring liability to any other of the named insureds, this policy shall provide protection for each named insured against whom claim is or may be made, including claims by other named insureds, in the same manner as if separate policies had been issued to each named insured. Nothing contained herein shall operate to increase the insurance company's limit of liability."

- L All insurance procured by Contractor shall comply with the following:
- 1 For each insurance policy, Contractor shall give to Board of Harbor Commissioners a 10-days prior notice of cancellation or reduction in coverage for nonpayment of premium, and a 30-days prior notice of cancellation or reduction in coverage for any other reason, by written notice via registered mail and addressed to City of Los Angeles Harbor Department, Attn: Risk Manager and City Attorney's Office, 425 S. Palos Verdes Street, San Pedro, California 90731.
  - 2 Electronic submission is the required method of submitting Contractor's insurance documents. KwikComply is City's online insurance compliance system which is designed to be used by insurance brokers and agents to submit client insurance certificates directly to City. Contractor's insurance broker or agent shall obtain access to KwikComply at <http://kwikcomply.org> and follow the instructions to register and submit the appropriate proof of insurance on Contractor's behalf.
  - 3 Prior to the expiration of each policy, Contractor shall show through submitting to KwikComply that the policy has been renewed or extended or, if new insurance has been obtained, submit the appropriate proof of insurance to KwikComply. If Contractor neglects or fails to secure or maintain the required insurance, or if Contractor fails to submit proof of insurance as required above, City's Harbor Department may, at its option and at the sole cost and expense of Contractor, obtain such insurance for Contractor.
  - 4 Executive Director, at his or her discretion, based upon recommendation of Risk Manager of City's Harbor Department, may request that Contractor increase or decrease amounts and types of insurance coverage required hereunder at any time during the term hereof by giving written notice to Contractor; provided that Contractor shall be entitled to an equitable adjustment under Contract to reimburse Contractor for any increase in the cost of such insurance to Contractor resulting from the requested changes.
  - 5 Upon request by City, Contractor must furnish a copy of the binder of insurance and/or full certified copies of any or all policies of insurance required herein. Contractor's obligation to provide such copies shall survive the expiration of this Contract regardless of whether City's request is made prior to or after the expiration of this Contract.

- 6 The approval of insurance by Risk Manager shall be a condition precedent to the right of Contractor to demand or receive payment for Work under Contract requiring such insurance. No request for payment shall be processed until the required insurance has been approved by Risk Manager, and no Project Site(s) and any Laydown Area(s) access shall be permitted until such approval has been given.
- 7 All insurance policies and surety bonds which Contractor is required to provide pursuant to Specifications, including, but not limited to, workers' compensation, liability, protection and indemnity, and builder's risk policies shall be placed with insurance carriers which are rated VII, A-, or better in Best's Insurance Guide. If a Best's Insurance Guide rating is not available, then the proposed carrier must meet comparable standards in another rating services satisfactory to City.
- M Contractor shall report to Engineer immediately and in writing to Executive Director within fifteen (15) days after it, its officers, or its managing agents have knowledge of any accident or occurrence involving death of or injury to any person or persons, or damage in excess of Ten Thousand Dollars (\$10,000) to property, occurring upon Project Site(s) and any Laydown Area(s), or elsewhere within the Harbor District, if Contractor's officers, agents, or employees are involved in such an accident or occurrence. Such report shall contain to the extent available: (1) the name and address of the persons involved; (2) a general statement as to the nature and extent of injury or damage; (3) the date and hour of occurrence; (4) the names and addresses of known witnesses; and (5) such other relevant information as may be known to Contractor, its officers, or its managing agents.

#### Section 3.4 COMPLIANCE WITH LAWS

During the performance of Contract, Contractor shall comply with all Applicable Laws as defined in GENERAL CONDITIONS Section of Specifications. Contractor shall also comply with the provisions of all permits.

### ARTICLE 4. MISCELLANEOUS

#### Section 4.1 BINDING EFFECT

Contract is to be binding on the heirs, successors and assigns of the parties hereto and is not to be assigned by either party without first obtaining the written consent of the other.

## Section 4.2 NOTICES

Any notice, request, demand or other communication required or permitted hereunder shall be deemed to be properly given when deposited in the United States mail, postage prepaid, addressed as follows:

To City:  
Executive Director  
Port of Los Angeles  
425 South Palos Verdes Street  
San Pedro, California 90731

To Contractor:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Nothing contained herein shall preclude the giving of notice in any other manner allowed by law.

## Section 4.3 RELATIONSHIP OF PARTIES

Nothing contained in Contract shall be construed as creating the relationship of employer and employee, master and servant, or principal and agent between the parties hereto. Contractor is an independent contractor and shall have no right or authority to assume or create any obligation, expressed or implied, on behalf of City.

## Section 4.4 ENTIRE AGREEMENT

Contract, together with all other Contract Documents, constitutes the entire agreement between the parties hereto, and all other representations or statements heretofore made, verbal or written, are merged herein, and Contract may be amended only in writing and executed by duly authorized representatives of the parties hereto.

## Section 4.5 LEGAL JUSTIFICATION AND RECOURSE

Contract shall be deemed entered into in Los Angeles, California, and shall be governed and construed in accordance with the laws of the State of California. In the event any provision hereof is held to violate any applicable law by a court of competent jurisdiction, such provision shall be deemed null and void to the extent thereof, without affecting the balance of Contract. If either party brings any action or proceeding to enforce, protect, or establish any right or remedy arising out of or based upon Contract, including but not limited to the recovery of damages for its breach, or based upon the claim that extra Work was performed, whether mandated by Contract or not, neither party in said action or proceeding shall be entitled to recover any attorney's fees. Each party hereby expressly waives the benefit of any California statute which would permit the award of any attorney's fees to a prevailing party in an action.



**Section 4.6 TIME OF ESSENCE**

Time is of the essence in Contract.

**Section 4.7 LABOR CODE SECTION 1861**

Contractor hereby certifies it is aware of the provisions of Section 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 that Contractor shall comply with such provisions before commencing the performance of Work of Contract.

**Section 4.8 ASSIGNMENT OF CERTAIN CAUSES OF ACTION**

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

**Section 4.9 TERMINATION DUE TO NON-APPROPRIATION OF FUNDS**

Contract is subject to the provisions of Los Angeles City Charter which, among other things, precludes City from making any expenditure of funds or incurring any liability, including contractual commitments, in excess of the amount appropriated therefor.

Board, in awarding Contract, is expected to appropriate sufficient funds to meet the estimated expenditures through June 30 of the current fiscal year and to make further appropriations in each succeeding fiscal year during the life of Contract. However, they are under no legal obligation to do so.

City of Los Angeles, its boards, officers, and employees are not bound by the terms of this Agreement or obligated to make any payment thereunder in any fiscal year in which Board does not appropriate funds therefor. Contractor is not entitled to any compensation in any fiscal year in which funds have not been appropriated in Contract by Board.

Although Contractor is not obligated to perform any Work under Contract in any fiscal year in which no appropriation for Contract has been made, Contractor agrees to resume performance of Work required by Contract on the same terms and conditions for a period of 60 days after the end of the fiscal year if an appropriation therefor is approved within that 60-day period. Contractor is responsible for maintaining all insurance and bonds during this 60 days period. The time for performance shall be extended during this period until the appropriation is made; however, such extension of time is not compensable.

If in any subsequent fiscal year funds are not appropriated for Work required by Contract, Contract shall be terminated. However, such termination shall not relieve the parties of liability for any obligation previously incurred.

#### Section 4.10 NO WAIVER

No waiver by either party at any time of any terms or conditions of this Contract shall be a waiver at any subsequent time of the same or any other term or condition. No breach of a covenant, term, or condition of this Contract shall be deemed to have waived by City unless the waiver is in writing and executed by City.

#### Section 4.11 JOINT AND SEVERAL OBLIGATIONS OF CONTRACTOR

If more than one individual or entity comprises Contractor, the obligations imposed on each individual or entity that comprises Contractor under this Contract shall be joint and several.

## Section 5.1 SIGNATURES

IN WITNESS WHEREOF, the parties hereto have executed Contract on the date of the left of their signatures.

Dated: \_\_\_\_\_, 20\_\_

THE CITY OF LOS ANGELES, by its  
Board of Harbor Commissioners

By: \_\_\_\_\_  
Executive Director

Attest: \_\_\_\_\_  
Board Secretary

(SEAL)

Contractor El Capitan Environmental Services

By: \_\_\_\_\_  
Haroutioun Harry Boyajian, Chief Executive Officer  
(Print/type Name and Title)

By: \_\_\_\_\_  
Haroutioun Harry Boyajian, Secretary  
(Print/type Name and Title)

Place of Business \_\_\_\_\_  
11080 Tuxford Street, Sun Valley, CA 91352

Contractor's License No. 640045

Expiration Date March 31, 2026

Dated: December 29, 2025

APPROVED AS TO FORM AND LEGALITY

January 14, 2026  
HYDEE FELDSTEIN SOTO, City Attorney  
STEVEN Y. OTERA, General Counsel

By: \_\_\_\_\_  
HELEN J. SOK, Deputy City Attorney



**CALIFORNIA 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 Los Angeles

On 12/29/2025

Date

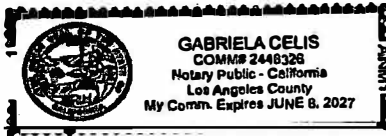
before me, Gabriela Celis Notary Public

Here Insert Name and Title of the Officer

personally appeared Haroutioun Harry Boyajian

Name(s) of Signer(s)

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

Signature of Notary Public

Place Notary Seal and/or Stamp Above

**OPTIONAL**

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

**Description of Attached Document**

Title or Type of Document: CONTRACT

Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: \_\_\_\_\_

**Capacity(ies) Claimed by Signer(s)**

Signer's Name: Haroutioun Harry Boyajian Signer's Name: \_\_\_\_\_

☒ Corporate Officer – Title(s): CEO & Secretary ☐ Corporate Officer – Title(s): \_\_\_\_\_

☐ Partner – ☐ Limited ☐ General ☐ Partner – ☐ Limited ☐ General

☐ Individual ☐ Attorney in Fact ☐ Individual ☐ Attorney in Fact

☐ Trustee ☐ Guardian or Conservator ☐ Trustee ☐ Guardian or Conservator

☐ Other: \_\_\_\_\_ ☐ Other: \_\_\_\_\_

Signer is Representing: \_\_\_\_\_ Signer is Representing: \_\_\_\_\_

Date: January 7, 2026

Contractor/Vendor Name: El Capitan Environmental Services  
2026-2028 Site Improvements – Specification No. 2852

|           |               |          |            |
|-----------|---------------|----------|------------|
| Account#  | <u>541000</u> | Project# | <u>TBD</u> |
| Division# | <u>30900</u>  | Task#    | <u>TBD</u> |

|            |               |
|------------|---------------|
| Budget FY: | Amount:       |
| 2025-26    | \$ 100,000.00 |
| 2026-27    | \$ 500,000.00 |
| 2027-28    | \$ 100,000.00 |
|            |               |
| TOTAL:     | \$ 700,000.00 |

For Acct/Budget Div. Use Only

Verified By:  Digitally signed by Joanna Leack  
Date: 2026.01.08 08:27:58 -08'00'

Verified Funds Available:  Digitally signed by Frank Liu  
Date: 2026.01.08 08:59:35 -08'00'

Date Approved: 1/8/26

|           |               |          |            |
|-----------|---------------|----------|------------|
| Account#  | <u>161305</u> | Project# | <u>TBD</u> |
| Division# | <u>00000</u>  | Task#    | <u>TBD</u> |

|            |                  |
|------------|------------------|
| Budget FY: | Amount:          |
| 2025-26    | \$ 400,000.00    |
| 2026-27    | \$ 14,583,299.00 |
| 2027-28    | \$ 10,279,209.00 |
|            |                  |
| TOTAL:     | \$ 25,262,508.00 |

For Acct/Budget Div. Use Only

Verified By:  Digitally signed by Joanna Leack  
Date: 2026.01.08 08:28:11 -08'00'

Verified Funds Available:  Digitally signed by Frank Liu  
Date: 2026.01.08 08:59:49 -08'00'

Date Approved: 1/8/26

KNOW ALL PERSONS BY THESE PRESENTS:

That we, El Capitan Environmental Services

as principal \_\_\_\_\_, and Philadelphia Indemnity Insurance Co.  
as surety(ies) are held and firmly bound unto THE CITY OF LOS ANGELES,  
CALIFORNIA, a municipal corporation, in the penal sum of \_\_\_\_\_

dollars (\$ 23,602,280.00) lawful money of the United States, for the payment of which  
sum well and truly to be made, we bind ourselves, our heirs, executors, administrators  
and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH: that whereas the principal  
entered into a certain contract, hereto attached, with City, for \_\_\_\_\_  
2026 - 2028 SITE IMPROVEMENTS

NOW THEREFORE, if said principal(s) shall fail to faithfully perform and fulfill all  
the undertakings, covenants, terms, conditions and agreements of said Contract during  
the original term of said Contract and any extensions thereof that may be granted by City,  
with or without notice to the surety(ies), and during the life of any guaranty required under  
Contract, or shall fail to faithfully perform and fulfill all the undertakings, covenants, terms,  
conditions and agreements of any and all duly authorized modifications of said Contract  
that may hereafter be made, notice of which modifications to the surety(ies) being hereby  
waived, said surety(ies) shall fully and faithfully carry out and perform all of the terms,  
covenants and conditions of said Contract upon its part to be performed and if surety(ies)  
does so, then this obligation to be null and void, otherwise to remain in full force and  
effect, and in addition thereto, in case suit is brought upon this bond, the judgment  
rendered against the principal or surety(ies), or both, a reasonable attorney's fee, to be  
fixed by the court, taxed as costs and included in the judgment rendered therein,  
otherwise this obligation to be void.

It is further agreed that this bond guarantees compliance with all applicable  
provisions of Section 17.00 et seq. and Section 62.105 through 62.118 of the Municipal  
Code of CITY OF LOS ANGELES.

IN WITNESS WHEREOF, the above-bounded parties have executed this  
instrument under their several hands and seals this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

(Principal) \_\_\_\_\_

ATTEST

(Surety) \_\_\_\_\_

(Surety) \_\_\_\_\_

(Corporate Seal)

## KNOW ALL PERSONS BY THESE PRESENTS:

That we, El Capitan Environmental Services

as principal (s) and Philadelphia Indemnity Insurance Co.

as surety(ies)

are held and firmly bound unto THE CITY OF LOS ANGELES, a municipal corporation, acting by and through its Board of Harbor Commissioners, and any person or party named below in the penal sum equal to: Twenty Three Million, Six Hundred Two Thousand, Two Hundred Eighty and 00/100-----

dollars (\$ 23,602,280.00) in lawful money of the United States, and the payment of which shall and truly be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH,

THAT WHEREAS, the principal (s) entered into a certain contract attached hereto with City for 2026 - 2028 SITE IMPROVEMENTS

NOW, THEREFORE, if said principal (s) as Contractor (s) or subcontractor (s) fail (s) to pay for any services provided by mechanics, material suppliers, contractors, subcontractors, lessors of equipment, artisans, architects, registered engineers, licensed land surveyors, machinists, builders, teamsters or dray, or fail (s) to pay all persons and laborers of every class performing labor upon or bestowing skill or other necessary service on, or furnishing materials or leasing equipment to be used or consumed in or furnishing materials or leasing equipment to be used or consumed in or furnishing appliances, teams or power contributing to a work or improvement or fail (s) to pay for the value of such labor done or materials furnished and for the value and use of such appliances, equipment, teams or power, whether done or furnished at the instance of City or of any person acting by its authority or under it as contractor or otherwise, or fail (s) to pay for amounts due under the Unemployment Insurance Code of the State of California with respect to work, or labor performed by any such claimant during the original term of said Contract and any extension thereof that may be granted by City with or without notice to the surety(ies) or during the life of any guarantee required under Contract, or fail (s) to pay for any amounts required to be deducted, withheld and paid over to the Franchise Tax Board from the wages of Contractor and subcontractors/suppliers pursuant to that portion of the Revenue and Taxation Code, imposing liability for failure to deduct, withhold, and pay employee taxes, with respect to such work and labor, then in such event said surety(ies) shall pay the same in an amount not exceeding the sum of Twenty Three Million, Six Hundred Two Thousand, Two Hundred Eighty and 00/100----- dollars (\$23,602,280.00 and, in addition thereto, in case suit is brought upon this bond and judgment rendered against the principal (s) or surety(ies), or both, a reasonable attorney's fee to be fixed by the court, taxed as costs and included in the judgment rendered therein; otherwise this obligation to be void.

It is understood and agreed by principal (s) and surety(ies) herein that by its terms, this payment bond shall insure to the benefit of any person named in Section 9100 of the California Civil Code so as to give a right of action such persons or their assigns in any suit brought upon this payment bond.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several hands and seals this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

ATTEST

\_\_\_\_\_

(Principal)\_\_\_\_\_

\_\_\_\_\_  
(Surety) \_\_\_\_\_

\_\_\_\_\_  
(Surety) \_\_\_\_\_

\_\_\_\_\_  
(Corporate Seal)



INDIVIDUAL FORM

AFFIDAVIT OF COMPLETION OF WORK  
UNDER SPECIFICATION NO. 2852  
CONTRACT NO. \_\_\_\_\_

(STATE OF CALIFORNIA)  
(COUNTY OF LOS ANGELES)

\_\_\_\_\_, being first duly sworn, deposes  
(Affiant)

and says:

Affiant is Contractor under Contract No. \_\_\_\_\_, and makes the following statements:

That, in accordance with the provisions under Subsection 01000.58 of GENERAL CONDITIONS Section of Specification No. 2852 which Specifications is a part of Contract No. \_\_\_\_\_, by and between City of Los Angeles and Affiant, to the best of my knowledge and belief, Work specified in said Specifications and said Contract has been completed in strict accordance with Drawings and Specifications therefor, that no lawful debts for labor or material are outstanding, and that no federal excise tax has been included in Contract price;

That all request for funds under Items of Contract, including Changes in Work, and under all billings of whatsoever nature are accurate, complete and final and that no additional compensation over and above the final payment now pending shall be requested or is due under Contract or under any adjustment issued thereunder;

That, in accordance with said Subsection 01000.58, upon receipt of said final payment now pending, Affiant acknowledges that City, Board thereof, Executive Director, Engineer and any and all authorized employees of City shall thereby be released from any and all claims or liability on account of Work performed under Contract or any additions thereof.

\_\_\_\_\_  
(Affiant)

Subscribed and sworn to before me  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Notary Public in and for said County of  
Los Angeles, State of California  
Form 298-E  
11-12-73

CO-PARTNERSHIP FORM

AFFIDAVIT OF COMPLETION OF WORK  
UNDER SPECIFICATION NO. 2852  
CONTRACT NO. \_\_\_\_\_

(STATE OF CALIFORNIA)  
(COUNTY OF LOS ANGELES)

\_\_\_\_\_, a co-partner in the firm of  
(Affiant)

\_\_\_\_\_, a co-partnership, being first  
(Contractor)

duly sworn, deposes and says:

Affiant is one of the co-partners of \_\_\_\_\_ and makes  
(Contractor)

the following statements and has the authority to do so for and on behalf of \_\_\_\_\_

\_\_\_\_\_  
(Contractor)  
a co-partnership, and Affiant personally;

That in accordance with the provisions under Subsection 01000.58 of GENERAL  
CONDITIONS Section of Specification No. 2852, which Specifications is a part of  
Contract No. \_\_\_\_\_, by and between City of Los Angeles and \_\_\_\_\_

\_\_\_\_\_  
(Contractor)  
to the best of my knowledge and belief, Work specified in said Specifications and said  
Contract has been completed in strict accordance with Drawings and Specifications  
therefor, that no lawful debts for labor or materials are outstanding, and that no federal  
excise tax has been included in Contract price;

That all requests for funds under Items of Contract, including Changes in Work, and under  
all billings of whatsoever nature are accurate, complete and final and that no additional  
compensation over and above the final payment now pending shall be requested or is  
due under Contract or under any adjustment issued thereunder;

That, in accordance with said Subsection 01000.58, upon receipt of said final payment now pending, Affiant acknowledges for himself/herself and for the \_\_\_\_\_,

(Contractor)

that City, Board thereof, Executive Director, Engineer, and any and all authorized employees of City shall thereby be released from any and all claims or liability on account of Work performed under Contract or any additions thereof.

\_\_\_\_\_  
(Affiant)

Subscribed and sworn to before me  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Notary Public in and for said County of  
Los Angeles, State of California  
Form 297-E  
11-12-73

CORPORATE FORM

AFFIDAVIT OF COMPLETION OF WORK  
UNDER SPECIFICATION NO. 2852  
CONTRACT NO. \_\_\_\_\_

(STATE OF CALIFORNIA)  
(COUNTY OF LOS ANGELES)

\_\_\_\_\_, the \_\_\_\_\_ of \_\_\_\_\_,  
(Affiant) (Title) (Contractor)  
a corporation, being first duly sworn, deposes and says:

Affiant is the \_\_\_\_\_ of \_\_\_\_\_  
(Title) (Contractor)  
and makes the following statements for and on behalf of \_\_\_\_\_,  
(Contractor)  
a corporation.

That, in accordance with the provisions under Subsection 01000.58 of GENERAL  
CONDITIONS Section of Specification No. 2852, which Specifications is a part of  
Contract No. \_\_\_\_\_, by and between City of Los Angeles and \_\_\_\_\_

\_\_\_\_\_  
(Contractor)

to the best of my knowledge and belief, Work specified in said Specifications and said  
Contract has been completed in strict accordance with Drawings and Specifications  
therefore, that no lawful debts for labor or materials are outstanding, and that no federal  
excise tax has been included in Contract price;

That all requests for funds under Items of Contract, including Changes in Work, and under  
all billings of whatsoever nature are accurate, complete and final and that no additional  
compensation over and above the final payment now pending shall be requested or is  
due under Contract or under any adjustment issued thereunder;

That, in accordance with said Subsection 01000.58, upon receipt of said final payment now pending, Affiant acknowledges for himself/herself and for \_\_\_\_\_,  
(Contractor)

that City, Board thereof, Executive Director, Engineer, and any and all authorized employees of City shall thereby be released from any and all claims or liability on account of Work performed under Contract or any additions thereof.

\_\_\_\_\_  
(Affiant)

Subscribed and sworn to before me  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Notary Public in and for said County of  
Los Angeles, State of California  
Form 308-E  
11/12/73

|                     |              |                |
|---------------------|--------------|----------------|
| DEPARTMENT USE ONLY |              |                |
| Contract No.:       | Award Date:  | Contract Term: |
| Contract Title:     | Award Total: |                |

Business Name: El Capitan Environmental Services Award Total: \$ \$16,704,902.50

Owner's Ethnicity: White Gender: Male Group: SBE VSBE MBE WBE DVBE OBE  
(Circle all that apply)

Local Business Enterprise: YES ✓ NO        (Check only one)

Primary NAICS Code: 562910

Address: 11080 Tuxford Street

City/State/Zip: Sun Valley, CA 91352

Telephone: ( 818 ) 768-9222 FAX: ( 818 ) 768-9222

Contact Person/Title: Harry Boyajan

Email Address: hboyajian@elcapenv.com

State Contractor's I.D. 640045 DIR Registration No. 1000004668

RAMP Company ID 20114

Business Name: Commercial Paving and Coating Company Award Total: \$ \$3,139,500.00

Owner's Ethnicity: White Gender: Male Group: SBE VSBE MBE WBE DVBE **OBE**

(Circle all that apply)

Local Business Enterprise: YES ✓ NO        (Check only one)

Primary NAICS Code: 237310

Address: 4617 Brazil Street

City/State/Zip: Los Angeles, CA 90039

Telephone: ( 323 ) 256-1331 FAX: (    )           

Contact Person/Title: Linda Rico / Account Receivable

Email Address: linda@compav.com

State Contractor's I.D. 475564 DIR Registration No. 1000004966

RAMP Company ID 44253

Description of Work to be Performed Asphalt paving, grinding, sealcoat, stripe  
or Items Being Supplied:

**SUBCONTRACTOR/SUPPLIER INFORMATION FORM (CIRCLE ONE)**

Business Name: J&I Trucking Award Total: \$ \$1,650,000.00  
Owner's Ethnicity: Hispanic Gender: Male Group: SBE VSBE MBE WBE DVBE OBE  
(Circle all that apply)  
Local Business Enterprise: YES ☒ NO ☐ (Check only one)  
Primary NAICS Code: 484220, 484230  
Address: P.O.Box 2063  
City/State/Zip: Irwindale, CA 91706  
Telephone: ( 818 ) 612-6710 FAX: ( )   
Contact Person/Title: Amanda Zepeda / Office Manager  
Email Address: jandizepeda@gmail.com  
State Contractor's I.D. DOT# 2121996; CA #0000449 DIR Registration No. 1000053352  
RAMP Company ID 54850  
Description of Work to be Performed Trucking, Hauling contaminated soil, construction debris,  
or Items Being Supplied: broken concrete/Asphalt

**SUBCONTRACTOR/SUPPLIER INFORMATION FORM (CIRCLE ONE)**

Business Name: Geronimo Concrete, Inc. Award Total: \$ \$902,500.00  
Owner's Ethnicity: Hispanic Gender: Male Group: SBE VSBE MBE WBE DVBE OBE  
(Circle all that apply)  
Local Business Enterprise: YES ☒ NO ☐ (Check only one)  
Primary NAICS Code: 236220  
Address: 4560 Huntington Drive, N.  
City/State/Zip: Los Angeles, CA 90032  
Telephone: ( 323 ) 225-2016 FAX: ( )   
Contact Person/Title: Sandy Jeronimo / Contracts Admin  
Email Address: Contracts@geronimo-concrete.com  
State Contractor's I.D. 770018 DIR Registration No. 1000011079  
RAMP Company ID 109470  
Description of Work to be Performed Concrete work  
or Items Being Supplied:



Authorized signature

12/09/2025

Date

Refer to Subsection 00030.06 for SBE, VSBE, DVBE, MBE, WBE, and OBE definitions and refer to Subsection 00030.10 for definition of Local Business Enterprise (LBE).

## SUBCONTRACTOR/SUPPLIER INFORMATION FORM (CIRCLE ONE)

Business Name: Calmat Co., dba Vulcan Material Company Award Total: \$ \$413,750.00  
Owner's Ethnicity: Corp. Gender: M/F Group: SBE VSBE MBE WBE DVBE OBE  
(Circle all that apply)  
Local Business Enterprise: YES ☒ NO (Check only one)  
Primary NAICS Code: 212319, 212321  
Address: 31 Rancho Camino Drive, Unit 300  
City/State/Zip: Pomona, CA 91766  
Telephone: ( 626 ) 862-7527 FAX: ( )  
Contact Person/Title: Carlos Castellanos / Sales Representative  
Email Address: castellanosc@vmcmail.com  
State Contractor's I.D. 49763 DIR Registration No. 1000054854  
RAMP Company ID 23230  
Description of Work to be Performed Provide aggregate base and CMB  
or Items Being Supplied:

## SUBCONTRACTOR/SUPPLIER INFORMATION FORM (CIRCLE ONE)

Business Name: Trench Shoring Award Total: \$ \$286,627.50  
Owner's Ethnicity: White Gender: M/F Group: SBE VSBE MBE WBE DVBE OBE  
(Circle all that apply)  
Local Business Enterprise: YES ☒ NO (Check only one)  
Primary NAICS Code: 532490  
Address: 206 N Central Ave  
City/State/Zip: Compton, CA 90220  
Telephone: ( 310 ) 327-5554 FAX: ( )  
Contact Person/Title: Alex Argueta / Estimator  
Email Address: alexa@trenchshoring.com  
State Contractor's I.D. None DIR Registration No. None  
RAMP Company ID 41893  
Description of Work to be Performed Supplying K-rails, rental and sales  
or Items Being Supplied:



Authorized signature

12/09/2025

Date

Refer to Subsection 00030.06 for SBE, VSBE, DVBE, MBE, WBE, and OBE definitions  
and refer to Subsection 00030.10 for definition of Local Business Enterprise (LBE).



**SUBCONTRACTOR/SUPPLIER INFORMATION FORM (CIRCLE ONE)**

Business Name: The Pros CA, Inc Award Total: \$ \$275,000.00  
Owner's Ethnicity: White Gender: Male Group: SBE VSBE MBE WBE DVBE **OBE**  
(Circle all that apply)  
Local Business Enterprise: YES ☒ NO ☐ (Check only one)  
Primary NAICS Code: 23821  
Address: 8748 Bradley Ave  
City/State/Zip: Sun Valley, CA 91352  
Telephone: ( 844 ) 766-7222 FAX: ( )   
Contact Person/Title: John Vardanyan / Operations Director  
Email Address: john@theprosca.com  
State Contractor's I.D. 1067398 DIR Registration No. 2000015984  
RAMP Company ID 217803  
Description of Work to be Performed Electrical Work  
or Items Being Supplied:

**SUBCONTRACTOR/SUPPLIER INFORMATION FORM (CIRCLE ONE)**

Business Name: KB Environmental Inc. Award Total: \$ \$150,000.00  
Owner's Ethnicity: White Gender: Male Group: SBE VSBE MBE WBE DVBE **OBE**  
(Circle all that apply)  
Local Business Enterprise: YES ☒ NO ☐ (Check only one)  
Primary NAICS Code: 562211  
Address: 112750 Raymer Street Unit #4  
City/State/Zip: North Hollywood, CA 91605  
Telephone: ( 818 ) 567-7312 FAX: ( )   
Contact Person/Title: Paul Kostanian / Project Manager  
Email Address: paul.kbeinc@gmail.com  
State Contractor's I.D. 974724 DIR Registration No. 1000020553  
RAMP Company ID 67824  
Description of Work to be Performed Asbestos abatement and Lead abatement  
or Items Being Supplied:



Authorized signature

12/09/2025

Date

Refer to Subsection 00030.06 for SBE, VSBE, DVBE, MBE, WBE, and OBE definitions and refer to Subsection 00030.10 for definition of Local Business Enterprise (LBE).

**SUBCONTRACTOR/SUPPLIER INFORMATION FORM (CIRCLE ONE)**

Business Name: Crosby Plumbing, Inc.

Award Total: \$ \$80,000.00

Owner's Ethnicity: White Gender: Male Group: **SBE** **VSBE** MBE WBE DVBE **OBE**

(Circle all that apply)

Local Business Enterprise: YES ☒ NO ☐ (Check only one)

Primary NAICS Code: 237110

Address: 371 Crosby Street

City/State/Zip: Altadena, CA 91001

Telephone: ( 626 ) 756-9672 FAX: ( 626 ) 765-9673

Contact Person/Title: Anthony Tatikian / President

Email Address: anthony@crosbyplumbing.net

State Contractor's I.D. 994490 DIR Registration No. 1000004513

RAMP Company ID 110641

Description of Work to be Performed or Items Being Supplied: Site Utility, plumbing, storm drain

**SUBCONTRACTOR/SUPPLIER INFORMATION FORM (CIRCLE ONE)**

Business Name: \_\_\_\_\_

Award Total: \$ \_\_\_\_\_

Owner's Ethnicity: \_\_\_\_\_ Gender: \_\_\_\_\_ Group: SBE VSBE MBE WBE DVBE OBE

(Circle all that apply)

Local Business Enterprise: YES \_\_\_\_\_ NO \_\_\_\_\_ (Check only one)

Primary NAICS Code: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Telephone: ( ) \_\_\_\_\_ FAX: ( ) \_\_\_\_\_

Contact Person/Title: \_\_\_\_\_

Email Address: \_\_\_\_\_

State Contractor's I.D. \_\_\_\_\_ DIR Registration No. \_\_\_\_\_

RAMP Company ID \_\_\_\_\_

Description of Work to be Performed or Items Being Supplied: \_\_\_\_\_



December 09, 2025

Authorized signature

Date

Refer to Subsection 00030.06 for SBE, VSBE, DVBE, MBE, WBE, and OBE definitions and refer to Subsection 00030.10 for definition of Local Business Enterprise (LBE).

02 SUBCONTRACTOR/SUPPLIER OWNERSHIP AND LOCAL BUSINESS  
ENTERPRISE AFFIDAVIT

## AFFIDAVIT

"The undersigned declares under penalty of perjury pursuant to the laws of the State of California that the following information and information contained on the attached Contractor/Subcontractor/Supplier Information Form is true and correct and includes all material information necessary to identify and explain the operations of

Name of Firm Commercial Coating Company, Inc.,  
dba Commercial Paving & Coating

as well as the ownership thereof. Further, the undersigned agrees to provide, upon request, either through the prime contractor or, directly to Harbor Department, complete and accurate information regarding ownership in the named firm, and all of its domestic and foreign affiliates, any proposed changes of the ownership and to permit the audit and examination of firm ownership documents, and the ownership documents of all of its domestic and foreign affiliates, in association with this Contract."

Please indicate the ownership of your company as defined in Subsection 00030.06 of BIDDING DOCUMENTS Section:

Small Business Enterprise (SBE)  
Very Small Business Enterprise (VSBE)

AL 12/9/25  
Yes or No (Circle One)  
Yes or No (Circle One)

Is your firm a DVBE MBE WBE OBE (Circle at least one)

Please indicate the local business enterprise (LBE) status of your company as defined in Subsection 00030.10 of BIDDING DOCUMENTS Section:

Circle One:  
LBE  
Non-LBE

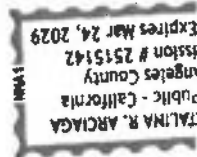
Signature \_\_\_\_\_ Title President

Printed Name ADRIAN LOERA Date Signed 11/24/25

NOTARY

State of California

County 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 Los Angeles

On 11/24/2025 before me, Maria Catalina R. Arciaga, Notary Public  
(insert name and title of the officer)

personally appeared Adrian Loera,  
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 [Signature] (Seal)



02 SUBCONTRACTOR/SUPPLIER OWNERSHIP AND LOCAL BUSINESS  
ENTERPRISE AFFIDAVIT

## AFFIDAVIT

"The undersigned declares under penalty of perjury pursuant to the laws of the State of California that the following information and information contained on the attached Contractor/Subcontractor/Supplier Information Form is true and correct and includes all material information necessary to identify and explain the operations of

Name of Firm

J & I TRUCKING

as well as the ownership thereof. Further, the undersigned agrees to provide, upon request, either through the prime contractor or, directly to Harbor Department, complete and accurate information regarding ownership in the named firm, and all of its domestic and foreign affiliates, any proposed changes of the ownership and to permit the audit and examination of firm ownership documents, and the ownership documents of all of its domestic and foreign affiliates, in association with this Contract."

Please indicate the ownership of your company as defined in Subsection 00030.06 of BIDDING DOCUMENTS Section:

Small Business Enterprise (SBE)

Yes or No

(Circle One)

Very Small Business Enterprise (VSBE)

Yes or No

(Circle One)

Is your firm a DVBE MBE WBE OBE (Circle at least one)

Please indicate the local business enterprise (LBE) status of your company as defined in Subsection 00030.10 of BIDDING DOCUMENTS Section:

Circle One:

LBE

Non-LBE

Signature



Title

OWNER

Printed Name

JESUS A. ZEPEDA

Date Signed

11-13-2025

NOTARY

State of California

County 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.

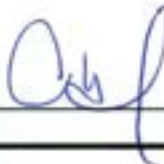
State of California  
County of Los Angeles

On November 13, 2025 before me, Armando Hegdahl, Notary Public  
(insert name and title of the officer)

personally appeared Jesus Hector Zepeda Ramos  
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)



02 SUBCONTRACTOR/SUPPLIER OWNERSHIP AND LOCAL BUSINESS  
ENTERPRISE AFFIDAVIT

## AFFIDAVIT

"The undersigned declares under penalty of perjury pursuant to the laws of the State of California that the following information and information contained on the attached Contractor/Subcontractor/Supplier Information Form is true and correct and includes all material information necessary to identify and explain the operations of

Name of Firm

Geronimo Concrete

as well as the ownership thereof. Further, the undersigned agrees to provide, upon request, either through the prime contractor or, directly to Harbor Department, complete and accurate information regarding ownership in the named firm, and all of its domestic and foreign affiliates, any proposed changes of the ownership and to permit the audit and examination of firm ownership documents, and the ownership documents of all of its domestic and foreign affiliates, in association with this Contract."

Please indicate the ownership of your company as defined in Subsection 00030.06 of BIDDING DOCUMENTS Section:

Small Business Enterprise (SBE)  
Very Small Business Enterprise (VSBE)

Yes ☒ No  
Yes ☒ No

(Circle One)  
(Circle One)

Is your firm a DVBE ☒ MBE ☒ WBE OBE (Circle at least one)

Please indicate the local business enterprise (LBE) status of your company as defined in Subsection 00030.10 of BIDDING DOCUMENTS Section:

Circle One:  
☒ LBE  
Non-LBE

Signature



Title

President

Printed Name

Ricardo Lopez

Date Signed

10/10/29

NOTARY

State of California

County of

Los Angeles

CONTRACTOR/SUBCONTRACTOR/SUPPLIER  
INFORMATION

On 11/10/2025 before me, LUIS F. TASSARA, NOTARY PUBLIC  
Date Here Insert Name and Title of the Officer

personally appeared RICHARD M DEZ  
Name(s) of Signer(s)

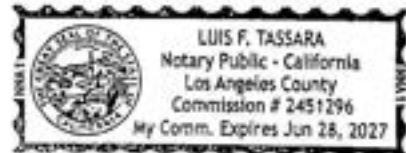
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s),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

Place Notary Seal Above Signature

Signature of Notary Public





02 SUBCONTRACTOR/SUPPLIER OWNERSHIP AND LOCAL BUSINESS  
ENTERPRISE AFFIDAVIT

## AFFIDAVIT

"The undersigned declares under penalty of perjury pursuant to the laws of the State of California that the following information and information contained on the attached Contractor/Subcontractor/Supplier Information Form is true and correct and includes all material information necessary to identify and explain the operations of

Name of Firm

Celmat Co. dba Vulcan Materials Company  
as well as the ownership thereof. Further, the undersigned agrees to provide, upon request, either through the prime contractor or, directly to Harbor Department, complete and accurate information regarding ownership in the named firm, and all of its domestic and foreign affiliates, any proposed changes of the ownership and to permit the audit and examination of firm ownership documents, and the ownership documents of all of its domestic and foreign affiliates, in association with this Contract."

Please indicate the ownership of your company as defined in Subsection 00030.06 of BIDDING DOCUMENTS Section:

Small Business Enterprise (SBE)  
Very Small Business Enterprise (VSBE)

Yes or No (Circle One)  
Yes or No (Circle One)

Is your firm a DBBE MBE WBE OBE N/A (Circle at least one)

Please indicate the local business enterprise (LBE) status of your company as defined in Subsection 00030.10 of BIDDING DOCUMENTS Section:

Circle One:  
LBE Yes 11/25/25  
Non-LBE

Signature Galacys Casillas Title Credit Representative  
Printed Name Galacys Casillas Date Signed 11/18/25

NOTARY

State of California

County of \_\_\_\_\_

See attached

**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 LOS ANGELES )On 11/18/2025 before me, KYI A. NYEIN, NOTARY PUBLIC

Date

Here Insert Name and Title of the Officer

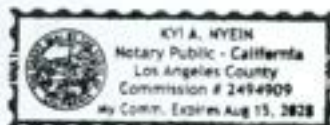
personally appeared GLADYS CASILLAS

Name(s) of Signer(s)

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

Signature of Notary Public

Place Notary Seal Above

**OPTIONAL**

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

**Description of Attached Document**Title or Type of Document: Supplier ownership and local business enterprise affidavit Document Date: 11/18/2025Number of Pages: 1 Signer(s) Other Than Named Above: n/a**Capacity(ies) Claimed by Signer(s)**Signer's Name: Gladys Casillas

Corporate Officer — Title(s): \_\_\_\_\_

Partner — Limited General

Individual Attorney in Fact

Trustee Guardian or Conservator

Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_

Signer's Name: \_\_\_\_\_

Corporate Officer — Title(s): \_\_\_\_\_

Partner — Limited General

Individual Attorney in Fact

Trustee Guardian or Conservator

Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_

02 SUBCONTRACTOR/SUPPLIER OWNERSHIP AND LOCAL BUSINESS  
ENTERPRISE AFFIDAVIT

## AFFIDAVIT

"The undersigned declares under penalty of perjury pursuant to the laws of the State of California that the following information and information contained on the attached Contractor/Subcontractor/Supplier Information Form is true and correct and includes all material information necessary to identify and explain the operations of

Name of Firm

The Pros CA, Inc

as well as the ownership thereof. Further, the undersigned agrees to provide, upon request, either through the prime contractor or, directly to Harbor Department, complete and accurate information regarding ownership in the named firm, and all of its domestic and foreign affiliates, any proposed changes of the ownership and to permit the audit and examination of firm ownership documents, and the ownership documents of all of its domestic and foreign affiliates, in association with this Contract."

Please indicate the ownership of your company as defined in Subsection 00030.06 of BIDDING DOCUMENTS Section:

Small Business Enterprise (SBE)  
Very Small Business Enterprise (VSBE)

Yes or No  
Yes or No

(Circle One)  
(Circle One)

Is your firm a DVBE MBE WBE OBE (Circle at least one)

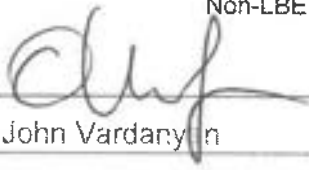
Please indicate the local business enterprise (LBE) status of your company as defined in Subsection 00030.10 of BIDDING DOCUMENTS Section:

Circle One:

LBE

Non-LBE

Signature

Title Operations DirectorPrinted Name John VardanyanDate Signed 11/24/2025

NOTARY

State of California

County of

Los AngelesSee attached jurat

# CALIFORNIA JURAT WITH AFFIANT STATEMENT

GOVERNMENT CODE § 8202

- ☒ See Attached Document (Notary to cross out lines 1-6 below)  
☐ See Statement Below (Lines 1-6 to be completed only by document signer[s], not Notary)

1 \_\_\_\_\_  
 2 \_\_\_\_\_  
 3 \_\_\_\_\_  
 4 \_\_\_\_\_  
 5 \_\_\_\_\_  
 6 \_\_\_\_\_

Signature of Document Signer No. 1

Signature of Document Signer No. 2 (if any)

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 Los Angeles

Subscribed and sworn to (or affirmed) before me  
 on this 24<sup>th</sup> day of November, 2025  
 by \_\_\_\_\_  
 Date Month Year

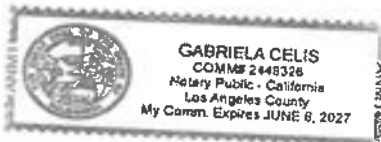
(1) John Vardanyan  
 (and (2) \_\_\_\_\_),

Name(s) of Signer(s)

proved to me on the basis of satisfactory evidence  
 to be the person(s) who appeared before me.

Signature

Signature of Notary Public



Place Notary Seal Above

## OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document:

Entrepreneur Affidavit  
Subcontractor/Supplier ownership and local business

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

Number of Pages: \_\_\_\_\_ Signer(s) Other Than Named Above: \_\_\_\_\_

02 SUBCONTRACTOR/SUPPLIER OWNERSHIP AND LOCAL BUSINESS  
ENTERPRISE AFFIDAVIT

## AFFIDAVIT

"The undersigned declares under penalty of perjury pursuant to the laws of the State of California that the following information and information contained on the attached Contractor/Subcontractor/Supplier Information Form is true and correct and includes all material information necessary to identify and explain the operations of

Name of Firm Tom Malloy Corporation dba Trench Shoring Company

as well as the ownership thereof. Further, the undersigned agrees to provide, upon request, either through the prime contractor or, directly to Harbor Department, complete and accurate information regarding ownership in the named firm, and all of its domestic and foreign affiliates, any proposed changes of the ownership and to permit the audit and examination of firm ownership documents, and the ownership documents of all of its domestic and foreign affiliates, in association with this Contract."

Please indicate the ownership of your company as defined in Subsection 00030.06 of BIDDING DOCUMENTS Section:

Small Business Enterprise (SBE)  
Very Small Business Enterprise (VSBE)

Yes or No  
Yes or No

(Circle One)

(Circle One)

Is your firm a DVBE MBE WBE OBE (Circle at least one)

Please indicate the local business enterprise (LBE) status of your company as defined in Subsection 00030.10 of BIDDING DOCUMENTS Section:

Circle One:

LBE

Non-LBE

Signature [Signature] Title BUSINESS ADMIN  
Printed Name WIEKI HSIAO Date Signed 11/24/2025

NOTARY

State of California

See attached

County of \_\_\_\_\_



**CALIFORNIA 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 Los Angeles }  
 On November 24, 2025 before me, Roxandra Grosser, Notary Public  
Date Here Insert Name and Title of the Officer  
 personally appeared Jie Jen Hsiao  
Name(s) of Signer(s)

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.



Place Notary Seal and/or Stamp Above

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 Roxandra Grosser  
Signature of Notary Public

**OPTIONAL**

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

**Description of Attached Document**

Title or Type of Document: Subcontractor/Supplier Ownership an Local Business Enterprise Affidavit

Document Date: 11/24/2025 Number of Pages: 1

Signer(s) Other Than Named Above: N/A

**Capacity(ies) Claimed by Signer(s)**

|                                                                                                      |                                                                                                      |
|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Signer's Name: _____                                                                                 | Signer's Name: _____                                                                                 |
| <input type="checkbox"/> Corporate Officer – Title(s): _____                                         | <input type="checkbox"/> Corporate Officer – Title(s): _____                                         |
| <input type="checkbox"/> Partner – <input type="checkbox"/> Limited <input type="checkbox"/> General | <input type="checkbox"/> Partner – <input type="checkbox"/> Limited <input type="checkbox"/> General |
| <input type="checkbox"/> Individual <input type="checkbox"/> Attorney in Fact                        | <input type="checkbox"/> Individual <input type="checkbox"/> Attorney in Fact                        |
| <input type="checkbox"/> Trustee <input type="checkbox"/> Guardian or Conservator                    | <input type="checkbox"/> Trustee <input type="checkbox"/> Guardian or Conservator                    |
| <input type="checkbox"/> Other: _____                                                                | <input type="checkbox"/> Other: _____                                                                |
| Signer is Representing: _____                                                                        | Signer is Representing: _____                                                                        |

02 SUBCONTRACTOR/SUPPLIER OWNERSHIP AND LOCAL BUSINESS  
ENTERPRISE AFFIDAVIT

## AFFIDAVIT

"The undersigned declares under penalty of perjury pursuant to the laws of the State of California that the following information and information contained on the attached Contractor/Subcontractor/Supplier Information Form is true and correct and includes all material information necessary to identify and explain the operations of

Name of Firm KB Environmental, Inc.

as well as the ownership thereof. Further, the undersigned agrees to provide, upon request, either through the prime contractor or, directly to Harbor Department, complete and accurate information regarding ownership in the named firm, and all of its domestic and foreign affiliates, any proposed changes of the ownership and to permit the audit and examination of firm ownership documents, and the ownership documents of all of its domestic and foreign affiliates, in association with this Contract."

Please indicate the ownership of your company as defined in Subsection 00030.06 of BIDDING DOCUMENTS Section:

Small Business Enterprise (SBE)  
Very Small Business Enterprise (VSBE)

Yes or No  
Yes or No

(Circle One)  
(Circle One)

Is your firm a DVBE MBE WBE OBE (Circle at least one)

Please indicate the local business enterprise (LBE) status of your company as defined in Subsection 00030.10 of BIDDING DOCUMENTS Section:

Circle One:

LBE  
~~Non-LBE~~

O.S. 11/24/25

Signature [Signature] Title Owner  
Printed Name Channar Saliba Date Signed 11/17/2025

NOTARY

State of California

County of Los Angeles

**CALIFORNIA 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 LOS Angeles }

On November 17<sup>th</sup> 2015 before me, Hovhannes Artur Gamburian,  
Date Here Insert Name and Title of the Officer

personally appeared Ohannes Haroutiun Saliba  
Name(s) of Signer(s)

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 \_\_\_\_\_  
Signature of Notary Public

Place Notary Seal and/or Stamp Above

**OPTIONAL**

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended 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: \_\_\_\_\_

☐ Corporate Officer – Title(s): \_\_\_\_\_

☐ Partner – ☐ Limited ☐ General

☐ Individual ☐ Attorney in Fact

☐ Trustee ☐ Guardian or Conservator

☐ Other: \_\_\_\_\_

Signer is Representing: \_\_\_\_\_

Signer's Name: \_\_\_\_\_

☐ Corporate Officer – Title(s): \_\_\_\_\_

☐ Partner – ☐ Limited ☐ General

☐ Individual ☐ Attorney in Fact

☐ Trustee ☐ Guardian or Conservator

☐ Other: \_\_\_\_\_

Signer is Representing: \_\_\_\_\_



02 SUBCONTRACTOR/SUPPLIER OWNERSHIP AND LOCAL BUSINESS  
ENTERPRISE AFFIDAVIT

## AFFIDAVIT

"The undersigned declares under penalty of perjury pursuant to the laws of the State of California that the following information and information contained on the attached Contractor/Subcontractor/Supplier Information Form is true and correct and includes all material information necessary to identify and explain the operations of

Name of Firm Crosby Plumbing, Inc.

as well as the ownership thereof. Further, the undersigned agrees to provide, upon request, either through the prime contractor or, directly to Harbor Department, complete and accurate information regarding ownership in the named firm, and all of its domestic and foreign affiliates, any proposed changes of the ownership and to permit the audit and examination of firm ownership documents, and the ownership documents of all of its domestic and foreign affiliates, in association with this Contract."

Please indicate the ownership of your company as defined in Subsection 00030.06 of BIDDING DOCUMENTS Section:

Small Business Enterprise (SBE)  
Very Small Business Enterprise (VSBE)

Yes or No  
Yes or No

(Circle One)  
(Circle One)

Is your firm a DVBE MBE WBE OBE AT 12/9/25 (Circle at least one)

Please indicate the local business enterprise (LBE) status of your company as defined in Subsection 00030.10 of BIDDING DOCUMENTS Section:

Circle One:

LBE  
Non-LBE

AT 11/25/25

Signature [Signature] Title President  
Printed Name Anthony Tatikian Date Signed 11/17/2025

NOTARY

State of California

County of \_\_\_\_\_

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 Los Angeles

Subscribed and sworn to (or affirmed) before me on this 17 day

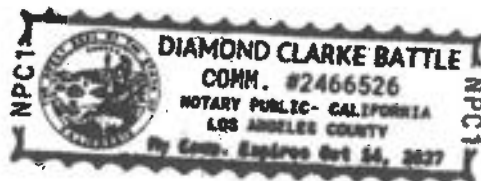
of November, 2025 by Anthony Tatikian

proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

Signature [Signature]

(Seal) 00660-3

Spec. No. 2852



Printed on: 4/28/2025 11:08:31 AM

To verify most current certification status go to: <https://www.caleprocure.ca.gov>

## Office of Small Business & DVBE Services

**Certification ID:** 5032**Legal Business Name:**

EL CAPITAN ENVIRONMENTAL SERVICES

**Doing Business As (DBA) Name 1:**

EL CAPITAN ENVIRONMENTAL SERVICES

**Doing Business As (DBA) Name 2:****Address:**11080 TUXFORD ST  
SUN VALLEY  
CA 91352**Email Address:**

hboyajian@elcapenv.com

**Business Web Page:**[www.elcapitanenvironmentalservices.com](http://www.elcapitanenvironmentalservices.com)**Business Phone Number:**

818/768-9222

**Business Fax Number:**

818/768-9230

**Business Types:**

Construction , Service

| Certification Type | Status   | From       | To         |
|--------------------|----------|------------|------------|
| SB                 | Approved | 05/01/2024 | 04/30/2026 |

Stay informed! KEEP YOUR CERTIFICATION PROFILE UPDATED!

-LOG IN at [CaleProcure.CA.GOV](https://www.caleprocure.ca.gov)

Questions?

Email: [OSDSHELP@DGS.CA.GOV](mailto:OSDSHELP@DGS.CA.GOV)

Call OSDS Main Number: 916-375-4940

707 3rd Street, 1-400, West Sacramento, CA 95605



CONTRACTORS  
STATE LICENSE BOARD  
ACTIVE LICENSE



License Number **640045**

Entity **CORP**

Business Name **EL CAPITAN ENVIRONMENTAL  
SERVICES**

Classification(s) **B A C57 HAZ**

Expiration Date **03/31/2026**

[www.cslb.ca.gov](http://www.cslb.ca.gov)



State of California

# 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:

EL CAPITAN ENVIRONMENTAL SERVICES



to engage in the business or act in the capacity of a contractor  
in the following classification(s):

B - GENERAL BUILDING CONTRACTOR  
A - GENERAL ENGINEERING CONTRACTOR  
C57 - WELL DRILLING (WATER)  
HAZ - HAZARDOUS SUBSTANCES REMOVAL

Witness my hand and seal this day,

January 8, 1998

Issued March 18, 1992

CERTIFIED COPY

This license is the property of the Registrar of Contractors, is not  
transferrable, 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  
Consumer  
Affairs

Signature of Licensee

Signature of License Qualifier

C. Lance Barnett, Ph.D.  
Registrar of Contractors

640045

License Number

STATE OF CALIFORNIA

STATE AND CONSUMER SERVICES AGENCY CONTRACTORS STATE LICENSE BOARD



*Building Quality*



## HAZARDOUS SUBSTANCES REMOVAL AND REMEDIAL ACTIONS CERTIFICATION

Pursuant to the provisions of Section 7058.7 of the Business and Professions Code, the Registrar of Contractors does hereby certify that the following qualifying person has successfully completed the hazardous substances removal and remedial actions examination.



Qualifier: HAROUTIOUN HARRY BOYAJIAN

License No.: 640045

Business Name: EL CAPITAN ENVIRONMENTAL SERVICES

WITNESS my hand and official seal this

10th day of

DECEMBER 1997

Registrar of Contractors

13L-36 (4/96)

This certification 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.





**Metro**

Los Angeles County  
Metropolitan Transportation Authority

One Gateway Plaza  
Los Angeles, CA 90012-2952

213.922.2000 Tel  
metro.net



## CALIFORNIA UNIFIED CERTIFICATION PROGRAM

March 30, 2021

**CUCP# 43266**  
**Metro File #7076**

Mr. Jesus H Zepeda  
**JESUS H ZEPEDA DBA J & I Trucking**  
PO BOX 2063  
IRWINDALE, CA 91706

Subject: Disadvantaged Business Enterprise Certification

Dear Mr. Jesus H Zepeda:

We are pleased to advise you that after careful review of your application and supporting documentation, the Los Angeles County Metropolitan Transportation Authority (Metro) has determined that your firm meets the eligibility standards to be certified as a Disadvantaged Business Enterprise (DBE) as required under the U.S. Department of Transportation (U.S. DOT) Regulation 49 CFR Part 26, as amended. This certification will be recognized by all of the U.S. DOT recipients in California. Your firm will be listed in the California Unified Certification Program (CUCP) database of certified DBEs under the following specific area(s) of expertise that you have identified on the NAICS codes form of the application package:

NAICS 484230: SPECIALIZED FREIGHT (EXCEPT USED GOODS) TRUCKING, LONG-DISTANCE  
NAICS 484220: SPECIALIZED FREIGHT (EXCEPT USED GOODS) TRUCKING, LOCAL

Your DBE certification applies only for the above code(s). You may review your firm's information in the CUCP DBE database which can be accessed at the CUCP website at <https://dot.ca.gov/programs/civil-rights/dbe-search>. Any additions and revisions must be submitted to Metro for review and approval.

In order to ensure your continuing DBE status, you are required to submit an annual update along with supporting documentation. If no changes are noted, then your DBE status remains current. If there are changes, Metro will review to determine continued DBE eligibility. Please note, your DBE status remains in effect unless Metro notifies you otherwise.

Also, should any changes occur that could affect your certification status prior to receipt of the annual update, such as changes in your firm's name, business/mailling address, ownership, management or control, or failure to meet the applicable business size standards or personal net worth standard, please notify Metro immediately. Failure to submit forms and/or change of information will be deemed a failure to cooperate under Section 26.109 of the Regulations.

Metro reserves the right to withdraw this certification if at any time it is determined that it was knowingly obtained by false, misleading, or incorrect information. Your DBE certification is subject to review at any time. The firm thereby consents to the examination of its books, records and documents by Metro.

Congratulations, and thank you for your interest in the DBE program. Should you have any questions, please contact us at (213) 922-2600. For information on Metro contracting opportunities, please visit our website at [www.metro.net](http://www.metro.net).

Sincerely,

Shirley Wong  
Principal Certification Officer  
Diversity & Economic Opportunity Department

**Vendor Information**

|                      |                                   |
|----------------------|-----------------------------------|
| BUSINESS NAME        | JESUS H ZEPEDA DBA J & I Trucking |
| SYSTEM VENDOR NUMBER | 20245722                          |
| PRIMARY OWNER'S NAME | Mr. Jesus H Zepeda                |
| ETHNIC GROUP         | Hispanic American                 |
| GENDER               | Male                              |

**Certification Information**

|                    |                                                          |
|--------------------|----------------------------------------------------------|
| CERTIFYING AGENCY  | Los Angeles County Metropolitan Transportation Authority |
| CERTIFICATION TYPE | SBE - Small Business Enterprise                          |
| EFFECTIVE DATE     | 3/30/2021                                                |
| RENEWAL DATE       | 3/31/2026                                                |

**Contact Information**

|                    |                       |
|--------------------|-----------------------|
| MAIN COMPANY EMAIL | Jandfzepeda@gmail.com |
| MAIN PHONE         | 626-960-7361          |
| MAIN FAX           | 626-960-3631          |

**Addresses**

|                  |                                                          |
|------------------|----------------------------------------------------------|
| PHYSICAL ADDRESS | PO BOX 2063<br>IRWINDALE, CA 91706 <a href="#">[map]</a> |
| MAILING ADDRESS  | PO BOX 2063<br>IRWINDALE, CA 91706 <a href="#">[map]</a> |

**Business Capabilities**

|                                           |                   |
|-------------------------------------------|-------------------|
| BUSINESS CERTIFIED FOR                    | Trucking, hauling |
| FULL DESCRIPTION OF CAPABILITIES/PRODUCTS |                   |



**COMMODITY CODES**

NAICS 484230

Specialized Freight (except Used Goods) Trucking, Long-Distance ([More](#)) [Primary Code]

NAICS 484220

Specialized Freight (except Used Goods) Trucking, Local ([More](#))**Owner Ethnicity and Gender**

ETHNIC GROUP

Hispanic American

GENDER

Male

**Location and Work Districts/Regions**

COUNTY

Los Angeles (CA)

STATEWIDE WORK AREA

Yes

WORK  
DISTRICTS/REGIONS**Additional Information**GROSS RECEIPTS  
CATEGORY

Category 2: \$500,001 -\$1,000,000

CUCP PUBLIC DIRECTORY  
CERTIFICATION NUMBER

43266



**Vendor Information**

|                      |                                   |
|----------------------|-----------------------------------|
| BUSINESS NAME        | JESUS H ZEPEDA DBA J & I Trucking |
| SYSTEM VENDOR NUMBER | 20245722                          |
| PRIMARY OWNER'S NAME | Mr. Jesus H Zepeda                |
| ETHNIC GROUP         | Hispanic American                 |
| GENDER               | Male                              |

**Certification Information**

|                    |                                                          |
|--------------------|----------------------------------------------------------|
| CERTIFYING AGENCY  | Los Angeles County Metropolitan Transportation Authority |
| CERTIFICATION TYPE | DBE - Disadvantaged Business Enterprise                  |
| EFFECTIVE DATE     | 3/30/2021                                                |
| RENEWAL DATE       | 3/31/2026                                                |

**Contact Information**

|                    |                       |
|--------------------|-----------------------|
| MAIN COMPANY EMAIL | JandIzepeda@gmail.com |
| MAIN PHONE         | 626-960-7361          |
| MAIN FAX           | 626-960-3631          |

**Addresses**

|                  |                                                          |
|------------------|----------------------------------------------------------|
| PHYSICAL ADDRESS | PO BOX 2063<br>IRWINDALE, CA 91706 <a href="#">[map]</a> |
| MAILING ADDRESS  | PO BOX 2063<br>IRWINDALE, CA 91706 <a href="#">[map]</a> |

**Business Capabilities**

|                                           |                   |
|-------------------------------------------|-------------------|
| BUSINESS CERTIFIED FOR                    | Trucking, hauling |
| FULL DESCRIPTION OF CAPABILITIES/PRODUCTS |                   |

**COMMODITY CODES**

NAICS 484230

Specialized Freight (except Used Goods) Trucking, Long-Distance ([More](#)) [Primary Code]

NAICS 484220

Specialized Freight (except Used Goods) Trucking, Local ([More](#))**Owner Ethnicity and Gender**

ETHNIC GROUP

Hispanic American

GENDER

Male

**Location and Work Districts/Regions**

COUNTY

Los Angeles (CA)

STATEWIDE WORK AREA Yes

WORK  
DISTRICTS/REGIONS**Additional Information**GROSS RECEIPTS  
CATEGORY

Category 2: \$500,001 -\$1,000,000

CUCP PUBLIC DIRECTORY  
CERTIFICATION NUMBER

43266



# Metro

March 30, 2021

Metro File #7076

Mr. Jesus H Zepeda  
JESUS H ZEPEDA DBA J & I Trucking  
PO BOX 2063  
IRWINDALE, CA 91706

Subject: Small Business Enterprise Certification

Dear Mr. Jesus H Zepeda:

We are pleased to advise you that after careful review of your application and supporting documentation, the Los Angeles County Metropolitan Transportation Authority (Metro) has determined that your firm meets the eligibility standards to be certified as a Small Business Enterprise (SBE) as required under Metro's SBE Program. Your firm will be listed in Metro's SBE database of certified SBEs under the following specific areas of expertise:

NAICS 484230: SPECIALIZED FREIGHT (EXCEPT USED GOODS) TRUCKING, LONG-DISTANCE  
NAICS 484220: SPECIALIZED FREIGHT (EXCEPT USED GOODS) TRUCKING, LOCAL

Your SBE certification is valid for five years from the date of this letter and applies only for the above NAICS code(s). Any additions and revisions must be submitted to Metro for review and approval.

In order to ensure your continuing SBE status, you are required to submit an annual update along with supporting documentation. If no changes are noted, then your SBE status remains current. If there are changes, Metro will review to determine continued SBE eligibility. Please note, your SBE status remains in effect unless Metro notifies you otherwise.

After the five-year certification period, your entire file will be reviewed in order to ascertain continued SBE certification status. You will be notified of the pending SBE status review and any documentation updates necessary prior to the expiration date.

Also, should any changes occur that could affect your certification status prior to receipt of the annual update application, such as changes in your firm's name, business/mailling address, ownership, management or control, or failure to meet the applicable business size standards or personal net worth standard, please notify Metro immediately.

Metro reserves the right to withdraw this certification if at any time it is determined that it was knowingly obtained by false, misleading, or incorrect information. Your SBE certification is subject to review at any time. The firm thereby consents to the examination of its books, records, and documents by Metro.

Congratulations, and thank you for your interest in Metro's SBE Program. Should you have any questions, please contact us at (213) 922-2600. For information on Metro contracting opportunities, please visit our website at [www.metro.net](http://www.metro.net).

Sincerely,

Shirley Wong  
Principal Certification Officer  
Diversity & Economic Opportunity Department

Home &gt; My Business Profile

Company Details

User Management

Compliance Documents

Certification

NAICS Codes and Licenses

Bookmarks

BIP Management

Related Opportunities

Contracts

RAMP Support

For any questions regarding certifications please contact the Bureau of Contract  
Administration, Office of Contract Compliance at [bca.certifications@lacity.org](mailto:bca.certifications@lacity.org)  
(mailto:bca.certifications@lacity.org)

## Certification

+ Add Certification

City of Los Angeles Harbor Expired Certifications

| Name                                          | Status   | Expiration Date |
|-----------------------------------------------|----------|-----------------|
| VSBE: VERY SMALL BUSINESS ENTERPRISE (HARBOR) | Verified | 9/22/2030       |

Certification  
Number

Agency City of Los Angeles Bureau of Contract Administration  
(certified as Small Local Business (SLB))

Certification Date 9/22/2025

Added Date 9/22/2025

Added By Hong To

LSB: LOCAL BUSINESS ENTERPRISE (HARBOR) Verified

## CITY OF LOS ANGELES

City of Los Angeles (<https://www.lacity.org/>)

Mayor's Office of Karen Bass (<http://www.lamayor.org/>)

Open Data (<https://data.lacity.org/dataset/RAMP-Open-Bid-Opportunities/hf3r-utug>)

Bond Assistance Program

Building Permits (<https://ladbs.org/services/core-services/plan-check-permit/>)

## BUSINESS SERVICES

Business Source Centers (<https://reddflacity.com/index.php/local-business/businesssource-centers>)

Business Tax Resources (<https://finance.lacity.org/>)

Minority Business Development Agency (<https://www.mbdba.gov/>)

Office of Small Business (<https://business.lacity.org/>)

City of Los Angeles Green Business Program ([https://www.lacityyear.org/san/faces/home/portal/s-lb-es/s-lb-es-si/s-lb-es-si-gbc?\\_af.cfr=state-dwghk62\\_44\\_wrl.sop=28382735382880796#1](https://www.lacityyear.org/san/faces/home/portal/s-lb-es/s-lb-es-si/s-lb-es-si-gbc?_af.cfr=state-dwghk62_44_wrl.sop=28382735382880796#1))

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bca Certifications (sent by selena.garcia@lacity.org)

12:09 PM (0 minutes ago)

to me

Good afternoon,

The City of LA does not issue certificates.

The best way to verify if a firm is certified is to check the public database of their certifying agency. Below are links to the most common directories: or a screenshot of your RAMP profile.



Accounts > Jesus H. Zepeda Ramos

## Certifications

New Cha

⚙️ ⌂

9 items • Sorted by Expiration Date • Updated a few seconds ago

| <input type="checkbox"/> | Certification ▾                                      | Certification Type ▾              | Certifying Ag... ▾     | Status ▾ | Cert Date ▾ | Expirati... ↑ ▾ |
|--------------------------|------------------------------------------------------|-----------------------------------|------------------------|----------|-------------|-----------------|
| 1                        | <input type="checkbox"/> <a href="#">CERT-229949</a> | DBE: DISADVANTAGED BUSINESS ...   | LA County Metrop...    | Verified | 3/30/2021   |                 |
| 2                        | <input type="checkbox"/> <a href="#">CERT-229951</a> | MBE: MINORITY OWNED BUSINES...    | California Unified ... | Verified | 3/30/2021   |                 |
| 3                        | <input type="checkbox"/> <a href="#">CERT-229981</a> | LBE: LOCAL BUSINESS ENTERPRISE... |                        | Verified |             |                 |
| 4                        | <input type="checkbox"/> <a href="#">CERT-229950</a> | SBE: SMALL BUSINESS ENTERPRIS...  | California Unified ... | Verified | 4/28/2025   | 4/28/2030       |
| 5                        | <input type="checkbox"/> <a href="#">CERT-233766</a> | SLB OR LSB: SMALL LOCAL BUSIN...  | City of Los Angeles    | Verified | 9/22/2025   | 9/22/2030       |
| 6                        | <input type="checkbox"/> <a href="#">CERT-233767</a> | LBE: LOCAL BUSINESS ENTERPRISE... | City of Los Angeles    | Verified | 9/22/2025   | 9/22/2030       |
| 7                        | <input type="checkbox"/> <a href="#">CERT-233900</a> | VSBE: VERY SMALL BUSINESS ENT...  | City of Los Angeles... | Verified | 9/22/2025   | 9/22/2030       |
| 8                        | <input type="checkbox"/> <a href="#">CERT-233898</a> | SBE: SMALL BUSINESS ENTERPRIS...  | City of Los Angeles... | Verified | 9/22/2025   | 9/22/2030       |
| 9                        | <input type="checkbox"/> <a href="#">CERT-233897</a> | EBE: EMERGING BUSINESS ENTER...   | City of Los Angeles... | Verified | 9/22/2025   | 9/22/2030       |

City of Los Angeles ACDBE/DBE/MBE/WBE Directory: <https://bca.lacity.gov/CertificationListings/DBETable.php>

City of Los Angeles SLB Directory: <https://bca.lacity.org/CertificationListings/SLBDirectory.php>

Disadvantaged Business Enterprise DBE Directory search: <https://caltrans.dbesystem.com/>

# Small Business Enterprise Certificate

DGS- SBE Certification exp 11.30.2026.pdf

**Questionnaire Source** LAUSD Small Business Enterprise (SBE) Certification Questionnaire for Geronimo Concrete Inc

|                           |                                                     |                         |
|---------------------------|-----------------------------------------------------|-------------------------|
| <b>Certificate Number</b> | <b>Certificate Issuer</b>                           | <b>Publication Year</b> |
| 2021618                   | State of California, Department of General Services | 2024                    |

|                                                |                       |                        |
|------------------------------------------------|-----------------------|------------------------|
| <b>Certificate Location</b>                    | <b>Effective Date</b> | <b>Expiration Date</b> |
| Certificate issued by a LAUSD-accepted agency. | Nov 26, 2024          | Nov 30, 2026           |

**Applicable Matrix**

**Category** All commodities

**Region** All

**Business Unit** All

FW: Vendor 1000003314- SBE cert

From Geronimo Concrete Billing <Billing@geronimo-concrete.com>

Date: Fri 2/7/2025 3:37 PM

To: Contracts <contracts@geronimo-concrete.com>

fyi

*Cec Phan*

**Geronimo Concrete, Inc** | Controller

4560 Huntington Dr N

Los Angeles, CA 90032

Phone: 323-225-2016

From: Cruz, Joanna <joanna.cruz2@lausd.net> On Behalf Of Vendor Service Unit

Sent: Friday, February 7, 2025 3:30 PM

To: Geronimo Concrete Billing <Billing@geronimo-concrete.com>; Vendor Service Unit <psg-vs@lausd.net>

Subject: RE: Vendor 1000003314- SBE cert

Hi,

This email and screenshot are confirmation of your SBE approval status. You may use this email as your proof. You may also view your approval in your Arriba profile.



**Geronimo Concrete Inc**  
(Public: Geronimo Concrete, Inc)

SM Vendor ID: 164728274  
ERP Vendor ID: 1000003314

[View SAP Business Network profile](#)

- Summary
- Contacts
- ERP data
- Certificates
- Activity log
- Supplier request
- Registration
- Qualifications
- Questionnaires
- Processes

### Certificates

Search  Filter  Sort



**Legacy Small Business Enterprise (SBE)**  
Expired Jan 31, 2025

**Small Business Enterprise Certificate**  
Valid till Nov 30, 2026

**Small Business Enterprise Certificate** ✕

DGS- SBE Certification exp 11.30.2026.pdf

**Questionnaire Source** LAUSD Small Business Enterprise (SBE) Certification Questionnaire for Geronimo Concrete Inc

|                                                |                                                     |                         |
|------------------------------------------------|-----------------------------------------------------|-------------------------|
| <b>Certificate Number</b>                      | <b>Certificate Issuer</b>                           | <b>Publication Year</b> |
| 2021618                                        | State of California, Department of General Services | 2024                    |
| <b>Certificate Location</b>                    | <b>Effective Date</b>                               | <b>Expiration Date</b>  |
| Certificate issued by a LAUSD-accepted agency. | Nov 26, 2024                                        | Nov 30, 2026            |
| <b>Applicable Matrix</b>                       |                                                     |                         |
| Category All commodities                       |                                                     |                         |
| Region All                                     |                                                     |                         |
| Business Unit All                              |                                                     |                         |

Best,

**LAUSD**  
**UNIFIED**  
Procurement Services Division

**Joanna Cruz**

Administrative Analyst

8525 Rex Road, 2<sup>nd</sup> Floor

Pico Rivera, CA 90660

Phone: (562) 654-9328

Email: [joanna.cruz2@lausd.net](mailto:joanna.cruz2@lausd.net)

**Credo:** We work with one another collaboratively and are empowered to do our jobs to the highest level and standards. We provide best-in-class customer service and meet or

exceed industry standards.

---

**From:** Geronimo Concrete Billing <Billing@geronimo-concrete.com>  
**Sent:** Friday, January 31, 2025 12:20 PM  
**To:** Vendor Service Unit <vsg-yvu@lausd.net>  
**Subject:** RE: Vendor 1000003314- SBE cert

CAUTION: EXTERNAL EMAIL

Hello

It has been submitted

*Cue Phan*

**Geronimo Concrete, Inc | Controller**  
4560 Huntington Dr N  
Los Angeles, CA 90032  
Phone: 323-225-2016

---

**From:** Cruz, Joanna <jcruz2@lausd.net> On Behalf Of Vendor Service Unit  
**Sent:** Friday, January 31, 2025 11:58 AM  
**To:** Geronimo Concrete Billing <Billing@geronimo-concrete.com>; Vendor Service Unit <vsg-yvu@lausd.net>  
**Subject:** RE: Vendor 1000003314- SBE cert

Hi,

I sent the SBE questionnaire through the Ariba network.

Let us know if you have any questions.

*Best,*

**LAUSD**  
**UNIFIED**  
**Procurement Services Division**

**Joanna Cruz**  
Administrative Analyst  
8525 Rex Road, 2<sup>nd</sup> Floor  
Pico Rivera, CA 90660  
Phone: (562) 654-9328  
Email: joanna.cruz2@lausd.net

**Credo:** We work with one another collaboratively and are empowered to do our jobs to the highest level and standards. We provide best-in-class customer service and meet or exceed industry standards.

---

**From:** Geronimo Concrete Billing <Billing@geronimo-concrete.com>  
**Sent:** Friday, January 31, 2025 10:46 AM  
**To:** Vendor Service Unit <vsg-yvu@lausd.net>  
**Subject:** FW: Vendor 1000003314- SBE cert

CAUTION: EXTERNAL EMAIL

Good morning

Im following up on this request again Please advise

*Cue Phan*

**Geronimo Concrete, Inc | Controller**  
4560 Huntington Dr N  
Los Angeles, CA 90032  
Phone: 323-225-2016

---

**From:** Geronimo Concrete Billing  
**Sent:** Wednesday, January 29, 2025 1:49 PM  
**To:** Vendor Service Unit <vsg-yvu@lausd.net>  
**Subject:** Vendor 1000003314- SBE cert

Good afternoon

I have reached out to the prequalification department at the beginning of January regarding renewing our SBE cert, but haven't heard back. Would you please advise on how to renew the cert?



*Car Phan*

Geronimo Concrete, Inc | Controller  
4560 Huntington Dr N  
Los Angeles, CA 90032  
Phone: 323-225-2016

Printed on: 11/18/2025 12:35:38 PM

To verify most current certification status go to: <https://www.caleprocure.ca.gov>

## Office of Small Business & DVBE Services

**Certification ID:** 38376**Legal Business Name:**

COMMERCIAL COATING COMPANY INC.

**Doing Business As (DBA) Name 1:**

COMMERCIAL PAVING &amp; COATING

**Doing Business As (DBA) Name 2:****Address:**

2809 W AVE 37

LOS ANGELES

CA 90065

**Email Address:**

amber@compav.com

**Business Web Page:**<http://compav.com>**Business Phone Number:**

323/256-1331

**Business Fax Number:**

323/256-2273

**Business Types:**

Construction

| Certification Type | Status   | From       | To         |
|--------------------|----------|------------|------------|
| SB-PW              | Approved | 06/04/2024 | 06/30/2026 |

Stay informed! KEEP YOUR CERTIFICATION PROFILE UPDATED!

-LOG IN at [CaleProcure.CA.GOV](https://www.caleprocure.ca.gov)

Questions?

Email: [Certification@dgs.ca.gov](mailto:Certification@dgs.ca.gov)

Call OSDS Main Number: 916-375-4940

707 3rd Street, 1-400, West Sacramento, CA 95605

Printed on: 11/18/2025 12:37:14 PM

To verify most current certification status go to: <https://www.caleprocure.ca.gov>

## Office of Small Business & DVBE Services

**Certification ID:** 1794628**Legal Business Name:**  
Crosby Plumbing Inc**Doing Business As (DBA) Name 1:****Doing Business As (DBA) Name 2:****Address:**  
371 CROSBY ST  
ALTADENA  
CA 91001**Email Address:**  
[admin@crosbyplumbing.net](mailto:admin@crosbyplumbing.net)**Business Web Page:****Business Phone Number:**  
626/765-9672**Business Fax Number:****Business Types:**  
Construction , Service

| Certification Type | Status   | From       | To         |
|--------------------|----------|------------|------------|
| SB(Micro)          | Approved | 01/26/2024 | 01/31/2026 |
| SB-PW              | Approved | 01/26/2024 | 01/31/2026 |

Stay informed! KEEP YOUR CERTIFICATION PROFILE UPDATED!

-LOG IN at [CaleProcure.CA.GOV](https://www.caleprocure.ca.gov)

Questions?

Email: [Certification@dgs.ca.gov](mailto:Certification@dgs.ca.gov)

Call OSDS Main Number: 916-375-4940

707 3rd Street, 1-400, West Sacramento, CA 95605

[Back to search](#) [Home > Business Profiles Search > El Capitan Environmental Services](#)



## El Capitan Environmental Services

Soil Remediation, Excavation, Disposal of Contaminated Soil, grading, Backfill, Restoration, Drilling, UST, AST Removal/Installation, SWPPP, OSD/OSP services, Site preparation

### Information

ID  
2074

Registered As  
Prime & Sub

Hours of Operation  
Monday, Tuesday, Wednesday, Thursday, Friday : 8:00:00 AM - 5:00:00 PM

Email  
[abakarian@elcapenv.com](mailto:abakarian@elcapenv.com) (mailto:abakarian@elcapenv.com)

Phone  
818-768-9222

Admin  
Ars Bakarian [abakarian@elcapenv.com](mailto:abakarian@elcapenv.com) (mailto:abakarian@elcapenv.com)

### Addresses

Website  
<https://www.elcapitanenvironmentalservices.com/> (<https://www.elcapitanenvironmentalservices.com/>)

Business/Billing  
11080 TUXFORD STREET  
SUN VALLEY, CA 91352  
United States  
(<https://www.google.com/maps?4=11080%20TUXFORD%20STREET%20SUN%20VALLEY%2C%20CA%2091352%20United%20States>)

Mailing  
11080 Tuxford ST  
Sun Valley, CA 91352  
USA  
(<https://www.google.com/maps?4=11080%20Tuxford%20ST%20Sun%20Valley%2C%20CA%2091352%20USA>)

### Summary

|                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                               | 23891 Site Preparation Contractors<br>23799 Other Heavy and Civil Engineering Construction<br>23899 All Other Specialty Trade Contractors<br>23711 Water and Sewer Line and Related Structures Construction<br>23713 Power and Communication Line and Related Structures Construction<br>56221 Waste Treatment and Disposal<br>56291 Remediation Services<br>56299 All Other Miscellaneous Waste Management Services<br>23890 Site Preparation Contractors<br>56290 Remediation Services |
| <b>NAICS Codes</b>                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Certifications</b>                                                         | LBE (LA), SBE (LA), LBE (Harbor), SBE (Proprietary), OBE                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>California Entity Number</b>                                               | 170173                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Non-Profit</b>                                                             | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Sole Proprietor</b>                                                        | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>BTIC Number</b><br>City of LA Business Tax Registration Certificate Number | 000068472-0001                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Industry</b>                                                               | Remediation and Other Waste Management Services                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Business Structure</b>                                                     | S-Corporation                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

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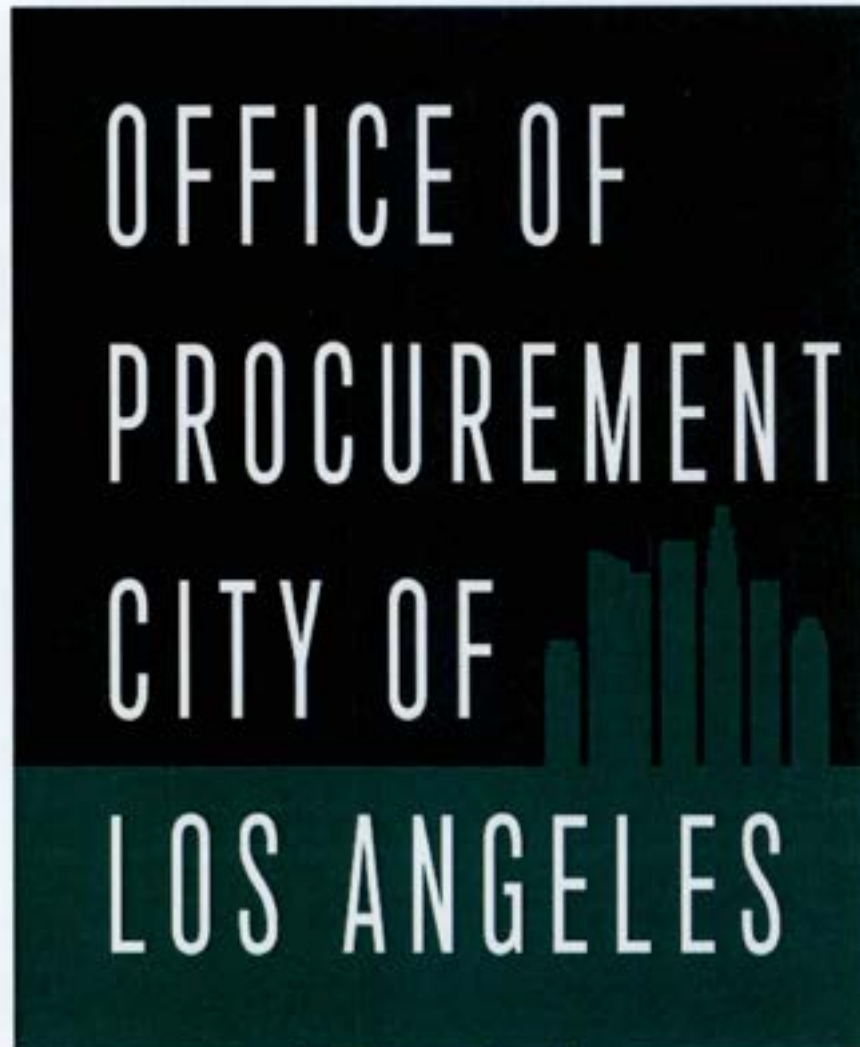
[Report](#) ☐

City of Los Angeles (<https://www.lacity.org>)  
Mayor's Office of Karen Bass (<http://www.lamayor.org>)  
Open Data (<https://data.lacity.org/dataset/RAMP-Open-Bid-Opportunities/hf3r-utnq>)  
Bond Assistance Program  
Building Permits (<https://ladbs.org/services/core-services/plan-check-permit>)

## BUSINESS SERVICES

Business Source Centers (<https://webd.lacity.com/index.php/local-business/businesssource-centers>)  
Business Tax Resources (<https://finance.lacity.org/>)  
Minority Business Development Agency (<https://www.mbdba.gov/>)  
Office of Small Business (<https://business.lacity.org/>)  
City of Los Angeles Green Business Program ([https://www.lacitysan.org/san/faces/home/portal/s-1sh-es/s-1sh-es-si/s-1sh-es-si-gbc?\\_afz.cbn-state=dwgha9b2\\_A&\\_afzLoop=26362735382680796#](https://www.lacitysan.org/san/faces/home/portal/s-1sh-es/s-1sh-es-si/s-1sh-es-si-gbc?_afz.cbn-state=dwgha9b2_A&_afzLoop=26362735382680796#))

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## Jesus H. Zepeda Ramos DBA J & I Trucking

### Information

ID  
54850

Registered As  
Sub

Hours of Operation  
Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday

Email  
[jandizepeda@gmail.com](mailto:jandizepeda@gmail.com) (<mailto:jandizepeda@gmail.com>)

Phone  
626-950-7350

Admin  
JESUS ZEPEDA ([jandizepeda@gmail.com](mailto:jandizepeda@gmail.com)) (<mailto:jandizepeda@gmail.com>)

### Addresses

Business/Billing  
4658 Nora Ave  
Irwindale, CA 91708  
United States  
(<https://www.google.com/maps?q=4658%20Nora+Ave%20Irwindale%20CA%2091708%20United%20States>)

### Summary

NAICS Codes 48422 Specialized Freight (except Used Goods) Trucking, Local  
48423 Specialized Freight (except Used Goods) Trucking, Long-Distance

Certifications D6C, E8E, L8E (LA), H8E, 8L8, 88E (LA), L8E (Harbor), V88E (Harbor)

Non-Profit No

Sole Proprietor Yes

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## CITY OF LOS ANGELES

City of Los Angeles (<https://www.lacity.org>)

Mayor's Office of Karen Bass (<http://www.kemayor.org>)

Open Data (<https://data.lacity.org/dataset/RAMP-Open-Bid-Opportunities/hf3r-utwq>)

Bond Assistance Program

Building Permits (<https://ladbs.org/services/one-services/plan-check-permit>)

## BUSINESS SERVICES

Business Source Centers (<https://www.lacity.org/index.php/local-business/business-source-centers>)

Business Tax Resources (<https://finance.lacity.org/>)

Minority Business Development Agency (<https://www.mdba.gov/>)

Office of Small Business (<https://business.lacity.org/>)

City of Los Angeles Green Business Program ([https://www.lacitysan.org/san/tales/home/portal/s-lsh-es/s-lsh-es-si/s-lsh-es-si-gbc?\\_adf.ctrl-state=dwgha9b2\\_4&\\_ahLloop=2836273538380799a1](https://www.lacitysan.org/san/tales/home/portal/s-lsh-es/s-lsh-es-si/s-lsh-es-si-gbc?_adf.ctrl-state=dwgha9b2_4&_ahLloop=2836273538380799a1))

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# OFFICE OF PROCUREMENT CITY OF LOS ANGELES



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[Back to search](#) [Home > Business Profiles Search > Commercial Paving & Coating](#)

## Commercial Paving & Coating

### Information

ID  
44253

Registered As  
Prime & Sub

Email  
[anaa@compas.com](mailto:anaa@compas.com) (<mailto:anaa@compas.com>)

Phone  
818-516-1026

Fax  
310-562273

Admin  
Amber Rueda [amber@compas.com](mailto:amber@compas.com) (<mailto:amber@compas.com>)

### Addresses

Website  
<http://compas.com/> (<http://compas.com/>)

Business/Billing  
P.O. Box 65557  
Los Angeles, CA 90065  
United States  
<https://www.google.com/maps?q=P.O.+Box+65557+Los+Angeles+CA+90065+United+States>

### Summary

|                 |                                                |
|-----------------|------------------------------------------------|
| NAICS Codes     | 23730 Highway, Street, and Bridge Construction |
| Certifications  | CBE                                            |
| Non-Profit      | No                                             |
| Sole Proprietor | No                                             |

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City of Los Angeles (<https://www.lacity.org/>)  
Mayor's Office of Karen Bass (<http://www.kamayer.org/>)  
Open Data (<https://data.lacity.org/dataset/KAPO-Open-Bld-Opportunities/M3r-utng>)  
Bond Assistance Program  
Building Permits (<https://ladbs.org/services/core-services/plan-check-permit>)

### BUSINESS SERVICES

Business Source Centers (<https://weiddlacity.com/index.php/local-business/businesssource-centers>)  
Business Tax Resources (<https://finance.lacity.org/>)  
Minority Business Development Agency (<https://www.mbdba.gov/>)  
Office of Small Business (<https://business.lacity.org/>)  
City of Los Angeles Green Business Program ([https://www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-si/s-lsh-es-si-gbct?\\_af.crl-state=dwghkfb2\\_4&\\_afLoop=28362735362880796#1](https://www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-si/s-lsh-es-si-gbct?_af.crl-state=dwghkfb2_4&_afLoop=28362735362880796#1))



[Back to search](#) [Home > Business Profiles Search > Geronimo Concrete Inc. DBA Geronimo Construction](#)**Geronimo Concrete Inc. DBA Geronimo Construction****Information**ID  
109430Registered As  
PrivatePhone  
3232252088Admin  
Lidia Lopez [contracts@geronimo-concrete.com](mailto:contracts@geronimo-concrete.com) (<mailto:contracts@geronimo-concrete.com>)**Addresses**Business/Billing  
4560 Huntington Drive North  
Los Angeles, CA 90032  
United States  
<https://www.google.com/maps?>  
[q=4560%20Huntington%20Drive%20North%20Los%20Angeles%2C%20CA%2090032%20United%20States](https://www.google.com/maps?q=4560%20Huntington%20Drive%20North%20Los%20Angeles%2C%20CA%2090032%20United%20States)**Summary**

|                   |                                                                      |
|-------------------|----------------------------------------------------------------------|
| <b>NMCS Codes</b> | 23811 Poured Concrete Foundation and Structure Contractors           |
|                   | 23814 Masonry Contractors                                            |
|                   | 23829 All Other Specialty Trade Contractors                          |
|                   | 23889 Other Foundation, Structure, and Building Exterior Contractors |
|                   | 238220 Commercial and Institutional Building Construction            |

|                       |                                                          |
|-----------------------|----------------------------------------------------------|
| <b>Certifications</b> | ORE, LBE (LA), PBC, WBE, LBE (Harbor), SBE (Proprietary) |
|-----------------------|----------------------------------------------------------|

|                   |    |
|-------------------|----|
| <b>Non-Profit</b> | No |
|-------------------|----|

|                        |    |
|------------------------|----|
| <b>Sole Proprietor</b> | No |
|------------------------|----|

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[Back to search](#) [Home](#) > [Business Profiles Search](#) > [Calmat Co.,dba Vulcan Materials Co.,Western Division](#)



## Calmat Co.,dba Vulcan Materials Co.,Western Division

### Information

ID  
23230

Registered As  
Prime & Sub

Phone  
626-653-4257

Fax  
626-969-6143

Admin  
Richard Hofmann [hofmann@vmmail.com](mailto:hofmann@vmmail.com) (<mailto:hofmann@vmmail.com>)

### Addresses

Website  
<http://www.vulcanmaterials.com> (<http://www.vulcanmaterials.com>)

Business/Billing  
500 North Brand Blvd., STE 500  
Glendale, CA 91203-1  
USA  
(<https://www.google.com/maps?q=500%20North%20Brand%20Bld.%2C%20STE%20500%20Glendale%2C%20CA%2091203-TS%2AUSA>)

### Summary

**NAICS Codes** 21231 Stone Mining and Quarrying  
21232 Sand, Gravel, Clay, and Ceramic and Refractory Minerals Mining and Quarrying  
21239 Other Nonmetallic Mineral Mining and Quarrying

**Certifications** LBE (Minority), DBE

**Non-Profit** No

**Sole Proprietor** No

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[Mayor's Office of Karen Bass](http://www.lamayor.org/) (<http://www.lamayor.org/>)

[Open Data](https://data.lacity.org/dataset/RAMP-Open-Bid-Opportunities/tf3n-utnq) (<https://data.lacity.org/dataset/RAMP-Open-Bid-Opportunities/tf3n-utnq>)

[Bond Assistance Program](#)

[Building Permits](https://ladbs.org/services/core-services/plan-check-permit) (<https://ladbs.org/services/core-services/plan-check-permit>)

## BUSINESS SERVICES

[Business Source Centers](https://ewdlacounty.com/index.php/local-business/businesssource-centers) (<https://ewdlacounty.com/index.php/local-business/businesssource-centers>)

[Business Tax Resources](https://finance.lacity.org/) (<https://finance.lacity.org/>)

[Minority Business Development Agency](https://www.mdba.gov/) (<https://www.mdba.gov/>)

[Office of Small Business](https://business.lacity.org/) (<https://business.lacity.org/>)

[City of Los Angeles Green Business Program](https://www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-si/s-lsh-es-si-gbc?_afz.cdn-state=dwqk962_A&_afz.cdn=28362795382880796#) ([https://www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-si/s-lsh-es-si-gbc?\\_afz.cdn-state=dwqk962\\_A&\\_afz.cdn=28362795382880796#](https://www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-si/s-lsh-es-si-gbc?_afz.cdn-state=dwqk962_A&_afz.cdn=28362795382880796#))

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**Trench Shoring Company**

### Independent Items

4184

Registered As  
Prime & Sub

Phone  
510.327.0174

Admin  
kevin.mallo@trenchshoring.com (mailto:kevinm@trenchshoring.com)

### Address

Business/Billing  
205 N. Central Ave  
Compton, CA 90220  
United States  
<https://www.google.com/maps?c=26°12'0N,118°10'0W>

### Supernature

NAICS Codes 532402 Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing

|                |     |
|----------------|-----|
| Certifications | ORE |
|----------------|-----|

|            |     |
|------------|-----|
| Non-Profit | Yes |
|------------|-----|

|                 |    |
|-----------------|----|
| Sole Proprietor | No |
|-----------------|----|

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## CITY OF LOS ANGELES

City of Los Angeles (<https://www.lacity.org>)

Mayor's Office of Career Bays (<http://www.lamayor.org>)

Open Data (<https://data.lacby.org/dataset/RAMP-Open-Bid-Opportunities/h/3r-ctng>)

### Bond Assistance Program

**Building Permits:** (<https://flaids.org/services/core-services/plan-check-permit/>)

## BUSINESS SERVICES

Business Source Centers (<https://www.fwdcity.com/index.php/local-business/business-source-centers>)

Business Tax Resources (<https://finance.iaclty.org/>)

Minority Business Development Agency (<https://www.mbdba.com/>)

Office of Small Business (<https://business.betty.org/>)

City of Los Angeles Green Business Program ([https://www.lacitysan.org/san/faces/home/portals/5-lbt-es/s-lbt-es-slf-s-lbt-es-cl-gbc?\\_afz.cfm-state=twshkw002\\_44\\_&\\_afz.cfm=2836272538260780#](https://www.lacitysan.org/san/faces/home/portals/5-lbt-es/s-lbt-es-slf-s-lbt-es-cl-gbc?_afz.cfm-state=twshkw002_44_&_afz.cfm=2836272538260780#))

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[Back to search](#) Home > Business Profiles Search > THE PROS CA INC DBA Service Pros, Electric Pros, Fire Pros**THE PROS CA INC DBA Service Pros, Electric Pros, Fire Pros**

Electrical - Fire Sprinkler - Fire Alarm Contractors

**Information****ID**  
217603**Registered As**  
Prime & Sub**Hours of Operation**  
Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday : 7:30:00 AM - 6:30:00 PM**Email**  
[info@theprosca.com](mailto:info@theprosca.com) (<mailto:info@theprosca.com>)**Phone**  
844-776-3222**Admin**  
The Pros Inc [info@theprosca.com](mailto:info@theprosca.com) (<mailto:info@theprosca.com>)**Addresses****Website**  
[www.theprosca.com/](https://www.theprosca.com/) (<https://www.theprosca.com/>)**Business/Billing**  
8748 Bradley Ave  
SUN VALLEY, CA 91352  
United States  
(<https://www.google.com/maps?q=8748%3DBradley%3DAve%3DSUN%3DVALLEY%3DCA%3D91352%3DUnited%3DStates%3D>)**Mailing**  
8748 Bradley Ave  
SUN VALLEY, CA 91352  
United States  
(<https://www.google.com/maps?q=8748%3DBradley%3DAve%3DSUN%3DVALLEY%3DCA%3D91352%3DUnited%3DStates%3D>)**Summary**

|                                                                               |                                                                        |
|-------------------------------------------------------------------------------|------------------------------------------------------------------------|
| <b>NAICS Codes</b>                                                            | 23822 Commercial and Institutional Building Construction               |
|                                                                               | 23821 Electrical Contractors                                           |
|                                                                               | 23821 Industrial Building Construction                                 |
|                                                                               | 23829 Other Building Equipment Contractors                             |
|                                                                               | 23899 All Other Specialty Trade Contractors                            |
|                                                                               | 23713 Power and Communication Line and Related Structures Construction |
| <b>California Entity Number</b>                                               | 4589085                                                                |
| <b>Sole Proprietor</b>                                                        | No                                                                     |
| <b>STRC Number</b><br>City of LA Business Tax Registration Certificate Number | 3227833                                                                |
| <b>Annual Revenue Range **</b>                                                | \$ - 12M                                                               |
| <b>Employees Range **</b>                                                     | Under 20                                                               |
| <b>Ethnicity **</b>                                                           | Other                                                                  |

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Bond Assistance Program



## BUSINESS SERVICES

Business Source Centers (<https://newddiacity.com/index.php/local-business/businesssource-centers/>)

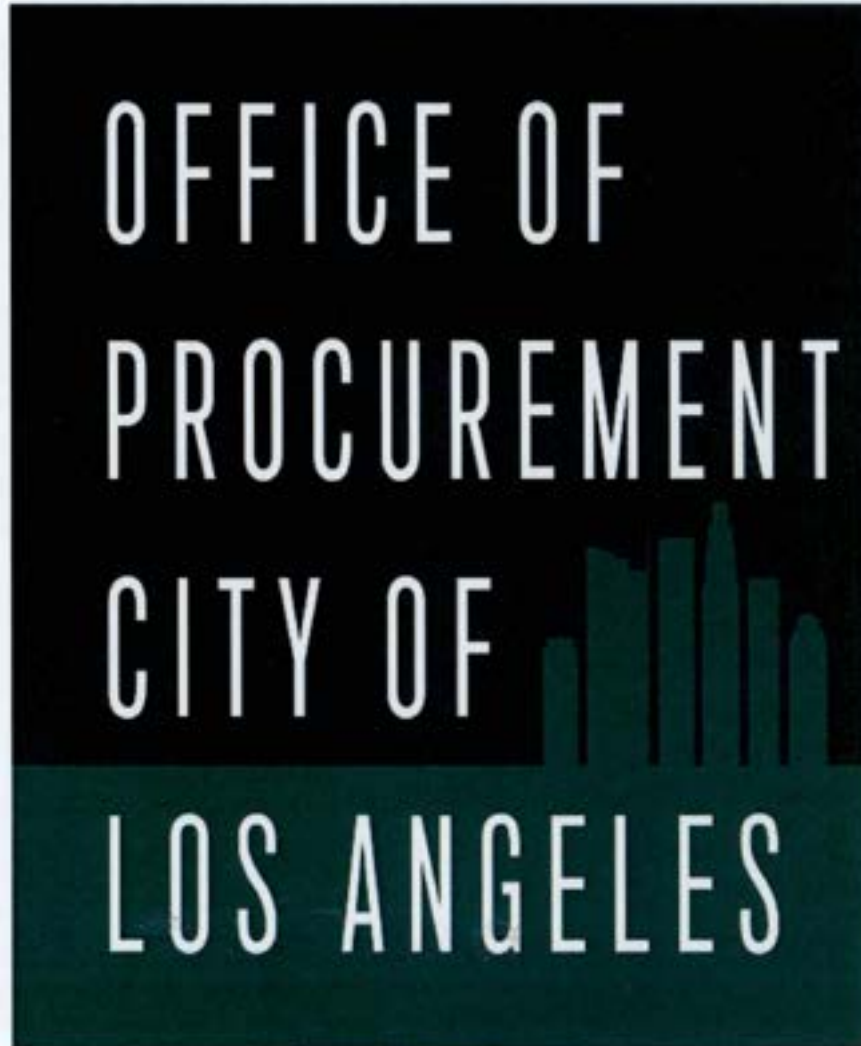
Business Tax Resources (<https://finance.lacity.org/>)

Minority Business Development Agency (<https://www.mdba.gov/>)

Office of Small Business (<https://business.lacity.org/>)

City of Los Angeles Green Business Program ([https://www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-si/s-lsh-es-si-gbc?\\_af.ctri-state=dwqk9b2\\_A&\\_afLoop=28362735382860796#](https://www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-si/s-lsh-es-si-gbc?_af.ctri-state=dwqk9b2_A&_afLoop=28362735382860796#))

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## KB Environmental, Inc.

### Information

ID  
63824

Registered As  
Prime & Sub

Phone  
877-640-1695

Admin  
Paroujan Kishorian [kbenvironmentalinc@gmail.com](mailto:kbenvironmentalinc@gmail.com) (<mailto:kbenvironmentalinc@gmail.com>)

### Addresses

Business/Billing  
1812 W. Burbank #343  
Burbank, CA 91506  
USA  
(<https://www.google.com/maps?q=1812%20W.%20Burbank%20%23343%20Burbank%2C%20CA%2091506%20USA>)

### Summary

#### NAICS Codes

23831 Drywall and Insulation Contractors  
562211 Hazardous Waste Treatment and Disposal  
236116 Residential Remodelers  
54800 Environmental Consulting Services  
56212 Hazardous Waste Collection  
562910 Remediation Services

#### Certifications

OBE

#### Non-Profit

No

#### Sole Proprietor

No

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Mayor's Office of Karen Bass (<http://www.lamayor.org/>)

Open Data (<https://data.lacity.org/dataset/RAMP-Open-Bid-Opportunities/hf3n-ufnq>)

Bond Assistance Program

Building Permits (<https://ladsb.org/services/core-services/plan-check-permit/>)

## BUSINESS SERVICES

Business Source Centers (<https://wddlcity.com/index.php/local-business/businesssource-centers/>)

Business Tax Resources (<https://finance.lacity.org/>)

Minority Business Development Agency (<https://www.mdba.gov/>)

Office of Small Business (<https://business.lacity.org/>)

City of Los Angeles Green Business Program ([https://www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-si/s-lsh-es-si-gbc?\\_af1.cbn-state=dwgha962\\_45\\_af1Loop=283627353826807964](https://www.lacitysan.org/san/faces/home/portal/s-lsh-es/s-lsh-es-si/s-lsh-es-si-gbc?_af1.cbn-state=dwgha962_45_af1Loop=283627353826807964))

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**Crosby Plumbing Inc.**

### Equipment

Registered As  
PrimePhone  
615-768-5172

Anthony Tatikian [estimating@crossbyplumbing.net](mailto:estimating@crossbyplumbing.net) ([maikts.estimating@crossbyplumbing.net](mailto:maikts.estimating@crossbyplumbing.net))

### Address

Business/Billing  
371 Crosby Street  
Citadens, CA 95001  
USA  
<https://www.scoop.com/mags/for/371%20Crosby%20Street%20Citadens%20CA%2095001%20USA>

## Symptoms

|             |                                           |
|-------------|-------------------------------------------|
| NAICS Codes | 22121 Natural Gas Distribution            |
|             | 22131 Water Supply and Irrigation Systems |
|             | 22132 Sewage Treatment Facilities         |

|               |     |
|---------------|-----|
| Certification | ORE |
|---------------|-----|

Non-Profit No

|                 |     |
|-----------------|-----|
| Sole Proprietor | Yes |
|-----------------|-----|

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Mayer's Office of Korean Bais (<http://www.samayee.org>)

Open Data (<https://data.lacity.org/dataset/FAMP-Open-Bid-Opportunities/fd3e-utna/>)

### Hand Assistance Program

**Building Permits** (<https://fladba.org/services/core-services/plus-check-permit>)

## BUSINESS SERVICES

Business Source Centers (<https://www.fitch.com/index.php/local-business/business-source-centers>)

Business Tax Resources (<https://finance.fidelity.org/>)

Minority Business Development Agency (<http://www.mbdba.gov/>)

Office of Small Business (<https://business.lacity.org/>)

City of Los Angeles Green Business Program ([https://www.lacitysan.org/san/faces/home/portals/1-1b-es/s-1b-es-si/s-1b-es-si-gbt?\\_afcl-ctrl-state=deqk6b2\\_4&\\_afcl-cop=28362735782890708#](https://www.lacitysan.org/san/faces/home/portals/1-1b-es/s-1b-es-si/s-1b-es-si-gbt?_afcl-ctrl-state=deqk6b2_4&_afcl-cop=28362735782890708#))

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## Bidder Certification

This form must be submitted with your bid or proposal to the City department that is awarding the contract noted below. If you have questions about this form, please contact the Ethics Commission at (213) 978-1960.

☒ **Original Filing**      ☐ **Amendment:** Date of Signed Original \_\_\_\_\_ Date of Last Amendment \_\_\_\_\_

|                                                                            |                                                                                                         |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Reference Number (Bid, Contract, or RAMP)<br><b>Specification No. 2852</b> | Awarding Authority (Department awarding the contract)<br><b>Port of Los Angeles - Harbor Department</b> |
| Bidder Name<br><b>El Capitan Environmental Services</b>                    |                                                                                                         |
| Address<br><b>11080 Tuxford Street, Sun Valley, CA 91352</b>               |                                                                                                         |
| Email Address<br><b>hboyajian@elcapenv.com</b>                             | Phone Number<br><b>818-768-9222</b>                                                                     |

## Certification

I certify the following on my own behalf or on behalf of the entity named above, which I am authorized to represent:

A. I am applying for one of the following types of contracts with the City of Los Angeles:

1. A goods or services contract with a value of more than \$25,000 and a term of at least three months;
2. A construction contract with any value and duration;
3. A financial assistance contract, as defined in Los Angeles Administrative Code § 10.40.1(h), with a value of at least \$100,000 and a term of any duration; or
4. A public lease or license, as defined in Los Angeles Administrative Code § 10.40.1(i), with any value and duration.

B. I acknowledge and agree to comply with the disclosure requirements and prohibitions established in the Los Angeles Municipal Lobbying Ordinance if I qualify as a lobbying entity under Los Angeles Municipal Code § 48.02.

I certify under penalty of perjury under the laws of the City of Los Angeles and the state of California that the information in this form is true and complete.

**Harry Boyajian**

Name

**President**

Title

Signature

**November 11, 2025**

Date



Prohibited Contributors  
(Bidders)

This form must be completed in its entirety and submitted with your bid or proposal to the City department that is awarding the contract. Failure to submit a completed form may affect your bid or proposal. If you have questions about this form, please contact the Ethics Commission at (213) 978-1960.

☒ **Original Filing** ☐ **Amendment:** Date of Signed Original \_\_\_\_\_ Date of Last Amendment \_\_\_\_\_

Reference Number (Bid, Contract, or RAMP): Spec. No. 2852 Date Bid Submitted: 11/13/2025

Contract Description (Title of the RFP or City contract solicitation and description of the services to be provided):

Port of Los Angeles - 2026-2028 Site Improvements

Awarding Authority (Department awarding the contract): City of Los Angeles - Harbor Department

Bidder Name: El Capitan Environmental Services

Bidder Address: 11080 Tuxford Street, Sun Valley, CA 91352

Bidder Email Address: hboyajian@elcapenv.com Bidder Phone Number: 818-768-9222

## Schedule Summary

Please complete all three of the following:

1. **SCHEDULE A – Bidder's Principals** (check one)

The bidder has one or more **PRINCIPALS**, as defined in LAMC § 49.7.35(A)(6).  
At least one principal is required for entities. (If you check "Yes", Schedule A is required.)

Yes



No

2. **SCHEDULE B – Subcontractors and Their Principals** (check one)

The bidder has one or more **SUBCONTRACTORS** on this bid or proposal with  
subcontracts worth \$100,000 or more. (If you check "Yes", Schedule B is required.)

Yes



No

3. **TOTAL NUMBER OF PAGES SUBMITTED** (including this cover page): 8

## Certification

I certify the following under penalty of perjury under the laws of the City of Los Angeles and the state of California:

A) I understand, will comply with, and have notified my principals and subcontractors of the requirements and restrictions in Los Angeles City Charter § 470(c)(12) and any related ordinances; B) I understand that I must amend this form within ten business days if any information changes; C) I am the bidder named above or I am authorized to represent the bidder named above, and my name appears below; and D) The information provided in this form is true and complete to the best of my knowledge and belief.

Harry Boyajian

Name

President

Title

Signature 

November 11, 2025

Date

# Prohibited Contributors (Bidders)

## Schedule A - Bidder's Principals

Please identify the names and titles of all the bidder's principals (attach additional sheets if necessary). Principals include a bidder's board chair, president, chief executive officer, chief operating officer, and individuals who serve in the functional equivalent of one or more of those positions. Principals also include individuals who hold an ownership interest in the bidder of at least 20 percent and employees of the bidder who are authorized by the bid or proposal to represent the bidder before the City.

Name: Harry Boyajian Title: President  
Address: 11080 Tuxford Street, Sun Valley, CA 91352

Name: Mark Fator Title: Sr. Project Manager  
Address: 11080 Tuxford Street, Sun Valley, CA 91352

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Address: \_\_\_\_\_

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Address: \_\_\_\_\_

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Address: \_\_\_\_\_

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Address: \_\_\_\_\_

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Address: \_\_\_\_\_

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Address: \_\_\_\_\_

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Address: \_\_\_\_\_

☐ Check this box if additional Schedule A pages are attached.



Prohibited Contributors  
(Bidders)

## Schedule B - Subcontractors and Their Principals

Please identify all subcontractors whose subcontracts are worth \$100,000 or more. Separate Schedule B pages are required for each subcontractor who meets the threshold.

|                                        |
|----------------------------------------|
| Subcontractor's Name                   |
| The Pros CA, Inc.                      |
| Subcontractor's Address                |
| 8748 Bradley Ave, Sun Valley, CA 91352 |

Please check one of the following options:

This subcontractor has one or more principals. ☒ Yes\* ☐ No

\* Each principal's name and title must be identified below. Attach additional sheets if necessary. Principals include a subcontractor's board chair, president, chief executive officer, chief operating officer, and individuals who serve in the functional equivalent of one or more of those positions. Principals also include individuals who hold an ownership interest in the subcontractor of at least 20 percent and employees of the subcontractor who are authorized by the bid or proposal to represent the subcontractor before the City.

|                                                 |                            |
|-------------------------------------------------|----------------------------|
| Name: John Vardanyan                            | Title: Operations Director |
| Address: 8748 Bradley Ave, Sun Valley, CA 91352 |                            |

|                                                 |                  |
|-------------------------------------------------|------------------|
| Name: Vardan Vardanyan                          | Title: President |
| Address: 8748 Bradley Ave, Sun Valley, CA 91352 |                  |

|                                                 |                |
|-------------------------------------------------|----------------|
| Name: Petros Khirmyan                           | Title: Officer |
| Address: 8748 Bradley Ave, Sun Valley, CA 91352 |                |

|                                                 |                |
|-------------------------------------------------|----------------|
| Name: Vardan Mirchyan                           | Title: Officer |
| Address: 8748 Bradley Ave, Sun Valley, CA 91352 |                |

|          |        |
|----------|--------|
| Name:    | Title: |
| Address: |        |

|          |        |
|----------|--------|
| Name:    | Title: |
| Address: |        |

☒ Check this box if additional Schedule B pages are attached.



**Prohibited Contributors  
(Bidders)****Schedule B - Subcontractors and Their Principals**

Please identify all subcontractors whose subcontracts are worth \$100,000 or more. Separate Schedule B pages are required for each subcontractor who meets the threshold.

|                                           |
|-------------------------------------------|
| Subcontractor's Name                      |
| <b>Commercial Paving and Coating</b>      |
| Subcontractor's Address                   |
| <b>4617 Brazil, Los Angeles, CA 90039</b> |

Please check one of the following options:

**This subcontractor has one or more principals.** ☒ Yes\* ☐ No

\* Each principal's name and title must be identified below. Attach additional sheets if necessary. Principals include a subcontractor's board chair, president, chief executive officer, chief operating officer, and individuals who serve in the functional equivalent of one or more of those positions. Principals also include individuals who hold an ownership interest in the subcontractor of at least 20 percent and employees of the subcontractor who are authorized by the bid or proposal to represent the subcontractor before the City.

|                                                    |                              |
|----------------------------------------------------|------------------------------|
| Name: <b>Adrian Loera</b>                          | Title: <b>President</b>      |
| Address: <b>4617 Brazil, Los Angeles, CA 90039</b> |                              |
| Name: <b>William Emerson</b>                       | Title: <b>Vice President</b> |
| Address: <b>4617 Brazil, Los Angeles, CA 90039</b> |                              |
| Name: _____                                        | Title: _____                 |
| Address: _____                                     |                              |
| Name: _____                                        | Title: _____                 |
| Address: _____                                     |                              |
| Name: _____                                        | Title: _____                 |
| Address: _____                                     |                              |
| Name: _____                                        | Title: _____                 |
| Address: _____                                     |                              |

☒ Check this box if additional Schedule B pages are attached.

Prohibited Contributors  
(Bidders)

## Schedule B - Subcontractors and Their Principals

Please identify all subcontractors whose subcontracts are worth \$100,000 or more. Separate Schedule B pages are required for each subcontractor who meets the threshold.

|                                   |
|-----------------------------------|
| Subcontractor's Name              |
| Crosby Plumbing, Inc.             |
| Subcontractor's Address           |
| 371 Crosby st, Altadena, CA 91001 |

Please check one of the following options:

This subcontractor has one or more principals. ☒ Yes\* ☐ No

\* Each principal's name and title must be identified below. Attach additional sheets if necessary. Principals include a subcontractor's board chair, president, chief executive officer, chief operating officer, and individuals who serve in the functional equivalent of one or more of those positions. Principals also include individuals who hold an ownership interest in the subcontractor of at least 20 percent and employees of the subcontractor who are authorized by the bid or proposal to represent the subcontractor before the City.

|                                            |                  |
|--------------------------------------------|------------------|
| Name: Anthony Tatikian                     | Title: President |
| Address: 371 Crosby st, Altadena, CA 91001 |                  |
| Name: _____                                | Title: _____     |
| Address: _____                             |                  |
| Name: _____                                | Title: _____     |
| Address: _____                             |                  |
| Name: _____                                | Title: _____     |
| Address: _____                             |                  |
| Name: _____                                | Title: _____     |
| Address: _____                             |                  |

☒ Check this box if additional Schedule B pages are attached.



## Prohibited Contributors (Bidders)



### Schedule B - Subcontractors and Their Principals

Please identify all subcontractors whose subcontracts are worth \$100,000 or more. Separate Schedule B pages are required for each subcontractor who meets the threshold.

|                                                                                   |
|-----------------------------------------------------------------------------------|
| Subcontractor's Name<br><b>Geronimo Concrete, Inc</b>                             |
| Subcontractor's Address<br><b>4560 Huntington Drive, N, Los Angeles, CA 90032</b> |

Please check one of the following options:

This subcontractor has one or more principals. ☒ Yes\* ☐ No

\* Each principal's name and title must be identified below. Attach additional sheets if necessary. Principals include a subcontractor's board chair, president, chief executive officer, chief operating officer, and individuals who serve in the functional equivalent of one or more of those positions. Principals also include individuals who hold an ownership interest in the subcontractor of at least 20 percent and employees of the subcontractor who are authorized by the bid or proposal to represent the subcontractor before the City.

|                                                                 |                              |
|-----------------------------------------------------------------|------------------------------|
| Name: <b>Geronimo Lopez</b>                                     | Title: <b>President</b>      |
| Address: <b>4560 Huntington Drive, N, Los Angeles, CA 90032</b> |                              |
| Name: <b>Lidia Lopez</b>                                        | Title: <b>Secretary</b>      |
| Address: <b>4560 Huntington Drive, N, Los Angeles, CA 90032</b> |                              |
| Name: <b>Ricardo Lopez</b>                                      | Title: <b>Vice President</b> |
| Address: <b>4560 Huntington Drive, N, Los Angeles, CA 90032</b> |                              |
| Name: _____                                                     | Title: _____                 |
| Address: _____                                                  |                              |
| Name: _____                                                     | Title: _____                 |
| Address: _____                                                  |                              |
| Name: _____                                                     | Title: _____                 |
| Address: _____                                                  |                              |

☒ Check this box if additional Schedule B pages are attached.



Prohibited Contributors  
(Bidders)

## Schedule B - Subcontractors and Their Principals

Please identify all subcontractors whose subcontracts are worth \$100,000 or more. Separate Schedule B pages are required for each subcontractor who meets the threshold.

Subcontractor's Name

J&amp;I Trucking

Subcontractor's Address

PO Box 2063 . Irwindale CA 91706

Please check one of the following options:

This subcontractor has one or more principals. ☒ Yes\* ☐ No

\* Each principal's name and title must be identified below. Attach additional sheets if necessary. Principals include a subcontractor's board chair, president, chief executive officer, chief operating officer, and individuals who serve in the functional equivalent of one or more of those positions. Principals also include individuals who hold an ownership interest in the subcontractor of at least 20 percent and employees of the subcontractor who are authorized by the bid or proposal to represent the subcontractor before the City.

Name: Jesus H. Zepeda Ramos

Title: Owner

Address: 4659 Nora Ave. Irwindale CA 91706

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

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

Address: \_\_\_\_\_

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

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

Address: \_\_\_\_\_

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

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

Address: \_\_\_\_\_

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

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

Address: \_\_\_\_\_

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

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

Address: \_\_\_\_\_

☒ Check this box if additional Schedule B pages are attached.

Prohibited Contributors  
(Bidders)

## Schedule B - Subcontractors and Their Principals

Please identify all subcontractors whose subcontracts are worth \$100,000 or more. Separate Schedule B pages are required for each subcontractor who meets the threshold.

|                         |                                               |
|-------------------------|-----------------------------------------------|
| Subcontractor's Name    | HS Environmental, Inc.                        |
| Subcontractor's Address | 12750 Raymer St. #4 North Hollywood, Ca 91605 |

Please check one of the following options:

This subcontractor has one or more principals. ☒ Yes\* ☐ No

\* Each principal's name and title must be identified below. Attach additional sheets if necessary. Principals include a subcontractor's board chair, president, chief executive officer, chief operating officer, and individuals who serve in the functional equivalent of one or more of those positions. Principals also include individuals who hold an ownership interest in the subcontractor of at least 20 percent and employees of the subcontractor who are authorized by the bid or proposal to represent the subcontractor before the City.

|                                                        |                  |
|--------------------------------------------------------|------------------|
| Name: Meraigan Kitchman                                | Title: President |
| Address: 12750 Raymer St. #4 North Hollywood Ca 91605  |                  |
| Name: Johannes Saliba                                  | Title: Owner     |
| Address: 12750 Raymer St. #4 North Hollywood, Ca 91605 |                  |
| Name: _____                                            | Title: _____     |
| Address: _____                                         |                  |
| Name: _____                                            | Title: _____     |
| Address: _____                                         |                  |
| Name: _____                                            | Title: _____     |
| Address: _____                                         |                  |
| Name: _____                                            | Title: _____     |
| Address: _____                                         |                  |

☐ Check this box if additional Schedule B pages are attached.

## 03 SUPPLIER LIST

Supplier information is required for calculation of SBE and VSBE participation. Photocopy this form for additional firms. Please list SBE and VSBE Suppliers that are being used to achieve the minimum required SBE and VSBE participation levels.

| Supplier Name and Location                  |                                                | Amount          | SBE<br>Yes or No | VSBE<br>Yes or No | Local<br>Business<br>Yes or No |
|---------------------------------------------|------------------------------------------------|-----------------|------------------|-------------------|--------------------------------|
| <b>Name</b>                                 | El Capitan Environmental Services (Contractor) | \$16,704,902.50 | Yes              | No                | Yes                            |
| <b>Address</b>                              | 11080 Tuxford Street                           |                 |                  |                   |                                |
| <b>City, State, Zip</b>                     | Sun Valley, CA 91352                           |                 |                  |                   |                                |
| <b>Phone</b>                                | 818-768-9222                                   |                 |                  |                   |                                |
| <b>Description of Items Being Supplied:</b> |                                                |                 |                  |                   |                                |
| Excavation, Haz removal, Site Preparation   |                                                |                 |                  |                   |                                |

|                                                      |                                               |                |    |    |     |
|------------------------------------------------------|-----------------------------------------------|----------------|----|----|-----|
| <b>Name</b>                                          | Commercial Paving and Coating (Subcontractor) | \$3,139,500.00 | No | No | Yes |
| <b>Address</b>                                       | 4617 Brazil Street                            |                |    |    |     |
| <b>City, State, Zip</b>                              | Los Angeles, CA 90039                         |                |    |    |     |
| <b>Phone</b>                                         | 323-256-1331                                  |                |    |    |     |
| <b>Description of Items Being Supplied:</b>          |                                               |                |    |    |     |
| Asphalt Paving, Milling, Seal coat, Crack fill, coat |                                               |                |    |    |     |

|                                                                                                      |                                |                |     |     |     |
|------------------------------------------------------------------------------------------------------|--------------------------------|----------------|-----|-----|-----|
| <b>Name</b>                                                                                          | J & I Trucking (Subcontractor) | \$1,650,000.00 | Yes | Yes | Yes |
| <b>Address</b>                                                                                       | P.O.Box 2063                   |                |     |     |     |
| <b>City, State, Zip</b>                                                                              | Irwindale, CA 91706            |                |     |     |     |
| <b>Phone</b>                                                                                         | 626-960-7361                   |                |     |     |     |
| <b>Description of Items Being Supplied:</b>                                                          |                                |                |     |     |     |
| Trucking, Hauling contaminated soil, construction debris, broken concrete/Asphalt, Import Clean Soil |                                |                |     |     |     |

|                 |                            |  |  |  |  |
|-----------------|----------------------------|--|--|--|--|
| <b>SUBTOTAL</b> | <b>DEPARTMENT USE ONLY</b> |  |  |  |  |
|                 |                            |  |  |  |  |

END OF SECTION

## 03 SUPPLIER LIST

Supplier information is required for calculation of SBE and VSBE participation. Photocopy this form for additional firms. Please list SBE and VSBE Suppliers that are being used to achieve the minimum required SBE and VSBE participation levels.

| Supplier Name and Location                  |                                         | Amount       | SBE<br>Yes or No | VSBE<br>Yes or No | Local<br>Business<br>Yes or No |
|---------------------------------------------|-----------------------------------------|--------------|------------------|-------------------|--------------------------------|
| Name                                        | Geronimo Concrete, Inc. (Subcontractor) | \$902,500.00 | Yes              | No                | Yes                            |
| Address                                     | 4560 Huntington Drive, N.               |              |                  |                   |                                |
| City, State, Zip                            | Los Angeles, CA 90032                   |              |                  |                   |                                |
| Phone                                       | 323-225-2016                            |              |                  |                   |                                |
| <b>Description of Items Being Supplied:</b> |                                         |              |                  |                   |                                |
| Concrete Work, curb and gutter              |                                         |              |                  |                   |                                |

|                                             |                                    |              |    |    |     |
|---------------------------------------------|------------------------------------|--------------|----|----|-----|
| Name                                        | Vulcan Material Company (Supplier) | \$413,750.00 | No | No | Yes |
| Address                                     | 31 Rancho Camino Drive, Unit 300   |              |    |    |     |
| City, State, Zip                            | Pomona, CA 91766                   |              |    |    |     |
| Phone                                       | 626862-7527                        |              |    |    |     |
| <b>Description of Items Being Supplied:</b> |                                    |              |    |    |     |
| CMB, CAB                                    |                                    |              |    |    |     |

|                                             |                                   |              |    |    |     |
|---------------------------------------------|-----------------------------------|--------------|----|----|-----|
| Name                                        | The Pros CA, Inc. (Subcontractor) | \$275,000.00 | No | No | Yes |
| Address                                     | 8748 Bradley Ave                  |              |    |    |     |
| City, State, Zip                            | Sun Valley, CA 91352              |              |    |    |     |
| Phone                                       | 844-766-7222                      |              |    |    |     |
| <b>Description of Items Being Supplied:</b> |                                   |              |    |    |     |
| Electrical Work                             |                                   |              |    |    |     |

|                 |                            |  |  |  |  |
|-----------------|----------------------------|--|--|--|--|
| <b>SUBTOTAL</b> | <b>DEPARTMENT USE ONLY</b> |  |  |  |  |
|                 |                            |  |  |  |  |

END OF SECTION

## 03 SUPPLIER LIST

Supplier information is required for calculation of SBE and VSBE participation. Photocopy this form for additional firms. Please list SBE and VSBE Suppliers that are being used to achieve the minimum required SBE and VSBE participation levels.

| Supplier Name and Location                  |                                      | Amount      | SBE<br>Yes or No | VSBE<br>Yes or No | Local<br>Business<br>Yes or No |
|---------------------------------------------|--------------------------------------|-------------|------------------|-------------------|--------------------------------|
| Name                                        | Crosby Plumbing Inc. (Subcontractor) | \$80,000.00 | Yes              | Yes               | Yes                            |
| Address                                     | 371 Crosby Street                    |             |                  |                   |                                |
| City, State, Zip                            | Altadena, CA 91001                   |             |                  |                   |                                |
| Phone                                       | 626-765-9672                         |             |                  |                   |                                |
| <b>Description of Items Being Supplied:</b> |                                      |             |                  |                   |                                |
| Plumbing, storm drain                       |                                      |             |                  |                   |                                |

|                                             |                           |              |    |    |     |
|---------------------------------------------|---------------------------|--------------|----|----|-----|
| Name                                        | Trench Shoring (Supplier) | \$286,627.50 | No | No | Yes |
| Address                                     | 206 N Central Ave         |              |    |    |     |
| City, State, Zip                            | Compton, CA 90220         |              |    |    |     |
| Phone                                       | 310-327-5554              |              |    |    |     |
| <b>Description of Items Being Supplied:</b> |                           |              |    |    |     |
| K-Rails                                     |                           |              |    |    |     |

|                                             |                                       |              |    |    |     |
|---------------------------------------------|---------------------------------------|--------------|----|----|-----|
| Name                                        | KB Environmental, Inc (Subcontractor) | \$150,000.00 | No | No | Yes |
| Address                                     | 12750 Raymer St #4                    |              |    |    |     |
| City, State, Zip                            | North Hollywood, CA 91605             |              |    |    |     |
| Phone                                       | 818-567-7312                          |              |    |    |     |
| <b>Description of Items Being Supplied:</b> |                                       |              |    |    |     |
| Asbestos Abatement and Lead Abatement       |                                       |              |    |    |     |

|                 |                            |  |  |  |  |
|-----------------|----------------------------|--|--|--|--|
| <b>SUBTOTAL</b> | <b>DEPARTMENT USE ONLY</b> |  |  |  |  |
|                 |                            |  |  |  |  |

END OF SECTION



## 01 ABBREVIATIONS AND DEFINITIONS

## a ABBREVIATIONS:

|         |                                                                    |
|---------|--------------------------------------------------------------------|
| AASHTO: | American Association of State Highway and Transportation Officials |
| ACI:    | American Concrete Institute                                        |
| ANSI:   | American National Standards Institute                              |
| AREMA:  | American Railroad Engineering and Maintenance of Way Association   |
| ASTM:   | American Society for Testing and Materials                         |
| AWPA:   | American Wood Protection Association                               |
| AWPB:   | American Wood Preservers Bureau                                    |
| AWS:    | American Welding Society                                           |
| AWWA:   | American Water Works Association                                   |
| CRSI:   | Concrete Reinforcing Steel Institute                               |
| DBE:    | Disadvantaged Business Enterprise                                  |
| DWP:    | Department of Water and Power                                      |
| ICEA:   | Insulated Cable Engineers Association                              |
| IES:    | Illumination Engineering Society                                   |
| IEEE:   | Institute of Electrical and Electronics Engineers                  |
| LAHD:   | Los Angeles Harbor Department                                      |
| LBE:    | Local Business Enterprise                                          |
| MBE:    | Minority Business Enterprise                                       |
| NEC:    | National Electrical Code                                           |
| NEMA:   | National Electrical Manufacturers Association                      |
| NFPA:   | National Fire Protection Association                               |

## 01000.01 Cont'd.

|       |                                                 |
|-------|-------------------------------------------------|
| OBE:  | Other Business Enterprise                       |
| OSHA: | Occupational, Safety, and Health Administration |
| POLA: | Port of Los Angeles                             |
| PVC:  | Polyvinyl chloride                              |
| RS:   | Reference Specifications                        |
| SBE   | Small Business Enterprise                       |
| SSPC: | Society for Protective Coatings                 |
| UDBE: | Underutilized Disadvantaged Business Enterprise |
| UL:   | Underwriters Laboratories, Inc.                 |
| VSBE: | Very Small Business Enterprise                  |
| WBE:  | Women Business Enterprise                       |

## b DEFINITIONS:

Applicable Laws: Any and all federal, state, county, or governmental agency laws, statutes, ordinances, standards, codes, rules, ordinances, resolutions, orders, or requirements adopted or implemented under color of law, in effect at any point during the term of Contract, pertaining to: Project, performance of Work by Contractor and/or those operating for or on behalf of Contractor, operation and occurrences on Project Site(s); use, occupancy, and/or condition of Laydown Area(s) and Contract Documents.

Award: The acceptance, by City, of the successful Bidder's proposal.

Backland: The area of a marine terminal's property behind the wharf where cargo, containers, chassis and other equipment are stored and other non-water invasive equipment and facilities are located.

Bidder: The person, firm, or corporation submitting a bid for Work.

Board: Board of Harbor Commissioners; the body vested with the control and management of Harbor Department of City of Los Angeles, as created by and operating under City Charter.

## 01000.01 Cont'd.

**Business Day:** Monday, Tuesday, Wednesday, Thursday, and Friday during working hours (8 am to 5 pm with a non-paid 1-hour break), with the exception of City of Los Angeles holidays.

**Calendar Day:** Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday. The term day(s) whether used on Drawings or Specifications are consecutive Calendar Days unless otherwise specified.

**Changes in Work:** A written order from City to Contractor covering changes in Drawings, Specifications, or Bid Proposal Line Items quantities and establishing the basis of payment and Contract Time adjustments, if any, for Work affected by such changes. Change Orders (COs) as defined in Cost-Plus Change Work Order (Change Orders) Subsection of this Section, and Authorities for Adjustment (AFAs) as defined in Authority for Adjustments Subsection of this Section, is considered to be Changes in Work.

**City:** City of Los Angeles, California.

**Consultant:** A firm under contract or agreement with Department to perform services.

**Contamination:** A spill, discharge, or release of any Environmentally Regulated Material.

**Contract Documents:** "Contract Documents" shall consist of Notice Inviting Bids, Information for Bidders, Bidding Documents, Contract, Performance Bond, Payment Bond, Affidavits of Completion, and Contractor/Subcontractor/Supplier Information, Sections of this Specification No. 2852 together with Contractor supplied documents required by these sections, and Specifications, Drawings, standard plans, and reference specifications referenced in Specifications or on Drawings, the appendices, addenda, permits, and Changes in Work.

**Contract:** The written agreement executed by Contractor and City covering Work not to exceed three (3) years commencing on Effective Date.

**Contractor:** The individual, firm, or corporation with whom Contract is made, or its legal representative.

**Contract Time:** The number of Calendar Days, stated in Contract Time Article of CONTRACT Section, allowed for completion of Work including any maintenance or plant establishment period and authorized time extensions. The first Notice to Proceed (NTP) shall specify the date on which Contract Time begins.

**Days:** See definition for Calendar Day.

## 01000.01 Cont'd.

Department: Harbor Department of City of Los Angeles.

Drawings: The official drawings or exact reproductions approved by Engineer, which show Project Site(s) and any Laydown Area(s), character, dimensions, and details of Work.

Effective Date: The date of execution of Contract by Executive Director upon authorization of Board, subject to the provisions of Charter Section 245 of City of Los Angeles.

Engineer: Chief Harbor Engineer of Construction Division of Department or designated representative.

Environmentally Regulated Material: Any material, pollutant, hazardous or toxic substance, material, or waste at any concentration, that is or becomes regulated by the United States, the State of California, or any local or governmental authority having jurisdiction over Project Site(s) and any Laydown Area(s) and/or Contractor's undertaking of Work. Environmentally Regulated Materials shall mean: (i) "hazardous substance" as defined by Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); (ii) "hazardous waste" as defined in Resource Conservation and Recovery Act (RCRA); (iii) Any pollutant, contaminant, or hazardous, dangerous, or toxic chemical, material, or substance, within the meaning of any other applicable federal, state, or local law, regulation, ordinance, or requirement (including consent decrees and administrative orders imposing liability or standard of conduct concerning any hazardous, dangerous, or toxic waste, substance, or material, now or hereinafter in effect); (iv) Radioactive material, including any source, special nuclear, or byproduct material as defined in the Atomic Energy Act of 1954 (42 USCS §§ 2011 et seq.) in its present or successor form; (v) Asbestos in any form or condition; (vi) Polychlorinated biphenyls ("PCBs") and any substance or compound containing PCBs; and (vii) Petroleum products.

Executive Director: Executive Director of Department or designated representative.

Inspector: An authorized representative of Engineer assigned to make all necessary inspections and tests of Work performed and being performed, and of the materials furnished and being furnished by Contractor.

Landside: Project activity approach from land, for example, pile driving from landside.

## 01000.01 Cont'd.

Laydown Area(s): Specific area or real property, ground, pavement, or water access expressly identified either on Drawings if applicable or in writing by Executive Director, located near or at Project Site(s), designated for the following uses and no others: delivery, storage, and handling of the materials and equipment to be installed or constructed as part of Work, field offices, parking, and access.

Notice of Award: The letter informing Contractor that Award of Contract has been made. The date on the Notice of Award starts the 30-day period for execution of Contract and the 14-day period for submittal and approval of acceptable bonds and insurance.

Notice(s) to Proceed: The letter(s) from Engineer which notify(ies) Contractor of the effective date Contract Time shall begin, and authorizes Work or items of Work to be started.

Project: The structure or improvement to be constructed in whole or in part, through the performance of Contract.

Project Site: The entire area of real property on which Work is to be performed. Area or areas where Project materials and equipment, as described in NOTICE INVITING BIDS Section and SUMMARY OF WORK Section of Specifications are installed or constructed.

Proposal: The written offer of Bidder (when submitted on the approved proposal form) to furnish the necessary materials, and perform Work in accordance with Contract Documents.

Specifications: The portion of Contract Documents containing written technical descriptions, instructions, provisions, general conditions, supplementary conditions, and detailed requirements pertaining to materials, methods, and manner of performing Work and to the quality of Work to be furnished and installed under Contract. Standards for specifying materials and testing which are cited in Specifications by reference shall have the same force and effect as if included in Contract Documents.

Substantial Completion: Upon satisfactory completion of Work, Engineer shall issue a Substantial Completion letter to Contractor to indicate a stop in Contract Time and that Work is acceptable for its intended use. Such Substantial Completion letter may include a list of punch list items that must be completed by Contractor prior to final acceptance of Work by Department.

Superintendent: Contractor's executive representative who is present on Project Site(s) and any Laydown Area(s) during construction, authorized to receive and fulfill instructions from Engineer, and who shall supervise and direct the construction.

## 01000.01 Cont'd.

Waterside: Project activity approach from water, for example, pile driving from waterside.

Work: The furnishing of labor, materials, tools, equipment, and incidentals necessary and convenient to Contractor's performance of all duties and obligations imposed by Contract. Unless otherwise noted, Work shall be performed on Project Site(s) and any Laydown Area(s).

## 02 TIME FOR SUBMITTAL OF BONDS

- a Within 14 Calendar Days after Notice of Award Contractor shall furnish City a performance bond and a payment bond.

## 03 PERFORMANCE BOND

- a A satisfactory performance bond in a form approved by the City Attorney shall be furnished as a guarantee of the faithful performance of Contract in the sum of 100 percent of the total amount of Contract.
- b The form of bond is included in Section 00070.
- c No payment shall be made to Contractor until Contractor's performance bond has been approved by the City Attorney.

## 04 PAYMENT BOND

- a If bid exceeds \$25,000, a satisfactory payment bond in a form approved by the City Attorney shall be furnished in the sum of 100 percent of the total amount of Contract to secure payment of all claims, demands, liens or charges of the State of California, of material suppliers, mechanics, or laborers employed by Contractor or by any subcontractor.
- b The form of bond is included in Section 00074.
- c No payment shall be made to Contractor until Contractor's payment bond has been approved by the City Attorney.

## 05 RESPONSIBILITY FOR LOSS

- a During use and occupancy of Project Site(s) and any Laydown Area(s) and progress of Work under Contract and until its final acceptance, Contractor shall have the charge and care thereof and shall take every necessary precaution against injury or damage to any part thereof by the action of the elements, or from any other cause whatsoever whether arising from the execution or from the non-execution of Work.

## 01000.05 Cont'd.

- b Contractor shall, at Contractor's sole cost and expense, except as provided in Paragraph c of this Subsection, rebuild, repair, restore and make good all injuries or damages to any portion of Work from any and all causes before its completion and final acceptance, and shall deliver Work complete in accordance with the terms of Contract.
- c Contractor shall not be required to pay more than 5% of the contracted amount to rebuild, repair, restore, and make good all injuries or damages to any portion of Work, built in accordance with accepted and applicable building standards, Drawings, and Specifications, that has been damaged by an earthquake in excess of a magnitude of 3.5 on the Richter scale or tidal wave.

## 06 PREVAILING WAGES

- a Contractor shall pay the general prevailing rate of per diem wages and rates for legal holiday and overtime work currently being paid in the area where Work is being performed.
- b Pursuant to the provisions of the Labor Code of the State of California, the general prevailing rate of wages for each craft, classification or type of workers needed in the execution of contracts under the jurisdiction of Board, shall be those rates as determined by the Director of the Department of Industrial Relations of the State of California. Copies of the applicable Determinations by the said Director are on file in Construction Division and are hereby incorporated and made a part hereof the same as though fully set forth herein. Copies of the applicable Determinations may be obtained at or by request to Department.
- c When Contractor has been determined to be in violation of Section 377 of City Charter making applicable the provisions of the California Labor Code relating to the payment of not less than the prevailing per diem wages on public works, deductions may be made from moneys due or to become due Contractor in the amount of twice the difference between such stipulated prevailing rates, and the amount paid to each wage worker for each Calendar Day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate.
- d Contractor shall also comply with Section 1775 of the Labor Code providing for a penalty per day as determined by the Labor Commissioner for each Calendar Day, or part thereof, for which each worker was paid less than the prevailing wage.



## 01000.06 Cont'd.

- e Contractor and subcontractors shall keep an accurate record showing the names and occupations of all workers employed by them in connection with any Work done under Contract, and the per diem wages paid to each of such workers, and shall keep such record open at all reasonable hours to the inspection of Board and to the State Division of Labor Law Enforcement. Contractor in all other respects shall comply with Section 1776 of the Labor Code.
- f No later than the end of the work day following the day on which Work was performed by Contractor, or any subcontractor, Contractor and applicable subcontractor(s) shall complete and furnish Contractor Daily Field Report, included as Subsection 67 of this Section, to Inspector. When Work has been performed, Contractor shall submit a form regarding all employees and equipment at Project Site(s) and any Laydown Area(s) on the work day, and Contractor shall submit a separate form for each subcontractor regarding each subcontractor's employees and equipment at Project Site(s) and any Laydown Area(s) on the work day. Each field report shall:
  - 1 Identify Project title, Specification number, name of Contractor or subcontractor, and date on which Work was performed.
  - 2 Show the names of the workers and identify their applicable company affiliation (Prime Contractor, subcontractor, supplier, or vendor).
  - 3 Show the labor classification for each worker. If worker is an operating engineer or teamster, Contractor or subcontractor must indicate which piece of equipment was operated by the worker.
  - 4 Show the Start Time and End Time for the worker listed, as well as the total hours worked by the worker on the work day.
  - 5 Show the type of equipment, size, identification number, and hours of operation, including loading and transportation, if applicable, utilized on the work day.
  - 6 Contain the printed name and title for Contractor or subcontractor representative, and shall be dated and signed by same.
- g Contractor shall submit the original (wet signature by Contractor or subcontractor) to Inspector for review. If additional space is needed, a second form, with pages numbered accordingly, can be completed.

## 01000.06 Cont'd.

- h Inspector shall compare Inspector's records with the report submitted by Contractor, discuss any apparent discrepancies with Contractor, and reconcile the report (and have it re-submitted, if necessary). Once the report is agreed upon by Contractor and Inspector, Inspector prints his/her name on the report and dates and signs the report. Each party shall retain a copy of the report, signed by both parties.
- i Certified payrolls from Contractor and all subcontractors shall be submitted to City weekly through the Department of Public Works Bureau of Contract Administration's Online Certified Payroll System (OCPS) and shall be accompanied by a Statement of Compliance, signed electronically on OCPS by Contractor or Contractor's agent attesting that the payrolls are correct and complete and the wage rates contained therein are not less than those set by the applicable wage determinations incorporated into Contract. City reserves the right to reject incomplete payroll reports and request re-submittal of complete reports.

## 07 WAGE AND EARNING ASSIGNMENT ORDERS/NOTICES OF ASSIGNMENTS

- a Contractor and its subcontractors shall comply with all applicable state and federal employment reporting requirements for Contractor's and/or subcontractor's employees.
- b Contractor and/or subcontractor shall certify that the principal owner(s) are in compliance with any Wage and Earnings Assignment Orders and Notices of Assignment applicable to them personally. Contractor or subcontractor shall comply with all lawfully served Wage and Earnings Assignment Orders and Notices of Assignments in accordance with California Family Code §§5230 et. seq. Contractor or subcontractor shall maintain such compliance throughout the term of Contract.

## 08 WORKING HOURS

- a Work shall be accomplished during daylight hours. Night work shall only be allowed, if in the opinion of Engineer, Work does not:
  - 1 conflict with noise laws, ordinances, regulations, City code, or
  - 2 create unsafe working conditions or poor quality control provisions.
- b Requests for night work shall be made 48 hours prior to the desired start of the night work.

## 09 APPRENTICE UTILIZATION ON PUBLIC WORKS

- a Contractor shall comply with the Provisions of Labor Code, State of California, Section 1777.5 relating to apprentice employment and training. Contractor shall assume full responsibility for compliance with said Section with respect to all apprenticeable occupations upon Project.
- b Section 1777.5 does not apply to prime contracts involving less than \$30,000.

## 10 NON-DISCRIMINATION PROVISIONS

- a Contractor shall agree to City of Los Angeles Non-discrimination provisions as provided in Subsections 00030.03 and 00030.04 of BIDDING DOCUMENTS Section.

## 11 BOARD RIGHT TO TERMINATE CONTRACT

- a Board may terminate Contract at its own discretion without liability to Contractor for damages when conditions encountered during Work make it impossible or impracticable to proceed, or when City is prevented from proceeding with Contract by act of God, by law, or by official action of a public authority.
- b Upon termination, Contractor may receive payment on the basis shown below in consideration of its irrevocable written agreement to release any and all claims and/or causes of action against City arising out of or related to such termination and to indemnify and hold City harmless from any and all liability, claims and/or causes of action arising from or related to such termination. City shall prepare such written agreement.
  - 1 Termination occurs prior to the Notice to Proceed date  
Subject to Contractor's full satisfaction of the requirements of Paragraph b of this Subsection, Contractor shall be entitled to payment as shown below.

| <u>Value of Contract</u>      | <u>Payment Due to Contractor</u>                          |
|-------------------------------|-----------------------------------------------------------|
| \$0 to \$1,000,000            | 10% of Contract amount                                    |
| \$1,000,001 to \$5,000,000    | \$100,000 plus 5% of Contract amount above \$1,000,000    |
| \$5,000,001 to \$10,000,000   | \$300,000 plus 2.5% of Contract amount above \$5,000,000  |
| \$10,000,001 to \$50,000,000  | \$425,000 plus 1% of Contract amount above \$10,000,000   |
| \$50,000,001 to \$100,000,000 | \$825,000 plus 0.5% of Contract amount above \$50,000,000 |
| Above \$100,000,000           | \$1,075,000 regardless of Contract amount                 |

## 01000.11 Cont'd.

- 2 Termination occurs after the Notice to Proceed date  
 Subject to Contractor's full satisfaction of the requirements of Paragraph b of this Subsection, Contractor shall be entitled to the estimates and payment for all Work done to the date of termination, if any, plus a percentage of the value of Work remaining (determined by subtracting payments made, or due, from Contract price), as shown below.

| <u>Value of Work Remaining</u> | <u>Payment Due to Contractor</u>                                  |
|--------------------------------|-------------------------------------------------------------------|
| \$0 to \$1,000,000             | 10% of value of Work remaining                                    |
| \$1,000,001 to \$5,000,000     | \$100,000 plus 5% of value of Work remaining above \$1,000,000    |
| \$5,000,001 to \$10,000,000    | \$300,000 plus 2.5% of value of Work remaining above \$5,000,000  |
| \$10,000,001 to \$50,000,000   | \$425,000 plus 1% of value of Work remaining above \$10,000,000   |
| \$50,000,001 to 100,000,000    | \$825,000 plus 0.5% of value of Work remaining above \$50,000,000 |
| Above \$100,000,000            | \$1,075,000 regardless of value of Work remaining                 |

## 12 ASSIGNMENTS

- a Contractor shall not assign, transfer, convey, sublet, or otherwise dispose of Contract, or rights, title or interest in or to the same or any part thereof, without the previous consent in writing of Executive Director endorsed upon or attached to the copies of Contract filed in Office of Board of Harbor Commissioners.
- b Nothing herein contained shall be construed to hinder, prevent or affect an assignment by Contractor for the benefit of Contractor's creditors; and no right under Contract shall be asserted against City, in law or in equity, by reason of any so-called assignment of Contract, or any part thereof, unless authorized as aforesaid by the written consent of Executive Director.
- c Any assignment of money shall be subject to all proper setoffs and withholdings in favor of City and to all deductions provided for in Contract. All money withheld whether assigned or not, shall be subject to being used by City for completion of Work, should Contractor be in default.

## 13 CANCELLATION FOR DEFAULT

- a If Contractor fails to begin Work within the time stipulated, or if Work to be done under Contract is abandoned by Contractor, or if Contract is assigned or Work sublet by Contractor otherwise than as herein specified, or if at any time Engineer shall be of the opinion, and shall so certify in writing to Executive Director, that the performance of Contract is unnecessarily or unreasonably delayed, or that Contractor is willfully violating any of the conditions or covenants of Contract or is executing the same in bad faith, or not in accordance with the terms thereof, Executive Director may notify Contractor not to resume, or to discontinue, all Work, or any part thereof, under Contract, by a written notice served upon Contractor.
- b Executive Director shall advise the bondsperson(s) or surety(ies) guaranteeing faithful performance of Contract, of the suspension and reasons therefor, and shall notify said bondsperson(s) or surety(ies) that they shall be given fourteen days within which to arrange for the completion of Work in accordance with the terms and provisions of Contract by another contractor or firm of contractors, satisfactory to Executive Director. If such bondsperson(s) or surety(ies) requests additional time in which to arrange for completion of Work, Executive Director may, in its sole and absolute discretion, extend such time period; however, Executive Director is under no obligation to do so.
- c Should the bondsperson(s) or surety(ies) fail to effect satisfactory arrangements within the period hereinbefore stipulated, Executive Director shall thereupon have the right without further notice, to exclude Contractor, bondsperson(s) or surety(ies) and any subcontractor or employee upon the line of work from Project Site(s) and any Laydown Area(s) and take possession of all material and equipment, and complete Work by City forces or by letting the unfinished Work to another contractor, or by a combination of such methods.

## 01000.13 Cont'd.

- d The cost of completing Work shall be charged against Contractor and the surety or bondspersons to the extent of their liability. If Department is required to complete Work or satisfy other Contract obligations because of the surety or bondspersons' failure to comply with the bond obligations, then bondspersons or surety shall, nevertheless, immediately reimburse City all costs in excess of Contract amount which City is obligated to pay in order to complete Work. If surety or bondspersons fail to pay such amount immediately upon City's demand, then City shall be entitled to collect interest from bondspersons or sureties on the amounts City is required to pay excess of Contract amount. The interest rate which surety or bondspersons shall pay shall be 2% in excess of the interest rate charged by Bank of America from time to time for prime commercial loans of ninety (90) day maturities. The interest rate shall accrue on all amounts City has had to pay excess of Contract amount from the date of City's payment. Engineer's certificate as to the amount of Work done, the cost, and the excess cost, if any, of completing Work specified by Contract shall be conclusive and binding upon Contractor's assignees and sureties.
- e If the surety or bondspersons assumes any part of Work, it shall take Contractor's place in all respects for that part, and shall be paid by City for all work performed by it in accordance with Contract. If the surety or bondspersons assumes the entire Contract, all money due Contractor at the time of Contractor's default shall be payable to the surety as Work progresses, subject to the terms of Contract.
- f In lieu of the provisions of this Subsection for setting aside Contract and completing Work for proper cause, City may pay Contractor for the parts already done according to the provisions of Contract and Specifications and may treat the parts remaining undone as if they had never been included or contemplated by Contract. No claim under this provision shall be allowed Contractor for prospective profits on work uncompleted by Contractor.
- g The provisions of this Subsection shall be in addition to all other rights and remedies available to City under law.

## 14 OTHER CONTRACTS

- a City reserves the right to have Work done in or about Project Site(s) and any Laydown Area(s) as provided for in Contract, by persons, firms, or corporations other than said Contractor, or to perform the same by force account under the direction and supervision of Engineer.
- b Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their Work, and shall properly connect and coordinate Work with others.
- c If any part of Contractor's Work depends upon the work of any other contractor for proper execution or results, Contractor shall inspect and promptly report to Engineer any defects in such work that render it unsuitable for such proper execution and results. Failure to so inspect and report shall constitute an acceptance of the other contractor's work as fit and proper.

## 15 CONTRACT DOCUMENTS COMPLEMENTARY

- a Contract Documents are intended to be complementary and to describe and provide for a complete Project. Anything in Specifications and not on Drawings; or on Drawings and not in Specifications, shall be considered as though shown or mentioned in both.
- b Information included by specific reference in any of Contract Documents shall be a part of Contract Documents as though reproduced in entirety in the document where the reference occurs.
- c While it is believed that much of the information pertaining to conditions which may affect the cost of Work shall be shown on Drawings or indicated in Specifications, City does not warrant the completeness or accuracy of such information. It is Contractor's responsibility to ascertain the existence of any conditions affecting the cost of Work which would have been disclosed by reasonable examination of Project Site(s) and any Laydown Area(s) and Contract Documents.
- d All contact information, website addresses, and related references are provided for convenience only, but it is Contractor's responsibility to obtain the current applicable phone numbers, addresses, and websites in the event that those provided are no longer current.

## 16 PRECEDENCE OF DOCUMENTS

- a If there is a conflict between Contract Documents, the document listed herein as higher in precedence shall control.
- b The precedence shall be as follows (ranking 1 as highest):
  - 1 Permits and Permit Documents
  - 2 Specifications (in total)
  - 3 Drawings
  - 4 Standard Plans
  - 5 Reference Specifications
- c Authorizations for Adjustments, Cost-plus Change Orders, supplemental agreements, and approved revisions to Drawings and Specifications shall take precedence over documents listed.
- d Detailed and large-scale Drawings shall have precedence over general and small-scale Drawings. Drawings shall have precedence over shop drawings.
- e Reference drawings are included for information only. Such information is given as being the best factual information available without the assumption of responsibility for its accuracy or for any conclusions that Contractor might draw therefrom.

## 17 STANDARD SPECIFICATIONS

- a Standard Specifications, such as ASTM, ACI, and ANSI, referenced herein shall be of the edition and supplements current as of the date of advertising for bids unless otherwise specified herein.

## 18 REFERENCE SPECIFICATIONS

- a Whenever the words "Reference Specifications" (sometimes abbreviated RS) are used, either in Specifications, or on Drawings, it shall mean "GREEN BOOK - STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION," edition and supplements current as of the date of advertising for bids unless otherwise specified herein.

## 19 ELECTRONIC COPIES OF CONTRACT DOCUMENTS FURNISHED

- a Engineer shall furnish to Contractor, free of charge, electronic files in pdf format of Contract Documents reasonably necessary for the execution of Work.
- b These Contract Documents are the property of Department, and shall not be reused on other work.



**20 RESPONSIBILITY OF COSTS AND MATERIALS**

- a Unless otherwise specifically stipulated elsewhere in Contract Documents, Contractor shall provide at its sole cost and expense all materials, labor, water, tools, equipment, light, power, transportation, and other facilities, utilities, and incidentals necessary for the execution and completion of Work.
- b Unless otherwise specifically stipulated elsewhere in Contract Documents, all materials, parts, and equipment incorporated in permanent Work shall be new and free from defects.

**21 SHOP DRAWINGS AND MATERIALS SAMPLES**

- a Shop drawings shall consist of drawings, diagrams, illustrations, schedules, performance charts, brochures, and other data prepared by Contractor or any subcontractor, manufacturer, supplier or distributor, to illustrate some portion of Work not covered in necessary detail by Drawings furnished by Department.
- b Samples shall consist of physical examples required by Contract to be furnished by Contractor to illustrate materials, labor, and equipment to conform to Specifications, and to establish standards by which completed Work shall be judged for acceptability. These samples are distinguished from test samples obtained for laboratory analysis and destructive testing.
- c Contractor shall review and stamp with approval and submit with reasonable promptness and in orderly sequence so as to cause no delay in Work or in the work of any other contractor, all shop drawings and samples required by Contract Documents and subsequently by the course of construction.
- d By approving and submitting shop drawings and samples, Contractor thereby represents that it has determined and verified all field measurements, field construction criteria, materials, catalog numbers and similar data, or shall do so, and that each shop drawings and samples has been checked and coordinated with the requirements of Work and of Contract Documents.

## 01000.21 Cont'd.

- e Engineer shall review and approve shop drawings and samples only for conformance with the design concept of Project and with the information given in Contract Documents. Review time shall be 28 Calendar Days, unless otherwise stated in Specifications. The time for City to review items does not commence until Contractor's submittal (or re-submittal, addressing Engineer's corrections/comments resulting from Engineer's review of previous submittal) is complete. Engineer's approval of a separate item shall not indicate approval of an assembly in which the item functions. One copy of all submittals shall be returned to Contractor.
- f At the time of submission, Contractor shall inform Engineer, in writing, of any deviation in the shop drawings and samples from the requirements of Contract Documents.
- g Contractor shall make any corrections required by Engineer and shall resubmit the required number of corrected copies of shop drawings and samples until approved. Contractor shall direct specific attention in writing to revisions on resubmitted shop drawings other than the corrections requested by Engineer on previous submissions.
- h Engineer's approval of shop drawings and samples shall not relieve Contractor of responsibility for any deviation from the requirements of Drawings and Specifications found in the shop drawings and samples unless Contractor has informed Engineer in writing of such deviation at the time of submission and Engineer has given written approval of the specific deviation in letter form separately from any notations on the shop drawings. Engineer's approval shall not relieve Contractor of any responsibility for errors or omissions in the shop drawings and samples.
- i No portion of Work requiring shop drawing and sample submission shall commence until the submission has been approved by Engineer. All such portions of Work shall be in accordance with approved shop drawings and samples.
- j The cost of furnishing shop drawings and samples shall be considered as included in the prices bid for Work and no addition to Contract price shall be made therefor.

## 22 SOURCE INSPECTIONS AND SAMPLES FOR TESTING

- a Unless otherwise specified, inspection is required at the source for asphalt concrete paving mixtures, structural concrete, metal fabrication, metal casting, welding, concrete pipe manufacture, concrete piles, steel piles, steel pipes, sheet steel piling, protective coating application, and similar shop or plant operations. Steel pipe in sizes less than 18 inches in diameter and vitrified clay and cast iron pipe in all sizes are acceptable upon certification as to compliance with Specifications, subject to sampling and testing by Engineer. Standard items of equipment such as electrical motors, conveyors, elevators, plumbing fixtures, and other similar equipment, are subject to inspection at Project Site(s) and any Laydown Area(s). Special items of equipment such as designed electrical panel boards, large pumps, gangways, floating docks, marine fenders, and other similar equipment, are subject to inspection at the source.
- b Before incorporation in Work, Contractor shall submit samples of materials required by Contract Documents. Contractor shall deliver the materials for testing to the place and at the time designated by Engineer.
- c Contractor shall notify Engineer in writing at least 15 days in advance, of Contractor's intention to use materials for which tests may be necessary, to allow sufficient time to perform the tests. The notice shall name the proposed supplier and source of the materials.
- d Unless otherwise specified, all testing and inspection within 75 miles of Department Administration Building shall be performed by Engineer, at no expense to Contractor.
- e Unless otherwise specified, when Contractor intends to purchase materials, fabricate products, or equipment from sources located more than 75 miles from Department Administration Building, an independent inspector or accredited testing laboratory (approved by Engineer), shall be provided by Contractor at Contractor's sole cost and expense, to inspect and test the materials, equipment, or process. Approval of the independent inspector or accredited testing laboratory shall be obtained before producing any material or equipment. The independent inspector or accredited testing laboratory shall evaluate the materials for conformance with the requirements of Drawings and Specifications. The independent inspector or accredited laboratory shall forward evaluation and test reports to Engineer, with copies provided to Contractor. No materials or equipment shall be shipped nor shall any processing, fabricating, or treating of materials be done without proper inspection by the independent inspector or accredited testing laboratory. Approval by the independent inspector or accredited testing laboratory shall not relieve Contractor of responsibility for complying with the requirements of Contract Documents.

## 01000.22 Cont'd.

- f Testing of the materials furnished by Contractor shall be made by Engineer in accordance with commonly recognized standards or national organization and such special methods and tests as are in use by Engineer in accordance with provisions of Specifications. If materials should fail any tests, retesting shall be performed by Engineer and paid for by Contractor.
- g Engineer may waive the materials testing and inspection requirements of Specifications and accept the manufacturer's written certificate of compliance that the materials to be supplied meet the requirements. Materials test data may be required by Engineer to be included with the submittal.

## 23 DEFECTIVE MATERIALS AND CONSTRUCTION

- a Materials and labor not conforming to the requirements of Specifications shall be considered defective and shall be subject to rejection. Defective Work or materials, whether in place or not, shall be removed immediately from Project Site(s) and any Laydown Area(s) by Contractor, when so directed by Engineer.
- b Contractor shall be required, at Contractor's sole cost and expense, to replace any inferior material, or correct any imperfect Work whenever discovered, as ordered by Engineer.
- c If Contractor fails to replace any defective or damaged Work or material after reasonable notice, Engineer may withhold payments until the defective or damaged Work or material is replaced.
- d No material furnished or Work to be done is to be considered as accepted which may be defective or deficient in any of the requirements of Specifications, whether or not due to any negligence of Inspector, or other authorized person, to point out such defect or deficiency during the execution of Contract.

**24 PROTECTION OF MATERIALS**

- a Contractor shall provide and maintain storage facilities and employ such measures as shall preserve the specified quality and fitness of materials to be used in Work. Stored materials shall be reasonably accessible for inspection. Contractor shall also adequately protect new, existing Work and all items of equipment until completion of Contract and acceptance by Executive Director.
- b Contractor shall be held responsible for all materials furnished by City after such are delivered at Project Site(s) and any Laydown Area(s) and deductions shall be made from any money due or to become due Contractor to make good any shortages and deficiencies from any cause whatsoever which may result after such delivery, or for any demurrage charges due to delinquency in unloading. In case of suspension of Work from any cause whatever, Contractor shall be responsible for all materials whether furnished by Contractor or by City, and shall properly store such if necessary.

**25 AUTHORITY OF ENGINEER**

- a Board has the final authority in all matters affecting Work covered by Contract Documents. Within the scope of Contract, Engineer shall have the authority to enforce compliance with Contract Documents. Contractor shall promptly comply with instructions from Engineer and Engineer shall have the executive authority to enforce and make effective such decisions and orders.
- b On all questions relating to quantities, the acceptability of material, equipment, or Work, the execution, progress or sequence of Work and the interpretation of Contract Documents, the decision of Engineer is final and binding, and shall be precedent to any payment under Contract, unless otherwise ordered by Board.

**26 SUBSURFACE DATA AND PHYSICAL CONDITIONS**

- a Engineer shall make available all information in Department's possession on subsoil conditions in the vicinity of Work. Any additional subsurface exploration shall be done by Contractor at Contractor's sole cost and expense.
- b All soil test hole data, water table elevations, and soil analyses apply only at the location of the test holes and to the depths indicated. The indicated elevation of the water table is that existing at the date the test hole data was determined. A difference in elevation between groundwater shown and groundwater actually encountered during construction shall not be considered as a basis for extra compensation.

## 01000.26 Cont'd.

- c Contractor shall promptly, and before such conditions are disturbed, notify Engineer in writing of: 1) Subsurface or physical conditions at Project Site(s) and any Laydown Area(s) differing materially from those indicated in Contract Documents or as given by survey points and instructions, 2) Unknown physical conditions at Project Site(s) and any Laydown Area(s), of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in Contract, or 3) Material that Contractor has suspected to possibly be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law. Engineer shall promptly investigate the conditions, and if Engineer finds that such conditions do so materially differ, or do involve hazardous waste and cause an increase or decrease in the cost of, or the time required for, performance of Contract, an equitable adjustment shall be made in accordance with applicable Contract provisions. Any request by Contractor for adjustment hereunder shall not be allowed unless written notice as herein required has been given. In the event that a dispute arises between City and Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in Contractor's cost of, or time required for, performance of any part of Work, Contractor shall not be excused from any scheduled completion date provided for by Contract but shall proceed with all Work to be performed under Contract. Contractor shall retain any and all rights provided either by Contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

## 27 PROTECTION OF EXISTING UTILITIES

- a Contractor is responsible for the protection of utilities and pipelines shown on Drawings, or otherwise made known to Contractor, which are designated to be protected or to remain in service. If service is interrupted, or utilities damaged by Contractor's operations, Contractor shall restore service and repair the utility to the satisfaction of the owner at Contractor's sole cost and expense.

## 28 HARBOR DATUM

- a All depths and elevations given in Specifications or shown on Drawings are referenced to the plane of the National Geodetic Vertical Datum of 1929 (NGVD 29), Mean Lower Low Water (MLLW) which is assumed as elevation 0.00.

## 01000.28 Cont'd.

- b The approximate range of tides, based on this datum is as follows:

|                             |           |
|-----------------------------|-----------|
| Lowest Tide .....           | -2.5 feet |
| Mean Lower Low Water .....  | 0.0 feet  |
| Mean Sea Level.....         | +2.8 feet |
| Mean Higher High Tide ..... | +5.4 feet |
| Highest Tide .....          | +7.5 feet |

## 29 SURVEYING AND STAKING

- a Unless otherwise specified, Engineer shall provide and be responsible for surveying needed to construct Project. Contractor shall be responsible for preserving construction survey stakes and marks for the duration of their usefulness. If any construction survey stakes are lost or disturbed and need to be replaced, such replacement shall be by Engineer at the sole cost and expense of Contractor.
- b Contractor shall notify Engineer at least two working days before survey services shall be required in connection with the laying out of any portion of Work. Contractor shall dig all holes necessary for line and grade stakes.
- c Unless otherwise specified, stakes shall be set and stationed by Engineer for curbs, headers, sewers, storm drains, rough grade, and a corresponding cut or fill to finished grade (or flow line) indicated on a grade sheet.
- d Grades for underground piping and conduit shall be set at the surface of the ground. Contractor shall transfer them to the bottom of the trench.
- e For all buildings and structures, including wharves, Engineer shall furnish land surveys, base lines, and stakes for locating the principal component parts of Work together with a suitable number of bench marks. Contractor shall develop and make all detail surveys, lines, and elevations as necessary.
- f Contractor shall check all the dimensions as a whole and in detail, and shall layout and become responsible for the exact position and elevation of all part of the structures.

## 30 INSPECTION OF WORK

- a All Work done and all material furnished shall be subject to the inspection and approval of Engineer, and Contractor shall perform Work only in the presence of Engineer.
- b Work done without proper inspection shall be subject to rejection. Engineer shall at all times have access to Work during its preparation and construction. Contractor shall furnish to Engineer equipment and facilities required for inspection of Work in accordance with the requirements and intentions of Contract Documents.
- c The inspection of Work shall not relieve Contractor of any obligation to fulfill all conditions of Contract as prescribed.
- d If any Work should be covered up without approval or consent of Engineer, it must, if required by Engineer, be uncovered for examination and properly restored at Contractor's sole cost and expense.
- e Re-examination of any Work may be ordered by Engineer, and, if so ordered, Work must be uncovered by Contractor. If such Work is found to be in accordance with Contract Documents, City shall pay the cost of the re-examination and replacement Work. If such Work is not in accordance with Contract Documents, Contractor shall pay such costs.

## 31 FIELD OFFICE TRAILER AND FIELD PERSONNEL

- a Contractor shall be responsible for providing, maintaining, and paying all costs associated with administering and managing Contract, including field and home office personnel, materials, equipment, tools, construction trailers, and any other items necessary until the end of Contract Time including maintenance or plant establishment period.
- b Contractor shall provide at all times during construction a competent Superintendent and necessary assistants satisfactory to Engineer. Superintendent shall represent Contractor and all direction given to Superintendent shall be binding as if given to Contractor.
- c Contractor's Superintendent shall be assigned solely to Project and be present on Project Site(s) and any Laydown Area(s) for the entire duration of Contract Time including maintenance or plant establishment period. Contractor's Superintendent shall not be replaced without notifying and obtaining approval of Engineer in writing at least 14 Calendar Days in advance.
- d All requests from Contractor for directions, clarifications, or field instructions and all response thereto shall be in writing.



## 32 CHARACTER OF WORKERS AND DISCIPLINE AMONG EMPLOYEES

- a Contractor shall, at all times employ sufficient labor for completing Work in the manner and time required by Contract Documents.
- b All workers shall have sufficient skill and experience to properly perform work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in such work and in the operation of the equipment required to perform such work satisfactorily.
- c Contractor shall at all times enforce discipline and order among employees, and shall avoid employing on Work any person not skilled in the work assigned.
- d Any person employed who is found to be incompetent, intemperate, troublesome, disorderly, or who fails or refuses to perform Work properly and acceptably, shall be immediately removed from Work by Contractor and not be reemployed on Work.

## 33 CHANGES IN WORK

- a City reserves the right, without notice to the sureties, at any time during the life of Contract and without invalidating same, to change Drawings, Specifications, character of Work, quantity of Work, or time within which Contract is to be completed, provided the total arithmetic dollar value of all such changes, both additive and deductive, does not exceed 25 percent of the total Contract price. Should it become necessary to exceed this limitation, the change shall be by written supplemental agreement between Contractor and City, unless both parties agree to proceed with the change by Change Order.
- b In giving instructions, Engineer shall have authority to make Changes in Work not involving extra cost when such changes are necessary or expedient to the satisfactory performance and completion of Work.
- c Engineer, by written order to Contractor, approved by Executive Director, shall have authority to implement Changes in Work, and/or to grant extensions of time, provided that Changes in Work and/or extensions of time which increase or decrease Contract price by more than \$150,000 in any one authorization, and all time extensions in excess of one year, shall become effective only after authority is granted by Board.
- d Except in an emergency endangering life or property, no Changes in Work involving additions to Contract price shall be made unless in pursuance of such written order, and no claim for an addition to Contract price shall be valid unless the additional Work was so ordered.

## 34 COST-PLUS CHANGE ORDER WORK (CHANGE ORDERS)

- a If it is impossible or impracticable to ascertain the total cost of Changes in Work to be done before such Work is begun, or if no agreement can be reached on Changes in Work and additions to Contract price, then Engineer may issue a Cost-Plus Change Order (Change Orders) instructing Contractor to do Work, indicating expressly and unmistakably the intention to treat the items as Changes in Work, setting forth the kind, character and limits of Work as far as can be ascertained, the terms under which changes to Contract price shall be determined and the estimated total change in Contract price anticipated thereunder. Change Order shall be fully executed by Department and accepted by Contractor before any Work is started on the items covered by the order. Such Change Order shall become the basis for a later Authority for Adjustment when the amount of adjustment to Contract price can be determined, and the prior approval of Change Order shall be considered necessary authority within the limits of the estimated change in Contract price. Without additional authority, no costs exceeding the estimated amount shall be paid.
- b Contractor shall maintain records sufficient to distinguish the direct cost of Change Order Work from the cost of other operations.
- c Costs in a Change Order shall be determined as follows:
  - 1 Labor costs shall be based on the prevailing wage scale for each craft or type of worker. Cost of payroll taxes and insurance, health and welfare, pension and vacation are allowable, subject to Contractor's submitting adequate documentation to substantiate cost.
  - 2 Material costs shall be the cost of all materials purchased by Contractor and used in Cost-Plus Change Order Work and shall be the actual cost of such materials, including sales taxes, freight and delivery charges. City reserves the right to approve materials and sources of supply of materials furnished by Contractor, or, if necessary, to facilitate the progress of Work, to furnish the materials to Contractor.
  - 3 Contractor shall be allowed rental for the time that machinery or equipment is required based on the applicable Equipment Rental Rates published by the State of California, Department of Transportation, Division of Construction, current on date of performance of Work; when machinery and equipment not so listed is required, a reasonable rental shall be allowed. In addition, Contractor shall be allowed reasonable move-in and move-out charges on heavy equipment.

## 01000.34 Cont'd.

- 4 Equipment and tools having a replacement value of \$500 or less, whether or not consumed by use, shall be considered small tools and no payment shall be made therefor.
- d Contractor shall notify Inspector at the beginning of each day when Change Order Work is being performed. Contractor shall describe the personnel involved, whether by Contractor forces or by its subcontractors at any tier. Failure to notify Inspector prior to the start of Change Order Work serves as Contractor's waiver to claim for compensation on that day.
- e At the end of each day when Change Order Work is performed, Contractor [not subcontractor(s)] shall furnish to Inspector, on Port of Los Angeles Construction Division Time and Material Form, reports of Cost-Plus Work for that day. Form is included at the end of this Section.

The reports shall:

- 1 Identify party (Contractor or subcontractors at any tier) performing Work.
- 2 Show names of workers, classifications, and hours worked.
- 3 Describe and list quantities of materials used.
- 4 Show type of equipment, size, identification number, and hours of operation, including loading and transportation, if applicable.
- 5 Describe other services and expenditures in such detail as Engineer may require.

An attempt shall be made to reconcile the report daily, and it shall be signed by Inspector, the subcontractor performing Work (if applicable) and Contractor. In the event of disagreement, pertinent notes shall be entered by each party to explain points which cannot be resolved immediately. Each party shall retain a signed copy of the report. Reports by subcontractors or others shall be submitted through Contractor.

In the event that more than one Change in Work is performed by Contractor in a Calendar Day, Contractor shall maintain separate records of labor, construction equipment, and materials for each such change. In the event any subcontractor of any tier shall provide or perform any portion of any changed work, Contractor shall require that each such subcontractor maintain records in accordance with this Subsection.

## 01000.34 Cont'd.

- f All Change Order reports to be submitted on the day that Work is performed, shall be signed by the subcontractor (if applicable) and Contractor or authorized representative, and witnessed by Inspector. Engineer's signature on the report shall indicate agreement with the information reflected therein (except when disagreements remain and each party has placed notes as to the disagreement on the form), not that Contractor is entitled to payment of the costs in the report.
- g A subsequent report, also on Port of Los Angeles Construction Division Time and Material Form, shall be submitted by Contractor to Engineer within 5 Business Days after the date that Work was performed. In addition to the information included in the report required on the day that Work is performed, this subsequent report shall itemize all costs for labor, materials, and equipment rental and give a total of costs to date for Change Order Work. This report shall be accompanied by all receipts, delivery tickets, and other documentation that verifies the identified costs.
- h Engineer shall compare Engineer's records with Contractor's reports, make the necessary adjustments, and compile the costs of Change Order Work. When such corrected reports are agreed upon and signed by both parties, they shall become the basis of payment. The total cost to City for Work covered by Change Order directive shall under no circumstances exceed a price that is reasonable, competitive and fair to City given the amount of and type of Work involved and the circumstances under which the change is performed. In the event that Contractor shall fail or refuse, for any reason, to maintain or make available for inspection, review, and/or reproduction of such records, adjustments to Contract price or Contract Time, if any, on account of any change to Work may be deemed waived for that day. Contractor's obligation to maintain back-up records hereunder is in addition to, and not in lieu of, other Contractor obligations under Contract Documents with respect to Changes in Work.
- i Contractor is responsible for tracking costs and for notifying Engineer in writing when costs approach 50% and 75% of the estimated total change in Contract price set forth in Change Order. In addition, if Changed/Extra Work cannot be completed within the estimated total change in Contract price set forth in Change Order, Contractor shall notify Engineer in writing, and in a timely manner, that the limit requires an increase. City shall only reimburse eligible costs up to the estimated total change in Contract price set forth in Cost-Plus Change Order.
- j City may authorize and approve payment for necessary services and expenditures other than labor, materials, and equipment rentals.

## 01000.34 Cont'd.

- k Materials, equipment rental, and other costs shall be substantiated by vendors' invoices submitted with the current reports; or, if not then available, shall be submitted with subsequent reports. If vendors' invoices are not submitted within 30 days after completion of the Cost-Plus Work or if in the opinion of Engineer the cost of materials is excessive, then the cost of such items shall be deemed to be the lowest current wholesale prices at which the items are available in the quantities required, delivered to Project Site(s) and any Laydown Area(s), less cash or trade discounts.

## 35 AUTHORITY FOR ADJUSTMENTS

- a An Authority for Adjustment (AFA) is a document that changes Work and adjusts Contract price. An AFA may be utilized in one of the following manners:
  - 1 A written order implementing Changes in Work for which a total cost has been negotiated prior to the issuance of the order. It is issued by Engineer and expressly indicates the intention to treat the items described therein as Changes in Work. It shall also contain the terms and amount of adjustment to Contract price. In this case, AFA shall be issued and executed before any work is started on the items covered by the order.
  - 2 To finalize (or close-out) one or more Change Orders, or Work initially authorized by Change Order.
  - 3 To adjust the estimated quantities of unit price bid items, and contingency items to agree with the actual quantities required. No mark-up fees shall be allowed for these adjustments.
- b Mark-up fees in an Authority for Adjustment for paragraphs a, 1 (negotiated AFAs) and a, 2 (finalized Change Orders) above shall be determined as follows:
  - 1 When extra Work is performed by one or more subcontractors other than Contractor, total mark-up fees shall be 15 percent, broken down as follows: 10 percent for the one or more subcontractors performing Work, and 5 percent for Contractor and all upper tier subcontractors, as shown in Example 1 below.

## 01000.35 Cont'd.

## Example 1:

|                                                                                   |           |
|-----------------------------------------------------------------------------------|-----------|
| Value of extra Work:                                                              | \$100,000 |
| Mark-up fees shall be broken down as follows:                                     |           |
| 10 percent of value of extra Work for one or more Subcontractors performing Work  | \$ 10,000 |
| 5 percent of value of extra Work for Contractor and all upper tier subcontractors | \$ 5,000  |
| Total AFA amount                                                                  | \$115,000 |

- 2 When Work is performed by Contractor only, mark-up fees shall be 10 percent, as shown in Example 2 below.

## Example 2:

|                                                                                 |           |
|---------------------------------------------------------------------------------|-----------|
| Value of extra Work:                                                            | \$100,000 |
| Mark-up fees shall be 10 percent of value of extra Work performed by Contractor |           |
|                                                                                 | \$ 10,000 |
| Total AFA amount                                                                | \$110,000 |

- 3 When part of Work is performed by Contractor and part of Work is performed by one or more subcontractors, mark-up fees shall be as shown in Example 3 below.

## Example 3:

|                                                                                                                  |           |
|------------------------------------------------------------------------------------------------------------------|-----------|
| Value of extra Work:                                                                                             | \$100,000 |
| Assume \$40,000 performed by Contractor and \$60,000 performed by one or more subcontractors.                    |           |
| For \$40,000 performed by Contractor, mark-up shall be 10 percent of value of extra Work performed by Contractor | \$ 4,000  |
| For \$60,000 performed by one or more subcontractors, mark-up fees shall be as follows:                          |           |
| 10 percent of value of extra Work for one or more subcontractors performing Work                                 | \$ 6,000  |
| 5 percent of value of extra Work for Contractor and all upper tier subcontractors                                | \$ 3,000  |
| Total AFA amount                                                                                                 | \$113,000 |

- 4 No percentage shall be paid to Contractor for any material furnished by Department. Where the portion of a change involves credit items for Contract Work not being performed by Contractor or subcontractor on any tier, Contract Work not being performed shall be deducted prior to adding the mark-up fee.

## 01000.35 Cont'd.

- 5 Mark-up fees shall apply to labor premium time for Change Order Work, when labor premium time is approved by Engineer.
  - 6 Contractor's mark-up fee percentage shall be considered to include all costs over and above the direct cost of the changed Work, including, but not limited to, the cost of preparing and furnishing all required reports and records sufficient to distinguish the direct cost of Change Order Work from the cost of other operations, overhead, profit, bond premium adjustment, insurance, field and office supervision, preparation of estimates, engineering, scheduling, use of small tools, incidental job burdens, general home office expenses, any impact costs, and other miscellaneous costs.
- c Should any lump sum bid item be eliminated in its entirety, or otherwise reduced in scope of Work, payment shall be made to Contractor for Contractor's actual costs incurred in connection with the elimination or reduction in scope of Work. Allowances for overhead and profit shall be based on the actual cost incurred and shall be determined pursuant to Cost-Plus Change Order Work (Change Orders) Subsection. Contractor shall not be entitled to retain any overhead or profit mark up for the reduced quantity of Work eliminated by Engineer.
  - d If material conforming to Drawings and Specifications is ordered by Contractor for use in the bid item prior to the date of notification of elimination or scope reduction by Engineer, and if the order for the material cannot be canceled or returned without charge, payment shall be made to Contractor for the actual cost or charges for the material. In this case, if the material cannot be returned and payment has been made, the material shall become the property of Department. Department shall also pay Contractor reasonable and necessary charges for handling said material.

## 36 FORCE ACCOUNT WORK

- a If no agreement can be reached on Changes in Work and additions to Contract price, or Contractor refuses to accept an Authority for Adjustment or Cost-Plus Change Order, Executive Director shall have the right to have Work in question done by persons, firms or corporations other than Contractor, or to perform the same by utilizing either City's own forces or forces of Contractor on the basis specified in Authority for Adjustments Subsection and Cost-Plus Change Order Work (Change Orders) Subsection of this Section.

**37 REQUEST FOR ADDITIONAL COMPENSATION**

- a If Contractor alleges that instructions issued after the date of Contract shall result in increases in Contract price, Contractor shall give Engineer written notice thereof within seven Calendar Days after the receipt of such instructions, and in any event before proceeding with Work, except in an emergency endangering life or property. The procedure for accounting for costs shall then be as provided in Cost-Plus Change Order Work (Change Orders) Subsection of this Section. No such notice or request for additional compensation resulting therefrom shall be considered unless Contractor complies with the requirements of this Subsection.
- b If Contractor submits a request to Engineer, for additional compensation for any kind of extra Work, said request when filed shall include all necessary evidence to support it. Engineer shall have the right to audit Contractor's request, including the right to examine books, records, documents, and other evidence and accounting procedures and practices, sufficient to verify all costs incurred or which may be incurred and for which a request has been submitted. The right to audit shall include the right to inspect Contractor's plants, or such parts thereof as may be or have been engaged in the performance of Contract.
- c Contractor further agrees that the right to audit encompasses all subcontracts and is binding upon all subcontractors. The rights to examine and inspect herein provided shall be exercisable through such representatives as Engineer chooses, during Contractor's normal business hours at the office of Contractor. Contractor shall make available to Engineer for auditing all relevant accounting records and documents, and other financial data, and upon request, shall submit true copies of records requested to Engineer. Contractor shall keep all such books and records locally.

**38 EMERGENCY WORK**

- a In an emergency endangering life or posing clear and imminent danger of grievous property damage, Contractor, without special instructions or authorization from Engineer, shall act to prevent such loss or injury until such time as Engineer can be contacted for an assessment of the situation. Contractor shall also so act, without appeal, if so authorized or directed by Engineer. Any compensation requested by Contractor on account of such emergency work, shall be determined by negotiation and agreement between Contractor and City.



## 01000.38 Cont'd.

- b Contractor shall maintain records sufficient to distinguish the direct cost of emergency work from the cost of other operations and shall itemize all costs for labor, material, and equipment rental in connection with emergency work.

## 39 TEMPORARY SUSPENSION OF WORK

- a Engineer may at any time suspend Work, or any part thereof, by giving notice to Contractor in writing ordering suspension of Work for such period as deemed necessary when, in Engineer's opinion, the suspension is necessary to protect the interest of City for any reason whatsoever.
- b Contractor shall comply immediately with any written order of Engineer suspending Work. Such suspension shall be without liability to Contractor on the part of City excepting only for such liability as specified in Extensions of Time and Compensable Delays Subsection of this Section.

## 40 UNAUTHORIZED WORK

- a Construction or demolition beyond the lines given and grades shown on Drawings, or any extra Work done without written authority, shall be considered as unauthorized and at the sole cost and expense of Contractor, and shall not be measured or paid for. Construction so done may be ordered removed and demolition so done may be ordered restored at Contractor's sole cost and expense.
- b Upon failure on the part of Contractor to comply with any order of Engineer made under the provisions of this Subsection, Engineer shall have authority to cause the order to be done by others, and to deduct the costs from any money due or to become due Contractor.

## 41 CONTRACTOR TO ABIDE BY APPLICABLE LAWS

- a At all times in its performance of Contract, Contractor, at Contractor's sole cost and expense, shall comply with all Applicable Laws pertaining to Work, Project Site(s) and any Laydown Area(s). Contractor is presumed to know both the existence and applicability of such Applicable Laws.
- b Contractor shall adhere to the provisions of the California Labor Code including but not limited to those provisions concerning minimum wages, the 8-hour day and 40-hour week, overtime, Saturday, Sunday, and holiday work. Contractor shall forfeit to City the penalties prescribed in the California Labor Code for violations.

## 01000.41 Cont'd.

- c Contractor shall have at Project Site(s), copies, or suitable extracts of: Construction Safety Orders and General Industrial Safety Orders issued by the State Division of Industrial Safety. Contractor shall comply with provisions of these and all other applicable laws, ordinances, and regulations.

## 42 EXPLOSIVES

- a Explosives may be used only when authorized in writing by Engineer, or as otherwise stated in Contract Documents. Explosives shall be handled, used, and stored in accordance with all applicable regulations.
- b Engineer's approval of the use of explosives shall not relieve Contractor from the liability or responsibility for claims arising from the use, handling, transportation, or storage of explosives by Contractor or from blasting operations.

## 43 PROPRIETARY NAMES AND SUBSTITUTIONS

- a Whenever any equipment, material, or process is indicated or specified by patent or proprietary name, or by name of manufacturer, such reference is used to establish the type, function, and quality required. Unless the name is followed by words indicating that no substitution is permitted, such references shall be deemed to be preceded by the words "equal and similar to". Contractor may offer any equipment, material, or process for which Contractor submits data supporting that such are substantially equal to that indicated or specified. Final determination of the acceptability of such substitute items shall rest with Engineer. Engineer may consider the strength, appearance, durability, reliability, dimension, finish, efficiency, maintainability, service history, life cycle cost, and other characteristics of the proposed substitute in making that determination.

## 01000.43 Cont'd.

- b A substitute item shall be a standard, catalogued product of a company regularly engaged in the manufacture of such items. No custom or prototype substitutes shall be accepted. Contractor shall certify that a substitute item shall perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance, and be suited to the same use as the specified item. Contractor shall identify all differences between the proposed substitute and that specified, and state whether or not acceptance of the proposed substitute shall require a change in Contract Documents to adapt the design to the proposed substitute. Any redesign or Changes in Work resulting from acceptance of a substitute shall be at the sole cost and expense of Contractor. Contractor shall furnish such data concerning and perform such testing of the proposed substitute as may be required by Engineer to evaluate the substitute item and determine if it is substantially equal. Additional information requested by Engineer shall be furnished by Contractor within 10 Calendar Days of such request.
- c Offers of substitute items shall be made within the first 25 percent of Contract Time. Where CONTRACT Section requires multiple Contract Times, offers of substitute items shall be made within the first 25 percent of Contract Time for the items of Work in which the substituted items are proposed to be incorporated. Contractor shall allow Engineer 28 Calendar Days review time to evaluate substitute items unless otherwise stated in Specifications. No extension of Contract Time shall be authorized for any circumstance developing from the provisions of this Subsection. Failure to comply with the provisions of this Subsection shall be sufficient cause for rejection of a proposed substitute.

## 44 PATENT RIGHTS

- a Contractor agrees to save, keep, hold harmless, and fully indemnify City and any of its officers or agents from all damages, cost, or expenses in law or equity that may at any time arise or to be set up for any infringement of the patent rights of any person or persons, or corporations in consequence of the use by City, or by any of its officers or agents, of articles supplied under Contract, and of which Contractor is not the patentee or assignee, or which Contractor is not lawfully entitled to sell.
- b The patent fees or royalties on any patented article or process which may be furnished or used in Work shall be considered as included in the cost of the various items of Work and no separate or extra payment shall be made therefor, regardless of whether notice of patent has or has not been included in any of the documents.

45 HOUSEKEEPING AND MAINTENANCE OF SURFACE AREAS OF PROJECT SITE(S) AND ANY LAYDOWN AREA(S)

- a Throughout all phases of construction, including suspension of Work, and until final acceptance of Project, Contractor shall keep the surface of Project Site(s) and any Laydown Area(s) clean and free from rubbish and debris. Contractor shall also abate dust nuisance by cleaning, sweeping, and sprinkling with water, or other means as necessary. The use of water resulting in mud on streets and paved areas shall not be permitted as a substitute for sweeping or other methods.
- b Care shall be taken to prevent spillage on haul routes. Any such spillage shall be removed immediately and the area shall be cleaned.
- c Should conditions warrant, Contractor shall furnish and operate a self-loading motor sweeper with spray nozzles as necessary to keep paved areas acceptably clean wherever construction, including restoration, is incomplete.
- d Contractor shall not discharge smoke, dust, or any other air contaminants into the atmosphere in such quantity as shall violate the regulations of any legally constituted authority.
- e Prior to completion of Work, Contractor shall remove all plant, tools, equipment and materials, and shall thoroughly clean Project Site(s) and any Laydown Area(s) and leave it with a neat, clean appearance to the satisfaction of Engineer.

46 PROTECTION OF HARBOR WATERS

- a Contractor shall keep materials away from drainage structures and the harbor. Contractor shall not allow lumber, blocking, chips, loose piles, rubbish, and all flotsam, jetsam, and contaminants of whatever nature to be deposited in harbor waters. If any of the above should be found floating near Project Site(s) and any Laydown Area(s) or submerged which might detrimentally affect navigation or water quality, it shall be immediately removed by Contractor.

47 PROJECT SITE(S) AND ANY LAYDOWN AREA(S) SECURITY

- a Contractor shall keep Project Site(s) and any Laydown Area(s) secure at all times. Contractor shall provide the security fencing, either temporary or permanent to meet this requirement.

## 48 PUBLIC CONVENIENCE AND PROTECTION

- a Contractor shall be responsible for protection of public and private property adjacent to Project Site(s) and any Laydown Area(s) and shall exercise due caution to avoid damage to such property.
- b The access rights of the public and lessees of adjacent property shall be considered at all times. Unless otherwise authorized, traffic shall be permitted to pass through Work or an approved detour shall be provided.
- c Unless otherwise authorized, Work shall be performed in only one-half of a roadway at one time. One-half shall be kept open and unobstructed until the opposite side is ready for use. If one-half a street only is being improved, the other half shall be conditioned and maintained as a detour.
- d Contractor shall provide and maintain all necessary barriers, guards, lights, signs, temporary crossings, flag persons and watchpersons, advise the public of detours and construction hazards and comply with all applicable State, County, and City requirements for closure of streets and Federal and State requirements for use of navigable waters. Contractor shall also be responsible for compliance with additional public safety requirements which may arise during construction. Contractor shall furnish and install, and upon completion of Work, promptly remove all signs and warning devices.
- e Contractor shall not interfere with navigation.

## 49 TEMPORARY UTILITIES

- a Contractor shall furnish, install, maintain, and remove all temporary light, power, and water, including piping, wiring, lamps, and other equipment, necessary for Work. Contractor shall not draw water from any fire hydrant, except to extinguish a fire, without first obtaining permission from the water agency concerned.

## 50 SANITATION

- a Contractor shall provide and maintain enclosed toilets for the use of employees engaged in Work. These accommodations shall be maintained in a neat and sanitary condition. They shall also comply with all applicable laws, ordinances, and regulations pertaining to the public health and sanitation.
- b Sewage flows shall not be interrupted. Should Contractor disrupt existing sewer facilities, sewage shall be conveyed in closed conduits and disposed of in a sanitary sewer system. Sewage shall not be permitted to flow in trenches, be covered by backfill, or flow into Harbor waters.

## 51 RAILROAD TRACKS

- a City does not guarantee that railroad tracks shall be free from trains and standing cars. Contractor shall exercise such care as shall prevent the displacement, injury or obstruction of any railroad tracks encountered in Work. In case it shall be necessary to protect, raise, lower, displace, or remove railroad tracks for the proper construction of Work, Contractor shall notify the operating railroad and obtain all necessary permission to perform the track work, or have Work performed, as the case may require.

## 52 CONSTRUCTION SCHEDULE

- a Unless otherwise specified, Contractor shall submit a proposed construction schedule to Engineer for review not later than 15 Calendar Days after Notice to Proceed. Failure to submit a schedule within the stated time may result in the withholding of the first progress payment.
- b The schedule shall identify all major construction elements, their start date and duration and shall reflect completion of all Work under Contract within the specified time and in accordance with Specifications.
- c Seven copies of the schedule shall be submitted on substantial paper of a reasonable and convenient size for handling and filing. Language, symbols, and notations shall be those commonly employed in construction scheduling.
- d The time base for reporting construction tasks shall be a regular working day taking into consideration all non-working days.
- e The time base for reporting milestones shall be Calendar Days.
- f The schedule shall be revised and updated monthly to reflect adjusted event dates, activity completions, additions to Work and late completion time. The schedule shall be revised and resubmitted for Engineer's review whenever Contractor desires to make changes in methods of operation, and whenever the schedule fails to reflect the actual progress.
- g Contractor shall include the cost of scheduling and updating the schedule in the prices bid for Work.

## 53 EXTENSIONS OF TIME AND COMPENSABLE DELAYS

- a Contractor's obligations for the performance and completion of Contract within Contract Time are of the essence of Contract. Contractor shall complete the performance of Contract within the time stipulated or within such time as may be extended by City pursuant to Changes in Work Subsection of this Section. Contractor shall be responsible for providing, maintaining, and paying all costs associated with administering and managing Contract including field and home office personnel, materials, equipment, tools, construction trailers, and any other items necessary until the end of Contract Time including any maintenance or plant establishment period.
- b Extension of time, when granted, shall be based upon the effect of delays to Project as a whole and shall not be granted unless it can be shown that such delays did, in fact, delay the progress of Project as a whole.
- c The time of completion shall be extended only if, in the opinion of Engineer, Contractor is necessarily delayed in completing Contract by a cause that meets all of the following conditions:
  - 1 Such cause is beyond Contractor's control and arises without Contractor's fault;
  - 2 Such cause arises after the opening of bids and neither was nor could have been anticipated before bid opening. Tide conditions shall be conclusively deemed to have been anticipated before opening of bids.
  - 3 The effect of such cause could not be anticipated and avoided or mitigated by the exercise of all reasonable precautions, efforts and measures by Contractor, including re-planning, scheduling, and rescheduling.
- d Notwithstanding the provisions of Paragraph c.2 of this Subsection above, a time extension may also be granted for delays caused by precipitation or Stage II Smog Alerts (at the South Coast Air Quality Management District Source Receptor Area 4) subject to the other requirements of this Subsection. However, Contractor shall not be entitled to compensation or additional payment due to such delays.
- e Requests for extension of time for Changes in Work shall be negotiated at the time of ordering such changes or after the effects of mitigating rescheduling have become known.

## 01000.53 Cont'd.

- f An extension of time granted shall not release the sureties from their obligations. Work shall continue and be carried on in accordance with all the provisions of Contract and said Contract shall be and shall remain in full force and effect during the continuance and until the completion and final acceptance of Work covered by Contract unless formally suspended or annulled in accordance with the terms of Contract.
- g Neither the granting of an extension of time beyond the date fixed for the completion of any part of Work nor the doing and acceptance of any part of Work or materials specified by Contract after the time specified for the completion of Work, shall be deemed to be a waiver by City of City's right to abrogate Contract for abandonment or failure to complete within the time specified, or to impose and deduct damages as may be provided.
- h As between Contractor and City, Contractor assumes the risk of any and all costs, expenses and liabilities which Contractor may incur in connection with all suspensions of, or delays in, performance of Contract, regardless of the length thereof, arising from all causes whatsoever including impacts by third parties, except that Contractor may be compensated for delays caused solely by the failure of City to furnish necessary rights of way, failure to provide materials shown in Contract Documents to be furnished by City, for its own convenience or benefit. If Contractor sustains loss as a consequence thereof which could not have been avoided by the judicious handling of forces, equipment and plant, there may be paid to Contractor such amount as Engineer finds to be fair and reasonable compensation for such part of Contractor's actual loss as was unavoidable. In no case, however, shall any compensation be made to cover loss of anticipated profits or indirect losses of any kind. If delays are caused by reasons other than those mentioned specifically in this Subsection, an extension of time may be granted, but Contractor shall not be entitled to compensation or additional payment due to such delays.
- i If Contractor desires an extension of time or compensation for a qualifying delay, Contractor shall, within 30 Calendar Days after the beginning of the delay, file with Engineer a written request and report as to the cause and extent of the delay. The request must be made at least 15 Calendar Days before the specified completion date. Failure by Contractor to file these items within the times specified shall be considered grounds for refusal by City to consider such request.



## 54 LIQUIDATED DAMAGES

- a If Contractor fails to complete Work covered by Contract Documents, or any portion thereof, in accordance therewith, within the time for completion stipulated, or within the time for such completion as extended, Contractor shall pay to City the sum stipulated in Contract, for each and every Calendar Day the time consumed in the execution of said Work may exceed the time allowed for that purpose, which said sum is agreed upon, fixed and determined by the parties hereto, as the liquidated damages that City shall suffer by reason of said delay and default. It is expressly understood that it shall be impracticable and extremely difficult to determine or fix the actual loss that City shall suffer by reason of delay in the performance of Work hereunder. City may deduct and retain the amount of such liquidated damages out of any money which may be due or become due Contractor. Such liquidated damages shall be City's sole monetary remedy for delay unless a court of competent jurisdiction finds the liquidated damages provisions in Contract to be invalid or unenforceable, in which case City shall retain all other remedies in law or equity, including without limitation the right to prove and recover actual damages due to delay.
- b In the computation of liquidated damages for delay in completion of Work, the time taken by City or allowed a new contractor to whom award may be made for the completion of Contract, as well as the time required for advertising and awarding such new contract, shall be added to the time consumed by the original Contractor up to the date that City shall have notified the original Contractor to suspend Work, and from such total there shall be deducted the time allowed to the original Contractor for completing Work under Contract.
- c Contractor shall not be assessed liquidated damages for delay in completion of Project caused by the failure of City or the owner of existing public utilities encountered to relocate same in a timely manner if such utilities are not identified on Drawings or in Specifications.

## 55 PARTIAL ACCEPTANCE AND USE

- a At any time prior to final acceptance, City reserves the right to take over and utilize all, or any portion of, the permanent construction which has been completed, if Engineer determines that such portion of the permanent construction is not required for the operations of Contractor or the use thereof is urgently needed by City. Engineer shall notify Contractor in writing identifying the specific portion or portions of the completed Work to be so utilized or otherwise placed into service. At Engineer's discretion, City may start the guarantee period on the portion of Work being utilized from the date of such acceptance.

## 01000.55 Cont'd.

- b Such action by City shall relieve Contractor of responsibility for injury or damages to said completed portions of the improvement resulting from use or from the action of the elements or from any other cause, except injury or damage resulting from Contractor's operation or negligence. Contractor shall not be required to re-clean such portions of the improvement before final acceptance, except for cleanup made necessary by Contractor's operations.
- c At Executive Director's discretion, City may, prior to final acceptance of Contract, upon issuance of substantial completion of Project, release a portion of the retention monies being held.
- d Nothing in this Subsection shall be construed as relieving Contractor from full responsibility for correcting defective Work or materials.
- e In the event City exercises its right to place into service and utilize all or part of any completed permanent construction, as between City and Contractor, Contractor shall be responsible for only those injuries to persons or property caused by any willful or negligent act or omission of Contractor, subcontractor, their officers, employees or agents or those injuries for which Contractor, subcontractor, their officer, employees or agents would be strictly liable or liable under a warranty.

## 56 PARTIAL PAYMENTS

- a In the event of a lump sum bid on all or any portion of Work upon which partial payments are to be made, Contractor shall, before the first payment becomes due, submit to Engineer a detailed schedule of prices for such units of Work as may be specified by Contractor for permanent Work accomplished and material worked into permanent place. The schedule of prices submitted shall be checked by Engineer, and, if in Engineer's opinion such unit prices appear to be reasonable and properly balanced, they shall be approved and used in the preparation of the monthly estimates. The sum of all extensions, based upon the quantities of the various items for the entire Work covered by Contract and the unit prices as approved, shall be equal to the total amount of Contract.

## 01000.56 Cont'd.

- b Contractor shall, within two weeks after issuance of Notice to Proceed, submit to Engineer a list of rates, without markup set forth in Authority for Adjustments Subsection Paragraph b of this Section, of pay for all labor classifications [for Contractor and subcontractors (listed and not listed) at every tier] as well as hourly equipment costs (rental rates or otherwise). The list of labor rates and equipment costs submitted shall be checked by Engineer, and, if in Engineer's opinion such rates and costs appear to be reasonable, they (along with Engineer's estimate of material costs, or latest verifiable information on material costs) shall be approved and used for reference when evaluating requests for monthly partial pay for Cost-Plus Change Order Work. It is the responsibility of Contractor to request any consideration for rates that represent an increase from those presented, and agreed upon prior to the first payment. This list shall not replace Contractor's obligation to provide backup records for Cost-Plus Work nor allow Contractor to receive compensation for Cost-Plus Work greater than Contractor's actual cost plus markup under Authority for Adjustments Subsection of this Section.
- c On or about the first of each calendar month, Engineer shall make an estimate in writing of all permanent Work accomplished and material permanently installed and the total amount of Work done up to the time of such estimate, and the value thereof based upon the unit price stated in the Bid Proposal Line Items or upon the prices agreed in the breakdown of a lump sum or sums stated in the Bid Proposal Line Items. When provided for in Specifications, and subject to the limitations and conditions of Acceptance and Final Payment Subsection of this Section, the cost of materials and equipment delivered but not yet incorporated in Work shall be included in the progress estimate. Contractor shall submit receipts from suppliers identifying the materials and equipment as paid for prior to the item being included in the progress estimate. The progress estimate shall be submitted to Engineer as a payment request. Upon receipt of a properly presented payment request, Engineer shall process the payment in conformance with California Public Contract Code Section 20104.50 for on time and prompt payment to Contractor. The following is a summary of California Public Contract Code Section 20104.50. For the full text, refer to California Public Contract Code Section 20104.50.
  - 1 If City fails to make any progress payment within 30 days after receipt of an undisputed and properly submitted payment request from Contractor for this Contract, City shall pay interest to Contractor equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure.
  - 2 Upon receipt of a payment request, City shall act in conformance with both of the following:

## 01000.56 Cont'd.

- a) Each payment request shall be reviewed by City as soon as practicable after receipt for the purpose of determining that the payment request is a proper payment request.
  - b) Any payment request determined not to be a proper payment request suitable for payment shall be returned to Contractor as soon as practicable, but not later than 7 days, after receipt. A request returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reasons why the payment request is not proper.
- 3 The number of days available to City to make a payment without incurring interest pursuant to this section shall be reduced by the number of days by which City exceeds the 7-day return requirement set forth in Subparagraph 2 of Paragraph c of this Article.
- 4 A progress payment includes all payments due to Contractor, except that portion of the final payment designated by Contract as retention earnings.
- 5 A payment request shall be considered properly executed if funds are available for payment of the payment request, and payment is not delayed due to an audit inquiry by the financial officer of City.
- d From each progress estimate, 5 percent of the amount attributable to Work, including Changes in Work and/or Authorities for Adjustment issued after the original Contract Award, shall be deducted and retained by City, and the remainder less the amount of all previous payments shall be paid to Contractor.
- e Contractor shall have the right to substitute approved securities equivalent to the amount retained or request that Department deposit the amount retained in an interest bearing account. The substitution of securities or the deposit of the amount retained shall be at the expense and request of Contractor.
- 1 If Contractor requests to substitute securities equivalent to the amount retained, City shall place the amount retained on deposit with a state or federally chartered bank as escrow agent after approved securities have been likewise deposited by Contractor. The escrow agent shall thereafter pay the amount retained to Contractor. Contractor shall be the beneficial owner of any securities deposited subject to Paragraph (f) of this Subsection.

## 01000.56 Cont'd.

- 2 If Contractor requests City to deposit the amount retained in an interest bearing account with a state or federally chartered bank as escrow agent, City shall do so and the escrow agent shall then pay all interest on said account to Contractor. Contractor shall be the beneficial owner of said account subject to Paragraph (f) of this Subsection.
- f Thirty-five Calendar Days following acceptance of Work by Executive Director and upon receipt of written notification of such fact from City, escrow agent shall release to Contractor the securities which have been placed on deposit or the amounts deposited in the interest bearing account. City has the right to order escrow agent to continue to retain necessary securities or deposits sufficient to cover such amounts required by law to be withheld pursuant to properly executed and filed notices to stop payment or as may be authorized by Contract to be further retained.
- g Securities eligible for substitution are those listed in Government Code Section 16430 and also bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by Contractor and City.
- h The escrow agent shall be authorized by Contractor to convert deposited securities or interest bearing accounts to cash in the event of default by Contractor and distribute the cash as instructed by City.
- i Unless otherwise provided, no payment shall be made for materials delivered to Project Site(s) and any Laydown Area(s) but not incorporated in Work.
- j Payment shall not be made for materials wasted or disposed of in a manner not called for under Contract. This includes rejected material not unloaded from vehicles, materials rejected after having been placed and material placed outside of the pay lines. Such quantities shall not be included in the pay quantities. No compensation shall be allowed for disposing of rejected or excess material.
- k No estimate or payment shall be required to be made when, in the judgment of Engineer, Work has not proceeded in accordance with the provisions of Contract. The value of any material or Work included in partial estimates, which may subsequently become lost, damaged, or unsatisfactory, shall be deducted from succeeding partial estimates.

## 57 ACCEPTANCE AND FINAL PAYMENT

- a When Work has been satisfactorily completed, Engineer shall determine the quantity of Work performed and prepare the final estimate of the value including all Changes in Work subject to Changes in Work Subsection Paragraphs a through d of this Section, for acceptance by Executive Director (or Board, if necessary).
- b The quantities listed in Bid Proposal Line Items do not govern final payment. Payments to Contractor shall be made only for the actual quantities of Contract items constructed in accordance with Drawings and Specifications. All prior partial estimates and payments shall be subject to correction in the final estimate of payments.
- c At the expiration of 35 Calendar Days from the date of acceptance of Work by Executive Director, the amount deducted from the estimates and retained by City shall be certified by Engineer as due and in the normal course of City business shall be paid to Contractor except such amounts as are required by law or as are authorized by Contract to be further retained.
- d If a notice to stop payment is filed with City due to Contractor's failure to pay for labor or materials used in Work, money due for such labor or materials, plus 25 percent prescribed by law, shall be withheld from payment to Contractor. In accordance with Section 9364 of the California Civil Code, Executive Director may accept a bond by a corporate surety in lieu of withholding payment.
- e It is mutually agreed between the parties to Contract that no certificate given or payment made under Contract, except the final certificate or final payment, shall be conclusive evidence of the performance of Contract, either wholly or in part, against any claim of City, and no payments shall be construed to be an acceptance of any defective Work or improper materials.
- f When Contractor has exceeded Contract Time and has not yet received an extension of time to complete Contract so that liquidated damages may be assessed, Engineer may withhold an additional amount of money to cover the amount of liquidated damages that shall accrue based on Contractor's estimated Contract completion time as confirmed by Engineer.

## 58 AFFIDAVIT OF COMPLETION

- a Contractor shall, upon completion of Work, including final clean up and demobilization, submit to Engineer (using Forms 298-E, 297-E, or 308-E in Section 00078) a sworn affidavit to the effect that: "to the best of Contractor's knowledge and belief, Work specified in said Specifications and said Contract has been completed in strict accordance with Drawings and Specifications therefor, that no lawful debts for labor or materials are outstanding, and that no federal excise tax has been included in Contract price; that all requests for funds for undisputed Work under Contract, including Changes in Work, and under all billings of whatsoever nature are accurate, complete and final and that no additional compensation over and above the final payment shall be requested or is due under Contract or under any adjustment issued thereunder for said undisputed Work; and that upon receipt of final payment, Contractor and subcontractors acknowledge that City, Board, Executive Director, Engineer, and any and all employees of City and their authorized representatives shall thereby be released from any and all claims or liability for additional sums on account of undisputed Work performed under Contract". Disputed Contract claims in stated amounts may be excluded by Contractor from the operation of the release.

## 59 GUARANTEE

- a Unless provided elsewhere in Specifications, Contractor guarantees all equipment, materials, and work furnished on Project against defective workmanship, material, construction and labor for a period of one year from the date of acceptance of Project by Executive Director (following completion of Project). If the supplier or manufacturer of material or equipment provides a warranty or guarantee, Contractor's guarantee shall be in addition to any warranty or guarantee of the supplier or manufacturer and Contractor shall be a co-guarantor of such equipment and materials for a period of one year from the date of acceptance of Project by Executive Director. Contractor shall supply Department with all warranty and guarantee documents relevant to equipment and materials incorporated in Project and guaranteed by their suppliers or manufacturers.
- b It shall be understood that the surety for the performance bond submitted in conformance with the terms of Contract by Contractor for Project is liable on its bond for all obligations of Contractor including guarantee provisions.

## 01000.59 Cont'd.

- c Contractor further agrees, that within ten Calendar Days after being notified in writing by Engineer of any Work not in accordance with requirements of Contract or any defects in Work, Contractor shall commence and prosecute with due diligence all Work necessary to fulfill the terms of this guarantee, and to complete Work within a reasonable period of time, and in the event Contractor fails to so comply, Contractor does hereby authorize City to proceed to have such Work done at Contractor's sole cost and expense and Contractor shall pay the cost thereof upon demand. City shall be entitled to all costs, including reasonable attorney's fees, necessarily incurred upon Contractor's refusal to pay the above costs.
- d Notwithstanding the foregoing subsections in the event of an emergency constituting an immediate hazard to the health or safety of City's employees, property or licenses, City may undertake at Contractor's sole cost and expense, without prior notice, all Work necessary to correct such hazardous condition when it was caused by Work of Contractor not being in accordance with the requirements of Contract.

## 60 NO PERSONAL LIABILITY

- a No member of Board or Executive Director, Engineer, any other officer, agent, or authorized employee of City, shall be personally responsible for any liability arising under Contract.

## 61 NO ESTOPPEL

- a City shall not, nor shall any department or officer thereof, be precluded or estopped by any return or certificate made or given by Engineer or other officer, agent, or employee of City under any provisions of Contract from at any time (either before or after the final completion and acceptance of Work and payment therefor) pursuant to any such return or certificate showing the true and correct amount and character of Work done, and materials furnished by Contractor or any person under Contract or from showing at any time that any such return or certificate is untrue and incorrect, or improperly made in any particular, or that Work and materials, or any part thereof, do not in fact conform to Specifications; and City shall not be precluded or estopped, notwithstanding any such return or certificate and payment in accordance therewith, from demanding and recovering from Contractor such damages as it may sustain by reason of Contractor's failure to comply with Specifications.



## 62 POTENTIALLY SIGNIFICANT CULTURAL MATERIAL

- a If potentially significant cultural material is discovered while excavating, Contractor shall immediately cease excavation in the area of discovery and shall not resume excavation in the area until ordered to do so by Engineer. When Contractor is ordered to resume excavation operations, such operations shall be conducted as directed by Engineer.
- b "Potentially significant cultural material" as used in this Subsection means artifactual material 50 years old or older.
- c Any delays to Project as a whole, caused by compliance with this Subsection shall entitle Contractor to an extension of time equivalent to the period of that delay.

## 63 STATE TIDELANDS GRANT

- a Contract is entered into in furtherance of and as a benefit to the State Tidelands Grant and the trust created thereby. Therefore, Contract is at all times subject to the limitations, conditions, restrictions, and reservations contained in and prescribed by the Act of the Legislature of the State of California entitled "An Act Granting to City of Los Angeles the Tidelands and Submerged Lands of the State Within the Boundaries of Said City," approved June 3, 1923, (Stats. 1929, Ch. 651), as amended, and provisions of Article VI of the Charter of City of Los Angeles relating to such lands. Contractor agrees that any interpretation of Contract and the terms contained herein must be consistent with such limitations, conditions, restrictions, and reservations.

## 64 RESPONSIBILITY FOR SUBCONTRACTORS

- a Contractor shall be fully responsible to City for its acts and/or omissions and for the acts and/or omissions of persons directly employed by Contractor. Additionally, Contractor shall be fully responsible to City for the acts and/or omissions of subcontractors and of persons or entities either directly or indirectly employed by subcontractors. Nothing contained in Contract Documents shall create or be construed as creating a contractual relationship between any subcontractor of Contractor and City.

65 CONTRACTOR'S LIABILITY FOR HAZARDOUS WASTES OR HAZARDOUS SUBSTANCES

- a As to Environmentally Regulated Materials whose existence on Project Site(s) and any Laydown Area(s) commenced prior to the effective date of Contract, City shall not seek to hold Contractor liable as an owner, operator, generator, or discharger of such Environmentally Regulated Material.
- b Provided that it has complied with all provisions of Contract, including but not limited to Protection of Harbor Waters Subsection of this Section, after final completion and acceptance of Work in strict accordance with Contract Documents, subject to its continuing obligations under Contract Documents (including, without limitation, its obligations under any representations, warranties, and guaranties with respect to Work performed and under Protection of Harbor Waters Subsection of this Section), Contractor shall not be responsible to City for the performance of any further remedial action, removal actions, or cleanup of hazardous waste or hazardous substances at Project Site(s) and any Laydown Area(s) that City may be ordered, directed, or required to perform by any governmental authority after the date of final completion and acceptance of Work.
- c Nothing in this Subsection shall limit or restrict the liability or responsibility of Contractor (or any of its subcontractors, consultants, employees, or agents) in the event of any failure to perform or comply with the terms of Contract, any negligence in the performance of Work, or any willful misconduct in connection with the performance of Work, nor shall this Subsection in any way limit or restrict Contractor's responsibilities under Contract and applicable law in connection with the handling, transporting, storing, or disposing of hazardous waste or hazardous substances and/or the arranging therefor.

## 66 TIME AND MATERIALS FORM



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**Total Amount (Labor/Equipment/Material):**

PORT OF LOS ANGELES INSPECTION SIGNATURE \_\_\_\_\_

## 67 DAILY FIELD REPORT

## Contractor Daily Field Report

Page \_\_\_\_\_ of \_\_\_\_\_

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

SPEC NO.: \_\_\_\_\_

CONTRACTOR/SUBCONTRACTOR: \_\_\_\_\_

WORK DATE: \_\_\_\_\_

| TYPE <sup>1</sup> | EMPLOYEE NAME | CLASSIFICATION | EQUIP # <sup>2</sup> | START TIME | END TIME | TOTAL |
|-------------------|---------------|----------------|----------------------|------------|----------|-------|
|                   |               |                |                      |            |          |       |
|                   |               |                |                      |            |          |       |
|                   |               |                |                      |            |          |       |
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|                   |               |                |                      |            |          |       |

| #  | QTY | EQUIPMENT DESCRIPTION | HRS | #  | QTY | EQUIPMENT DESCRIPTION | HRS |
|----|-----|-----------------------|-----|----|-----|-----------------------|-----|
| 2  |     |                       |     | 12 |     |                       |     |
| 3  |     |                       |     | 13 |     |                       |     |
| 4  |     |                       |     | 14 |     |                       |     |
| 5  |     |                       |     | 15 |     |                       |     |
| 6  |     |                       |     | 16 |     |                       |     |
| 7  |     |                       |     | 17 |     |                       |     |
| 8  |     |                       |     | 18 |     |                       |     |
| 9  |     |                       |     | 19 |     |                       |     |
| 10 |     |                       |     | 20 |     |                       |     |

Contractor's Authorized Representative: \_\_\_\_\_

PRINT NAME AND TITLE HERE

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

**Los Angeles Harbor Department - Construction Division**

*To be completed by the Project Inspector Only*

INSPECTOR: \_\_\_\_\_

PRINT NAME HERE

SIGNATURE \_\_\_\_\_

DATE RECEIVED \_\_\_\_\_

NOTE 1: TYPE: P- Prime; SC - Subcontractor; S-Supplier; V - Vendor

NOTE 2: EQUIP # - Required if labor classification is Operating Engineer or Teamster

## 68 PROJECT SITE(S) AND ANY LAYDOWN AREA(S)

- a Contractor use and occupancy of Project Site(s) and any Laydown Area(s) shall be revocable during the duration of Contract and shall be identified in each separate NTP. Contractor shall not be provided any Laydown Area(s) for duration of Contract. Contractor shall not be required to provide payment or compensation for use and occupancy of any Laydown Area(s). Engineer reserves the right to revoke Contractor use and occupancy of Project Site(s) and any Laydown Area(s) at any time during Contract. Engineer shall provide Contractor with written notice and Contractor shall be required to vacate Project Site(s) and any Laydown Area(s) within 2 Calendar Days of such notice.
- b For each separate NTP, Contractor acknowledges and agrees that Project Site(s) and any Laydown Area(s) is suitable for the use intended and accepts use and occupancy of Laydown Area(s) subject to each and every term and condition of the Port of Los Angeles Tariff No. 4 (Tariff) <https://www.portoflosangeles.org/business/tariff>, as applicable to Laydown Area(s), as if fully set forth herein. Contractor shall not alter or construct on Laydown Area(s) without first obtaining a Harbor Engineer Permit except for those alterations set forth in this Contract, and complying with Applicable Laws. Contractor shall not cause or permit any Environmentally Regulated Material to be generated, brought onto, handled, used, stored, transported from, received, or disposed of (hereinafter sometimes collectively referred to as "handle" or "handled") in or about Laydown Area(s) except for limited quantities of standard office and janitorial supplies containing chemicals categorized as Environmentally Regulated Material and except as permitted, required, or necessary in conformance with Contract Documents, if any. Contractor shall handle all such Environmentally Regulated Material in strict compliance with Applicable Laws in effect during Contractor's occupancy.
- c Contractor is aware that City's Department of Water and Power, other utility, or other maintenance or service from or on behalf of City, may need to service or repair certain facilities on Project Site(s) and any Laydown Area(s). If such repair is necessary, Contractor agrees to relocate all of its equipment and other personal property to provide such personnel adequate access. Contractor agrees to complete such relocation within 24 hours of receiving notice from City except in case of emergency. Contractor shall be entitled to an equitable adjustment in Contract time and/or price for delays as a result of the need to relocate equipment to provide access for any repairs that are beyond the control and without the fault of Contractor and is for City's own convenience or benefit.

## 01000.68 Cont'd.

- d Contractor shall remediate or cause the remediation of any Contamination that occurs in, on, under, or about Project Site(s) and any Laydown Area(s), whether caused by Contractor or any third-party acting for or on behalf of Contractor during Contractor's occupancy, including Contamination of improvements, adjacent harbor waters, soil, sediment, groundwater, or air, or of adjacent Project Site(s) and any Laydown Area(s) (including soil, sediment, groundwater, or air) and including Contamination that is considered a nuisance under Applicable Laws. Remediation shall be to the reasonable satisfaction of City, and the requirements of the applicable governmental agencies including the Regional Water Quality Control Board, by removing or effecting the removal of all Contamination including but not limited to contaminated soil, water, groundwater, sediment, or other material it may place or cause to be placed on site such that no encumbrances, such as deed or land use restrictions, be imposed on Project Site(s) and any Laydown Area(s) as a result of such Contamination. In fulfilling the obligations of this Article, Contractor shall also comply with any other conditions reasonably imposed by City. If Contractor knows or has reasonable cause to believe that Contamination has occurred in, on, under, or about Project Site(s) and any Laydown Area(s), Contractor shall immediately give written notice to City. Contractor shall not be responsible for any Contamination existing on, below, or about Project Site(s) and any Laydown Area(s) prior to the NTP, including contamination as depicted in the baseline report.

## 01000.68 Cont'd.

- e Contractor bears responsibility for full compliance with any and all Applicable Laws regarding the use, storage, handling, distribution, processing, and/or disposal of Environmentally Regulated Material including Contamination, regardless of whether under Applicable Laws the obligation for such compliance or responsibility is placed on the owner of Laydown Area(s), on the owner of any improvements on Laydown Area(s), on the user of Laydown Area(s), or on the user of any improvements on Laydown Area(s). Contractor shall only be responsible for Contamination caused by Contractor, or any third party acting for or on behalf of Contractor and shall not be responsible for any preexisting Contamination on Laydown Area(s) prior to Contractor's first occupancy thereof. Contractor agrees that any claims, damages, fines, or other penalties asserted against or levied on City and/or Contractor as a result of noncompliance with any Applicable Laws by Contractor under this Contract shall be the sole responsibility of Contractor and that Contractor shall indemnify and hold City harmless from any and all such claims, damages, fines, penalties, and/or judgments, as well as any costs expended to defend against such claims, damages, fines, and penalties and/or judgments, including attorneys' and experts' fees. City, at its sole option, may, after providing Contractor with a reasonable opportunity to defend such claims, damages, fines, penalties, and/or judgments pay the claims, damages, fines, penalties, and/or judgments resulting from Contractor's noncompliance with any of the aforementioned authorities, and Contractor shall indemnify and reimburse City for any such payments.
- f In discharging Contractor's obligations under this Subsection only, if Contractor disposes of any Contamination, within 30 days of Contractor's receipt of original documents, Contractor shall provide City copies of all records, including a copy of each uniform hazardous waste manifest indicating the quantity and type of material being disposed of, the method of transportation of the material to the disposal site, and the location of the disposal site. Neither City, Port of Los Angeles, nor Los Angeles Harbor Department shall appear on any manifest document as a generator of such material. Contractor shall not be responsible for preexisting contamination. Contractor shall only be responsible for contamination caused by Contractor, or any third-party acting for or on behalf of Contractor, and shall not be responsible for any preexisting contamination on Laydown Area(s) prior to Contractor's first use and occupancy thereof.

## 01000.68 Cont'd.

- g In discharging Contractor's obligations under this Subsection, Contractor shall perform any tests using a State of California Department of Health Services certified testing laboratory or other similar laboratory upon City's written approval. By signing this Contract, Contractor hereby irrevocably directs any such laboratory to provide City, upon written request from City, copies of all of its reports, tests results, and data gathered. As used in this Subsection, "Contractor" includes agents, employees, contractors, subcontractors, and/or invitees of Contractor.
- h Contractor shall implement City's Harbor Department's policies, known as Best Management Practices, in order to reduce the potential for pollutants to enter Harbor waters, as follows:

  - 1 Facility Operations: Clean and maintain facility regularly. Use dry cleaning methods whenever possible; avoid washing areas down. Do not allow sweepings or sediment to enter the storm drain or the Harbor. Collect wash water for disposal or direct to a clarifier. Do not encourage scavengers. Do not feed birds, feral cats, sea lions, or other scavengers. Recycle whenever possible.
  - 2 Maintenance Operations: Use drip pans to prevent any drips or leaks from contacting the ground during maintenance and fueling operations. Clean spills or drips immediately using dry methods. Use spill cleanup kits to confine or contain spills. Do not hose down equipment or allow process water to enter the storm drain or the Harbor. Place tarps beneath maintenance and repair operations to prevent materials such as paint chips and metals from contacting the ground.
  - 3 Material and Waste Handling and Storage: Train employees responsible for waste management on handling and disposal procedures. Store all hazardous and universal waste in accordance with all federal, state, and local regulations. Store all materials and waste inside and in secondary containment. If stored outside, store only in designated, covered, and contained areas. Store waste in covered, leak proof, labeled containers. Keep lids closed on all outdoor containers including dumpsters. Store all oily products (e.g. engines), batteries, tires, and metal off the ground and under cover when stored outdoors.
  - 4 Except as may be otherwise provided in this Contract, Contractor's obligations in this Article shall survive the Termination Date of this Contract.



## 01000.68 Cont'd.

- i For each separate NTP, upon completion of Work, subject to Protection of Harbor Waters Subsection of Specifications, Contractor shall quit and surrender occupancy and use of Project Site(s) and any Laydown Area(s) to City and shall, without cost to City, remove any and all its property and restore Laydown Area(s) to the same or as good condition as the same were in at the time of the first occupancy thereof, allowing for normal wear and tear, by Contractor. Contractor may incur additional charges and/or withholding of payment if Contractor fails to fully restore Laydown Area(s) to the reasonable satisfaction of Executive Director prior to completion of Work.
- j For each separate NTP, restoration of any Laydown Area(s) must be completed by completion of Work identified in each separate NTP.

END OF SECTION

- I. The following language is being added as Subsection 01000.69 of GENERAL CONDITIONS Section pursuant to California Public Contract Code Section 9204.

69 CALIFORNIA PUBLIC CONTRACT CODE SECTION 9204

- (a) The Legislature finds and declares that it is in the best interests of the state and its citizens to ensure that all construction business performed on a public works project in the state that is complete and not in dispute is paid in full and in a timely manner.
- (b) Notwithstanding any other law, including, but not limited to, Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, Chapter 10 (commencing with Section 19100) of Part 2, and Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3, this section shall apply to any claim by a contractor in connection with a public works project.
- (c) For purposes of this section:
  - (1) "Claim" means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:
    - (A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.
    - (B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.
    - (C) Payment of an amount that is disputed by the public entity.
  - (2) "Contractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.
  - (3) (A) "Public entity" means, without limitation, except as provided in subparagraph (B), a state agency, department, office, division, bureau, board, or commission, the California State University, the University of California, a city, including a charter city, county, including a charter county, city and county, including a charter city and county, district, special district, public authority, political subdivision, public corporation, or nonprofit transit corporation wholly owned by a public agency and formed to carry out the purposes of the public agency.

- (B) "Public entity" shall not include the following:
  - (i) The Department of Water Resources as to any project under the jurisdiction of that department.
  - (ii) The Department of Transportation as to any project under the jurisdiction of that department.
  - (iii) The Department of Parks and Recreation as to any project under the jurisdiction of that department.
  - (iv) The Department of Corrections and Rehabilitation with respect to any project under its jurisdiction pursuant to Chapter 11 (commencing with Section 7000) of Title 7 of Part 3 of the Penal Code.
  - (v) The Military Department as to any project under the jurisdiction of that department.
  - (vi) The Department of General Services as to all other projects.
  - (vii) The High-Speed Rail Authority.
- (4) "Public works project" means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.
- (5) "Subcontractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.
- (d) (1) (A) Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.
- (B) The claimant shall furnish reasonable documentation to support the claim.

- (C) If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.
  - (D) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.
- (2) (A) If the claimant disputes the public entity's written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.
- (B) Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

- (C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.
  - (D) Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.
  - (E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.
- (3) Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.
  - (4) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.
  - (5) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.
- (e) The text of this section or a summary of it shall be set forth in the plans or specifications for any public works project that may give rise to a claim under this section.

- (f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.
- (g) This section applies to contracts entered into on or after January 1, 2017.
- (h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.
- (i) This section shall remain in effect only until January 1, 2027, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2027, deletes or extends that date.

END OF SECTION

## PART 1 - GENERAL

## 1.1 SECTION INCLUDES

- A. Scope of Work: Contractor shall perform Work necessary to complete Contract in satisfactory manner. Furnish transportation, labor, materials, equipment, mobilization, demobilization, and incidentals necessary to perform Work which may or may not include but is not limited to the following:
1. Secure necessary and permits, perform coordination Work, regulatory requirements, and site environmental requirements for Project.
  2. Demolition and removal Work not limited to demolition of oil pipelines, concrete and asphalt concrete pavements, curbs, gutters, sidewalks, chain link fences, railroad tracks, and other improvements.
  3. Cut and cap/plug existing utilities, sewer, electrical, water, and other utility lines.
  4. Fill, compact, and grade voids and excavations caused by the demolition and removal Work.
  5. Grading of Project Site(s).
  6. Furnish and place asphalt concrete.
  7. Renovate existing pavement by cold milling, saw cutting, crack filling, crack sealing, seal coating, and slurry sealing.
  8. Construct concrete and asphalt concrete pavements, sidewalks, and concrete curbs and gutters.
  9. Place, grade, and compact earth fill and crushed miscellaneous base provided by the Department, by Contractor, and from on-site sources.
  10. Earthwork including clearing and grubbing, rough grading, and compacting of subgrade.
  11. Place, grade, and compact earth fill and crushed miscellaneous base.
  12. Pavement markings and striping.
  13. Construct chain link and decorative metal fences and gates associated foundations.

14. Provide water trucks to distribute dust control agent and to achieve compaction of earth materials.
  15. Apply dust and erosion control agent over graded area.
  16. Furnish and install Temporary Railing (Type K) K-Rail (in accordance with Caltrans Standard Drawings T3A), plastic water filled barrier, and wheel stops.
  17. Construct concrete dolly strips and transtainer runways.
  18. Stabilize soil using geogrid and concrete slurry.
  19. Erosion barriers including silt fence and sand bags.
  20. Construct miscellaneous electrical PVC conduit utility system.
  21. Construct fiber optic system.
  22. Excavate, stockpile, and remove soil material.
  23. Excavate, characterize, stockpile, haul away, dispose, or recycle contaminated/ non-hazardous waste (including hydrocarbon impacted) soil.
  24. Stockpile potential chemically impacted soil approved for use on Project.
  25. Hardscaping, including installation of concrete pavers, patterned colored-concrete, river run cobblestone, decomposed granite, and used brick.
  26. Install topsoil, fertilizer, headers, and miscellaneous items, lawns, plants, shrubs, trees, and vines.
  27. Install irrigation systems.
  28. Construct sanitary sewerage and storm drainage systems.
  29. Construct concrete flatwork.
  30. Site cleaning and removal of debris, equipment, and excess material from Project Site(s) and any Laydown Area(s) upon completion of Work.
  31. Other Work necessary to complete Project.
- B. Work shall be performed concurrently when multiple Notices to Proceed are issued for items of Work at multiple Project Site(s) during the same time period.



- C. Project Directive Drawings (referred to by the term "Drawings" throughout entire Specification) shall not be available prior to Award of Contract, but shall be furnished prior to issuance of Notice to Proceed for each item of Work, if authorized by Engineer.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

PART 1 - GENERAL

1.1 LOCATION OF PROJECT

- A. Project Site(s) shall vary in size and be located within the San Pedro, Wilmington, and Terminal Island districts in the Port of Los Angeles.  
Contractor shall visit Project Site(s) and determine the conditions which may affect Work.

1.2 ACCESS TO PROJECT

- A. Access to and from Project Site(s) and any Laydown Area(s) by Contractor's personnel and equipment shall be coordinated with representatives of the terminal operator or tenant. (Refer to COORDINATION Section).

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Requirements concerning the following:
  - 1. Existing surface conditions
  - 2. Existing subsurface conditions
  - 3. Restrictions upon Contractor's use of Project Site(s) and any Laydown Area(s)
  - 4. On-site traffic control
  - 5. Utility availability
  - 6. Contractor shall review information provided and resource materials referred to in this Section concerning geotechnical reports, existing surface and subsurface improvements and systems at Project Site(s), and temporary utility points of connection.
  - 7. Contractor shall visit Project Site(s) and determine the conditions which may affect Work. Refer to LOCATION AND ACCESS Section for Project Site(s) access.

### 1.2 EXISTING SURFACE CONDITIONS

- A. Project Site(s) contain various existing improvements and structures including asphalt concrete and concrete pavements, light poles, chain link fencing and gates, railroad tracks, electric transformers, fire hydrants, guard posts, and other improvements.
- B. Streets around Project Site(s) and any Laydown Area(s) are usually heavily traveled.

### 1.3 EXISTING SUBSURFACE CONDITIONS

- A. Project Site(s) and any Laydown Area(s) contain underground utilities and substructures that are either abandoned or still in service. Refer to BASIC SITE MATERIALS AND METHODS Section for additional requirements.

#### 1.4 CONTRACTOR'S USE OF SITE

- A. On most Projects, Contractor shall not be given a storage site. When available, Contractor's storage site shall be located as directed by Engineer. Security of Project Site(s) and any Laydown Area(s) shall be the responsibility of Contractor.
- B. Upon completion of Work, remove temporary facilities and utility installations, equipment, tools, excess materials, and debris from Project Site(s) and any Laydown Area(s) and leave Project Site(s) and any Laydown Area(s) in clean condition. Clean grease and oil spills and concrete waste in conformance with REGULATORY REQUIREMENTS Section.

#### 1.5 ON-SITE TRAFFIC CONTROL

- A. Obtain approval from Engineer and terminal operator for Contractor's equipment and vehicle traffic routes within terminal limits.
- B. Provide temporary traffic controls such as flag persons, signs, and barricades necessary to control traffic on Department property during the phases of construction, including traffic movements of adjacent contractor's activities through Project Site(s) and any Laydown Area(s), in conformance with the California Manual of Uniform Traffic Control Devices (California MUTCD).
- C. Regulate speed on Project Site(s) and any Laydown Area(s) to avoid generating dust or spillage.
- D. Traffic speeds on unpaved roads shall be reduced to 15 miles per hour (mph) or less.
- E. Schedule construction activities that affect traffic flow on the arterial system to off-peak hours to the extent practicable.

#### 1.6 UTILITY AVAILABILITY

- A. Many Project Site(s) may not have an electricity connection available. Contractor shall be responsible for making arrangements for and paying costs for temporary utilities. If electricity is available, verify location of temporary electrical point of connection with Engineer.
- B. Refer to the Temporary Utilities Subsection of GENERAL CONDITIONS Section.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

#### A. Notification and coordination requirements:

1. Coordination with tenant
2. Coordination with railroad

#### B. Project meetings

### 1.2 PRICE AND PAYMENT PROCEDURES

#### A. Measurement and Payment:

1. For railroad flag persons, payment for Work of this Section shall be paid under the Railroad Flag Person(s) Allowance bid item of Bid Proposal Line Items.

### 1.3 NOTIFICATION AND COORDINATION REQUIREMENTS

- A. Coordinate Work with other contractors, tenants, and City workers who may be working in or are adjacent to Project Site(s) and any Laydown Area(s).
- B. Coordinate Work with Department tenants having utilities or pipelines on Project Site(s) and any Laydown Area(s) or occupying facilities adjacent to Project Site(s) and any Laydown Area(s).
- C. Coordinate installation and location of temporary utilities with Engineer and tenants.
- D. Contractor shall furnish the tenants with a construction schedule for Work within the tenant's areas.
- E. Instructions or orders received by Contractor from regulatory agencies, tenants, utility, or pipeline owners that are in conflict with this Section shall be brought to the immediate attention of Engineer.
- F. Coordinate construction activities with adjacent contractors and Department Construction and Maintenance (C&M) crews through Engineer as shown on Drawings and described in this Section.
- G. For electrical power shut down, contact Department's C&M Division by contacting Engineer 2 working days before shut-down is needed.

- H. Other contractors, C&M crews, or tenants shall be working at irregular time intervals within Project Site(s) and any Laydown Area(s) limits concurrent with Contractor's Work.
1. There shall be no additional charge resulting solely from the presence of other entities authorized by Engineer to work within Project Site(s) and any Laydown Area(s) limits.
- I. Representatives of the following agencies, tenants, and companies shall be notified in writing, as applicable, 10 working days before Work is started in areas affecting them, unless Engineer directs otherwise:

| <u>Company or Agency</u>                                              | <u>Contact</u>           | <u>Telephone</u>                         |
|-----------------------------------------------------------------------|--------------------------|------------------------------------------|
| South Coast Air Quality Management District (SCAQMD) Toxics Section   |                          | (909) 396-2327<br><br>fax (909) 396-3342 |
| City of Los Angeles Fire Department                                   | Battalion Chief          | (310) 548-7516                           |
| Electrical Power - Los Angeles Department of Water and Power          | Chris Rodriguez          | (310) 522-1709                           |
| Electrical Service - Department Construction and Maintenance Division |                          | through Engineer                         |
| Water Service - Los Angeles Department of Water and Power             | Nikki Kiem<br>Annika Tan | (213) 367-2096<br>(213) 367-3928         |
| Water Service - Department Construction and Maintenance Division      |                          | through Engineer                         |
| Gas Service - Southern California Gas Company                         | Louie Flores             | (310) 605-4172                           |

| <u>Company or Agency</u>                                                                                    | <u>Contact</u>                                               | <u>Telephone</u> |
|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|------------------|
| Gas Service - Department<br>Construction and Maintenance<br>Division                                        |                                                              | through Engineer |
|                                                                                                             |                                                              |                  |
| Telephone Service - AT&T                                                                                    | Business Office                                              | (800) 310-2355   |
|                                                                                                             |                                                              |                  |
| AT&T building service cable,<br>AT&T backbone cable and<br>adjustment of phone company<br>maintenance holes | Kosal Sieng                                                  | (310) 200-7228   |
|                                                                                                             |                                                              |                  |
| Removal and installation of<br>phone booths:                                                                |                                                              | (800) 924-3666   |
|                                                                                                             |                                                              |                  |
| CalTrans (Vincent Thomas<br>Bridge painting and scaffold<br>crew)                                           | Bill Hansel                                                  | (310) 548-1271   |
|                                                                                                             |                                                              |                  |
| 11th US Coast Guard District<br>Waterways Management                                                        | Waterways Aids<br>to Navigation<br>(W.A.N.) and              | (310) 521-3860   |
|                                                                                                             | Notice to<br>Mariners                                        |                  |
|                                                                                                             |                                                              |                  |
| U.S. Coast Guard Sector Los<br>Angeles - Long Beach                                                         | Captain of Port<br>of Los Angeles<br>Captain Ryan<br>Manning | (310) 521-3606   |
|                                                                                                             |                                                              |                  |
| Pacific Harbor Lines (PHL)                                                                                  | Monte Stokes                                                 | (310) 984-5780   |



## J. Department Emergency Contacts:

| <u>Company or Agency</u> | <u>Contact</u>                     | <u>Telephone</u>                 |
|--------------------------|------------------------------------|----------------------------------|
| Port Police              | Watch Commander<br>Emergencies     | (310) 732-3491<br>(310) 732-3500 |
| Port Pilots              | Chief Pilot<br>Dispatch (24 hours) | (310) 732-3808<br>(310) 732-3805 |

## K. Emergency spill contacts-in the event of a spill in harbor waters:

| <u>Company or Agency</u>                                    | <u>Contact</u>                 | <u>Telephone</u>                 |
|-------------------------------------------------------------|--------------------------------|----------------------------------|
| U.S. Coast Guard National Response Center                   |                                | (800) 424-8802                   |
| U.S. Coast Guard Command Duty Office                        |                                | (310) 521-3805                   |
| Office of Emergency Service                                 |                                | (800) 852-7550 or (916) 845-8911 |
| Department of Fish and Wildlife                             | 24 hour contact number         | (916) 445-0045                   |
| Los Angeles County Fire Department Hazardous Materials Unit | Emergency Response Coordinator | (323) 890-4317                   |

## L. Excavating and Digging:

- Contractor shall provide 2 working days notice prior to excavation work.

| <u>Company or Agency</u>        | <u>Contact</u> | <u>Telephone</u>      |
|---------------------------------|----------------|-----------------------|
| Underground Service Alert (USA) |                | (800) 422-4133 or 811 |

#### 1.4 PROJECT MEETINGS

- A. Preconstruction Meeting: Attend preconstruction meeting scheduled by Engineer. Meeting activities:
  - 1. Contractor shall introduce Project team and present a preliminary schedule, activity coding plan, and work force requirements.
  - 2. Engineer shall review administrative procedures with Contractor.
  - 3. A representative of City of Los Angeles Office of Contract Compliance shall present labor compliance requirements.
  - 4. Other Project stakeholders may also attend preconstruction conference, including tenant at Project Site(s) and any Laydown Area(s) and tenants adjacent to Project Site(s) and any Laydown Area(s).
- B. Attend weekly Project meetings as scheduled by Engineer to discuss construction progress and other issues affecting Work.
  - 1. At this meeting, present and explain a weekly schedule. The weekly schedule shall be in bar chart format and shall show the actual and planned Work, including changed Work, of the week before and the 2 weeks succeeding the date of the meeting. Bar chart shall also contain the following information:
    - a. Activity numbers and descriptions of Work shall be the same as in the baseline and monthly updates, although activities may be subdivided to more accurately monitor progress.
    - b. For activities completed during the period, show the actual start date, the actual finish date, and the percent complete.
    - c. For activities worked on during the period, show the actual start date, the forecast completion date, and the forecast percent complete.
    - d. For activities forecast to start during the period, show the forecast start date, the forecast finish date, and the percent complete.

## 1.5 COORDINATION WITH TENANT

- A. The terminal's operations shall continue uninterrupted. Coordinate construction activities with the tenants or terminal operators to avoid interference with terminal operations.
  - 1. In the event of a conflict, tenant requirements shall have priority over Contractor's requirements in areas of active terminal operations.
  - 2. Contractor's personnel shall present valid photo identification at terminal entry gates upon demand. Vehicles shall have plaques or markings identifying company. Refer to REGULATORY REQUIREMENTS Section Marine Terminal Security Article for Transportation Worker Identification Credential (TWIC) program requirements.
  - 3. Do not interfere with ship berthing, ship loading and unloading, and facility maintenance activities. Contractor shall obtain tenant's ship berthing schedule and moor floating plant outside of area required for tenant to moor vessels. Relocate interfering floating plant, materials and equipment on and under wharf as required prior to ship berthings.
- B. Obtain weekly ship berthing schedule from tenant and re-confirm daily. Tenant shall provide 2-day advance confirmation of ship schedules. Work is allowed when no ship is berthed.

## 1.6 COORDINATION WITH RAILROAD

- A. General:
  - 1. Maintenance and inspection programs are and shall continue to be provided by PHL or its agents on the track, switches, ballast, ties, signals, instrument shelters, and other rail infrastructure. Coordinate Work with PHL and its inspection agencies such that PHL inspectors can be on-site and fully knowledgeable of the modifications being performed on PHL-operated tracks.
- B. Railroad Flag Persons: Provide railroad flag persons in conformance with U.S. Department of Transportation's Federal Railway Administration (FRA) requirements and REGULATORY REQUIREMENTS Section. Coordinate with PHL and provide payment in advance to PHL for railroad flag persons. Arrange with PHL to provide the flag persons required to accomplish Work. Refer to Appendix "B" of Specifications for PHL Railroad Flagging Agreement, Flagging Policy, and Rate Schedule.

C. Scheduling of Work and Safety Requirements:

1. Coordinate and schedule Work so that the construction activities do not interfere with railroad operations.
2. Any time Work is performed within 20 feet of the track centerline, Contractor shall provide protection for workers in conformance with FRA and railroad worker safety rules, Title 49, Part 214 of the Code of Federal Regulations.
  - a. For Work within 20 feet of track centerline: Provide PHL railroad flag person for the safety and protection of Contractor's personnel. The cost of required flagging services shall be provided by Contractor and included with the cost of related bid items for such Work. A specific Railroad Work Plan is required prior to any track closures or activity within 10 feet of the track centerline. No Work shall be performed, nor any piece of equipment moved within 10 feet of the railroad track centerline until Work Plan is approved by Engineer.
  - b. For PHL flag persons and watch persons, submit a Railroad Flagging Agreement, included in Appendix "B" of Specifications, to Engineer 21 Calendar Days in advance of any Work within 20 feet of track centerline.
3. Contractor shall request a "Conditional Work Window" or "Absolute Work Window" directly from PHL.
  - a. Conditional Work Windows: A Conditional Work Window is a period of time Contractor is allowed to work on or near the railroad tracks but the tracks remain fully operational as defined by California Public Utilities Commission (CPUC) and FRA. When trains are approaching, Contractor shall clear the tracks. No construction equipment, personnel, or materials may be present within 10 feet of the tracks or as directed by the railroad flag person. Construction activity shall cease within 20 feet of the tracks. Conditional Work Windows shall be approved by PHL 48 hours before Work commences.

- 1) Construction activities requiring a Conditional Work Window shall be clearly identified on the construction schedule as activities requiring a Conditional Work Window. Any modifications to these work windows shall be identified and submitted to Engineer and PHL in writing a minimum of 30 Calendar Days prior to any proposed changes.
- b. Absolute Work Window: An Absolute Work Window is a period of time during which construction activities are given priority over railroad operations because required construction makes the track non-operable. At the end of an Absolute Work Window, the railroad tracks and signals shall be completely restored for train operations. Comply with CPUC and FRA requirements, codes, and regulations for operational tracks. PHL or its agent shall perform inspections of Work prior to placing the track back into service.
  - 1) Submit a detailed schedule of Work to be accomplished and a list of items to be installed during an Absolute Work Window. Upon approval of Engineer that Absolute Work Window is required, that Work can be accomplished in the time requested and that the necessary materials are at Project Site(s), Contractor shall request an Absolute Work Window from PHL. Allow a minimum of 14 Calendar Days to arrange Absolute Work Windows with PHL and consider whether Absolute Work Window may be on the weekend or at night. Allow minimum 48 hours after PHL's approval of Absolute Work Window before commencing Work and rendering track non-operable.
  - 2) Submit to Engineer copy of PHL's agreement to provide a railroad flag person for the item of work and PHL's notification that the railroad track shall be out of service.
4. Crossing of tracks by Contractor's equipment other than at public or designated private road crossings is prohibited without specific authorization by Engineer.
5. Immediately report any accidents, injuries, track defects, or any unusual track conditions, which may affect the safe and efficient operation of the railroad to Engineer.

6. Protect railroad facilities, equipment, and operating trains from damage due to Contractor's activities. In the event Contractor damages railroad facilities or equipment, report the damage immediately to Engineer.  
Repair of damage caused by Contractor's activities shall be at the sole cost and expense of Contractor and approved by PHL and Engineer.
7. Upon completion of Work, Contractor shall promptly remove materials, tools, equipment, and leave the right-of-way in a clean condition as approved by Engineer.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Computer system requirements to use an Internet-based project management system.

### 1.2 INTERNET-BASED PROJECT MANAGEMENT SYSTEM

- A. Project shall use an Internet-based project management system, PMWeb, to submit and process for approval the following including, but not limited to:
  - 1. Requests for Information (RFIs) and RFI responses.
  - 2. Shop drawings and shop drawings responses.
  - 3. Change Request Forms Time and Materials (T & M)
  - 4. Contractor Daily Reports
- B. Shop drawings shall also be submitted in conformance with Subsection 01000.21 of GENERAL CONDITIONS Section.
- C. Department shall provide Contractor access to the system at no charge.
- D. Department shall provide Contractor training on how to use the system. Contractor's personnel shall have basic working knowledge of computers (i.e., mouse operation, using a browser) to effectively learn the system during the training session.

### 1.3 USER ACCESS

- A. Department shall control Contractor's access to the system and assign user profiles to a maximum of 4 authorized Contractor personnel. User profiles shall define levels of access, determine function-based authorizations, and determine user privileges. Contractor's access to the system shall be sufficient to perform Work required in this Section.
- B. Contractor shall generate (including the use of a scanner where electronic files are not available) and send electronic files for the correspondence listed in Paragraph A of Internet-Based Project Management System Article of this Section.

- C. Subcontractors and suppliers shall not be given direct access to the system. Information exchanged between Contractor, subcontractors, and suppliers shall be the responsibility of Contractor. Direct communication through the system shall only occur between Engineer and Contractor.
- D. Any correspondence or information entered into the system shall become an official document and shall be included in Project file.
- E. Comments made by Engineer on Contractor-submitted correspondence shall not relieve Contractor from compliance with requirements of Contract Documents.

#### 1.4 COMPUTER SYSTEM REQUIREMENTS

- A. Contractor shall have access to the Internet, using the latest version of any of the following browsers:
  - 1. Google Chrome
  - 2. Apple Safari
  - 3. Microsoft Edge

#### 1.5 CONTRACTOR RESPONSIBILITY

- A. Contractor shall be responsible for maintenance of Contractor's hardware, software, and connectivity to the Internet. Department shall not be responsible for any delays associated from the use of the system including, but not limited to, hardware or software problems, slow response times, downtime periods, connection problems or loss of information. Under no circumstances shall the use of the system be grounds for a time extension or cost adjustment to Contract.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION



## PART 1 - GENERAL

## 1.1 SECTION INCLUDES

- A. Surveying and field engineering work needed for Project under the direction of the professional land surveyor or registered civil engineer licensed to practice surveying in State of California.
- B. Survey Work scope in this Section supersedes Work scope in Survey and Staking Subsection of GENERAL CONDITIONS Section.
- C. Work under this Section includes, but is not limited to the following:
  - 1. Establish and maintain horizontal and vertical control points from Engineer-supplied benchmarks and control points.
  - 2. Layout of Improvements:
    - a. Control and staking for earthwork, crushed miscellaneous base, paving, cold planing, roadway, curb and gutter, and other improvements required on Project(s).
    - b. Control and staking for sewer, water, storm drain, electrical, communications, gas, and other improvements.
    - c. Control and staking for chain link fences, block walls, K-rail, and striping.
    - d. Additional construction staking for other improvements with specific coordinates or stationing shown on Drawings.
    - e. Surveys for progress payments.
    - f. Maintain as-constructed coordinates of improvements that were surveyed during the course of Project.

## 1.2 WORK TO BE PERFORMED BY ENGINEER

- A. Engineer shall provide permanent benchmarks and main horizontal control as established by Department. Contractor shall establish temporary horizontal control points and benchmarks as necessary for Work. Engineer shall periodically check and re-establish permanent control points, but shall not be responsible for protection or ongoing maintenance of temporary benchmarks and control points.

- B. Engineer may conduct topographic and other surveys of site conditions at selected areas of Project prior to construction to establish a basis for subsequent quantity surveys for payment and acceptance.

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Payment for surveying and field engineering shall be considered incidental to construction of applicable items on Bid Proposal Line Items. No separate payment shall be made.

### 1.4 SUBMITTALS

- A. Survey submittals shall be identified as to time, area, and reason (e.g. progress survey for quarry run placement) and name of survey party.
- B. Submittals shall be stamped and signed by a State of California-licensed professional land surveyor or a registered civil engineer licensed to practice surveying in the State of California.
- C. Submit drawings in the current version of AutoCAD of substructure alignments showing as-built bearings, distances, elevations, and curve data for conduits and pipe alignments and as-built coordinates of vaults, pedestals, and other improvements.
  - 1. Alignments in AutoCAD drawings shall be based on survey of substructures prior to backfill.
  - 2. Refer to PROJECT RECORD DOCUMENTS Section for additional requirements.
- D. Submit scaled AutoCAD drawings of above-ground and marine structure improvements entered on record documents Project set in conformance with PROJECT RECORD DOCUMENTS Section where improvements were not constructed according to Drawings. Include as-built coordinates, bearings, distances, curve data, and other relevant survey data.
- E. Submit grade sheets for roadway, curbs, gutters, headers, sewers, storm drains, and water lines.
- F. Comply with requirements of REGULATORY REQUIREMENTS Section.

### 1.5 QUALITY ASSURANCE

- A. Maintain at Project Site(s) a complete and accurate log of control and survey Work as it progresses and make log available for Engineer's review.

### PART 2 - PRODUCTS - NOT USED

### PART 3 - EXECUTION

#### 3.1 SITE VERIFICATION OF CONDITIONS

- A. Verify accuracy of survey control points prior to starting any Work on Project Site(s).
- B. Notify Engineer of any discrepancies discovered.

#### 3.2 SURVEYS AND RECORDS

- A. Quantity Surveys:
  - 1. Perform surveys for Engineer's progress payment requests and make computations based on these surveys and on topographic or other surveys performed by Engineer. Perform survey under the direction of Engineer, unless Engineer waives this requirement in writing.
- B. Layout of Improvements:
  - 1. Lay out improvements from Drawings based on Engineer's established control points and benchmarks.
  - 2. Furnish, at Contractor's sole cost and expense, stakes, templates, platforms, lighting, equipment, range markers, and labor as may be required to lay out any part of the improvements.
  - 3. Lay out improvements to lines and grades established on Drawings.

#### 3.3 SURVEY PROCEDURES

- A. Verify original grid system used by Engineer for setting up benchmarks and Project control points and continue to use that system in surveying Work.
- B. Verify alignments and elevations shown on Drawings, in relation to Engineer's benchmarks and control before proceeding with layout of improvements.

- C. Record deviations from design alignments of both constructed improvements and existing utilities exposed during construction and advise Engineer promptly upon detection of deviations exceeding tolerances identified in applicable Sections of Specifications. Record deviations which are accepted by Engineer (not corrected) on scaled AutoCAD drawings.
- D. Staking:
  - 1. Stake the following improvements, including but not limited to:
    - a. Set finish grade stakes at a maximum of 50-foot intervals for dirt subgrade, 25-foot intervals for base course and at the grade breaks.
    - b. Set paving grades for each lift at 25-foot intervals and at the widths of paving machine to be used, and at the grade breaks. Set grades for cold planing similarly for each pass of cold planing machine at 25-foot intervals and at the widths of machine to be used, and at the grade breaks.
    - c. Set curb and gutter and roadway stakes at 25 feet on center and at horizontal and vertical curves.
    - d. Set sewer and storm drain grade stakes at 25-foot intervals, at maintenance holes and junction structures, and at curves.
    - e. Set water, electrical and communications, and gas stakes at 50-foot intervals and at angle points and curves.
    - f. Stake chain link fences, block walls, and permanent K-rail at 50-foot intervals.
      - 1) Stake also end points, angle points, grade breaks, block wall top-of-footing elevations, step-downs in block wall top-of-footings, gates, curve data, and other design improvements associated with fencing shown on Drawings.
    - g. Stake striping at end points of lines and at 50 feet on center on line, at angle points, and at curves.

### 3.4 FIELD QUALITY CONTROL

#### A. Tests and Inspections:

1. Furnish upon Inspector's request, use of fully equipped survey personnel, equipment, and materials as may be necessary to inspect Work and verify quantities.
2. Engineer reserves the right to check the accuracy of survey measurements and calculations.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Permit and fee requirements
- B. Government agency notifications, fees, and license requirements required for Project
- C. Submittal requirements for permits and notifications
- D. Contractor shall pay costs of fines, including fines against Department, resulting from Contractor's non-compliance with permit requirements or failure to procure appropriate permits.

### 1.2 CITY OF LOS ANGELES PERMITS

- A. Contractor shall obtain and Department shall pay for City of Los Angeles permits required by Department of Building and Safety (LADBS), Fire Department, and Department of Public Works. Payment shall be made by an Interdepartmental Order (IDO) to these departments. Engineer shall obtain plan check unless specified otherwise.
1. City of Los Angeles Department of Building and Safety permit applicants are required to present the following prior to the issuance of permits:
    - a. Worker's Compensation Insurance Certificate.
    - b. Contractor's license.
    - c. City of Los Angeles Business Tax Identification Number.
  2. Coordinate payment with Engineer. Permits required include but are not limited to the following:
    - a. Building Permit (Refer also to the Construction Stormwater Pollution Control and Construction General Stormwater Permit and Stormwater Pollution Prevention Plan (SWPPP) Articles of this Section)
    - b. Grading Permit (Refer also to the Construction Stormwater Pollution Control and Construction General Stormwater Permit and Stormwater Pollution Prevention Plan (SWPPP) Articles of this Section)
    - c. Plumbing Permit

- d. Mechanical Permit
  - e. Electrical Permit
  - B. Obtain City of Los Angeles Department of Public Works, Bureau of Street Services Overload permit where hauled material dimensions exceed overlength, overwidth, or overheight criteria, or materials are subject to other permit requirements.
  - C. On-site inspection approval from Department shall be required for hot work. Secure a hot work permit for welding, cutting, burning, pitch heating, riveting, grinding, drilling, and other fire and spark producing operations from Port Police Office at (310) 732-3973 or (310) 732-3500 at 330 South Centre Street, San Pedro, California 90731 two working days prior to start of hot work. There is no fee for this permit.
    - 1. Furnish safety devices, extinguisher, and fire watch as required by permit.
    - 2. Exercise caution in welding and cutting operations to avoid fire.
- 1.3 CALIFORNIA AIR RESOURCES BOARD (CARB) REQUIREMENTS
- A. On-road vehicles shall comply with CARB Clean Truck Check (Heavy Duty Inspection and Maintenance Regulation) and Advanced Clean Fleets Regulation
    - 1. Prior to start of Work, submit to Engineer proof of compliance required by CARB for Contractor and subcontractors. Follow applicable regulatory requirements for retention of paperwork.
  - B. Off-road equipment shall comply with CARB off-road equipment regulations including but not limited to: In-Use Off-Road Diesel and Large Spark Ignition Regulations.
    - 1. Prior to start of Work, submit to Engineer proof of compliance required by CARB for Contractor and subcontractors. Follow applicable regulatory requirements for retention of paperwork.

2. Prominently display appropriate signage in conformance with CARB In-Use Off-Road Diesel Regulation (<https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation>) on Project Site(s). Signage shall state the following:

“Who does the In-Use Off-Road regulation apply to? The In-Use Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation) applies to all self-propelled off-road diesel vehicles 25 horsepower or greater and most two-engine vehicles (except onroad two-engine sweepers) owned or operated in California. This includes vehicles that are rented or leased (rental or leased fleets).”

#### 1.4 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD) REQUIREMENTS

- A. Obtain pertinent SCAQMD permits and comply with SCAQMD rules and permit requirements, including, but not limited to, the following:
  1. Submit to South Coast Air Quality Management District (SCAQMD) a notification form (SCAQMD Rule 1403) 10 working days prior to start of chemically-impacted soil cleanup or abatement order soils remediation Work. Obtain forms from the SCAQMD Enforcement Division, Toxics Section.
  2. Obtain and pay for SCAQMD permits under Rules 201, 203, 222, and/or 2202 for affected classes of equipment, including but not limited to, internal combustion engines greater than 50 brake horsepower which are not used as vehicle propulsion (air compressors, generators, winch motors, and the like).
    - a. California Air Resources Board permits may be obtained for eligible portable engines in lieu of SCAQMD permits.
  3. Comply with SCAQMD Rules 401, Visible Emissions and 402, Nuisance.
  4. Comply with City of Los Angeles Municipal Code Section 91.108.13 and SCAQMD Rule No. 403, Fugitive Dust.
    - a. Contractors performing Large Operations as defined by SCAQMD Rule No. 403 shall prepare and obtain SCAQMD approval of a fugitive dust control plan prior to start of Work.



- b. Implement SCAQMD's Best Available Control (BAC) measures in Table 1 of Rule 403. Large construction projects (on a property which contains 50 acres or more of disturbed surface area) shall also follow Rule 403 Tables 2 and 3.
  - 5. Comply with SCAQMD Rule 1166 Volatile Organic Compound Emissions from Decontamination of Soil.
  - 6. Abrasive Blasting: Select materials and methods that comply with SCAQMD Rule 1140 Abrasive Blasting.
  - 7. Comply with SCAQMD Rule 1466 Control of Particulate Emissions from Soils with Toxic Air Contaminants.
- 1.5 OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), FIRE, AND OTHER SAFETY REQUIREMENTS
- A. Comply with State of California Construction Safety Orders and General Industry Safety Orders issued by Department of Industrial Relations, Division of Occupational Safety and Health; and Safety and Health Regulations for Construction administered by United States Department of Labor, Occupational Safety and Health Administration (OSHA).
  - B. Hazardous Substances: Also known as hazardous materials, are defined in California Health and Safety Code 25501 (n). Hazardous substances include those shown in "Director's List" from Department of Industrial Relations pursuant to Hazardous Substances Information and Training Act, and those described in Part 172 of Title 49 of the Code of Federal Regulations (CFR), Department of Transportation Hazardous Materials List.
- 1. Examples of hazardous substances commonly used in construction projects include, but are not limited to, the following:
    - a. Toxic materials (pesticides, herbicides, epoxies, curing compounds, and paints),
    - b. Corrosive materials with pH of 2 or less (muriatic and other acids),
    - c. Corrosive materials with pH of 12.5 or more (soda lye and lime),
    - d. Ignitable materials (gasoline and diesel fuel, propane, and solvents),
    - e. Reactive materials (chlorine), or

- f. Any other material for which a Safety Data Sheet (SDS) has been prepared.
2. Handle hazardous substances in conformance with applicable federal, state, and local regulations.
3. Make current and accurate copies of SDS available at Project Site(s) for each hazardous substance to be used at Project Site(s).
  - a. Train employees that handle hazardous substances and hazardous wastes in procedures for handling such materials. Refer also to Hazardous Waste Article of this Section.
4. Store hazardous substances in conformance with California Health and Safety Code and City of Los Angeles Fire Code requirements.
  - a. Comply with California Health and Safety Code, Division 20, Chapter 6.95, Section 25500. Contractor shall file a Hazardous Materials Business Plan through California Environmental Reporting System (CERS) as implemented by City of Los Angeles Fire Department and associated Certified Unified Program Agency (CUPA) at [http://fire.lacounty.gov/wp-content/uploads/2019/08/lacofd-CERS-User-Guide\\_Part3.pdf](http://fire.lacounty.gov/wp-content/uploads/2019/08/lacofd-CERS-User-Guide_Part3.pdf) if on-site storage of hazardous substances exceeds the following quantities:
    - 1) Liquids: 55 gallons
    - 2) Gas: 200 cubic feet
    - 3) Solids: 55 pounds
  - b. On-site storage refers to the uninterrupted presence of hazardous substances at Project Site(s) for 30 Calendar Days or more, including refills or replacement of stock.
5. Protect hazardous substance storage containers from wind and rain. Place secondary containment beneath containers or equipment to capture drips and spills.
6. Clean up spills immediately. Place absorbent material on residue from small spills and dispose of wastes in conformance with federal, state, and local regulations and with Hazardous Waste Article of this Section. Submit spill cleanup method to Engineer upon request.

7. Depending on the extent, volume, and discharge to surface or subsurface waters from the spill, Contractor shall comply with notification and reporting requirements.

## 1.6 HAZARDOUS WASTE

- A. General: Hazardous waste is defined by Health and Safety Code 25117 and, California Code of Regulations, Title 22 Division 4.5, Chapter 11 Article 2, Section 66261.10 et. Seq. Notify Engineer of observances or occurrences of hazardous waste. Comply with federal, state, and local reporting requirements. Continued Work at the affected area of Project Site(s) shall require the approval of Engineer.
  1. Prior to performing any Work in affected areas, prepare a Project Site-specific Safety and Health Program pursuant to Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements in California Code of Regulations CCR Title 8 Section 5192. Upon generating hazardous waste, Contractor shall furnish Safety and Health Plan for Project Site(s) and submit to Engineer within 2 Calendar Days of generation.
  2. Workers shall be trained in conformance with CCR Title 8 Section 5192.
  3. Dispose of hazardous wastes at licensed facility that is permitted to receive hazardous waste (recycling and disposal) as approved by Engineer.
  4. Submit copies of documents to Engineer, including hazardous waste manifests indicating the amount, nature, and disposition of the hazardous waste within 10 Calendar Days of disposal, as required by law and regulations.
  5. Refer to EXCAVATING, STOCKPILING, AND DISPOSING OF CHEMICALLY IMPACTED SOIL Section for additional requirements.
- B. Pre-Existing Hazardous Wastes: City shall retain title to pre-existing hazardous waste removed from Project.
  1. Store and manage hazardous wastes discovered on-site during the course of construction and resulting from construction activities in conformance with California Health and Safety Code. Protect hazardous waste storage containers from wind and rain in conformance with applicable laws and regulations. Place secondary containment beneath receptacles to capture drips and spills.

2. In handling City's materials, City acknowledges that for the purposes of Contract, it retains generator status and shall be the primary or designated generator, shall obtain the necessary United States Environmental Protection Agency (U.S. EPA) identification number, and sign the transportation manifests as owner of the material.
  3. Pay fees required for the disposal of hazardous waste.
- C. Contractor-Generated Hazardous Wastes: Contractor shall retain title to hazardous waste generated from supplies and equipment brought on Project Site(s) and any Laydown Area(s).
1. Contractor shall bear costs, including disposal fees and taxes, for managing and disposing of hazardous waste generated from supplies and equipment brought on Project Site(s) and any Laydown Area(s).

#### 1.7 CHEMICALLY IMPACTED SOIL AND WATER

- A. Notify Engineer of observances or occurrences of soil and/or groundwater contamination. Engineer shall notify Port Police, Director of Environmental Management, and Risk Manager. Continued Work at the affected area of Project Site(s) shall require the approval of Engineer.
- B. Remove chemically impacted soil and groundwater as directed by Engineer and in conformance with applicable federal, state, and local regulations, including, but not limited to, South Coast Air Quality Management District (SCAQMD); California Environmental Protection Agency (EPA), Department of Toxic Substances Control (DTSC); State Water Resources Control Board (SWRCB); and City of Los Angeles Fire Department. Dispose of chemically impacted soil and groundwater as directed by Engineer.
- C. Obtain permits for excavation and disposal of chemically impacted soil and water.
- D. Refer to Hazardous Waste Article of this Section for further requirements if the contamination is determined to be hazardous.
- E. For chemically-impacted soil and water, prepare a Project Site-specific Safety and Health Plan in conformance with requirements of Hazardous Waste Article of this Section.

## 1.8 OFF-SITE TRAFFIC REQUIREMENTS

- A. Minimize interference with the existing traffic patterns on surrounding publicly traveled streets and access roads.
  - 1. Provide traffic control barriers, lights, detours, markings, and construction signage on publicly traveled streets advising of construction in conformance with California Manual of Uniform Traffic Control Devices (California MUTCD).
    - a. 7 Calendar Days prior to start of construction, provide advance construction signs in accordance with City of Los Angeles Standard Plan S-791-1.
  - 2. Route vehicles hauling materials to minimize traffic conflicts and congestion.
  - 3. Trucks hauling dirt, sand, or gravel shall comply with SCAQMD Rule 403 Best Available Control measures and the following additional requirements:
    - a. Maintain at least 6 inches of freeboard.
  - 4. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads in conformance with Construction Stormwater Pollution Control Article of this Section.
  - 5. Stabilize the materials while loading, unloading, and transporting to reduce fugitive dust emissions.
  - 6. Belly-dump truck seals shall be checked regularly to remove trapped rocks to prevent spillage.
  - 7. Comply with track-out regulations in conformance with SCAQMD Rule 403, regardless of project size.
- B. Rush Hour Construction Ban: Work in the public right-of-way on City of Los Angeles streets is prohibited during the morning and evening rush hours, from 6:00 a.m. to 9:00 a.m. and from 3:30 p.m. to 7:00 p.m. The ban includes both actual construction on City streets as well as the staging of equipment and materials, even if construction is not in the public right-of-way.
  - 1. Construction activities related to emergency maintenance and repair are exempted from the rush hour construction ban. Verify emergency status with Engineer.

C. Refer to SITE CONDITIONS Section for additional requirements.

## 1.9 CONSTRUCTION STORMWATER POLLUTION CONTROL

A. Minimum Water Quality Protection Requirements:

1. Comply with the following minimum standards of good housekeeping:
  - a. Earth, construction materials, sediments, trash, construction-related wastes, other potential pollutants, or stockpiles of these materials shall not be transported by wind or blower, storm or wash water from Project Site(s) and any Laydown Area(s) via sheetflow, swales, area drains, natural drainage, storm drains, or streets.
  - b. Handle hazardous materials in conformance with Occupational Safety and Health Administration (OSHA), Fire, And Other Safety Requirements Article of this Section, and applicable federal, state, and local regulations.
  - c. Retain concrete wastes on-site until concrete wastes can be appropriately disposed or recycled. Accumulated concrete wastes on Project Site(s) and any Laydown Area(s) shall become property of Contractor and shall be recycled in conformance with Contractor's Waste Management Plan (WMP) as described in CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT Section of Specifications. On-site washout shall be allowed only in designated areas away from drains, ditches, and streets.
  - d. Deposit trash and construction-related solid wastes in covered and labeled receptacles. Prevent dispersal of trash by wind and prevent rainwater percolation through trash.
  - e. Handle and dispose of hazardous wastes in conformance with Hazardous Waste Article of this Section and applicable federal, state, and local regulations.
  - f. Prevent tracking of sediments and other materials from Project Site(s) and any Laydown Area(s) by vehicle traffic. Stabilize construction entrance roadways to inhibit sediments from being deposited into the public ways. Comply with the provisions of Housekeeping And Maintenance of Surface Areas of Project Site(s) and any Laydown Area(s) Subsection of GENERAL CONDITIONS Section.

- 1) Install Stanton Systems STB 30 Tire Wash system or Moby Dick ConLine KIT Flex 400 C at construction entrance. Washing shall be automatically triggered.
  - 2) Manufacturers:
    - a) Stanton Systems, (215) 956-9800 or (800) 884-9281.
    - b) Moby Dick, <https://www.mobydick.com/en/>
  - 3) Submit proposed manufacturer and product to be used.
- g. Non stormwater runoff from equipment and vehicle washing and any other activity shall be contained at Project Site(s) and any Laydown Area(s).
- h. Best Management Practices (BMPs) Requirements: Installed BMPs shall be as defined by and in conformance with "California Stormwater Best Management Practices Handbook" and SWRCB. Contractor shall obtain a copy of "California Stormwater Best Management Practices Handbook". Visit <https://www.casqa.org/resources/bmp-handbooks/construction>.
- i. Inspect Project Site(s) and any Laydown Area(s) prior to storm event predictions to ensure that BMPs are properly installed. Conduct routine inspections of Project Site(s) and any Laydown Area(s) to ensure that Best Management Practices are adequate to prevent any debris, particulates or fluids from leaving the lay down area and/or entering Port waters.
- j. Soil and debris piles shall be underlain with 2 layers of Visqueen and shall be covered with Visqueen weighted down with sandbags. Create temporary berms around piles to prevent stormwater infiltration of storage materials. Routinely observe the water surface to look for sheen, debris, or particulates from Project Site(s) and any Laydown Area(s). Immediately cease Work on piles should a pollutant enter the water and notify Engineer.
- B. Small Project Erosion Control Measures:
1. Small project description: Erosion prevention measures required for projects disturbing less than 1 acre of soil and are not otherwise permitted with LADBS nor covered under Construction General Permit (CGP).

2. Small project BMPs requirements: Install the following BMPs as defined by and in conformance with California Stormwater Best Management Practices Handbook:
    - a. Sediment control practices: Street Sweeping, SE-7. Perimeter of disturbed soil area: Silt Fence, SE-1 for slopes up to 4:1 (H:V). For slopes exceeding 4:1, Sandbag Barrier, SE-8 and Fiber Rolls, SE-5.
    - b. Storm drain catch basin within drainage catchment of disturbed soil area: Storm Drain Inlet Protection, SE-10.
      - 1) Provide inlet protection at catch basins within drainage catchment regardless of whether or not the catch basins are within Project Site(s) limits.
    - c. Waste management control practices: Material Delivery and Storage, WM-1; Material Use, WM-2; Stockpile Management, WM-3, Spill Prevention and Control, WM-4; Solid Waste Management, WM-5; and Concrete Waste Management, WM-8.
    - d. Tracking control practices: Stabilized Construction Entrance and Exit, TC-1; Stabilized Construction Roadway, TC-2, and Entrance Outlet Tire Wash, TC-3.
  3. Contractor shall prepare and submit to Engineer a Best Management Practices Plan (BMPP). A sample BMPP is included in Appendix "C" of Specifications, which includes a BMP layout map and a list of BMPs to be used on-site during the duration of Project.
  4. Inspect Project Site(s) and any Laydown Area(s) prior to storm event predictions to ensure that BMPs are properly installed. Inspect Project Site(s) and any Laydown Area(s) during and after each significant storm event where surface runoff is observed to maintain and repair damaged BMPs.
  5. To purchase a copy of the California Stormwater Best Management Practices Handbook, visit <https://www.casqa.org/resources/bmp-handbooks/construction>.
- C. Refer to Construction General Stormwater Permit and Stormwater Pollution Prevention Plan (SWPPP) Article of this Section for projects disturbing 1 acre or more of soil.



### 1.10 CONSTRUCTION GENERAL STORMWATER PERMIT AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

- A. Project has 1 acre or more of disturbed soil and is subject to U.S. EPA National Pollution Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit) (CGP) Order WQ 2022-0057-DWQ NPDES No. CAS000002 adopted on September 9, 2022 and any subsequent iterations for stormwater discharges associated with construction activity. Contractor shall comply with the requirements of CGP. CGP and attachments can be found at: [https://www.waterboards.ca.gov/water\\_issues/programs/stormwater/construction/general\\_permit\\_reissuance.html](https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction/general_permit_reissuance.html)
- B. Project was determined by Engineer to be Risk Level 2.
- C. Visual monitoring and reporting requirements shall be in conformance with Risk Level 2 included in Attachments D, D.1, and D.2 of CGP.
- D. Effluent monitoring and sampling requirements shall be in conformance with Risk Level 2 included in Attachments D, D.1, and D.2 of CGP.
- E. Stormwater discharges and authorized non-stormwater discharges shall not contain a hazardous substance equal to or in excess of a reportable quantity listed in 40 CFR Part 117.3 and 40 CFR 302.4.
- F. Comply with Total Maximum Daily Load (TMDL) Implementation Requirements in Attachment H of CGP.
- G. Submit to Engineer the names and qualifications of Qualified SWPPP Developer (QSD) and Qualified SWPPP Practitioner (QSP) within 14 Calendar Days after issuance of Notice to Proceed date.
  - 1. QSD shall write, amend, and certify SWPPP documents.
  - 2. QSP shall perform visual observations of discharges, field BMP inspections, perform sampling and analysis, Pre-Qualifying Precipitation Event (QPE) inspections, and train employees on BMPs.

#### H. Stormwater Pollution Prevention Plan:

##### 1. Plan Description:

- a. Design, submit, implement, and document Project Site(s)-specific SWPPP plan in conformance with CGP to control stormwater pollution from sediments and construction materials leaving Project Site(s) and any Laydown Area(s). For additional information on plan preparation, visit SWRCB website at [www.swrcb.ca.gov](http://www.swrcb.ca.gov). Refer also to City of Los Angeles Bureau of Sanitation, Watershed Protection Division, at [www.lastormwater.org](http://www.lastormwater.org) and California Stormwater Quality Association (CASQA), "California Stormwater Best Management Practice Handbooks", telephone number (650) 366-1042. Website address: [www.casqa.org](http://www.casqa.org).

##### 2. Plan Requirements:

- a. Prepare SWPPP as follows:
  - 1) Supply information required by SWRCB in SWPPP and submit to Engineer, for review and approval, 30 Calendar Days prior to grading or other soil disturbing construction activities. Refer to SWPPP Requirements and Qualifying Precipitation Events (QPE) Paragraph of this Article for additional requirements.
    - a) Include Project Site(s)-specific BMP layout map.
    - b) Failure to submit SWPPP to Engineer may be cause for withholding of payment.
- b. Construction Project Site(s) and any Laydown Area(s) Monitoring Program:
  - 1) Develop and implement Construction Site Monitoring Program (CSMP) as part of SWPPP in conformance with the requirements of Attachments D, D.1, and D.2 of CGP. CSMP shall be Project Site(s) and any Laydown Area(s)-specific and shall include monitoring procedures and instructions, pre-earthwork drawings, construction and earthwork drawings, location maps, forms, and checklists.
  - 2) Perform required monitoring and inspections, including non-compliance reporting, conforming to Project's Risk Level. Refer to Attachments D, D.1, and D.2 of CGP.

- c. Maintain a copy of the reviewed SWPPP plan at Project Site(s).
- 3. Electronically submit other Permit Registration Documents (PRDs) to Engineer, including Site(s) Map; Project Site(s) and any Laydown Area(s)-specific Stormwater Pollution Prevention Plan; and Signed Certification Statement.
  - a. Include check payable to State Water Resources Control Board to cover fee due per project, per year of construction activity starting at Notice to Proceed. Engineer shall file the completed PRDs (including fee) with State Water Resources Control Board, per project per year of construction activity. Include in fee amount the base cost, per acre cost, and applicable surcharge. Allow Engineer at least 14 days prior to commencement of construction activities for filing PRDs and at least 7 days prior to commencement of construction activities to send the check.
  - b. Contact Engineer to obtain Waste Discharge Identification (WDID) number.
  - c. Electronic file of Notice of Intent (NOI) and listing of fees can be found at:  
[https://www.waterboards.ca.gov/resources/fees/water\\_quality/#stormwater](https://www.waterboards.ca.gov/resources/fees/water_quality/#stormwater)
- 4. Sampling, Testing, and Action Levels:
  - a. For Risk Level 2 projects, perform sampling and testing in conformance with Attachments D, D.1, and D.2 of CGP.
  - b. If numeric action levels (NALs) for Risk Levels 2 or 3 are exceeded, perform Project Site(s) and any Laydown Area(s) evaluation, implement additional BMPs, and revise SWPPP either to prevent pollutants and authorized non-stormwater discharges from contaminating stormwater, or to substantially reduce the pollutants to levels consistently below NALs. Submit NAL exceedance report electronically to Engineer within 2 days after conclusion of the storm event for Engineer to report to SWRCB.
  - c. Comply with applicable TMDL Implementation Requirements in Attachment H of CGP, including TMDL-specific additional BMPs and site pollutant modeling, numeric action levels, and numeric effluent limitations.

## 5. Inspection, Maintenance, and Repair:

- a. Implement and maintain the reviewed SWPPP BMPs at Project Site(s) and any Laydown Area(s) year-round in conformance with SWRCB requirements.
- b. Perform self-inspection of BMPs prior to and during anticipated storm events.
- c. Complete self-inspection checklists and logs required by SWRCB for each inspection and maintain at Project Site(s) for Engineer's review for Contract duration.
  - 1) Adequate checklist and log maintenance, and approval of them, shall be a condition to approval of rain delay schedule extensions.
- d. QSD and QSP shall perform on-site inspections as listed in CGP.

6. Contractor shall show Waste Discharge Identification number (WDID) to LADBS as proof of submittal of NOI whenever Contractor is required to get a permit from LADBS.

7. Refer to Attachment B of CGP for definitions of Numeric Effluent Limitation and Numeric Effluent Limitation Exceedance.

## I. Qualified Precipitation Event (QPE):

1. QSP shall conduct a pre-QPE inspection within 72 hours prior to any weather pattern that forecasts having a 50 percent or greater Probability of Precipitation (PoP) of 0.5 inches or more in a 24-hour period.
2. Obtain precipitation forecast information from National Weather Service of the National Oceanic and Atmospheric Administration (NOAA) Forecast Office.
3. Submit pre-QPE to Engineer for all phases of construction.
4. Refer to Attachments D, D.1, and D.2 of CGP for additional requirements.

- J. Maintain a paper or electronic copy of CGP records at Project Site(s). Submit records on a monthly basis to Engineer during the course of construction and, for Annual Report, prior to September 1 of each year, the collection of the year's records since September 1 of the previous year and, upon Substantial Completion of Project, remaining un-submitted records for Project. Include:
1. A summary and evaluation of sampling and analysis results, including original laboratory reports.
  2. The analytical methods, method reporting units and method detection limits of each analytical parameter (analytical results that are less than the method detection limit shall be reported as "less than the method detection limit").
  3. A summary of corrective actions taken during the reporting period.
  4. Identification of any compliance activities or corrective actions that were not implemented.
  5. A summary of violations of CGP.
  6. The individuals who performed the facility inspections, sampling, visual observation (inspections), and measurements.
  7. The date, place, time of facility inspections, sampling, visual observation (inspections), and measurements including precipitation (rain gage).
  8. The visual observations and sample collection exception records and reports specified in Attachments D, D.1, and D.2 of CGP.
  9. Training information consisting of:
    - a. Documentation of training for individuals responsible for activities associated with compliance with CGP.
    - b. Documentation of training for individuals responsible for BMP installation, inspection, maintenance, and repair.
    - c. Documentation of training for individuals responsible for overseeing, revising, and amending SWPPP.
  10. Photographs of BMPs before, during, and after storm events.
  11. Chain of custody forms.

K. Terminating Permit Coverage:

1. To file Notice of Termination (NOT), notify Engineer upon completion of construction and land disturbing activities and provide the following documents to Engineer:
  - a. Completed NOT
  - b. QSP-prepared final NOT inspection with QSP name and valid QSP certificate number
  - c. Final Project Site(s) and any Laydown Area(s)-specific map
  - d. Photos demonstrating final stabilization and implementation of post-construction BMPs and low impact development

L. Prohibited Discharges:

1. The following discharges are prohibited:
  - a. Debris and trash, in conformance with SWRCB Resolution 2015-0019 as applicable to construction stormwater discharges including the following:
    - 1) Dischargers shall implement, operate, and maintain trash management, treatment, and institutional controls to eliminate debris and trash from stormwater discharges and authorized non-stormwater dischargers consistent with the prohibition of the discharge of debris and trash regulated by CGP.
  - b. Treatment chemicals except as authorized in Attachments F and G of CGP;
  - c. Wastewater from washout or cleanout of areas, structures or equipment with concrete, grout, stucco, paint, or other construction materials;
  - d. Form-release oils and curing compounds;
  - e. Fuels, oils, fluids, or other materials used in vehicle and equipment operation and maintenance;
  - f. Soaps, solvents, or detergents (used in vehicle equipment washing or external building wash down, and the like); and
  - g. Toxic or hazardous substances (asbestos, lead, mercury, or PCBs).

### 1.11 TREATED WOOD AND TREATED WOOD WASTE

- A. Railroad ties, timber piles, timber wharf framing, and utility poles present within the facilities are considered, upon disposal, to be treated wood waste (TWW) containing creosote, pentachlorophenol, or waterborne preservative (such as Ammoniacal Copper Zinc Arsenate (ACZA)) which the State of California has determined to be potentially hazardous. Remove, manage, and dispose of TWW materials at California Regional Water Quality Control Board (CRWQCB) approved and licensed landfills in conformance with Alternative Management Standards (AMS). Contractors performing treated wood removal and TWW disposal shall have a HAZ certification from California Contractors State License Board.
  - 1. Confirm with Engineer the latest Department of Toxic Substances Control (DTSC) requirements prior to starting demolition.
- B. Submit 2 copies of the manifest from the transporter to Engineer including weigh tickets.
- C. Refer also to Hazardous Waste Article of this Section.

### 1.12 FEDERAL RAILWAY ADMINISTRATION (FRA) AND PUBLIC UTILITY COMMISSION (PUC) RAILROAD SAFETY REQUIREMENTS

- A. Contractor shall qualify employees to perform Work within railroad right of way as required by FRA regulations. Refer to COORDINATION Section for additional requirements.
- B. Railroad flag persons for Work shall be present at all times where Work is occurring within 20 feet of the nearest railroad track. Refer to COORDINATION Section for additional requirements.
- C. Clear a safe toe path to existing live railroad track after each workday in conformance with Public Utility Commission General Order No. 118.

### 1.13 MARINE TERMINAL SECURITY

- A. Comply with facility operator's (tenant's) security measures pursuant to 33 CFR, Chapter 1, Part 105, Maritime Security: Facilities, including, but not limited to, gate access, vehicle loading and unloading, maintaining fences, and access to restricted areas within the terminal.

1. Contractor shall comply with terminal's approved Facility Security Plan with regards to Transportation Workers Identification Credential (TWIC) program. Provide sufficient number of TWIC-credentialed individuals such that Work can be performed without escorts provided by the terminal and be in compliance with U.S. Coast Guard Maritime Security Regulations.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION



## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Temporary barrier rail to be installed around a phased Work area.

### 1.2 RELATED SECTIONS

- A. Section 32 31 13 - Chain Link Fences and Gates

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:

1. Payment for Work of this Section shall be included in each corresponding bid item of Bid Proposal Line Items that requires K-rails.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. The barrier rail units shall be new reinforced concrete units in conformance with Caltrans Standard Specification Subsection 12-3.08 and in conformance with Standard Plan T3A modified with scuppers.
- B. Chain link materials shall conform to CHAIN LINK FENCES AND GATES Section.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Place barriers continuously and without openings, with the exception of accessways for Contractor and tenant.
- B. Barrier rails shall have chain link fencing on top.
- C. Placement connections and anchorage of the barrier rail units shall be in accordance with Drawings or as directed by Engineer.
- D. Disassemble and remove from Project Site(s) temporary barrier rail upon completion of phased Work area and at the direction of Engineer.

END OF SECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Procedures for ensuring optimal diversion of construction and demolition waste generated by Project and documentation procedures for tracking waste generation and diversion.
  - 1. Project shall promote City's sustainable building efforts by creating a resource-efficient and environmentally sensitive Project and maintaining optimum control of Construction and Demolition (C&D) waste generated during Project.
  - 2. Project shall use products with post-consumer recycled content to the greatest extent feasible. Refer to California Department of Resources Recycling and Recovery's (CalRecycle's) website for information about recycled content construction products.

1.2 ABBREVIATIONS

- A. CalMAX: California Materials Exchange
- B. CalRecycle: California Department of Resources Recycling and Recovery
- C. C&D: Construction and Demolition
- D. CCR: California Code of Regulations
- E. CDRG: Construction and Demolition Recycling Guide
- F. LEA: Local Enforcement Agency
- G. SWDD Report: Solid Waste Diversion and Disposal Report
- H. WMP: Waste Management Plan

## 1.3 DEFINITIONS

- A. Certified C&D Waste Processing Facility or Certified C&D Waste Processor: A solid waste processing facility that accepts loads of C&D waste for the purpose of recovering re-usable and recyclable materials and disposing of the non-recyclable residual material. A Certified C&D Waste Processing Facility has been certified by City of Los Angeles (City) Bureau of Sanitation to have a facility specific recycling rate for C&D waste. For information on becoming a certified C&D waste processor, refer to:  
[https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-s/s-lsh-wwd-s-r/s-lsh-wwd-s-r-cdr?\\_adf.ctrl-state=1d5d9u35ny\\_1&\\_afLoop=4798033367694392&\\_afWindowMode=0&\\_afWindowId=null#!%40%40%3F\\_afWindowId%3Dnull%26\\_afLoop%3D4798033367694392%26\\_afWindowMode%3D0%26\\_adf.ctrl-state%3D1d5d9u35ny\\_5](https://www.lacitysan.org/san/faces/home/portal/s-lsh-wwd/s-lsh-wwd-s/s-lsh-wwd-s-r/s-lsh-wwd-s-r-cdr?_adf.ctrl-state=1d5d9u35ny_1&_afLoop=4798033367694392&_afWindowMode=0&_afWindowId=null#!%40%40%3F_afWindowId%3Dnull%26_afLoop%3D4798033367694392%26_afWindowMode%3D0%26_adf.ctrl-state%3D1d5d9u35ny_5). See CDRG for information on the current list of certified processors and recycling facilities.
- B. Class III Landfill: A landfill that accepts non-hazardous solid waste such as household, commercial, and industrial solid waste. A Class III landfill is regulated by LEA and shall have a CalRecycle solid waste facilities permit.
- C. Construction and Demolition Recycling Guide (CDRG): A publication by City of Los Angeles Department of Public Works, Bureau of Sanitation, Solid Resources Citywide Recycling Division. CDRG can be found at:  
<https://www.lacitysan.org/cs/groups/pressrelease/documents/document/y250/mdgy/~edisp/cnt082545.pdf>.
- D. C&D Waste or Mixed C&D Waste or C&D Debris or Mixed C&D Debris: Solid waste and recyclable materials, and building materials from construction, deconstruction, remodeling, repair, or demolition of buildings and other structures, do not contain hazardous waste (as defined in CCR Title 22, Section 66261.3, et seq.), and contain no more than 1 percent putrescible wastes by volume, calculated on a monthly basis. C&D waste includes, but is not limited to: asphalt, concrete, Portland cement, brick, lumber, drywall, roofing material, ceramic tile, pipe, glass, carpet, and associated packaging.
- E. Deconstruction: The process of taking apart a structure with the primary goal of preserving the value of useful building materials, so that they may be reused or recycled.
- F. Disposal: Acceptance of solid waste at a legally operating facility for the purpose of landfilling.

- G. Diversion: Activities that result in reducing the amount of solid waste disposed at a landfill. This can include source reduction activities, composting, recycling, and reuse.
- H. Inert Backfill Site: A location, other than inert fill or other disposal facility, to which inert debris is taken for the purpose of filling an excavation, shoring, or another soils engineering operation.
- I. Inert Debris: Solid waste and recyclable materials that are source separated or separated for reuse and do not contain hazardous waste (as defined in CCR, Title 22, Section 66261.3 et seq.) or soluble pollutants at concentrations in excess of applicable water quality. Inert debris may not contain any putrescible wastes. Inert debris includes but is not limited to concrete, asphalt, crushed glass, fiberglass, asphalt or fiberglass roofing shingles, brick, slag, ceramics, plaster, clay, and clay products.
- J. Inert Debris Engineered Fill Operation (IDEFO): An activity exceeding 1 year in duration in which only the following inert debris may be used: fully cured asphalt, uncontaminated concrete (including steel reinforcing rods embedded in the concrete), crushed glass, brick, ceramics, clay and clay products, which may be mixed with rock and soil. Those materials are spread on land in lifts and compacted under controlled conditions to achieve a uniform and dense mass which is capable of supporting structural loading, as necessary, or supporting other uses such as recreation, agriculture, and open space in order to provide land that is appropriate for an end use consistent with approved local general and specific plans (e.g. roads, building sites, or other improvements) where an engineered fill is required to facilitate productive use(s) of the land.
- K. Non-Permitted Solid Waste Hauler: A company that does not possess a valid and current solid waste from individuals or businesses in City of Los Angeles.
- L. Permitted Solid Waste Hauler: A company that possesses a valid and current solid waste hauler permit from City of Los Angeles to collect and transport solid waste from individuals or businesses in City of Los Angeles. Refer to: [https://www.lacitysan.org/san/faces/wcnav\\_externalId/s-lsh-wwd-s-c-whp?\\_adf.ctrl-state=jir2v5wty\\_2037&\\_afLoop=14808459037152891&\\_afWindowMode=0&\\_afWindowId=null#!%40%40%3F\\_afWindowId%3Dnull%26\\_afLoop%3D14808459037152891%26\\_afWindowMode%3D0%26\\_adf.ctrl-state%3Djir2v5wty\\_2041](https://www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-s-c-whp?_adf.ctrl-state=jir2v5wty_2037&_afLoop=14808459037152891&_afWindowMode=0&_afWindowId=null#!%40%40%3F_afWindowId%3Dnull%26_afLoop%3D14808459037152891%26_afWindowMode%3D0%26_adf.ctrl-state%3Djir2v5wty_2041).

- M. Recycling: The process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products that meet the quality standards necessary to be used in the marketplace.
1. On-site Recycling: Materials that are sorted and processed for use in an altered form in Project, (e.g. concrete is crushed for use as base for a parking lot on Project Site).
  2. Off-site Recycling: Source-separated materials hauled to another location and used in an altered form in the manufacture of a new product.
- N. Recycling Facility: An operation that can legally accept materials for the purpose of processing the materials into an altered form for the manufacture of a new product. Depending on the types of materials accepted and operating procedures, a recycling facility may or may not be required to have a Solid Waste Facilities permit from CalRecycle or be regulated by LEA.
- O. Reuse: Materials that are recovered for use in the same form. This includes materials that are reused on-site or off-site.
- P. Salvage: Materials recovered for reuse or sale or donation to a third party.
- Q. Source Reduction: Any action causing a net reduction in the generation of solid waste. Source reduction includes, but is not limited to, reducing the use of non-recyclable materials, replacing disposable materials and products with reusable materials and products, reducing packaging, and reducing the amount of yard waste generated.
- R. Source-Separated Materials (Construction and Demolition Waste): Material that is sorted at the site of generation by individual material type for the purpose of reuse or recycling, i.e., loads of concrete that are source-separated for delivery to an inert debris recycling facility to be crushed into road base material. Note: Contractor may be able to save money on collection fees for source-separated material. Source-separated material is not subject to City's 10 percent AB 939 fee.
- S. Solid Waste: Shall mean waste that CalRecycle has deemed acceptable for disposal at a Class III Landfill and shall not include source-separated material.

- T. Transfer Station: A facility that can legally accept solid waste for the purpose of temporarily storing the materials for re-loading onto other trucks and transporting them to a landfill for disposal or recovering some materials for reuse or recycling. Transfer stations shall be permitted by CalRecycle and regulated by LEA.
- U. Solid Waste Hauler or Waste Hauler: Shall mean any person engaged in the business of providing or responsible for the collection, removal, or transportation of Solid Waste, Construction and Demolition Waste, Source-Separated Materials.
- V. Solid Waste Hauler Permit, Waste Hauler Permit, or AB 939 Compliance Permit: Persons who collect, remove, or transport Solid Waste, including Construction and Demolition Waste, Source-Separated Materials or co-mingled recyclables, generated with City, shall obtain, in addition to other required permits, and AB 939 Compliance Permit from City of Los Angeles, Department of Public Works Bureau of Sanitation.

#### 1.4 DIVERSION REQUIREMENTS

- A. Each construction or demolition Project shall reuse or recycle a minimum of 80 percent of the inert debris and 65 percent of the remaining construction and demolition waste generated by Project.
- B. Each construction or demolition Project shall dispose of construction and demolition waste generated from Project in conformance with City's C&D Waste Recycling Ordinance (Ordinance No. 181519). Los Angeles Municipal Code requires that mixed C&D waste generated within City of Los Angeles be taken to a City Certified C&D Waste Processing Facility and source separated C&D waste be taken to a recycling facility or City Certified C&D Waste Processing Facility. Further, C&D waste can only be legally collected, removed, or transported by City of Los Angeles Permitted Solid Waste Haulers. If Contractor plans on collecting, removing, or transporting its own waste, Contractor shall first apply for and obtain a Solid Waste Hauler Permit from Solid Resources Citywide Recycling Division (SRCRD) of the Bureau of Sanitation.
- C. Failure to meet the C&D waste recycling requirements as detailed in Paragraphs 1.4 A and B of this Article shall result in the assessment of penalties up to \$5,000 per each load of mixed C&D waste not taken to City Certified C&D Waste Processing Facility. Further, collecting, removing, or transporting C&D waste within City without a valid Solid Waste Hauler Permit is a criminal misdemeanor subject to fines and/or imprisonment.

## 1.5 SUBMITTALS

- A. Waste Management Plan (WMP): Conduct a Project Site assessment and estimate the types and quantities of materials, generated during Project, that are anticipated for on-site or off-site processing, recycling, or reuse.
1. Not more than 10 working days after Notice to Proceed, submit to Engineer a written WMP, Attachment A, based on forms in Appendix "D" of Specifications. The plan shall show a minimum 80 percent recycling for inert debris expected from Project and 65 percent recycling for the remaining C&D waste expected from Project. Submit the plan in the format as shown on Attachment A provided in Appendix "D" of Specifications. Instructions for filling out the form are in Attachment A, Instruction Sheet for Waste Management Plan included in Appendix "D" of Specifications. Work shall not begin until Engineer approves WMP for Project.
  2. If Contractor expects a circumstance that Contractor believes makes it infeasible to comply with the Diversion Requirement, Contractor may submit a written request for an exemption at the time WMP is submitted. If the exemption request is not approved by Engineer, revise and resubmit a WMP.
  3. If City determines that it is infeasible for Contractor to meet Diversion Requirement due to unique circumstances, City shall determine the maximum feasible diversion rate for each material and shall indicate this rate on WMP submitted by Contractor. City shall return a copy of WMP to Contractor marked "Approved for Infeasible Exemption". Contractor shall be required to meet the maximum feasible diversion rates as approved by City. If Contractor fails to meet revised rates, Contractor shall be subject to the stipulated penalties. Exempt Projects are required to keep and submit documentation for Project. This includes receipts, WMP, SWDD Reports, and supporting documentation as required in this Section.
  4. City's approval of Contractor's WMP shall not otherwise relieve Contractor of responsibility for adequate and continuing control of pollutants and other environmental protection measures.

- B. Solid Waste Diversion and Disposal Report (SWDD Report): One week prior to the first of every month, and prior to Engineer's monthly progress estimate for payment, Contractor shall prepare and submit to Engineer a written SWDD Report quantifying material generated, diverted, and disposed in Project during the time period covered by SWDD Report and progress payment. Part 3 of each SWDD Report is a cumulative history of the diversion and disposal for Project. Submit the report in the format provided in Attachment B included in Appendix "D" of Specifications. Failure to submit the report and the supporting documentation shall render the application for progress payment incomplete and delay payment until the proper documentation is submitted. The supporting documentation includes manifests, weight tickets, receipts, reports, invoices, and other supporting documents specifically identifying the projects, the recyclables and solid waste generated by Project, and where the material was sent. Instructions for filling out the forms are in Attachment B, Instruction Sheet for Solid Waste Diversion & Disposal Report included in Appendix "D" of Specifications. Together, all of the SWDD Reports shall cover the complete time period of Project. The final SWDD Report and supporting documentation shall be submitted within 30 Calendar Days of substantial completion of Project but before Affidavits of Completion are submitted.
- C. Substitutions: Should Contractor desire to use materials, equipment, or products that meet the requirements of these specifications but are more environmentally responsive, Contractor shall submit these substitutions in conformance with Proprietary Names and Substitutions Subsection of GENERAL CONDITIONS Section.

#### 1.6 PENALTY

- A. If the diversion requirement has not been met, a per ton penalty shall be applied to the disposed material over that allowed in approved WMP.
- B. The penalty shall be calculated as follows: Tons over that allowed in the approved WMP times the per-ton penalty in effect at the time Contract was awarded. The penalty may not exceed the total payment retention for Project.
- C. Tons of mixed C&D waste either not hauled to City Certified C&D Waste Processing Facilities or hauled by non-permitted waste haulers shall be assessed a per-ton penalty. The penalty may not exceed the total payment retention for Project.
- D. The penalty is \$100 per ton.



- E. The recommended penalty shall be determined by Bureau of Contract Administration and Bureau of Sanitation and shall be considered by Board of Harbor Commissioners at the time of Project closeout.

#### 1.7 WASTE MANAGEMENT PLAN SUBMITTAL MEETING

- A. On or about 5 working days after Notice to Proceed, Engineer shall schedule and attend a meeting with Contractor to discuss the proposed WMP submittal. This meeting shall be held to allow Department and Contractor an opportunity to develop a mutual understanding regarding the recycling and reuse requirements and programs.

#### 1.8 REUSE, SALVAGE, AND RECYCLING OPTIONS

- A. Construction projects shall make use of as many reuse and salvage options as is feasible. One option is CalMAX, a free program sponsored by CalRecycle. The most recent issues of CDRG, contains contact information for non-profit organizations, salvage facilities, and other reuse organizations.
- B. Recycling shall include both on-site and off-site recycling of source-separated materials, as well as mixed C&D waste recycling efforts.
- C. On-site recycling programs shall produce a quality product to meet Specifications identified in Contract Documents, subject to approval. Estimate the amount of material to be used in Project and include a program for off-site recycling of any excess material that cannot be used in Project.
- D. Develop and implement a program to include source separation of solid waste, to the greatest extent feasible, of the following types:
  - 1. Asphalt
  - 2. Concrete, concrete block, slump stone (decorative concrete block)
  - 3. Rock
  - 4. Wood (lumber)
  - 5. Green material (i.e. tree trimmings)
  - 6. Other materials, as appropriate, such as red clay brick, building fixtures, architectural details, drywall, carpet, carpet padding, and corrugated cardboard.

- E. Mixed C&D Waste Recycling: Develop and implement a program to transport commingled construction and demolition materials that cannot be feasibly source-separated to Certified C&D Waste Processing Facility.
- F. Certified C&D Waste Processing Facility: These facilities have facility recycling rates, established by City of Los Angeles for mixed C&D waste. Mixed C&D waste taken to these facilities are considered to have been recycled at the rate of the certified processing facility. For example, 100 tons of material taken to a facility with an 80 percent recycling rate results in 80 tons of recycling and 20 tons of disposal for Project. A list of these facilities and their recycling rates is in the most recent issue of CDRG.
- G. Recycling, Reuse, Mixed C&D Waste Processing, and Salvage Facilities: CDRG is incorporated in this Section by reference and contains information about processing, recycling, reuse, and salvage facilities.
- H. Revenue: Revenue or savings obtained from recycled, reused, or salvaged materials shall accrue to Contractor unless otherwise noted in Contract Documents. Note: Contractor may be able to save money on collection fees for source-separated material. Source-separated material is not subject to City's 10 percent AB 939 fee.
- I. AB 939 Fee: AB 939 fee is assessed on solid waste hauled within City of Los Angeles in conformance with Section 66.32 of Los Angeles Municipal Code.
  - 1. Solid waste haulers hauling material from City of Los Angeles locations must be permitted in conformance with Section 66.32 of City of Los Angeles Municipal Code.
  - 2. Source-separated material is not assessed this fee.

## 1.9 HAULING AND DISPOSAL OPERATIONS

- A. Hauling: Arrange the collection and hauling of C&D waste by a solid waste hauler that is permitted by City of Los Angeles in conformance with Section 66.32 of Los Angeles Municipal Code.
- B. Recycling and Processing Facilities: Transport C&D waste to recycling or processing facilities. Contractor shall be familiar with the requirements for acceptance of C&D waste at the recycling and processing facilities before the material is delivered. The most recent issue of CDRG, includes a partial list of these facilities. Always call facilities in advance.

- C. Disposal Facilities: Transport C&D waste that cannot be accepted at a recycling or processing facility, to a transfer station or disposal facility that can legally accept the materials for the purpose of disposal. A load of C&D waste may be taken to a disposal facility only after it has been rejected by 2 different certified processing facilities and the driver is in possession of both rejection slips. The rejection slips and the weight ticket from the final destination shall be kept together and submitted to Contractor and copy furnished to Engineer.
- D. Project Site Disposal: Do not burn, bury, or otherwise dispose of solid waste on the Project Site.

PART 2 – PRODUCTS - NOT USED

PART 3 – EXECUTION - NOT USED

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Procedures and requirements for preparation and submittal of "As-Built" set of Record Documents including, but not limited to, Drawings and Specifications utilizing Bluebeam Revu Complete Annual Subscriptions and AutoCAD.

### 1.2 SUBMITTALS

- A. Engineer's approval of the up-to-date status of Record Documents is a prerequisite for the approval of requests for progress payments.
- B. Submit the final Record Documents, consisting of marked up Drawings, Specifications, and additional drawings, to Engineer in digital and paper formats for approval upon completion of Project and prior to submitting Affidavit of Completion.
- C. Project Record Documents shall be updated daily for review and approval and shall consist of marked up Drawings and Specifications utilizing Bluebeam. Submit the final Record Documents, consisting of marked up Drawings, Specifications, and additional drawings to Engineer in Bluebeam and AutoCAD for approval upon completion of Project and prior to submitting Affidavit of Completion.

### 1.3 DESCRIPTION - PROJECT SET RECORD DOCUMENTS

- A. Following Award of Contract, secure from Engineer (at no charge) 1 complete set of "As Bid" Drawings and conformed Specifications to be the basis of Project Set Record Documents.
- B. Engineer shall create and manage a Bluebeam Revu Studio Session. Contractor shall make entries to project record documents within the Bluebeam Revu Studio Session. Contractor shall coordinate with Engineer for a list of Revu attendees.
- C. Following Award of Contract, Engineer shall provide a complete set of "As Bid" Drawings and conformed Specifications in digital portable document format (PDF) via Bluebeam Revu Studio Session and full size hard-copy format to be the basis of Project Set Project Record Documents.
- D. Project Set Record Documents shall be identified with the title "RECORD DOCUMENTS - PROJECT SET". Project Set shall be used for no purpose other than the entry of data and review by Engineer.

#### 1.4 ENTRIES ON JOB SET

- A. The following entries shall be made on Bluebeam:
  - 1. Enter changes on Drawings and Specifications, as applicable.
  - 2. Describe and date changes by note and graphic line. Emphasize entry by a "cloud" around the affected area or areas. In the event of overlapping changes, different colors may be used for each change.
  - 3. Include changes clearly marked on Drawings from sources, including responses to Requests for Information (RFIs), product substitutions, and delta revision changes transmitted from Engineer.
  - 4. Note authority and reason for each change.
  - 5. Reference change on any other affected sheets.
  - 6. Enter make and model of equipment installed in the Project.
  - 7. Maintain record documents "as-current" continually and available for examination by Engineer, upon request.
- B. The following entries shall be made on AutoCAD and shall include hard-copy and electronic AutoCAD files of "As-Builts":
  - 1. Note actual location (dimension, elevations, depths, stations) of substructures constructed (including pile tip elevation, sewer wyes and laterals, utility stubouts, and Work shown schematically) and existing substructures encountered during construction. Call for survey to determine as-built alignment and elevation as required before concealing Work.

#### 1.5 CONVERSION OF SCHEMATIC LAYOUTS TO AS-BUILT DRAWINGS

- A. Where Work is shown on Drawings by use of a schematic diagram, supplement the diagram or provide a new drawing, in a manner approved by Engineer, to show the actual dimensioned locations, elevations, and details of Work.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION

PART 1 – GENERAL

1.1 SECTION INCLUDES

- A. Specific measures and practices to protect the environment, be socially responsible, provide for the economic development of Port of Los Angeles and include air quality, materials management, energy use, health and safety, and labor sustainability measures.

1.2 REFERENCES

- A. FGC Division 4 Part 2 Chapter 1 - Birds and Mammals.

1.3 SUBMITTALS

- A. Provide a list of equipment prior to entering Project Site(s).
- B. Submit backup documentation monthly demonstrating compliance with the environmental measures, including but not limited to project conditions, as applicable and, in particular, as indicated in the Environmental Compliance Tracking (ECT) Form (refer to sample form in Appendix "E" of Specifications and fill in form in PMWeb), including the California Air Resources Board Executive Order, Engine Model Summary Template, vehicle registration card, photos of equipment with equipment identification number, and the like, and monitoring logs and reports.
- C. Submit pre-construction survey for nesting birds to Engineer as required by Protection of Nesting Birds Article of this Section.

1.4 DEPARTMENT DIESEL FUEL REQUIREMENTS

- A. Project shall require diesel-fueled off-road equipment to use renewable diesel in conformance with CARB regulations.
- B. When possible, use renewable diesel instead of conventional diesel for on-road diesel vehicles.

## 1.5 DEPARTMENT EQUIPMENT REQUIREMENTS

## A. On-Road Trucks:

1. On-road trucks, including import haulers, used during the construction phase of the proposed Project shall meet or exceed CARB on-road vehicle emission requirements unless Contractor is able to provide proof that any of these circumstances exist:
  - a. On-road truck used in the proposed Project has received an exemption from CARB.
  - b. On-road truck is not subject to current CARB regulatory requirements.
2. Trucks hauling materials such as debris or fill materials shall be fully covered to prevent unintentional discharge of materials onto roads, highways, streets, and the like while operating off Department property.
3. Idling shall be restricted to a maximum of 5 minutes when not in use.
4. A copy of each unit's certified EPA rating, BACT documentation, and CARB or South Coast Air Quality Management District (SCAQMD) operating permit and/or compliance certification to applicable regulations shall be provided at the time of mobilization of each applicable unit of equipment.
5. For duration of Project, report trucks subject to CARB truck reporting requirements as part of Contractor's fleet of vehicles, not as part of Department's fleet of vehicles.

## B. Diesel Powered Off-Road Construction Equipment:

1. Diesel powered off-road construction equipment is defined as any self-propelled land vehicle used for construction purposes, including earth movers, using diesel fuel, having a manufacturer's maximum gross vehicle weight rating of 6,000 pounds (2,721.5 kg) or more, with a power rating greater than or equal to 25 horsepower (hp).
2. Shut down engines on construction equipment when not in use for more than 5 minutes.
3. Place drip pans under parked equipment where feasible.

4. Construction equipment shall incorporate, where feasible, emissions-savings technology such as alternative fuels, hybrid drives, and specific fuel economy standards.
5. Equipment Engine Specifications:
  - a. Off-road diesel-powered construction equipment greater than or equal to 25 hp shall meet Tier-4 off-road emission standards and/or CARB requirements. Use the emission standard that has the least amount of allowable emissions for this type of equipment.
6. The above Equipment Engine Specifications measures shall be met, unless one of the following circumstances exists, and Contractor is able to provide proof that any of these circumstances exist:
  - a. A piece of specialized equipment is unavailable within 200 miles of Port of Los Angeles, including through a leasing agreement.
    - 1) If this circumstance exists, the equipment must comply with one of the options contained in the Step Down Schedule as shown in Table A of this Section. At no time shall equipment meet less than the current CARB requirements.
  - b. Reassess the availability of construction equipment on an annual basis. For example, if a piece of equipment is not available prior to December 31, 2018, Contractor shall reassess this availability on January 1, 2019.

Table A: Compliance Step Down Schedule

| Compliance Alternative                                                               | Engine Standard | CARB-Verified DECS | PM Emissions* g/bhp-hr | NOx-Emissions g/bhp-hr |
|--------------------------------------------------------------------------------------|-----------------|--------------------|------------------------|------------------------|
| 1                                                                                    | Tier 4          | N/A                | 0.01                   | 0.3                    |
| 2                                                                                    | Tier 3          | Level 3            | 0.02                   | 2.9                    |
| 3                                                                                    | Tier 2          | Level 3            | 0.02                   | 4.47                   |
| Equipment less than Tier 2 or lower than current CARB requirements is not permitted. |                 |                    |                        |                        |

\*Stated emission levels are for engine horsepower ratings of 176 bhp and above. Emission levels for engine bhp ratings below 176 hp are marginally higher. (0.02-0.08 g/bhp-hr depending on hp, Tier and VDEC level)



7. Provide a copy of each unit's certified EPA rating, Verified Diesel Emission Control Strategy (VDECS), proof of use of renewable fuels, and CARB or SCAQMD operating permits and compliance certificates to applicable regulations at time of mobilization of each applicable unit of equipment.
8. Show proof of compliance with the In-Use Off-Road Diesel Regulation for Contractor and subcontractor off-road diesel-powered fleet prior to commencing Work.
9. For duration of Project, report off-road diesel-powered equipment subject to CARB reporting requirements as part of Contractor's fleet of vehicles, not as part of Department's fleet of vehicles.

C. Fugitive Dust Control:

1. Water active grading sites at a maximum of 2-hour intervals to control fugitive dust. Applies to sites when vehicles or equipment is in the process of ground disturbance activities. Maintain the soil in a moist condition when not actively working such as nights, weekends, and holidays to prevent fugitive dust from leaving Project Site. In the event a more restrictive site-specific fugitive dust control requirement is needed or regulated, the site-specific requirement shall govern.
2. Apply approved non-toxic chemical soil stabilizers to inactive construction areas or replace groundcover in disturbed areas.
3. Provide temporary wind fencing around sites being graded or cleared.
4. Suspend soil disturbance activities when winds exceed 25 miles per hour (mph) or when visible dust plumes emanate from a Project Site. Stabilize disturbed areas if construction is delayed.
5. Cover open storage piles (greater than 3 feet tall and a total surface area of 150 square feet) with a plastic tarp or chemical dust suppressant.
6. Haul waste materials off-site immediately.
7. Pave road and road shoulders where feasible.
8. Sweep streets at the end of each day if visible soil is carried onto paved roads on-site or roads adjacent to Project Site(s) to reduce fugitive dust emissions.

9. Appoint a construction relations officer to act as a community liaison concerning on-site construction activity, including resolution of issues related to PM 10 generation.
10. Refer to REGULATORY REQUIREMENTS and SITE CONDITIONS Sections for additional requirements.

#### 1.6 PROTECTION OF NESTING BIRDS

- A. To comply with state and federal laws protecting nesting birds, Contractor shall have a qualified biologist conduct pre-construction surveys for nesting birds before any construction activity that disturbs vegetation, trees, or soil is performed between February 1st and September 15th. Conduct pre-construction survey within 1 week prior to vegetation, tree, or soil disturbing activity.
  1. The minimum professional qualifications for biologist are a graduate degree in ornithology, wildlife biology, vertebrate field biology, or a closely related field, in addition to:
    - a. At least 3 years of professional experience studying birds and performing nest surveys;
    - b. At least 1 year of experience in coastal Southern California, including sufficient local field experience in identification of flora or fauna, particularly rare, endangered, and threatened species, with knowledge of their local and range-wide population status and trends.
- B. Contractor shall provide and pay for the services of the biologist as required for Project.
- C. If a project includes a federal/state-listed endangered, threatened, or other special-status species, the qualified biologist shall also possess the applicable Endangered Species Act Section 10(a)(1)(A) recovery permit. If such a recovery permit does not exist for the species of concern, the qualified biologist's previous experience shall include at least 3 years documentable experience monitoring or managing projects that include this specific species.
- D. Biologist shall determine during pre-construction survey if deterrents are necessary to prevent future nesting. Contractor shall install deterrents as directed by Engineer.

- E. If nesting birds are detected, Contractor shall implement no-disturbance buffers until the nests have fledged. The size of the buffers shall be based on the judgment of a qualified biologist. The biologist shall determine the buffer based on the species ecology, its tolerance to disturbance, and the type of construction activity that is occurring. Conduct periodic monitoring to ensure the nest is not disturbed. The biologist shall recommend a monitoring schedule subject to approval by Engineer.
- F. If a potentially active nest is encountered during construction, Contractor shall immediately cease Work in the area and immediately notify Engineer of the discovery. Contractor shall not resume Work in the area until after consultation with a qualified biologist and directed to do so by the Engineer. When Contractor is directed to resume construction, such operations shall be conducted as directed by Engineer.
- G. Applicable laws include but are not limited to Federal Migratory Bird Treaty Act; Fish and Game Code (FGC) FGC Division 4 Part 2 Chapter 1 - 3503 and 3503.5.

PART 2 – PRODUCTS – NOT USED

PART 3 – EXECUTION – NOT USED

END OF SECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Basic site materials, methods, and requirements to locate, protect, repair, remove, replace, and dispose of existing surface and subsurface conditions and improvements at Project Site(s), including existing utilities, structures, and substructures.
- B. Basic materials and methods common to new Project Site(s) construction.

1.2 RELATED SECTIONS

- A. Section 02 41 13 - Selective Site Demolition
- B. Section 02 61 14 - Excavating, Stockpiling, and Disposing of Chemically Impacted Soil

1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for Work of this Section shall be paid under the corresponding bid items of Bid Proposal Line Items.

1.4 REFERENCES

- A. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)).
- B. ASTM D6938 - Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).
- C. Reference Specifications (RS):
  - Section 201 - Concrete, Mortar, and Related Materials
  - Section 306 - Open Trench Conduit Construction
    - Subsection 306-3.3 - Removal and Abandonment of Existing Conduits and Structures

Section 401 - Removal

Subsection 401-2 - Asphalt Concrete Pavement

Subsection 401-3.1 - Concrete Pavement

1.5 EXISTING SUBSURFACE CONDITIONS

- A. Locations of existing pipelines, utilities, and substructures shown on Drawings are approximate only.
- B. Keep existing services and facilities in operation except when Engineer permits shutdown in writing, and then only after temporary services have been provided.
- C. Refer to SITE CONDITIONS Section for additional requirements.

PART 2 - PRODUCTS

2.1 CEMENTITIOUS SLURRY MATERIAL

- A. Cement-Sand Slurry: Class 100-E-100 in conformance with RS Subsection 201-1.3.3, Table 201-1.3.3.
- B. Concrete for High Voltage (Greater than 600 volts) Encasement: Concrete shall be Class 450-C-2000 in conformance with RS Subsection 201-1.3.3, Table 201-1.3.3, red tinted with 5 pounds liquid equivalent of MasterColor (formerly Rheocolor L) Liquid coloring admixture as manufactured by Master Builders Solutions or similar coloring product approved by Engineer.

PART 3 – EXECUTION

3.1 VERIFICATION OF SITE CONDITIONS

- A. Notify Underground Service Alert 2 working days prior to commencing demolition, excavating, trenching, drilling, or similar underground Work.
- B. Contact owners of existing lines and substructures that may interfere with Work.

- C. Determine and mark locations of substructures not marked by owners. In addition to the substructure information shown on Drawings, maps and reference drawings showing record locations of substructures are available for review in the office of Engineer. Department neither belongs to Underground Service Alert nor participates in its activities. Department does not mark substructures in the field.
- D. Hand-dig excavations to design depths where alignments shown on Drawings occur within 5 feet radially of existing utilities. Hand-dig until the existing utility is located.

### 3.2 PROTECTION OF EXISTING FACILITIES

- A. Protect existing facilities adjacent to Work to avoid damage. Repair or replace existing structures and improvements located above or below ground which are damaged or removed as a result of Contractor's operations wherever such existing improvements are not specifically designated to be permanently removed. Structures to protect and repair include, but are not limited to, asphalt concrete and concrete pavement, pipelines, wires, cables, electrical pull boxes, conduits, vaults, and maintenance holes. Repairs and replacements shall be made at Contractor's sole cost and expense and shall be equal to existing improvements and shall match existing in finish and dimension.
  - 1. Replacement asphalt concrete pavement shall be 1 inch greater in thickness than the existing pavement that was removed.
  - 2. Damaged Pipelines:
    - a. Replace damaged pipeline section(s) up to and including the joints at the end of the damaged section(s).
    - b. Replace damaged joint materials.
- B. Place barricades and install warning lights around excavations.
- C. Exercise extreme caution when working in the vicinity of existing power poles and light poles designated to remain. Support Department of Water and Power and other utilities' poles and guy wires as occur adjacent to excavations in conformance with the requirements of the utility owning the pole.

### 3.3 BASIC PAVEMENT REMOVAL METHODS

- A. Perform asphalt concrete pavement removal in conformance with RS Subsection 401-2 and, where the removal line shall be a join line, saw cut line to full depth to provide a butt joint.
- B. Concrete pavement removal shall conform to RS Subsections 401-3.1, except that the saw cut shall be made to a depth of 3 inches. Assume that concrete slabs are reinforced.
- C. Removal Work performed beyond the lines and grades shown on Drawings, or beyond limits described in excavation and demolition submittal approved by Engineer, shall be considered to be unauthorized and at the sole cost and expense of Contractor. Engineer may order Contractor to restore such removals in conformance with Protection of Existing Facilities Article of this Section.

### 3.4 BASIC BACKFILL AND COMPACTION METHODS

- A. Earth soil compaction shall be 95 percent relative compaction for top 12-inches and 90 percent relative compaction below that unless indicated otherwise on Drawings or Specifications. Exceptions:
  - 1. Compaction recommendations from Project geotechnical report.
  - 2. Soil requiring 95 percent compaction throughout as required by City of Los Angeles Building Code, Chapter 70 "Fills" Section, as determined and directed by Engineer.
- B. Jetting and flooding is not permitted for compaction of trench backfill. Mechanical compaction of soil is required.
- C. Removal areas 5 feet by 5 feet or less and surrounded by pavement to remain in place on 3 or 4 sides shall be backfilled with cement sand slurry up to the bottom of proposed pavement.

### 3.5 FIELD QUALITY CONTROL

- A. Tests and Inspections:
  - 1. Engineer shall take samples of the soil to be compacted to determine the optimum moisture content and maximum dry density of the soil in conformance with ASTM D1557.

2. Department shall perform field testing of compacted soil in conformance with American Society for Testing and Materials (ASTM International) standards, including ASTM D6938 (nuclear methods). Department shall perform compaction tests, 1 time, at no expense to Contractor.  
Department shall perform retests required due to inadequate compaction at Contractor's sole cost and expense. Contractor shall allow 2 working days in construction schedule for tests to be run and results to be furnished.
  - a. Make requests for testing 24 hours in advance through Engineer.

### 3.6 INTERFERING SUBSTRUCTURES

- A. Consult Engineer immediately for directions whenever substructures not shown on Drawings interfere with or affect Work. Contractor shall propose means and methods to Engineer to deal with the interferences. Engineer shall make final decision on method of correction or protection to be used.
1. If interfering substructures must be removed, the following shall be done before removing or cutting the substructures:
  - a. Tap the line and determine if the line contains any kind of liquid or gaseous material.
  - b. If storm drain or sewer lines are empty or filled with concrete or mud slurry, lines may be cut, removed, and capped or plugged, in conformance with RS Subsection 306-3.3.
  - c. Test conductors in conduits appearing to be abandoned and verify that conductors are de-energized. Remove de-energized conductors. Report energized conductors to Engineer and cease removal Work until Engineer authorizes Work to resume.
  - d. Consult Engineer for methods of handling other substructures.
  - e. Notify Engineer to identify contents of unknown line if it is found to contain liquid or gaseous material. Remove contents and dispose in conformance with applicable regulations. Such Work shall be considered a Change in Work and payment shall be determined in conformance with GENERAL CONDITIONS Section.



- f. Test pipeline coatings for asbestos-containing materials (ACM) or other toxic substances. Remove, handle, and dispose of hazardous pipeline coatings in conformance with applicable regulations. Such Work shall be considered a Change in Work and payment shall be determined in conformance with GENERAL CONDITIONS Section. A description of Work shall be submitted to Engineer when Work is complete.
2. Evacuated lines or remaining portions of abandoned lines shall be capped or removed as described in this Article for empty lines.

### 3.7 OWNERSHIP AND DISPOSAL

- A. Asphalt concrete and other bituminous pavement, concrete rubble, unreinforced concrete, rocks, concrete masonry, and reinforced concrete demolished at Project Site(s) shall become property of Contractor and shall be recycled in conformance with Contractor's Waste Management Plan (WMP) as described in CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT Section of Specifications.
  1. The following materials shall be disposed of as specified in Paragraph 3.7B of this Article: Bricks; concrete-filled steel posts; heavily reinforced concrete items, such as concrete piles, concrete railroad ties, creosote-contaminated asphalt concrete cold millings from between railroad tracks with timber ties, and wire-mesh-reinforced concrete.
- B. Materials to be removed other than those shown on Drawings to remain or be salvaged, or listed in Salvage Article of SELECTIVE SITE DEMOLITION Section, shall become the property of Contractor and shall be disposed of off Department property in conformance with Contractor's Waste Management Plan.

### 3.8 CHEMICALLY IMPACTED SOIL

- A. Refer to EXCAVATING, STOCKPILING, AND DISPOSING OF CHEMICALLY IMPACTED SOIL Section.

### 3.9 MAINTENANCE AND REPAIR

- A. Unpaved access roads servicing Project may become unstable during rainy weather. Maintain unpaved access roads to allow passage of Contractor's as well as Department's trucks and passenger vehicles at Contractor's sole cost and expense.
- B. Maintain continuity and integrity of permanent fences and temporary construction fences. Immediately replace fence sections damaged or missing during construction prior to close of the regular working day upon which damage occurred.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Selective demolition and removal Work including disposal but not limited to the following:
  - 1. Concrete demolition and removals
  - 2. Asphalt concrete and concrete pavement removals
  - 3. Curbs, ramps, gutters, driveways, and sidewalks removals
  - 4. Railroad track and ties removals
  - 5. Chain-link fencing and related footings removals
  - 6. Guard posts and related footings removals
  - 7. Sign posts and related footings removals
  - 8. Pavement markings removals
  - 9. Wheel stops removals
- B. Develop waste management plan in conformance with CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT Section.

### 1.2 RELATED SECTIONS

- A. Section 02 00 01 - Basic Site Materials and Methods
- B. Section 31 00 00 - Earthwork
- C. Section 31 50 01 - Excavation Safety Requirements

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for Work of this Section shall be paid under the Miscellaneous Demolition and Removals Allowance bid item of Bid Proposal Line Items.

#### 1.4 REFERENCES

- A. 29 CFR 1926.200 - Accident prevention signs and tags.
- B. ANSI Z535.5 - Safety Tags and Barricade Tapes (for Temporary Hazards).
- C. Reference Specifications (RS):

Section 306 - Open Trench Conduit Construction

#### 1.5 SUBMITTALS

- A. Procedures, equipment to be used, and operational sequences.
- B. Submit prior to start of Work photographs of existing damage to structures adjacent to but not a part of Work where such damage could be misconstrued as caused by Contractor.

#### 1.6 TRAFFIC MAINTENANCE

- A. Refer to REGULATORY REQUIREMENTS Section.

#### 1.7 SALVAGE

- A. No on-site sale of salvage shall be allowed. No removals shall be made from Project Site(s) by any person other than Contractor or employees of Contractor.
- B. Refer also to CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT Section for other requirements.

#### 1.8 ENVIRONMENTAL REQUIREMENTS

- A. Refer to REGULATORY REQUIREMENTS and COORDINATION Sections for South Coast Air Quality Management District (SCAQMD) notification and permit requirements.

### PART 2 - PRODUCTS

#### 2.1 BACKFILL MATERIALS

- A. Fill, where required for backfill of voids, shall be in conformance with EARTHWORK Section.

## PART 3 - EXECUTION

### 3.1 DEMOLITION AND REMOVALS

- A. Removal Work shall not exceed the limits shown on Drawings.
- B. Control dust in conformance with REGULATORY REQUIREMENTS Section.
- C. Items not shown on Drawings or mentioned in Specifications, which are encountered during Contractor's operations shall be brought to the attention of Engineer. Engineer shall determine the disposition of the items.
- D. Obtain permission from Engineer and terminal manager, if need arises, to traverse adjacent portions of the terminal or other properties with outriggers, swinging cranes, or other heavy equipment. Refer to SITE CONDITIONS Section, Contractor's Use of Site Article.
- E. Should Contractor decide to move any large items intact off Project Site(s), Contractor shall make arrangements for permits, clearances, and utilities.
- F. Remove vermin infested and harmful materials from Project Site(s). Dispose of materials in conformance with applicable health regulations to protect workers, tenants, and the public.
- G. Perform demolition and removals under Engineer's inspection in conformance with applicable safety standards and requirements.
- H. Burning of material on-site is prohibited.
- I. No debris shall be allowed to enter harbor waters.
- J. Perform pavement removals in conformance with BASIC SITE MATERIALS AND METHODS Section.
- K. Repair or replace surface and subsurface improvements removed or damaged as a result of Contractor's operations in conformance with BASIC SITE MATERIALS AND METHODS Section.

### 3.2 SAFETY AND PROTECTION

- A. Protect existing buildings, substructures, and other improvements within and adjacent to Project Site(s) in conformance with BASIC SITE MATERIALS AND METHODS and EXCAVATION SAFETY REQUIREMENTS Sections.

- B. Provide, erect, and maintain barriers, barricades, lighting, and guard rails as required to protect general public, workers, and adjoining properties.
- C. Cease operation and notify Engineer immediately if demolition appears to endanger life, facilities, or property. Do not resume operations until safe conditions have been restored.
- D. Post hazard warning signage compliant with requirements of 29 CFR 1926.200 and recommendations of ANSI Z535.5 at perimeter fence. Promptly remove signage after Engineer verifies that demolition hazards no longer exist.
- E. Refer to REGULATORY REQUIREMENTS Section for additional requirements in the event that hazardous wastes are discovered.

### 3.3 OWNERSHIP AND DISPOSAL

- A. Refer to BASIC SITE MATERIALS AND METHODS Section for requirements concerning ownership and disposal criteria for demolished materials.

### 3.4 BACKFILL EXCAVATIONS

- A. Mechanically backfill voids in subgrade areas in conformance with BASIC SITE MATERIALS AND METHODS Section.

### 3.5 CONDUIT AND SUBSTRUCTURE ABANDONMENT

- A. Interfering conduits and substructures not shown on Drawings shall be handled in conformance with BASIC SITE MATERIALS AND METHODS Section.
- B. Seal conduits, storm drain, and sanitary sewer pipes where abandonment is required on Drawings in conformance with RS Subsection 306-3.3. Refer to Drawings for capping of other underground pipes.

### 3.6 TOXIC MATERIAL REMOVALS

- A. Dispose of creosote, pentachlorophenol, or ACZA-containing materials, including timber power poles and railroad ties, in conformance with REGULATORY REQUIREMENTS Section. Unless indicated otherwise on Drawings or reference drawings, assume timber railroad tie spacing at 19 1/2 inches on center for existing track system embedded in asphalt concrete.

3.7 HIGH VOLTAGE POWER POLES

- A. Refer to BASIC SITE MATERIALS AND METHODS Section for Work around existing power poles and light poles.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Procedures and requirements to crush rubble

### 1.2 RELATED SECTIONS

- A. Section 01 74 20 - Construction and Demolition Waste Management

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:

1. Crush Rubble: Measurement shall be in cubic yards. The quantity shall be calculated from a Department survey of crushed miscellaneous base (CMB), copies of which shall be made available to Contractor. No corrections shall be made for internal voids inherent in and normally present in CMB when stockpiled. Include the cost for Work required by Materials and Crushing Articles of this Section. Payment shall be paid under the Crush Rubble bid item of Bid Proposal Line Items.
2. Break Oversize Rubble: Measurement shall be in cubic yards. Oversize rubble as defined by Paragraph 3.2A.6 of this Section shall be measured after crushing and breaking. Include the cost for Work required by Paragraph 3.2B of this Section in the bid price. Payment shall be paid under the Break and Crush Oversized Rubble bid item of Bid Proposal Line Items.
3. Load Checker: Payment shall be paid under the Loader and Operator bid item of Bid Proposal Line Items.
4. Water Truck: Payment shall be paid under the Water Truck (4,000-Gallon Capacity) and Operator bid item of Bid Proposal Line Items.
5. Trash: Trash generated by crushing Work shall be paid under the Dispose of Trash Generated by Crushing Rock bid item of Bid Proposal Line Items.
6. Steel Tire Cleaner (Rumble Plates): Payment shall be paid under the Steel Tire Cleaner (Rumble Plates) bid item of Bid Proposal Line Items.



## 1.4 REFERENCES

- A. ASTM D75 - Standard Practice for Sampling Aggregates.
- B. ASTM D3665 - Standard Practice for Random Sampling of Construction Materials.
- C. Reference Specifications (RS):

Section 200 - Rock Materials

Subsection 200-2.4 - Crushed Miscellaneous Base

Subsection 200-2.4.1 - General

Subsection 200-2.4.2 - Grading

## 1.5 QUALITY ASSURANCE

- A. CMB shall be tested by Department. Sampling shall be performed in conformance with ASTM D75 and ASTM D3665.
- B. CMB shall be tested for the parameters listed in RS Subsection 200-2.4.

## PART 2 – PRODUCTS

### 2.1 MATERIALS

- A. CMB shall conform to RS Subsection 200-2.4, fine gradation.

## PART 3 - EXECUTION

### 3.1 LOAD CHECKER

- A. Provide a load checker equipped with a cellular telephone. Duties of load checker shall include but are not limited to the following:
  - 1. Monitor activities during Department's regular weekday working hours (7:00 a.m. to 5:30 p.m.) including opening and closing gate as needed for Project Site management and coordination with Department personnel.
  - 2. Secure and control ingress and egress to Project Site and ensure unsuitable materials are not brought on Project Site.
  - 3. Accept rubble from other contractors directed by Department to deliver rubble, and direct the unloading location.

4. Direct loading locations for other contractors directed by Department to pickup CMB.
5. Report to Engineer other contractors that are constantly bringing in oversize rubble or trash.

### 3.2 CRUSHING

#### A. Crush Rubble:

1. Quantity of existing rubble at Project Site stockpile is estimated at 60,000 cubic yards.
2. Issuance of Notice to Proceed based on a minimum of 10,000 cubic yards of existing or new rubble at Project Site, shall precede each mobilization.
3. Perform operations necessary to load and move rubble to crusher, crush and move CMB to stockpile site, and stockpile CMB.
4. Asphalt concrete, portland cement concrete, reinforced concrete, and other suitable material as defined in RS Subsection 200-2.4.1 shall be crushed and stockpiled.
5. Use water spray on crushing equipment for dust control during crushing operations.
6. In general, rubble provided to Contractor shall not exceed 4 cubic feet in volume or 1 foot in thickness. Projected area on any one face shall not exceed 4 square feet with the longest measurement no greater than 3 feet. Rebars in reinforced concrete rubble shall not protrude more than 3 inches beyond the face of concrete. Rubble larger than this shall be considered oversize. Maximum dimensions also apply to concrete wheel stops.
7. Piles of CMB shall be tightly grouped together to provide maximum storage capacity at Project Site. Perform operations as directed by Engineer to facilitate survey.
8. Provide Project Site security for equipment.

#### B. Break Oversize Rubble:

1. Separate and stockpile existing and new oversize rubble.
2. Break oversize rubble into pieces that can be crushed.

C. Dispose Trash (Unsuitable Materials):

1. Existing and new materials unsuitable for incorporation in CMB shall be separated and legally disposed of off Department property in conformance with CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT Section. Dispose of trash at facilities that accept trash generated by the crushing operations. Unsuitable materials may include, but not be limited to, wood, paper, organic materials, reinforcing steel, miscellaneous metal, debris, wire, clay bricks, ceramic tiles, plastic, concrete filled bumper posts, and heavily reinforced concrete items such as concrete piles and concrete railroad ties.
2. Trash does not include concrete, asphalt concrete, dirt, sand, or other fine earth material. Inclusion of significant quantities of such material in trash shall be sufficient reason for rejection of request for payment for such disposal.
3. Load and dispose of trash at the end of each crushing event only when Department's Inspector is present.

D. Mobilization and Demobilization:

1. Arrange for necessary equipment to perform the crushing event. At the direction of Engineer, deliver, and setup equipment at Project Site.
2. Remove the equipment after the crushing event.

3.3 MAINTENANCE AND HOUSEKEEPING

A. Project Site Maintenance:

1. Dress rubble stockpile to maximize storage capacity of Project Site and ensure safe dumping of rubble.
2. Grade Project Site to a uniform slope and fill in potholes and depressions as directed by Engineer.
3. Maintain steel tire cleaner (rumble plates) at the entrance gate and at the access road. Steel tire cleaner shall be 8 feet by 10 feet and be kept free of accumulated soil.
4. Maintain the fire access road, which bisects the primary Project Site. Maintain a 12-foot road around Project Site perimeter.

B. Street Sweeper Services:

1. Provide street sweeping services on Department or public paved streets adjacent to Project as directed by Engineer.

C. Water Truck Services:

1. Sprinkle Project Site surfaces as directed by Engineer.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Design, qualifications, and permit requirements for staging areas and stockpiles, excavating and stockpiling potential chemically impacted soil (potential CIS) and chemically impacted soil (CIS) as directed by Engineer where unexpectedly encountered during performance of Work scope including but not limited to:
  - 1. Personnel qualifications
  - 2. South Coast Air Quality Management District (SCAQMD) permit requirements
  - 3. Safety and health requirements
  - 4. Soil excavation requirements
  - 5. Soil staging and stockpiling requirements
  - 6. Soil sampling, characterization, testing, and profiling requirements
  - 7. Air emission monitoring requirements
  - 8. Stormwater runoff control requirements
  - 9. Leachate and stormwater collection and disposal requirements
  - 10. Backfill requirements
  - 11. Disposal or recycling facility acceptance and manifest requirements
  - 12. Transportation requirements
  - 13. CIS loading and unloading requirements

### 1.2 RELATED SECTIONS

- A. Section 02 00 01 - Basic Site Materials and Methods
- B. Section 02 41 13 - Selective Site Demolition
- C. Section 31 00 00 - Earthwork

### 1.3 PRICE AND PAYMENT PROCEDURES

A. The following shall be considered incidental to Work described in each bid item and no additional payment shall be made for the following Work:

1. Staging area construction including construction, inspection, and maintenance of soil cells and stockpiles.
2. Air quality monitoring and other CIS and potential CIS Work area maintenance.
3. Stormwater best management practices.
4. Sampling, characterizing, testing, and profiling associated with CIS and potential CIS disposal.
5. Sampling, characterizing, and disposing of Contractor's waste materials and decontamination of Contractor's equipment and disposal of decontamination wash water associated with CIS and potential CIS excavating, stockpiling, and disposal.
6. Loading, hauling, and unloading of soil to and from excavation and stockpile sites.
7. Disposing of Work and staging area materials.
8. Permits.
9. Documentation.

B. Measurement and Payment:

1. Unforeseen Contaminated and Hazardous Soil and Groundwater (Allowance): Payment shall be made on either a negotiated lump sum basis or a time-and-materials basis for any portion of Work described in this Section that is authorized in writing by Engineer and shall be paid for under the Unforeseen Contaminated and Hazardous Soil and Groundwater bid item of Bid Proposal Line Items.

EXCAVATING, STOCKPILING, AND  
DISPOSING OF CHEMICALLY  
IMPACTED SOIL

2. Quantities of disposed CIS shall be measured by the tonnage shown on weigh tickets from the disposal or recycling site. Quantities shall be paid for under 1 or more of the following bid items based upon Engineer's characterization of CIS:
  - a. Excavate, Stockpile, and Dispose of Soil Material (Less Than or Equal to 1,000 Cubic Yards Per Order): The quantity of soil material excavated, stockpiled, hauled away, and disposed of off Department property measured in cubic yards from Project Site. Payment shall be made under the Excavate, Stockpile, and Dispose of Soil Material (Less Than or Equal to 1,000 Cubic Yards Per Order) bid item of Bid Proposal Line Items.
  - b. Excavate, Stockpile, and Dispose of Soil Material (Greater Than 1,000 Cubic Yards Per Order): The quantity of soil material excavated, stockpiled, hauled away, and disposed of off Department property measured in cubic yards from Project Site. Payment shall be made under the Excavate, Stockpile, and Dispose of Soil Material (Greater Than 1,000 Cubic Yards Per Order) bid item of Bid Proposal Line Items.
  - c. Excavate, Stockpile, and Dispose of Non-Hazardous Waste Soil: The quantity of non-hazardous waste soil excavated, stockpiled, characterized, hauled away, and disposed of off site at a licensed and Class I lined landfill acceptable to Department measured in tons. Payment shall be based on tonnage tickets from disposal facility accompanied by waste manifest signed by receiving disposal facility. Payment shall be made under the Excavate, Stockpile, and Dispose of Non-Hazardous Waste Soil bid item of Bid Proposal Line Items.
  - d. Excavate, Stockpile, and Dispose of Non-Hazardous Waste Soil with PCBs Less than 50 PPM: The quantity of non-hazardous waste soil with polychlorinated biphenyls (PCBs) less than 50 parts per million (PPM) excavated, stockpiled, characterized, hauled away, and disposed of off Project Site(s) at a licensed and Class I lined landfill acceptable to Department measured in tons. Payment shall be based on tonnage tickets from disposal facility accompanied by waste manifest signed by receiving disposal facility. Payment shall be made under the Excavate, Stockpile, and Dispose of Non-Hazardous Waste Soil with PCBs Less than 50 PPM bid item of Bid Proposal Line Items.

EXCAVATING, STOCKPILING, AND  
DISPOSING OF CHEMICALLY  
IMPACTED SOIL

- e. Excavate, Stockpile, and Dispose of Resource Conservation and Recovery Act (RCRA) Hazardous Waste Soil: The quantity of RCRA hazardous waste soil material excavated, stockpiled, characterized, hauled away, and disposed of off Project Site(s) at a Class I lined landfill facility that accepts RCRA hazardous waste soil measured in tons. Payment shall be based on tonnage tickets from disposal facility accompanied by waste manifest signed by receiving disposal facility. Payment shall be made under the Excavate, Stockpile, and Dispose of Resource Conservation and Recovery Act (RCRA) Hazardous Waste Soil bid item of Bid Proposal Line Items.
  - f. Excavate, Stockpile, and Dispose of California Hazardous (Non-RCRA) Waste Soil: The quantity of California hazardous non-RCRA waste soil material excavated, stockpiled, characterized, hauled away, and disposed of off Project Site(s) at a Class I lined landfill facility that accepts California hazardous waste soil measured in tons. Payment shall be based on tonnage tickets from disposal facility accompanied by waste manifest signed by receiving disposal facility. Payment shall be made under the Excavate, Stockpile, and Dispose of California Hazardous (Non-RCRA) Waste Soil bid item of Bid Proposal Line Items.
- 3. Cubic yard quantities of potential CIS approved by Engineer for use as fill shall be determined by Engineer prior to placing the material as fill.
  - 4. Quantities of leachate and contaminated stormwater liquids shall be measured by the number of gallons shown on the tickets from the disposal or recycling facility. Quantities shall be paid for under the Unforeseen Contaminated and Hazardous Soil and Groundwater bid item of Bid Proposal Line Items based upon Contractor's characterization of liquids approved by Engineer.
  - 5. If CIS or potential CIS is excavated beyond the limits set by Engineer, associated costs for excavation, stockpiling, loading, transporting, and disposing of such CIS or potential CIS shall be at Contractor's sole cost and expense.
  - 6. CIS and potential CIS payable quantities are subject to reduction if improperly covered stockpiles are exposed to rainfall, wind erosion, and blowing wind which could result in a public health problem.



#### 1.4 REFERENCES

- A. 8 CCR 5192 - Hazardous Waste Operations and Emergency Response.
- B. 22 CCR Division 4.5 - Environmental Health Standards for the Management of Hazardous Waste.
- C. 29 CFR 1910 - Occupational Safety and Health Standards.
- D. 40 CFR - Protection of Environment.
- E. 40 CFR 761 - Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution In Commerce, And Use Prohibitions.
- F. 49 CFR - Transportation.

#### 1.5 ABBREVIATIONS

- A. HAZWOPER: Hazardous Waste Operations and Emergency Response
- B. PCB: Polychlorinated biphenyl
- C. RCRA: Resource Conservation and Recovery Act
- D. TSCA: Toxic Substances Control Act

#### 1.6 SUBMITTALS

- A. Submit the following to Engineer prior to starting Project excavation or earthwork:
  - 1. Contractor's qualifications for handling and disposing of CIS, environmental sampling, sample collection and handling, sample preservation and storage, decontamination, and chain of custody procedures including applicable certificates, licenses, personnel training records, and HAZWOPER training certificates (including current 8-hour annual refresher certificates, if applicable) for each person working on Project Site(s).
  - 2. Credentials of project manager and Project Site(s) superintendent or foreperson for excavating, stockpiling, and disposing of CIS.

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3. Sketch of stockpile design including foundation material with method of protecting liner against liner equipment damage, liner thickness, berm materials and height, and spacing of toe of stockpile to berm, cover material and thickness, and sand bag layout. The design and construction of the containment area shall be in conformance with regulatory requirements.
- B. Submit the following to Engineer prior to starting potential CIS excavating and stockpiling Work:
1. Sketch of proposed location(s) on Project Site(s) of temporary storage cells showing also distances to existing storm drain catch basins and the harbor pier head or shoreline. Show location of storage tanks for leachate and stormwater pumping.
  2. Proposed Project Site(s) Specific Safety and Health Plan in conformance with REGULATORY REQUIREMENTS Section.
  3. Method for equipment decontamination after completion of potential CIS and CIS Work. Include structural best management practices (BMPs) such as rumble plates and bermed wash down area. Refer to REGULATORY REQUIREMENTS Section, Construction General Stormwater Permit and Stormwater Pollution Prevention Plan (SWPPP) Article for more information. Include wheel washer locations at stockpile and excavation sites.
  4. Method for equipment decontamination after completion of PCB Work in conformance with 40 CFR 761.
  5. Sampling procedure, characterization, testing, and profiling plan for CIS and potential CIS.
  6. Sampling procedure and characterization plan for leachate liquids and name of independent test laboratory.
  7. Submit BMPs for containing CIS and wash water within staging area.
  8. Method for maintenance of separate stockpile sites for each excavation site.

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- C. Submit to Engineer during excavating and stockpiling:
  - 1. Documentation of daily potential CIS quantities excavated and CIS quantities stockpiled.
    - a. Laboratory test reports associated with any samples collected at Project Site(s) within 48 hours of receipt of final copies from the laboratory.
    - b. Records of daily calibration and direct readings for instrumentation maintained by Contractor. Submit daily to Engineer.
- D. Submit to Engineer prior to loading and transporting CIS:
  - 1. Name of proposed disposal or recycling facility.
    - a. Depending upon the deposition location, approval from Los Angeles Regional Water Quality Control Board (LARWQCB) may be necessary.
  - 2. Manifest forms prior to initiating transportation of CIS in conformance with Disposal, Acceptance, and Manifest Requirements Article of this Section.
  - 3. Copies of information supplied to the disposal or recycling facility for the purpose of securing acceptance of the waste material.
    - a. Provide final analytical characterization information. Draft data is not acceptable.
  - 4. Waste acceptance pre-approval documentation received from the disposal or recycling facility(s).
  - 5. Results of characterization of liquids collected from behind stockpile berms and from potential CIS excavation locations.
  - 6. Results of characterization of waste material generated during decontamination of equipment.
- E. Submit to Engineer during disposal or recycling of CIS:
  - 1. Waste acceptance documentation received from the disposal or recycling facility (e.g., weight tickets, manifests, certificate of destruction or reuse).

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- F. Submit the following to Engineer after Work is complete:
  - 1. Provide as-built drawings of excavation areas including volume estimates and global positioning system (GPS) location information.
- G. Submit upon Engineer's request:
  - 1. Copy of State of California Contractor's license with hazardous substance removal certification required to excavate, stockpile, and dispose of CIS.
  - 2. Copy of the disposal or recycling facility permit with applicable limits and conditions.

1.7 QUALIFICATIONS

- A. Project Site(s) superintendent or foreperson overseeing Work of this Section shall have not less than 5 years experience in excavating, stockpiling, loading, transporting, and disposing of CIS.
- B. Contractor shall have and maintain plan, programs, training, and medical surveillance requirements under 29 CFR 1910 and 8 CCR 5192. Prepare and implement a Project Site(s) Specific Safety and Health Plan for Contractor employees.
- C. Personnel performing Work at Project Site(s) under this Section shall be 40 hour Occupational Safety and Health Administration (OSHA) health and safety trained, complete with 8-hour annual refresher, supervisor training, respirator fit testing, and other training and certifications required under 29 CFR 1910.

1.8 SEQUENCE OF ACTIVITIES

- A. Submit to Engineer stockpile design and credentials prior to earthwork and trenching Work.
- B. Notify Engineer at least 2 working days before excavation, stockpile, and sampling activities.
- C. Notify Engineer in conformance with this Section and REGULATORY REQUIREMENTS Section of unexpected discovery of potential CIS. Basis of identification:
  - 1. Discolored soil
  - 2. Odoriferous soil

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- D. Confirm existence of CIS or potential CIS with a photo ionization detector (PID) or other devices and tests and determine approximate limits of CIS or potential CIS excavation.
  - 1. Notify Engineer and adjust limits during course of CIS or potential CIS excavation based on periodic Project Site(s) inspections.
- E. Engineer authorizes Contractor to excavate, stockpile, and dispose of CIS. Contractor shall not start CIS or potential CIS excavation without Engineer's written authorization.
- F. Contractor excavates CIS or potential CIS and places in stockpiles conforming to this Section and located in storage cells within staging area location approved by Engineer.
- G. After each storage cell is filled, Contractor samples, characterizes, tests, and profiles material in stockpiles and provides information to Engineer.
  - 1. Contractor samples and characterizes leachates.
  - 2. Sample frequency for potential re-use soil to be used as fill shall be in conformance with Paragraph 3.4 A.4 of EARTHWORK Section.
- H. Contractor continues excavating and stockpiling CIS or potential CIS in accordance with Drawings until Engineer tells Contractor that CIS or potential CIS excavation is complete.
- I. Contractor obtains Engineer's approval of disposal or recycling facility location.
- J. Contractor disposes of CIS at approved off-site disposal location.
- K. Contractor returns approved soil to Project Site(s) as fill or disposes as directed by Engineer.

1.9 WASTE DISPOSAL SERVICE PROVIDERS

- A. The following disposal facilities are acceptable to Department at the time of bid. After Contract is awarded, Contractor may propose additional disposal facilities but Department reserves the exclusive right to reject any proposed facilities for any reason at its sole discretion.
  - 1. RCRA Hazardous and TSCA Waste for Landfill or Treatment:

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- a. Chemical Waste Management - Kettleman Hills, Kettleman City, California
  - b. Clean Harbors Buttonwillow, LLC, Buttonwillow, California (very limited TSCA)
  - c. US Ecology Nevada, Beatty, Nevada
2. Non-RCRA Hazardous (California Haz) Waste for Landfill:
- a. Chemical Waste Management - Kettleman Hills, Kettleman City, California
  - b. Clean Harbors Buttonwillow, LLC, Buttonwillow, California
  - c. US Ecology Nevada, Beatty, Nevada
3. Non-Hazardous Contaminated Waste for Landfill:
- a. Simi Valley Landfill - Waste Management, Simi Valley, California
  - b. Sunshine Canyon Landfill - Republic Services, Sylmar, California
4. Non-Hazardous Contaminated Waste for Thermal Desorption Recycling (non-hazardous TPH contaminated soil):
- a. Soil Safe, Inc., Adelanto, California
5. Treated Weathered Wood Waste (railroad ties, etc.)
- a. Simi Valley Landfill - Waste Management, Simi Valley, California
  - b. Sunshine Canyon Landfill - Republic Services, Sylmar, California

6. RCRA Hazardous Waste Liquid, Non-RCRA (California Haz) Waste Liquid, and/or Non-Hazardous Waste Liquid:
  - a. World Oil Recycling, Compton, California
  - b. Clean Harbors, Wilmington, California

## PART 2 - PRODUCTS

### 2.1 DESIGN REQUIREMENTS

- A. Design staging area as follows:
  1. Staging Area:
    - a. Locate on Project Site(s) as far as possible from storm drain catch basins and from pierhead and harbor shoreline.
    - b. Locate upon existing pavement if sufficient area is available.
  2. Enclose staging area perimeter with 8 foot high temporary chain link fence. Locate storage cells within fenced area. Each cell shall be capable of containing 1 potential CIS or CIS stockpile.
  3. Show location of storage tank for leachate and stormwater retained in CIS excavation.
  4. Include perimeter berm surrounding entire staging area in addition to berms surrounding each stockpile.
- B. Design stockpile system based on materials and equipment specified in PART 2 of this Section as minimum requirements. Adjust according to results of Engineer's characterization if required. Address the following additional considerations:
  1. Foundation: Where staging area must be located on dirt grade, design protection against equipment damage to liners through protective layers inserted above liners.
  2. Liners: Design to prevent cross-contamination of native soil beneath stockpile and to seal berm from migration of leachate and stormwater run off from covered stockpile.

3. Berm: Design to retain leachate from stockpile and stormwater.
  - a. If soil from Project Site(s) are proposed for use in berm construction, do not use potential CIS or CIS.
4. Covers: Design to prevent volatile organic compound (VOC) emissions, rain infiltration, and to be resistant to both wind and VOC emissions damage.

## 2.2 MATERIALS

### A. Sandbags:

1. Fabricate from woven, ultraviolet-resistant materials that are sufficiently close knit to prevent fines from migrating out through the bag, with bags tied tightly closed.
  - a. Burlap bags, if used, shall be lined with plastic.
  - b. Tires and lined paper bags shall not be used.
2. Sand shall be non-CIS, 100 percent passing No. 8 sieve.
3. Each bag shall weigh 40 to 60 pounds when filled.

### B. Storage Cell Foundation:

1. Existing asphalt concrete or concrete pavement.
2. Bare dirt grade condition: Protection to liner shall be minimum, 2 inches sand on 8 ounce per square yard geotextile over liner.

### C. Liners: 60 mil high density polyethylene (HDPE), minimum.

### D. Berm: Minimum height: 12 inches.

### E. Covers: 18 mil polyolefin minimum.

### F. Truck Bed Liners: 3 mil polyethylene, minimum.

## 2.3 EQUIPMENT

- A. Provide and maintain equipment, including health and safety monitoring equipment, dust monitoring equipment, and emission control equipment, necessary to complete this Work scope.



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B. Leachate and stormwater collection and storage:

1. Minimum storage tank capacity shall be 550 gallons.
  - a. Tanks shall have sample ports and minimum 2-inch diameter drain valves to facilitate characterization and disposal of accumulated liquid.

PART 3 – EXECUTION

3.1 INSTALLATION - GENERAL

- A. Contractor shall adequately protect its workers and subcontractors from exposure to CIS and potential CIS.
- B. Use a water truck for dust control during CIS and potential CIS excavating, stockpiling, and loading activities.
- C. Provide hazardous material identification information to personnel involved in equipment handling, shipping, and disposing of potential CIS and CIS.
- D. Use excavating, handling, and loading methods and equipment that minimize disturbance to CIS and potential CIS and to areas beyond the limits of CIS and potential CIS excavation Work.
- E. Obtain and comply with applicable SCAQMD Permits and Rules. Refer to REGULATORY REQUIREMENTS Section.
- F. Material or soil that become contaminated as a result of Contractor's negligent operations shall be removed and recycled or disposed of at no additional cost to Department.
- G. CIS and potential CIS excavating, loading, and hauling equipment shall be decontaminated prior to leaving immediate loading area or Project Site(s) for excavation of non-CIS in conformance with method approved by Engineer.
  1. Waste materials generated during decontamination of equipment shall be recycled and disposed of off Department property in conformance with local, state, and federal regulations and guidelines.
  2. Decontamination records shall be maintained for TSCA-regulated wastes in conformance with 40 CFR.
- H. Handle PCB contaminated soil in conformance with 40 CFR 761.

### 3.2 SOIL EXCAVATION

- A. Segregate potential CIS from non-CIS and place excavated potential CIS in storage cells.
  - 1. Exercise caution during handling and transporting of materials so as not to cross-contaminate surrounding areas.
  - 2. Coordinate with Engineer to obtain characterization and determination of appropriate recycling or disposal options in conformance with local, state, and federal regulations.
  - 3. Place soil confirmed by Engineer to be CIS in different storage cell in staging area than potential CIS.
- B. Notify Engineer immediately in the event that potential CIS is encountered outside the approximate limits previously identified. Segregate suspicious potential CIS in these areas from non-CIS.
- C. Materials generated from the demolition of existing structures, i.e. concrete, asphalt, piping, steel or wood framing and the like, shall be decontaminated, if necessary, prior to recycling or disposal. Such material is not considered CIS and shall be segregated from potential CIS during performance of Work.  
Refer to SELECTIVE SITE DEMOLITION and REGULATORY REQUIREMENTS Sections for additional information.
- D. Stop Work and notify Engineer if free product liquids are encountered during excavation of potential CIS or if groundwater is encountered in a known CIS area.

### 3.3 SOIL STAGING AND STOCKPILING

- A. Construct storage cell(s) for CIS or potential CIS at the staging area location(s) within Project Site(s) limits approved by Engineer.
  - 1. Store excavated CIS or potential CIS in temporary storage cell(s) for 30 days, maximum, prior to transporting to disposal or recycling facility.
  - 2. Create separate storage cells for each distinct area within Project Site(s) where CIS or potential CIS was discovered. Do not mix CIS or potential CIS from separate discovery areas or previously identified CIS areas.

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B. The purpose of the temporary storage cell(s) shall be to:

1. Allow for Department characterization of potential CIS as well as to provide a mechanism to reduce or eliminate air and stormwater pollution from the stockpiles.
2. Prevent CIS or potential CIS from encountering non-CIS.
3. Prevent migration of liquid from surrounding areas into CIS or potential CIS and CIS.
4. Prevent migration of liquid and air emissions from CIS or potential CIS to the surrounding areas.

C. Storage Cell Construction:

1. Install temporary chain link fencing and entrance gates at the perimeter of staging area to prevent unauthorized entry. Install signs on fencing and entrance gate identifying the contents of the temporary storage cells and Contractor's emergency telephone numbers.
2. Storage cell foundation shall consist of existing asphalt concrete or concrete pavement. Obtain Engineer's approval of foundation design for stockpile on exposed dirt grade prior to constructing foundation.
3. Construct perimeter barrier berm around entire staging area.
4. Install temporary plastic liner to ensure that CIS and potential CIS does not contact surrounding materials.
  - a. For bare dirt conditions, remove rocks and other sharp objects greater than 3/4 inch in diameter from dirt prior to placing liners.
  - b. For bare dirt conditions, install sand and geotextile or other membrane as approved by Engineer to protect liner from damage.
  - c. Engineer reserves the right to take samples, beneath Contractor's proposed staging area location before and after creation of stockpiles to verify that adjacent grade has not been cross-contaminated.
5. Install a berm around each of the storage cell(s) sufficient to contain soil, sediment, and liquid, and to prevent stormwater runoff from flowing into or away from stockpiles.

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- a. Extend liner up and over inside and outside faces of berm to prevent migration of liquids under the berm.
  - b. Anchor berm and liner with sandbags.
6. Do not overfill cells with CIS and potential CIS. Maintain minimum of 18 inches from toe of stockpile to inside edge of berm.
7. Keep stockpiles covered with plastic to prevent odors and dust emissions in conformance with applicable local, state, and federal regulations and guidelines.
  - a. Lap plastic to prevent entrance of stormwater into stockpile.
  - b. Remove and replace stockpile covers to allow Engineer access upon request of Engineer.
  - c. Remove stockpile covers to allow Engineer access for sampling upon request of Engineer. Replace covers after Engineer's sampling is complete.
8. Anchorage: Secure berm and liner with sandbags. Secure cover from wind uplift with sandbags regularly spaced from top to bottom of stockpile suspended by ropes or by other method approved by Engineer from top of stockpile. Secure edges of liner and cover. Remove and replace broken sandbags immediately.
- D. Install BMPs approved by Engineer and use decontamination practices that prevent potential CIS from leaving the staging area.
  1. Inspect vehicles prior to leaving the staging area to ensure that no potential CIS adheres to the wheels or undercarriage of equipment.
- E. Inspect stockpiles on a daily basis to verify that stockpiles remain covered in order to prevent odorous and dust emissions in conformance with the terms of SCAQMD permits and other applicable local, state, and federal regulations. Verify emission levels by daily photo ionization detector (PID) monitoring. Replace covers whenever emissions exceed permit requirements or when VOC emission damage or other damage becomes evident.
- F. Repair or replace perimeter controls, liners, or covers as needed, or as directed by Engineer to keep them functioning properly.

- G. Remove sediment and soil coming from stockpile when accumulation reaches 1/3 of the perimeter berm height.

### 3.4 AIR EMISSION MONITORING

- A. Air monitoring shall comply with local, state, and federal regulations and guidelines.
- B. Monitor air quality continuously during excavation operations at potential CIS and CIS locations.
- C. Provide field screening and monitoring equipment to monitor for:
  - 1. Worker safety
  - 2. Air monitoring permit requirements
- D. In conformance with SCAQMD Rule 1166, use a PID, capable of detecting volatile organic vapors to a minimum of 1 part per million (ppm), to assess potential soil contamination levels. Soil with PID readings of 50 ppm or greater (measured at a distance of no more than 3 inches from the surface of the soil material) shall be deemed VOC-impacted soil and shall be excavated and managed in conformance with this Section.
- E. Conform to requirements of SCAQMD Rule 1466. Refer also to REGULATORY REQUIREMENTS Section regarding Rule 1466.

### 3.5 STORMWATER CONTROL

- A. Control perimeter of CIS and potential CIS excavations to prevent stormwater runoff from flowing into or out of excavated areas.
- B. Implement structural stormwater best management practices (BMPs) to divert flows from exposed CIS and potential CIS, temporarily store flows, or otherwise prevent runoff and the discharge of pollutants from CIS and potential CIS excavation areas.
  - 1. Refer to Construction Stormwater Pollution Control and Construction General Stormwater Permit and Stormwater Pollution Prevention Plan (SWPPP) Articles of REGULATORY REQUIREMENTS Section for additional BMP information.

2. Remove accumulated stormwater from potential CIS excavation areas in conformance with Leachate and Stormwater Handling Article of this Section.

### 3.6 LEACHATE AND STORMWATER HANDLING

- A. Remove, store, sample, characterize, and recycle or dispose of stormwater that enters any excavation containing CIS and potential CIS as well as leachate and stormwater collected behind stockpile berms.
- B. Construct collection sumps to facilitate removal of any accumulated stormwater and liquid leachate between toe of stockpile and inside edge of perimeter berms. Locate collection sumps at the low point between each berm and stockpile.
- C. Construct collection sump at low point of CIS and potential CIS excavation locations.
- D. Install transfer pumps in each of the collection sumps and connect piping to temporary storage tank(s) for transfer of accumulated liquid.
- E. Use vacuum truck to collect leachate from stockpiles, stormwater accumulated behind stockpile berms, in potential CIS and CIS excavations, and from temporary storage tanks.
  1. Pump accumulated leachate and stormwater weekly or as directed by Engineer.
- F. Contractor shall obtain characterization of liquids.
- G. Dispose or recycle liquids at location approved by Engineer.

### 3.7 BACKFILL

- A. Soil determined by Engineer to be non-CIS may be considered for reuse within Project Site(s) limits where fill is required. Refer to EARTHWORK Section for information on import fill and excavated soil to be re-used as fill.

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- B. Potential CIS and CIS shall not be used as backfill and shall be properly recycled or disposed of at a disposal facility approved by Engineer.
  - 1. In some cases, Engineer, after receiving approval (if necessary) from applicable regulatory agencies, may determine that some or all of CIS is suitable for reuse within Project Site(s) or on other Department properties. In these cases, Engineer shall direct Contractor concerning locations, methods, and quantities where Contractor shall reuse all or part of CIS.
    - a. CIS to be considered for reuse shall meet the same chemical contamination criteria as for import fill in conformance with EARTHWORK Section.Fea
- C. Under no circumstances shall Contractor blend or mix excavated potential CIS or CIS with other soil or material. Do not add potential CIS or CIS to characterized stockpiles.

3.8 DISPOSAL, ACCEPTANCE, AND MANIFEST REQUIREMENTS

- A. Classification of waste materials shall be in conformance with 40 CFR and 22 CCR Division 4.5.
- B. Obtain written approval from Engineer on the acceptability of the proposed disposal or recycling facility prior to transporting CIS. Depending upon the facility, approval from LARWQCB may be necessary.
- C. Upon receipt of written approval from Engineer and a minimum of 2 working days prior to initiation of soil loading, transporting, and disposing activities, prepare manifests designating the recycling or disposal facility and properly describe the waste in conformance with 49 CFR or 22 CCR Division 4.5 (whichever is applicable) for Engineer's review.
  - 1. Engineer shall notify Contractor of errors or inadequacies, if any.
  - 2. Engineer shall designate a representative to be present during soil loading and transporting activities in order to sign the manifests.
- D. Department of Toxic Substances Control (DTSC) Form 8022A/Environmental Protection Agency Form 8700-22 (California Uniform Hazardous Waste Manifest) is required for manifesting of hazardous waste, unless the receiving state requires otherwise.

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1. Non-hazardous wastes shall be manifested using a non-hazardous waste form. These are usually supplied by the receiving recycling or disposal facility.
- E. Engineer shall supply Generator's U.S.EPA ID Number required on the waste manifest. Refer to REGULATORY REQUIREMENTS Section for additional requirements.
- F. Dispose of CIS in conformance with applicable bid item of Bid Proposal Line Items.
- G. Dispose of soil transported to the temporary storage cell(s) that is determined by Engineer not to be CIS at facility approved by Engineer.

3.9 SOIL TRANSPORTATION REQUIREMENTS

- A. Select transporter with a current DTSC registration certificate, current Certificate of Compliance for vehicles and containers, adequate insurance coverage, and applicable Department of Transportation and Public Utilities Commission licenses.
- B. Comply with Department of Transportation requirements for packaging, labeling, and marking to ensure that the transport vehicles are correctly placarded.
- C. Cover transported materials appropriately to minimize loss of material during transportation due to leaking, spilling, falling, or blowing in conformance with REGULATORY REQUIREMENTS Section.
- D. Transport soil off-site with no free liquids to avoid spillage on roads. Beds of trucks transporting CIS shall be lined and covered.

END OF SECTION



PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Light non-aqueous phase liquid (LNAPL)/water mix skimming, removal, and disposal

1.2 RELATED SECTIONS

- A. Section 02 41 13 - Selective Site Demolition
- B. Section 02 61 14 - Excavating, Stockpiling, and Disposing of Chemically Impacted Soil

1.3 PRICE AND PAYMENT PROCEDURES:

- A. Measurement and Payment:
  - 1. LNAPL/Water Mix Skimming, Removal, and Disposal: Contractor shall furnish transportation, labor, materials, and equipment to skim, remove, and dispose of LNAPL/water mix floating on the groundwater in the excavation areas and convey the recovered LNAPL/water mixture to LNAPL holding tank located onsite or a vacuum truck and shall be paid under the Light Non-Aqueous Phase Liquid (LNAPL)/Water Mix Skimming, Removal, and Disposal bid item of Bid Proposal Line Items.

1.4 DEFINITIONS

- A. LNAPL: Light Non-Aqueous Phase Liquid. A groundwater contaminate that is not soluble and has a lower density than water. Examples of LNAPLs are gasoline and other hydrocarbons.
- B. RCRA: Resource Conservation and Recovery Act
- C. TSDF: Treatment, Storage, and Disposal Facility

1.5 SUBMITTALS

- A. Provide a skimming plan detailing LNAPL skimming equipment, LNAPL storage, and disposal to Engineer for approval prior to start of Work of this Section.
- B. Prior to disposal, verify percentage of LNAPL and submit to Engineer. Submittal shall include the method used to determine LNAPL percentage.

- C. Provide waste profiles for LNAPL/water mixture and any solid waste (e.g. contaminated personal protective equipment) for Engineer's review and approval prior to off-site transportation to a TSDF or recycling facility. Upon acceptance by TSDF and 48 hours prior to waste transportation, provide manifests for Engineer's review and approval.
- D. Provide a detailed summary of waste collected and transported off-site, including the volumes of LNAPL/water mixture sent to each facility, on a weekly basis.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Oil skimmers: Suction skimmers and adhesion skimmers are the 2 main categories of skimmers. The final selection of skimmers and pumps shall be based on the magnitude, thickness, and physical properties of LNAPL/sheen accumulated in the recovery trench.
- B. Vacuum trucks with a capacity of 1,000 gallons or greater, shall be used for removal of LNAPL from excavation areas.

## PART 3 - EXECUTION

### 3.1 LNAPL SKIMMING

- A. Recover LNAPL on the groundwater surface in the excavations by using a floating oil skimmer connected to a vacuum truck. LNAPL removal efficiency shall not be less than 80 percent LNAPLs and higher than 20 percent water content.
  - 1. Contractor shall convey the recovered LNAPL/water mixture to a vacuum truck as specified in this Section.
- B. Contractor shall dispose of recovered LNAPL/water mixture stored in vacuum trucks in conformance with waste regulations and as specified in this Section.
  - 1. As an excavation area expands and a large open water surface is created, Contractor may use absorbent booms to collect and contain LNAPL in one or several manageable areas that are accessible to vacuum trucks.
- C. Contractor may opt to reduce the frequency of LNAPL recovery events.

- D. The selection of skimmers and the operation of the skimmers shall focus on maximizing LNAPL recovery and minimizing the content of water in the mixture.
- E. Contractor shall characterize recovered LNAPL/water mixtures prior to transporting off-site for disposal, but shall assume for bidding purposes that the material shall be characterized RCRA D001 Ignitable.

### 3.2 LNAPL DISPOSAL

- A. Dispose of LNAPL/water mix by transferring the contents of LNAPL storage tanks into a 1,000 gallons or greater capacity vacuum truck.
- B. Transport LNAPL/water to a proper disposal facility, such as Crosby & Overton located at 1610 West 17th Street, Long Beach, California or Industrial Service Oil located at 1700 South Soto Street, Los Angeles, California, or other permitted and approved facility.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Repair materials for damaged galvanizing

### 1.2 RELATED SECTIONS

- A. Section 09 90 01 - Painting for Exterior Improvements
- B. Section 32 31 13 - Chain Link Fences and Gates

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:

- 1. Payment for Work of this Section shall be paid under each corresponding bid item of Bid Proposal Line Items that requires treatment of damaged galvanizing.

### 1.4 REFERENCES

- A. ASTM A780/A780M - Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Materials shall be zinc-based alloys, zinc-rich paints, or sprayed zinc in conformance with ASTM A780/A780M.
- B. The following product is acceptable: Carbozinc 859 VOC manufactured by Carboline Company, (314) 644-1000 or (800) 848-4645.
- C. Products shall be in compliance with South Coast Air Quality Management District (SCAQMD) regulations.

- D. Materials shall comply with City of Los Angeles Green Building Code requirements.
  - 1. Enter product data in VOC Content Verification Checklist form and provide product specification sheets. Make checklist and specifications available to City of Los Angeles Department of Building and Safety inspector through Engineer upon request. VOC Content Verification Checklist can be found here: [https://www.ladbs.org/docs/default-source/forms/green-building-2023/grn\\_2\\_voc\\_content\\_verification\\_checklist-01.17.23.pdf?sfvrsn=19f4c153\\_10](https://www.ladbs.org/docs/default-source/forms/green-building-2023/grn_2_voc_content_verification_checklist-01.17.23.pdf?sfvrsn=19f4c153_10)

### PART 3 - EXECUTION

#### 3.1 REPAIR

- A. Repairs shall be in conformance with ASTM A780/A780M and manufacturer's latest material safety data sheet instructions.
- B. Coating thickness shall be a minimum of 3.0 mils in dry film thickness.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Liquid-applied, non-sacrificial surface sealer at exposed exterior concrete and masonry surfaces

### 1.2 RELATED SECTIONS

- A. Section 09 96 23 - Graffiti-Resistant Coatings
- B. Section 32 13 14 - Concrete for Exterior Improvements

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for Work of this Section shall be paid under each corresponding bid item of Bid Proposal Line Items that requires water repellents.

### 1.4 SUBMITTALS

- A. Product Data: Manufacturer's technical data, application instructions, material Safety Data Sheets (SDS), and published literature stating recommended coverage rates. Include:
  - 1. Instructions and recommendations for cleaning and preparation of surfaces.
  - 2. Coating application techniques.
  - 3. Equipment to be used.
  - 4. Protection of adjacent materials.
  - 5. Recommendations for products and techniques for removing various types of graffiti.
  - 6. Cleaning methods for overspray.
  - 7. Special procedures.
- B. Samples:
  - 1. 18-inch-square sample of each substrate to receive water repellent, with water repellent applied to half of sample.

2. Apply coating on mock-up panel and sample panel for review and approval both for aesthetics and effectiveness, accompanied with a letter stating the actual application rates required to meet warranty requirements.

C. Quality Control:

1. City of Los Angeles Research Report with RR number; RR 25079-T.
2. Statement of applicator qualifications.
3. Post-application inspection report by manufacturer's representative, verifying Work has been applied in conformance with Specifications and manufacturer's written instructions.

D. Closeout:

1. Extra stock as specified.
2. Extended warranty as specified.

## 1.5 QUALITY ASSURANCE

- A. Comply with South Coast Air Quality Management District (SCAQMD) requirements including but not limited to volatile organic compound (VOC) regulations.
- B. Coatings shall be approved by City of Los Angeles City Department of Building and Safety.
- C. Mock-up: Provide minimum 4 feet by 4 feet sample panel for each type of substrate to which water repellent coating shall be applied.
  1. Apply proposed coating over half of substrate.
  2. 5 days after application, in presence of Engineer, flood mock-up with water or use a suitable water-absorption device, to verify that surface shall repel moisture effectively.
  3. Test surface with common waterborne graffiti media, to verify graffiti-repellent qualities and cleanability.
  4. Accepted sample panel shall set standard for finish and quality of Work. Remove sample panel when directed by Engineer.

## 1.6 WARRANTY

- A. Warrant that surfaces treated with water repellent shall be free of defects in materials and workmanship, and that treated surfaces shall remain water repellent. No warranty for graffiti repellency is intended or required.
  - 1. Upon expiration of warranty period, sufficient water repellent shall remain on treated material to reduce water absorption to less than 50 percent of the water absorbed by an untreated sample of the same material in a 24-hour water-absorption test.
  - 2. Where terms of manufacturer's guarantee require, provide a full-time Project Site inspector to supervise application.
- B. Locate and recoat defective Work during warranty period at no cost to Department.
- C. Warranty Period: 10 years.

## 1.7 EXTRA MATERIALS

- A. Provide five 1-gallon cans of graffiti removing compound and 1 hand operated spray applicator to Department for maintenance purposes.

## PART 2 - PRODUCTS

### 2.1 DESIGN AND PERFORMANCE REQUIREMENTS

- A. Water repellent shall not darken, stain, or discolor substrate.
- B. Water repellent shall not change reflectivity of substrate by having a sheen or a gloss when dry.
- C. Water repellent shall be "breathable" and shall permit water vapor to escape from treated concrete, precast concrete, and masonry.
- D. Water repellent shall reduce water absorption of treated substrate to less than 25 percent of water absorbed by an untreated sample of the same material in a 24-hour water-absorption test.
- E. Surfaces treated with water repellent shall resist dark staining and degradation caused by fungal growth, mold, and mildew.
- F. Surfaces treated with water repellent shall resist most graffiti media, and shall permit easy cleaning of most graffiti media.



## 2.2 MATERIALS

- A. Sure Klean Weather Seal Blok-Guard & Graffiti Control II as manufactured by PROSOCO, <https://prosoco.com/>.
  - 1. Coating shall be water-based and VOC-compliant.
  - 2. Coating shall be clear, non-yellowing, weather resistant, and ultra-violet resistant.
  - 3. Coating shall meet requirements of City of Los Angeles RR 25079-T.
- B. Primer (If Required): As recommended by coating manufacturer.
- C. Graffiti-Removing Compound: As recommended by manufacturer of graffiti/ water repellent; Fast Acting Stripper by PROSOCO.
- D. Application Equipment: Low-pressure airless sprayer and hoses as recommended by manufacturer. Pump shall not atomize material.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Surfaces to receive coatings shall be dry, free of dust, dirt, rust, alkali, efflorescence, oil, grease, loose and peeling paint, scale, and other foreign material.
- B. Clean and prepare surfaces to receive coatings in conformance with manufacturer's written instructions.
  - 1. Verify calks, concrete curing compounds, and sealers are fully cured and compatible with the coating.
  - 2. Verify that painted surfaces are fully cured and compatible with coating.
- C. Protect adjacent surfaces against spatter. Take special precautions to cover and protect finished Work.

### 3.2 APPLICATION

- A. Prepare and mix coatings in conformance with manufacturer's written instructions.
- B. Apply coatings when temperature is above 50 degrees F but below 100 degrees F. Do not apply coating if rain is imminent within 24 hours.

- C. Apply coatings using methods and equipment in conformance with manufacturer's written instructions and SCAQMD requirements.
- D. Allow curing time between coats in conformance with manufacturer's written instructions.
- E. Apply over entire exposed exterior concrete masonry surfaces at the buildings, unless otherwise specified or indicated on Drawings.
  - 1. Do not coat cast glass wall assembly.
  - 2. Do not coat glazed concrete unit masonry (Astro-Glaze).
  - 3. Do not apply graffiti-resistant coating over the water repellent coating.  
Since the specified water repellent coating also has graffiti-resistant properties, no graffiti-resistant coatings are required to be applied over the water repellent coating.
- F. Refer to GRAFFITI-RESISTANT COATINGS Section for surfaces that need graffiti resistant coatings.

### 3.3 CLEANING

- A. Clean spillage and overspray from adjacent surfaces in conformance with coating manufacturer's written instructions.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Calking materials
- B. Sealant materials

### 1.2 RELATED SECTIONS

- A. Section 32 13 14 - Concrete for Exterior Improvements

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for Work of this Section shall be paid under each corresponding bid item of Bid Proposal Line Items that requires joint sealants.

### 1.4 REFERENCES

- A. ASTM D1752 - Standard Specification for Preformed Sponge Rubber, Cork, and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction.

### 1.5 SUBMITTALS

- A. Submit samples of materials proposed for substitution for review prior to delivery of materials to Project Site(s). Each sample shall bear manufacturer's name and technical data.

### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver calking and sealant materials to Project Site(s) in original, unbroken, and unopened containers bearing the manufacturer's brand name and statement that material conforms to the specified standard.

### 1.7 WARRANTY

- A. Warranty period specified in GENERAL CONDITIONS Section, shall be extended to 2 years for Work in this Section. Contractor to provide written warranty and file 5 copies of same with Engineer as a prerequisite for final acceptance of Work.

## PART 2 - PRODUCTS

### 2.1 CALKING MATERIALS

- A. Thiokol polysulfide calk shall be provided for joints other than those to receive sealant; including miscellaneous vertical joints, door frames, and elsewhere. Sealant color shall blend with area or material it is sealing or calking.
- B. Calking stop shall be polyethylene having a diameter 25 percent larger than joint.
- C. Oakum shall be made of untarred, picked loose, fine hemp fibers.

### 2.2 SEALANT MATERIALS

- A. For expansion joints, the following shall be used:
  - 1. Filler, plain type for use with elastomeric sealers in conformance with ASTM D1752. Type selected shall be consistent with manufacturer's written instructions with the selected joint sealant.
  - 2. Asphalt Sealant: W.R. Meadows Safe-Seal 3405
  - 3. Portland Cement Concrete Pavement Joint Sealant: Dow Corning 890-SL silicone.
  - 4. Primers, Joint Backing, and Bond Breakers: As recommended in the latest published data sheet of the sealant manufacturer.

### 2.3 CITY OF LOS ANGELES GREEN BUILDING CODE

- A. Materials shall comply with City of Los Angeles Green Building Code requirements.
  - 1. Enter pertinent product data in VOC Content Verification Checklist form and provide product specification sheets. Make checklist and specifications available to City of Los Angeles Department of Building and Safety inspector through Engineer upon request. VOC Content Verification Checklist form can be found here: [https://www.ladbs.org/docs/default-source/forms/green-building-2023/grn\\_2\\_voc\\_content\\_verification\\_checklist-01.17.23.pdf?sfvrsn=19f4c153\\_10](https://www.ladbs.org/docs/default-source/forms/green-building-2023/grn_2_voc_content_verification_checklist-01.17.23.pdf?sfvrsn=19f4c153_10)

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Prior to installation of caulking and sealant materials, correct conditions that may impair proper installation.
- B. Joints shall be free from foreign materials for the full depth of joint. Joint surfaces shall be clean of grease, oil, wax, or other foreign matter and dry.
- C. Joint surfaces shall be primed in conformance with sealant or caulking manufacturer's written instructions.

### 3.2 INSTALLATION

- A. Installation shall be in conformance with the manufacturer's written instructions and by manufacturer's approved applicator.
- B. Adjoining surfaces shall be protected from staining. Provide masking to limit extent of caulking and sealant material application to joints.
- C. Fill joints where no backing exists partially with filler material that is compatible with specified caulking or sealant material in conformance with the following requirements:
  - 1. Metal to metal joints shall have a minimum joint width of 1/4 inch.
  - 2. Minimum joint depth 1/2-inch for concrete, masonry, and plaster.
  - 3. Other joints shall have a maximum of 3/4 inch width.
- D. Apply sealants under sufficient pressure to completely fill joint.
- E. Apply non-sagging type sealants in vertical joints.
- F. Apply self-leveling type sealants in horizontal joints.
- G. Finish exposed joints smooth and flush with surface unless Drawings show to be recessed.
- H. Provide strippable masking for factory applied sealing materials to prevent dirt contamination until parts are assembled.
- I. Apply non-tracking sealants having a Shore A hardness range of 35 to 45 to expansion joints subject to foot or vehicular traffic.

- J. After installation, remove calking or sealant from adjacent surfaces not specified to receive sealant or calking.

### 3.3 FIELD QUALITY CONTROL

- A. If leakage results from failure of sealant or calking to bond to adjacent Work or if sealant or calking hardens, cracks, shrinks, runs, or stains adjacent Work, remove defective Work. Clean joints and install new calking or sealant with Engineer approved material only.

### 3.4 SCHEDULE

- A. Multi-part sealants shall be used in expansion and contraction joints and joints in concrete surfaces.
- B. Elastomeric calking joint compound shall be used in expansion joints and contraction joints where limited movement is anticipated and areas where general calking is required.

END OF SECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Exterior paint for:

1. Other elements shown on Drawings or listed in Specifications to receive painting or coating

1.2 RELATED SECTIONS

- A. Section 05 05 14 - Treating Damaged Galvanizing
- B. Section 32 13 14 - Concrete for Exterior Improvements

1.3 PRICE AND PAYMENT PROCEDURES

A. Measurement and Payment:

1. Payment for Work of this Section shall be paid under each corresponding bid item of Bid Proposal Line Items that requires painting for exterior improvements.

1.4 REFERENCES

- A. 29 CFR 1910.134 - Respiratory protection.
- B. 29 CFR 1910.1000 - Air Contaminants.
- C. SSPC PA Guide 10 - Guide to Safety and Health Requirements for Industrial Painting Projects.
- D. SSPC-SP 6/NACE No.3 - Commercial Blast Cleaning.
- E. Reference Specifications (RS):  
Subsection 210-1 - Paint

1.5 SUBMITTALS

A. Samples of Painting:

1. Color swatches 8 1/2 inches by 11 inches shall be required for each type of paint material and color. Submit swatches to Engineer for approval not less than 10 days prior to start of painting.

## B. Extra Stock Materials:

1. Provide two 1-gallon paint, in original and sealed containers bearing manufacturer's label, for each type and color used for finish coats. Identify each container by color and type.

## 1.6 QUALITY ASSURANCE

- A. Paint products and applications shall comply with South Coast Air Quality Management District (SCAQMD) regulations. The product label and/or Safety Data Sheet (SDS) shall state that the product meets requirements or manufacturer shall furnish certificate of compliance.

## 1.7 ENVIRONMENTAL AND HEALTH REQUIREMENTS

## A. Coating Hazards:

1. Comply with the requirements of SSPC PA Guide 10.
2. Specified coatings may have potential health hazards if ingested or improperly handled. The coating manufacturer's written safety precautions shall be followed throughout mixing, applying, and curing of the coatings. During cleaning, cleanup, surface preparation, and coating application phases, ensure that employees are protected from toxic and hazardous chemical agents which exceed concentrations in 29 CFR 1910.1000. Comply with respiratory protection requirements as required in 29 CFR 1910.134 .
3. Take care to prevent fire; open containers or inflammable materials only as needed; keep rubbing cloths and oily rags in tightly closed metal container, or remove from Project Site(s) daily. Benzene, gasoline, and distillate shall not be permitted on Project Site(s).
4. Do not apply coatings in unheated space during foggy or rainy weather, or under the following surface temperature conditions:
  - a. Less than 5 degrees Fahrenheit (F) (4 degrees Celsius (C)) above the dew point; and
  - b. Below 40 degrees F (4 degrees C) for oil based paints, 10 degrees F (50 degrees C) for latex paints or over 95 degrees F (35 degrees C), unless approved in writing by manufacturer's representative and quality control manager.



- c. Below 32 degrees F (0 degrees C) or over 120 degrees F (49 degrees C), unless approved in writing by manufacturer's representative and quality control manager.
- 5. Paints shall comply with City of Los Angeles Green Building Code requirements.
  - a. Enter pertinent product data in VOC Content Verification Checklist form and provide product specification sheets. Make checklist and specifications available to City of Los Angeles Department of Building and Safety inspector through Engineer upon request. VOC Content Verification Checklist form can be found here:  
[https://www.ladbs.org/docs/default-source/forms/green-building-2023/grn\\_2\\_voc\\_content\\_verification\\_checklist-01.17.23.pdf?sfvrsn=19f4c153\\_10](https://www.ladbs.org/docs/default-source/forms/green-building-2023/grn_2_voc_content_verification_checklist-01.17.23.pdf?sfvrsn=19f4c153_10)

## 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver in factory sealed containers with labels intact, in conformance with RS Subsection 210-1.
- B. Store in conformance with manufacturer's written instructions for paint shelf life, including, but not limited to, protection from temperature extremes.
- C. Obtain Engineer's approval of materials before containers are opened.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Paint products used in the coating systems shall be from the same manufacturer.
- B. Paints shall comply with City of Los Angeles Green Building Code requirements.

- C. The products listed are to be produced and supplied by Dunn-Edwards Paints.

1. Ungalvanized Ferrous Metals:

|             |                         |
|-------------|-------------------------|
| First Coat  | BRPRO0 Bloc-Rust Primer |
|             |                         |
| Second Coat | EVSH60 Evershield Gloss |
|             |                         |
| Third Coat  | EVSH60 Evershield Gloss |

2. Galvanized Metals:

|              |                                               |
|--------------|-----------------------------------------------|
| Pretreatment | Metal Clean & Etch by Krud Cutter/ Rust-Oleum |
|              |                                               |
| First Coat   | ULGM00-WH Ultrashield Galvanized Metal Primer |
|              |                                               |
| Second Coat  | EVSH60 Evershield Gloss                       |
|              |                                               |
| Third Coat   | EVSH60 Evershield Gloss                       |

3. Wood:

|             |                              |
|-------------|------------------------------|
| First Coat  | EZPR00 EZ-Prime Premium      |
|             |                              |
| Second Coat | EVSH50 Evershield Semi-Gloss |
|             |                              |
| Third Coat  | EVSH50 Evershield Semi-Gloss |

4. Concrete:

|             |                                        |
|-------------|----------------------------------------|
| First Coat  | ESSL00 EFF-STOP Select                 |
|             |                                        |
| Second Coat | ACHS10 ACRI-HUES Exterior Acrylic Flat |
|             |                                        |
| Third Coat  | ACHS10 ACRI-HUES Exterior Acrylic Flat |

PART 3 - EXECUTION

3.1 SURFACE PREPARATION-UNGALVANIZED METALS

- A. Clean surfaces to be painted by No. 6 Commercial Blast Cleaning in conformance with SSPC-SP 6/NACE No.3.

3.2 SURFACE PREPARATION-GALVANIZED METALS

- A. Clean galvanized metals in conformance with written instructions of pretreatment wash manufacturer, then apply pretreatment wash.
- B. Blast lightly with fine abrasive or organic media (walnut shells) at 45 degree angle (profile only, do not remove zinc coating).

3.3 APPLICATION

- A. Surfaces to be painted shall be approved by Engineer prior to painting.
- B. Do not use paints with coarse particles, skins, and indications of color instability.
- C. Protect surfaces not designated to receive paint.
- D. Apply paint in uniform thickness and Work into joints in conformance with manufacturer's written instructions.
- E. Surfaces shall be dry during painting. No painting shall be done in damp weather unless surfaces to be painted are kept dry.
- F. Paint shall be dry before applying succeeding coats.
- G. Color schedule (if any) shall be in accordance with Drawings and applicable Specification Sections and shall be approved by Engineer prior to painting.
- H. Paint showing signs of blistering, spotting, uneven coating, or sagging shall be rejected.
- I. Steel items that are to be encased or partially encased in concrete shall be painted with complete coating system before being encased.
- J. Do not apply second and third coats until previous coat has been approved by Engineer.
- K. Electrical panels shall be touched-up in conformance with manufacturer's written instructions to match original color and type of paint.

### 3.4 COATING THICKNESSES

- A. First Coat: (Prime coat): 1.5 to 2.5 mils in dry film thickness.
- B. Second Coat: 1.5 to 2.0 mils in dry film thickness.
- C. Third Coat: 1.5 to 2.0 mils in dry film thickness.

### 3.5 CLEANING AND PROTECTION

- A. Cleaning: Remove from Project Site(s) discarded paint materials, rubbish, cans, and rags at end of each day.
- B. Upon completion of painting Work, clean overspray off of adjacent surfaces. Remove overspray by proper methods of washing and scraping, taking care not to scratch or otherwise damage adjacent finished surfaces.
- C. Protection: Protect Work of other trades and existing adjacent surfaces, whether to be painted or not, against damage by painting and finishing Work. Correct any damage by cleaning, repairing or replacing, and repainting, as acceptable to Engineer.
  - 1. Place "Wet Paint" signs as required to warn passersby of newly-painted finishes.
  - 2. Touch-up and restore damaged or defaced painted surfaces before final inspection.
  - 3. Remove temporary protective wrappings for protection of adjacent Work after completion of painting operations.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Graffiti-resistant coatings

### 1.2 RELATED SECTIONS

- A. Section 32 13 14 - Concrete for Exterior Improvements

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:

1. Payment for Work of this Section shall be paid under each corresponding bid item of Bid Proposal Line Items that requires graffiti-resistant coatings.

### 1.4 SUBMITTALS

- A. Submit manufacturer's technical data, application instructions, safety data sheets (SDS), and published literature stating recommended coverage rates.
- B. Apply coating on mock-up panel and sample panel for review and approval both for aesthetics and effectiveness, accompanied with a letter stating the actual application rates required to meet the warranty requirements.

### 1.5 QUALITY ASSURANCE

- A. Comply with South Coast Air Quality Management District (SCAQMD) requirements including but not limited to volatile organic compounds (VOC) regulations.
- B. Coatings shall be approved by City of Los Angeles City Department of Building and Safety.
  1. Submit copy of City of Los Angeles Research Report with RR number.
- C. Provide minimum 4 foot by 4 foot sample panel for each type of substrate to which anti-graffiti coating shall be applied. Apply proposed coating over half of substrate.
  1. Accepted sample panel shall set standard for finish and quality of Work. Remove sample panel when directed by Engineer.

## 1.6 MAINTENANCE MATERIALS

- A. Provide five 1 gallon cans of graffiti removing compound and 1 hand operated spray applicator to Department for maintenance purposes.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURER

- A. Monopole, Inc., (818) 500-8585.

### 2.2 MATERIALS

- A. Coating shall be clear, non-yellowing, weather resistant, and ultra-violet resistant.
  - 1. Unpainted Porous Surfaces:
    - a. First coat: Monochem Aquaseal Heavy Duty
    - b. Second Coat: Monochem Perma Shield Non-Sacrificial Graffiti Control - Semi-gloss
    - c. Third Coat: Monochem Perma Shield Non-Sacrificial Graffiti Control - Semi-gloss
    - d. Fourth Coat: Monochem Perma Shield Non-Sacrificial Graffiti Control - Semi-gloss
  - 2. Painted Surfaces:
    - a. First Coat: Monochem Perma Shield Sacrificial Graffiti Control - Semi-gloss
    - b. Second Coat: Monochem Perma Shield Sacrificial Graffiti Control - Semi-gloss
    - c. Third Coat: Monochem Perma Shield Sacrificial Graffiti Control - Semi-gloss
- B. Primer as required and as recommended by coating manufacturer.
- C. Graffiti remover as recommended by coating manufacturer.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Surfaces to receive coatings shall be dry, free of dust, dirt, rust, alkali, efflorescence, oil, grease, loose and peeling paint, scale, and other foreign material.
- B. Clean and prepare surfaces to receive coatings in conformance with manufacturer's written instructions.
  - 1. Verify calks, concrete curing compounds, and sealers are fully cured and compatible with the coating.
  - 2. Verify that painted surfaces are fully cured and compatible with coating.
- C. Protect adjacent surfaces against spatter. Take special precautions to cover and protect finished Work.

### 3.2 APPLICATION

- A. Prepare and mix coatings in conformance with manufacturer's written instructions.
- B. Apply coatings when temperature is above 50 degrees Fahrenheit (F) but below 100 degrees F. Do not apply coating if rain is imminent within 24 hours.
- C. Apply coatings using methods and equipment in conformance with manufacturer's written instructions and SCAQMD requirements.
- D. Allow curing time between coats in conformance with manufacturer's written instructions.
- E. Apply at exterior walls to a height of 10'-0" above grade to horizontal reveal, unless otherwise indicated on Drawings.
  - 1. Do not coat aluminum entrances and storefront.
  - 2. Do not coat aluminum windows.
- F. Apply at exposed surfaces of concrete planter walls.

### 3.3 CLEANING

- A. Clean spillage and overspray from adjacent surfaces as recommended by coating manufacturer.

END OF SECTION



## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Fabrication and installation of signage including but not limited to the following:
  - 1. Secure sign permits including plan check required by City of Los Angeles Department of Building and Safety for the installation of exterior signage for Project. Department shall pay for fees associated with plan check and permits.
  - 2. Sign Fabrication: Types of signs, messages, and graphics as indicated on Drawings and specified in this Section and required various materials, finishes, and fabrication and installation techniques.
  - 3. Shop drawings, layouts, samples, and mock-ups for Engineer's approval.
  - 4. Structural design and calculations for freestanding signage to confirm structural integrity of the designed support connection. Structural connections shall require certification by an engineer registered in State of California.
  - 5. Installation of fabricated signs, including fasteners, fastenings, and related appurtenances.
  - 6. Coordination and verification of messages with Engineer. Engineer shall provide a complete set of sign location plans with sample numbering system schedule template for fabricator to complete sign message schedule for submission and approval by Engineer.
  - 7. Verification of conditions and sign dimensions in the field. Verification of conditions and sign dimensions shall be completed prior to sign fabrication and approval of required submittals.
  - 8. Construct concrete footings for signage.
  - 9. Removal Work to accommodate new sign installation.

### 1.2 RELATED SECTIONS

- A. Section 05 05 14 - Treating Damaged Galvanizing
- B. Section 32 13 14 - Concrete for Exterior Improvements

### 1.3 PRICE AND PAYMENT PROCEDURES

#### A. Measurement and Payment:

1. Payment for Work of this Section shall be paid under the Pavement Markings and Signage Allowance bid item of Bid Proposal Line Items.

### 1.4 REFERENCES

- A. ASTM A500/A500M - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
- B. ASTM A572/A572M - Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel.
- C. AWS D1.1/D1.1M - Structural Welding Code - Steel.
- D. ICC A117.1 - Accessible and Usable Buildings and Facilities.

### 1.5 SUBMITTALS

#### A. Shop Drawings:

1. Submit shop drawings in reproducible form for approval by Engineer prior to fabrication. The internal structure, dimensions, and specifications for items shall be indicated on shop drawings. Dimensions or specifications on shop drawings which do not conform to Drawings need to be noted as such and approved by Engineer.
  - a. Shop drawings shall include:
    - 1) Complete fabrication and installation drawings for each sign type. Indicate elevations of each type of sign, dimensions, materials, finishes, fastening, details, anchorage and footings, joining, sealing, backing, and adjacent related Project Site(s) condition. Include full size details of exposed edges, joints between materials, and details affecting the appearance.
    - 2) Each sign with graphic elements.
    - 3) Letter styles shall be accurately reproduced.
    - 4) Provide half size letter and word spacing patterns for copy. Submit patterns with black copy on white background. Indicate outline of sign panel on pattern.

- 5) Provide full size patterns or prints of copy, arrows, and graphic elements to be applied.
  - 6) No changes shall be made on shop drawings after approval of shop drawings except by written consent or direction of Engineer.
  - 7) Substitution of items from those shown on shop drawings shall be made only when approved in writing by Engineer.
  - 8) No material shall be ordered prior to approval of shop drawings.
- B. Samples: Submit physical samples 12 inch by 12 inch or of sufficient size and quantity to illustrate materials, finishes, equipment or workmanship, and to establish standards by which completed Work shall be judged. Samples shall represent the functional characteristics of the product or material, with integrally related parts and attachment devices, colors, and finishes.
1. Samples shall have a place for approval stamp.
  2. Submit complete sets of samples to Engineer for review.
  3. Required samples for review:
    - a. Full 12 inch by 12 inch set of specified paint colors and finishes. Submit manufacturer's certification or recommendation for the paint and coating applicator.
    - b. Complete, full-size message in each typeface to demonstrate proper spacing (black text on white background, outline not accepted).
    - c. Sample of each type of fastener to be used.
    - d. Each type of exposed metal used for major elements of Work with respective finish.
    - e. Each type of adhesive vinyl film, including computer-cut designs shown full-size on each of the specified ground colors.
    - f. Complete list of prototypes. Prototypes shall become the property of Department and are not to be part of completed signs unless previously agreed upon.
    - g. Paint manufacturer's application instructions and color palette.

- C. Structural design and calculations prepared and signed by a State of California registered engineer to substantiate design.
- D. Installation details of fabricated signs, including fasteners and related footings.
- E. Copies of permits prior to performing Work of this Section.
- F. Unused mock-ups and submittals shall be removed from Project Site(s) prior to final acceptance.
- G. Submit operation manuals, tools, and keys as specified in this Section.

#### 1.6 PERMITS

- A. Contractor shall make submittals for each permit through Engineer. Contractor shall be responsible for making adjustments as required, or any task necessary for obtaining local building and installation sign permits for the proper execution of Work. Refer to REGULATORY REQUIREMENTS Section for payment requirements.
- B. Secure sign permits, including plan check required by City of Los Angeles Department of Building and Safety for the installation of exterior signage for Project.

#### 1.7 QUALITY ASSURANCE

- A. Engineer reserves the right to inspect the manufacture or fabrication. Engineer's inspection of Work does not relieve Contractor of the responsibility for Work. Errors or faults that are discovered during fabrication shall be corrected by Contractor prior to installation.
- B. If manufacturing site is within a 75-mile radius of Department Administration Building, Engineer shall inspect the sign manufacturing on-site at no cost to Contractor. If Project Site is beyond the specified radius, Contractor shall bear transportation and per diem costs for 1 full time Inspector at the manufacturing site. Transportation costs shall include transporting Inspector from and to Department Administration Building.
- C. Welders shall be City of Los Angeles Department of Building and Safety certified.

D. Mock-ups and Prototypes:

1. Provide a mock-up (partial for large signs; complete for smaller signs) of each sign type requested at the fabrication facility for review.
2. Utilize the same materials and installation methods in the mock-up as intended for final Work. Schedule the installation so that the mock-up may be examined, and any necessary adjustments made, prior to commencing fabrication of final Work. Replace unsatisfactory items as directed by Engineer.
3. When accepted, mock-up shall serve as the standard for materials, workmanship, and appearance for Work throughout Project.
4. The final mock-up shall be installed within Project as a complete and functioning sign/element as approved by Engineer.
5. Mock-ups shall become property of Contractor and are not be part of completed Work.

E. Work-In-Progress Approvals:

1. Provide Work-in-progress sign elements reviews. Scheduled or unscheduled viewings at the fabrication facility may be initiated by Engineer as deemed necessary to ensure continued quality control and make any adjustments required during fabrication. Unsatisfactory items shall be corrected by Contractor as directed by Engineer.

F. Regulatory Requirements:

1. Comply with applicable requirements of the applicable laws and authorities. Obtain necessary approvals and permits from such authorities as required.

G. Final Location of Signs:

1. The location of signs as shown on the location plans is for general reference only and in some cases is not representative of the exact final location. Final locations of signs shall be field located in coordination with Engineer.
2. Contractor shall arrange for meetings at Project Site(s) to accommodate direction of final locations conforming to Project Construction Schedule.

## H. Lettering:

1. Contractor shall be responsible for the quality control of lettering. Letterforms shall be crisp, sharp, free of nicks, ragged edges, and discontinuous curves. Lettering shall conform to approved typeface, weight, and letter spacing. No substitutions of typeface foundry, brand, or version or implementation technique shall be accepted without prior approval of Engineer.
2. Vinyl Die Cut Graphics: Camera-ready artwork shall be anagraph scanned for cutting on a Gerber Sign Maker II.
3. Execute cutting and routing in such a manner that edges and corners of finished letterforms are true and clean. Letterforms with rounded positive or negative corners, nicked, cut, ragged edges, and the like shall not be accepted. Letterforms shall be aligned to maintain a baseline parallel to the sign format. Margins shall be maintained.
4. Work of this Section shall be performed by skilled workers under the supervision of a trained foreperson, experienced in the trade of craft required to accomplish Work and produce a product of high quality.

## I. High Quality of Workmanship:

1. Contractor shall be responsible for the high quality of materials and labor required for the execution of Work of this Section.
2. Contractor shall be responsible for providing up-to-date drawings, specifications, graphic schedule, and the like, to subcontractors.

## J. Dimensions:

1. Written dimensions shall have precedence over scaled dimensions.
2. Contractor shall verify and be responsible for dimensions and conditions shown. Shop details shall be approved by Engineer prior to fabrication.

## K. Discrepancies:

1. Notify Engineer of any discrepancies on sign location plan or sign message schedule, in field dimensions, or conditions or changes required in construction details.

L. Regulatory Requirements:

1. Comply with applicable portions in American with Disabilities Act (ADA) and Architectural Barriers Act (ABA) Accessibility Guidelines and ICC A117.1.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Package signage separately or in like groups of names, labeled as to names enclosed; include installation template, hardware, or adhesive specified and installation instructions.
- B. Deliver the materials to Project Site(s) in their manufacturer's unopened shipping cartons with their contents and manufacturers' names clearly marked on the cartons. Store the products in protected undercover locations until their installation.

1.9 WARRANTY

A. Signage Warranty:

1. Submit to Engineer a 5-year written warranty (effective the date of final acceptance) covering signs, notarized by Contractor, agreeing to repair or replace the defective signs. Upon notification of such defective signs within the warranty period, make necessary repairs or replacement at the convenience of Engineer.

B. Linear Polyurethane Paint Factory Finish Warranty:

1. Submit to Engineer a 5-year written warranty, warranting that the factory-applied linear polyurethane finishes shall not develop excessive fading or excessive non uniformity of color or shade, and shall not crack, peel, pit, corrode or otherwise fail as a result of defects in materials or workmanship within the following defined limits. Upon notification of such defects within the warranty period, make necessary repairs or replacement at the convenience of Engineer.
  - a. Excessive Fading: A change in appearance which is perceptible and objectionable as determined when visually compared with the original color range standards.
  - b. Excessive Non-Uniformity: Non-uniform fading to the extent that adjacent panels have a color difference greater than the original acceptable range of color.

- c. Shall Not Pit or Otherwise Corrode: No pitting or other type of corrosion, discernible from a distance of 10 feet, resulting from the natural elements in the atmosphere at Project Site(s).

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Architectural Design and Signs (AD/S) <https://ad-s.com/> (951) 278-0680
- B. ASI Signage Innovations <https://asisignage.com/>

### 2.2 DESIGN REQUIREMENTS

- A. Design Criteria:
  - 1. Structural Design: Drawings indicate a general design approach for sign fabrication but do not necessarily include fabricating details required for the complete fabrication and structural integrity of the signs, including consideration for static, dynamic, and erection loads during handling, erecting, and service at the installed locations. Provide complete structural design of the signs. Design of structural elements shall be prepared and signed by a licensed engineer registered in State of California. Signs shall meet applicable local, state, and national codes, as well as testing laboratory listings where required.
  - 2. Final design shall be submitted to Engineer for approval.

### 2.3 MATERIALS

- A. Specified Metals - General:
  - 1. Aluminum:
    - a. Aluminum shall be suitable for ornamental, architectural Work. Surface finish shall be smooth, free of extrusion marks or imperfections. Alloy shall be selected to meet the structural requirements of the specific application.



2. Stainless Steel:

- a. Stainless steel shall be suitable for ornamental and architectural Work. Surface finish shall be smooth, free of extrusion marks, or imperfections. Alloy shall be selected to meet the structural requirements of specific application.

3. Structural metal for concealed framing shall be of galvanized rolled steel and meet structural requirements.

B. Metals:

- 1. Steel Posts: Hot-dipped galvanized steel tubular post conforming to ASTM A500/A500M. Post shall be designed to accept and permit attachment of the panel framing system without exposed fasteners. Provide caps for each post.
- 2. Panel Framing System: Panel framing consisting of galvanized steel sections and interlocking track components shall be designed to interlock with posts with concealed fasteners. Top and bottom framing members shall be removable to permit panel removal.
- 3. Finish: Paint as shown on Drawings.
- 4. Aluminum posts shall be constructed from 2-inch square T52 tubes, 0.1875 wall thickness and No. 4 brushed and clear anodized finish with capped ends, unless otherwise indicated on Drawings.
- 5. Steel Plates and other Structural Sections: ASTM A572/A572M, hot-dipped galvanized.

C. Aluminum exterior cabinets, spacers, backplates and frames shall be constructed from 0.25-inch aluminum, No. 4 horizontal brushed and clear anodized finish, unless otherwise indicated on Drawings.

D. Extruded aluminum shapes utilizing 6063-T6 aluminum alloys, unless otherwise indicated on Drawings.

E. Concrete installation of anchoring devices into concrete slab shall be adjusted to avoid penetrating existing reinforcing conduit contained in the concrete slab. Coordinate with Engineer.

- F. Stainless steel exterior cabinets, spacers, backplates and frames shall be constructed from 0.125-inch stainless steel, No. 4 horizontal brushed and clear anodized finish, unless otherwise specified on Drawings.
- G. Stainless steel interior plaques shall be constructed from 0.125-inch thickness stainless steel sheet, No. 4 horizontal brushed finish with semi-gloss linear polyurethane clear coat, unless otherwise indicated on Drawings.
- H. Stainless steel interior fabricated components shall be constructed from 0.0625-inch stainless steel, unless otherwise indicated on Drawings.
- I. Acrylic intended for non-illuminated use shall be 0.25 inch cast acrylic sheet with non-glare finish, unless otherwise specified on Drawings.
- J. Decal or Transfer: Provide special printed paper or vinyl suitable for reproducing the design onto material indicated, as required. Submit sample to Engineer for approval.
- K. Hardware and Hinges: Provide and install incidental hardware necessary for the proper functioning of the signs, including, but not restricted to, materials and products covered in this Section. Provide stainless steel hinges for hinged access panels. Provide pin tumbler locks for access panels requiring locks. Provide stainless steel fasteners for assembling ferrous and non-ferrous metals.
- L. Bolts, nuts, screws, washers, anchors, and other devices required to complete Work. Contractor shall use the same basic metal or alloy as the metal fastened, and finish to match in color and texture. Use stainless steel 300 series alloy where used to join dissimilar materials.
- M. Exposed fasteners shall be 0.125-inch flathead stainless steel screws painted to match adjoining surfaces unless otherwise specified on Drawings.
- N. Pin-mount supports shall be 3/16 inch to 1-inch diameter painted threaded rods as appropriate.
- O. Insulation/Material Isolation: Separate ferrous and non-ferrous metals with non-conductive gaskets to prevent electrolysis. In addition to gaskets, provide stainless steel fasteners for some cases as required.

- P. Welding Electrodes and Filler Metal:
  - 1. Provide the alloy and type of welding electrodes and filler metal required for strength, workability, compatibility, and color match after grinding smooth and finishing the fabricated product.
- Q. Applied interior vinyl graphics shall be high performance cast vinyl sheeting, unless otherwise indicated on Drawings. Applied exterior vinyl graphics shall be high performance reflective vinyl sheeting, unless otherwise indicated on Drawings.
- R. Additional Material and Processes: For materials and processes described in the preceding list, the material and/or process as detailed in the design documents shall be used as the meet or exceed equivalent.
- S. Paint finishes shall be Matthews Acrylic Polyurethane with Matthews Primers and Metal Pre-Treatments.
- T. Shop painting to be uniform on and around sign elements to ensure sign elements shall withstand weather conditions.
- U. Concrete for Footings: As specified in CONCRETE FOR EXTERIOR IMPROVEMENTS Section.

## 2.4 FINISHING MATERIALS

- A. Linear Polyurethane Coatings: Provide the following, or other products as approved by Engineer:
  - 1. Acrylic Linear Polyurethane Enamel: 2 components, acrylic aliphatic isocyanate/acrylic polyurethane having ultraviolet (UV) inhibitors and engineered for exterior application by Matthews Paint Company.
  - 2. Primer for Aluminum: 2-part component primer: 1-coat Matthews 74-734 and 74-735 Metal Pretreat at 0.25 mils dry film thickness or 1-coat Matthews 74-793 Spray Bond at 0.15 to 0.25 mils dry film thickness or AKZO Grip-Guard Wash Primer (2Afy-31284) with Grip-Guard Wash Primer Hardener (10AFK-31285) combined and applied in conformance with manufacturer's written instructions for the application of the pre-approved and pre-formulated paint system.

3. Primer for Steel: 2-part component primer: 1-coat Matthews 74-734 and 74-735 Metal Pretreat at 0.25 mils dry film thickness or AKZO Grip-Guard Wash Primer (2Afy-31284) with Grip-Guard Wash Primer Hardener (10AFK-31285) combined and applied in conformance with manufacturer's written instructions for the application of the pre-approved and pre-formulated paint system.
  4. Clear Sealers: Crystal clear matte polyurethane sealers by Matthews Paint Company. Sealers shall resist rust and corrosion associated with exposure to salt air. As required and of highest quality available, applied in conformance with manufacturer's written instructions.
- B. Anodized Aluminum Components/Panels: If required, Contractor shall provide anodized (application of aluminum oxide film coating in clear or colored dye finish) aluminum panels or parts to match color, grain, finish, and specifications.
- C. Silk Screening Materials: Provide photo processed screening, arranged to furnish sharp and solid images without edge build up or bleeding of the coating. Pattern-cut screens may be used for non-repeat copy, provided that final image copy is equal to photoscreen quality. Provide only weather-resistant coating materials, compatible with the intended substrates. Silk-screened graphics shall be done with the finest screen size feasible for sharp, even reproduction.
- D. Vinyl Die-Cut and Pattern Cut-out Graphics: Use Scotchcal Opaque and Translucent film and Scotchcal Diamond Grade VIP Reflective film manufactured by 3M where specified. Use pressure-sensitive, non-yellowing, non-peeling, and weather resistant vinyl as specified. Use approved fonts and equipment as specified.

## 2.5 FABRICATION

- A. Signage shall be complete for proper installation as described on Drawings.
- B. Finished Work shall be firm, well anchored, in true alignment, properly squared, with smooth clean uniform appearance, without holes, cracks, discoloration, distortion, stains, or marks.
- C. Construct Work to eliminate burrs, dents, cutting edges, and sharp corners.

- D. Welding shall be in conformance with American Welding Society (AWS) requirements. Finish welds on exposed surfaces shall be unnoticeable in finished Work.
- E. Except as indicated or directed otherwise by Engineer, finish surfaces smooth.
- F. Surfaces, which are intended to be flat, shall be without dents, bulges, oil canning, gaps, or other physical deformities.
- G. Surfaces, which are intended to be curved, shall be smoothly free-flowing to required shapes.
- H. Except where approved otherwise by Engineer, conceal fasteners.
- I. Make access panels tight-fitting, lightproof, and flush with adjacent surfaces.
- J. Conceal identification labels and Underwriters Limited labels to conform to Underwriters Limited Codes.
- K. Carefully follow manufacturer's written instructions for fabricating procedures regarding expansion or contraction, fastening, and restraining of acrylic plastic.
- L. Exercise care to ensure that painted, polished, and plated surfaces are unblemished in finished Work.
- M. Isolate dissimilar materials. Exercise particular care to isolate nonferrous metals from ferrous metals with non-conductive gaskets and stainless steel fasteners.
- N. Ease exposed metal edges.
- O. Provide miscellaneous metal items required for completion of Work even though not shown or specified.
- P. Refer to Drawings for sign color specifications.
- Q. Mounting: Mounting plates shall be in conformance with manufacturer's written instructions.

R. Markings and Labels:

1. Locate markings, labels, manufacturer names, and other identifications so as to be concealed from public view and as acceptable by Engineer.
2. No trade name or other identification shall appear on any item where it shall be seen by the public except as specifically approved by Engineer in advance.

2.6 FABRICATION OF SIGNS AND SUPPORTS

- A. General: Provide custom manufactured sign assemblies and components completely fabricated and finished at factory before delivery to Project. Construct to accurate detail and dimensions as shown and as reviewed on approved shop drawings. Fit and assemble signs at the shop and mark the components as required to facilitate assembly during installation. Exposed fasteners on finished faces shall not be allowed, unless specifically indicated. Waviness and oil canning of surfaces is not acceptable. Minimum material thickness shall be 0.090 inch.
- B. Lettering: Cut and rout in a manner to produce true and clean edges and corners of finished letterforms. Letterforms having rounded positive or negative corners, nicked, cut, or ragged edges are not acceptable. Align letter forms to maintain a baseline parallel to the sign format. Maintain margins as indicated on Drawings.
- C. Seams and Joints: Contractor shall cut walls and floors carefully and neatly repair them in an acceptable manner. Contractor shall consult Engineer in cases where cutting into a structural portion of the building is required so that satisfactory reinforcement may be provided. Added joints shall be ground filled and finished flush and smooth with adjacent Work. Such seams shall be invisible after final finish has been applied. Spot welded joints shall not be visible on exterior of signs after final finish has been applied. No gaps, light leaks, waves, or oil canning shall be permitted in Work. If any of these are evident, Contractor shall correct its Work or construct a new sign at Contractor's sole cost and expense.
- D. Metal Signs and Supports: Fabricate exposed surfaces uniformly flat and smooth, without distortion, pitting, or other blemishes. Form exposed metal edges to a smooth radius. Permanently bond the laminated metal components and honeycomb core with adhesive or sealant in conformance with product manufacturer's written instructions. Grind exposed welds and rough areas to make flush with adjacent smooth surfaces.

## E. Welding:

1. Make welds continuous.
2. Welding shall be in conformance with AWS requirements. Finish welds on exposed surfaces shall be unnoticeable in finished Work.
3. Comply with AWS, Aluminum Association (AA), and Copper Development Association (CDA) standards for the type of metal used.
4. Welding inspection and testing shall conform to Section 6 of AWS D1.1/D1.1M.

## F. Fasteners:

1. Use exposed fasteners only if shown on Drawings.
2. Perform drilling and tapping at shop.
3. Fasteners shall be fully concealed wherever possible. Provide counter sunkscrews for access panels or where exposed fasteners are required. Methods of fastening shall be detailed and exact specifications for all fasteners shall be noted on shop drawings. Any portion of mounting brackets which are visible shall match wall, frame, or hardware of sign color as indicated.

## G. Dissimilar Materials: Where metal surfaces shall be in contact with dissimilar materials, coat the surfaces with epoxy paint, plate with zinc chromate, or provide other means of dielectric separation as recommended by manufacturer to prevent galvanic corrosion (i.e. Neoprene gasket as an isolation membrane).

## H. Castings: Exposed surfaces shall be uniformly free from porosity and roughness. Edges shall be filled and ground smooth. Faces shall be chemically etched and mechanically polished for specified finish.

## I. Galvanizing: Provide for steel components in exterior construction and where noted on Drawings to be galvanized. Complete the shop fabrication prior to application of the zinc coating. Remove mill scale and rust, clean and pickle the units as required for proper pretreatment of the surfaces.

## J. Hardware: Provide incidental hardware necessary for the proper functioning of signs. External hardware shall conform to the external appearance of the sign.

- K. Supports and Backing in Walls: Contractor shall provide engineered sign supports anchored to building structure where required and to meet requirements of applicable City of Los Angeles Building Code. Support or backing requiring installation within the building wall construction shall be immediately relayed to Engineer for field coordination.
- L. Access Doors and Frames: Access doors and frames shall be flush with the material in which they occur, unless otherwise specified. Access doors and frames shall be provided upon prior written approval of Engineer. Each trade providing access doors and frames shall verify the need for fire rated doors on Drawings. Access doors in walls, partitions, or ceilings shall bear Underwriters Laboratories, Incorporated (UL) fire rated labels of same fire rating. If access doors and frames are required to be exposed to view, they shall be chrome, brass, stainless steel, or other finish to match other finishes in the spaces in which they are to be installed, unless otherwise specified. Obtain Engineer's approval for location of each access door prior to placement.
- M. Treat damaged galvanizing in conformance with TREATING DAMAGED GALVANIZING Section.

## 2.7 GRAPHIC APPLICATION

- A. Preparation: Surfaces to receive the graphic markings shall be clean, dry, and otherwise made ready for application of the materials. Accurately measure and lay out the required marking configurations as indicated on Drawings.
- B. Vinyl Die-cut and Pattern-cut Graphics: Use pressure sensitive, non-yellowing, non-peeling, and weather resistant vinyl adhesive letters or images, custom flood coated as required, die cut from Scotchcal or Scotchlite as manufactured by 3M Company. Apply in strict conformance with manufacturer's written instructions. Make uniformly smooth and free from bubbles, wrinkles, stretching, and blemishes.
- C. Painted or Silk-screened Graphics: Graphics shall be applied using photo processed screens from camera ready art, arranged to furnish sharp and solid images without build-up or bleeding of the coating. Comply with coating manufacturer's written application instructions. Provide proper type of primer to suit each substrate and obtain a permanent bond. Verify compatibility of each substrate with the coatings to be used in Work. Apply the markings with neat edges, minimum 3 mils (0.075 mm) dry film thickness and as required to obtain solid markings without voids.



- D. Graphics and message shall be applied to panel using silkscreen process. Silkscreened images shall be executed with photo screens prepared from original art. No handcut screens shall be accepted. Original art is defined as artwork that is a first generation stencil of the original specified art.
- E. Edges and corners shall be clean. Rounded corners, cut or ragged edges, edge buildup, bleeding or surfaces pinholes shall not be accepted.
- F. Refer to Drawings for graphics and messages and required signage.
- G. Graphics, message, and colors shall be in accordance with Drawings. Type face shall be as shown on Drawings.

## 2.8 SHOP APPLICATION OF SIGN FINISHES

- A. Sign Graphics: Provide the letters, numerals, symbols, and other graphics markings, using the finish materials shown. Apply the graphics neatly, uniformly proportioned and spaced, and accurate within the dimensions indicated. Prepare the substrate surfaces and apply finish materials in conformance with manufacturer's written instructions.
- B. Metal Finishes: Remove scratches, abrasions, dents, and other blemishes before applying finish. Apply the following finishes to the fabricated Work, with texture and reflectivity as required to match the approved sample:
  - 1. Linear Polyurethane Finishes: Clean the surfaces as required for proper adhesion of coatings. Use 3M Co. "Scotch Brite" pads with cleanser and water, or chemically treat as recommended by paint manufacturer to remove deleterious film or residue.
  - 2. Linear Polyurethane Paint: Provide pretreatment and primer in conformance with manufacturer's written instructions. Add ultra violet inhibitors to paint subject to sunlight exposure.
  - 3. Clear Linear Polyurethane Finish: Provide pretreatment, primer, and matte or semi-gloss finish coatings in conformance with manufacturer's written instructions. Apply 1.5 to 2.0 mils (0.0375 to 0.050 mm) dry film thickness.

## PART 3 - EXECUTION

### 3.1 VERIFICATION OF CONDITIONS

- A. Inspect surfaces to receive signage and report defects which would interfere with signage installation.
- B. Verify conditions and sign dimensions in field. Contractor shall review and study architectural, landscape, lighting, electrical, and related plans to ensure proposed signs can be installed and supported. Verification of conditions and sign dimensions shall be completed prior to sign fabrication.
- C. Starting Work implies acceptance of surfaces as satisfactory.

### 3.2 INSTALLATION

- A. Install signage in accordance with Drawings and approved submittals and shop drawings.
- B. Special Precautions: Guard against damaging existing pavements, structures, landscaping, planting, and other improvements where signage is to be installed.
- C. Footings beneath topping surface shall be installed and located prior to top surface installation. Construct footings in accordance with approved shop drawings.
- D. Prior to installation, check components, nuts, bolts, and other connections for proper alignment, fit, and any damage. Replace damaged or defective components.
- E. Concrete Footings:
  - 1. Construct footings in accordance with approved shop drawings and CONCRETE FOR EXTERIOR IMPROVEMENTS Section.
  - 2. Concrete installation of anchoring devices into concrete slab shall be adjusted to avoid penetrating existing reinforcing contained in the concrete slab. Coordinate with Engineer.
- F. Installed signs shall be clean, properly aligned, level and true to line and dimension, flush to surface unless otherwise specified, and free of imperfections and excess visible adhesive if used, with no damage to signs or surrounding surfaces.

- G. Where stud fastening or other mechanical fasteners are used, provide adequate mounting to prevent unauthorized removal of sign.
- H. Finish surfaces shall be free of brush marks, streaks, laps, or pile up of paints, with all surfaces uniformly covered.

### 3.3 REPAIR AND RESTORATION

- A. Repair or replace existing structures and improvements damaged or removed as a result of Contractor's operations.

### 3.4 CLEANING

- A. Keep areas of Work clean, neat, and orderly at all times. Clean surfaces, inside and out. Use approved cleaners to remove dirt.
- B. Remove protective coverings and strippable films at a time that shall afford the greatest protection of the furniture signage. Clean surfaces to remove excess sealant compounds, dirt, and other substances.
- C. Upon completion of Work and before final acceptance, remove tools, surplus materials, apparatus, unused mock-ups, and debris from Project Site(s). Leave Project Site(s) in a neat, clean condition, acceptable to Engineer. Wash, clean, and leave paved areas without stains.

### 3.5 PROTECTION

- A. Protect signs from damage until acceptance. Repair any damage to signs or surrounding surfaces.

### 3.6 FINAL INSPECTION AND ACCEPTANCE

- A. Upon completion of Work of this Section, a final inspection for acceptance shall be performed by Engineer.

END OF SECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Basic electrical materials, methods, and requirements to perform electrical Work

1.2 RELATED SECTIONS

- A. Section 02 00 01 - Basic Site Materials and Methods
- B. Section 26 05 42 - PVC Conduit
- C. Section 26 05 45 - Underground Electrical Work
- D. Section 31 23 33 - Trenching and Backfilling
- E. Section 33 05 97.23 - Underground Utility Warning Tape

1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for Work of this Section shall be paid under the Miscellaneous Utility Systems Allowance bid item of Bid Proposal Line Items.

1.4 SUBMITTALS

- A. Complete list of materials and equipment proposed for use in Project prior to purchase and installation of materials or equipment.
  - 1. Submittals shall include manufacturer's names and material descriptions or equipment identification such as styles, types, and catalog numbers. Submittal data shall show published ratings or capacity data, detailed equipment drawing for fabricated items, panel diagrams, wiring diagrams, installation instructions, and other pertinent data. Where literature is submitted covering a group or series of similar items, clearly indicate or identify the applicable items. Drawings shall be drawn to scale indicating exact dimensions.
- B. Review of materials shall be based on the manufacturer's latest published data and such physical tests as may be performed by Department Testing Laboratory.

- C. Prior to start of construction, submit to Engineer proposed equipment layout drawings for each equipment room or area containing items of equipment furnished under Division 26. Layout drawings shall consist of plan view of room, to scale, showing projected outlines of equipment, complete with dotted indication of required clearances including those needed for removal of service. Indicate location of conduit and pull boxes.
- D. Operation and Maintenance Manuals: Provide 1 copy of indexed operation and maintenance manual which shall include test reports, service instructions, and renewal parts lists of equipment installed in Project. Submit in hard copy and electronic file format.
  - 1. Submit operation and maintenance manuals at least 30 Calendar Days before final inspection. Include the following information together with any pertinent data:
    - a. Renewal part numbers of replaceable items.
    - b. Manufacturer's specific product data.
    - c. Serial numbers of principal pieces of equipment.
    - d. Supplier's name, address, and phone number.
    - e. Final settings for breakers, relays, and control devices.
- E. Submit resume of full-time quality assurance person.
- F. Project Records:
  - 1. In addition to the requirements of PROJECT RECORD DOCUMENTS Section, the make and model of equipment installed in Project shall be indicated on Project Record Drawings.

## 1.5 QUALITY ASSURANCE

- A. Provide at Project Site(s), a full time quality assurance person with minimum 5 years of electrical construction experience. This person shall lay out on plans the installation of electrical equipment, conduit alignments, terminations, wiring, and Work pertaining to electrical construction, which shall be used by the electricians for field installations.

## B. Jobsite Workers:

1. Apprentices and Journey Level Electricians:
  - a. Apprentices shall be registered in a State of California approved apprenticeship program.
  - b. The use of Journey level electricians shall comply with State of California labor laws.
2. Project Workforce for Compliance with Electrical Safety Policy:
  - a. 70 percent of Journey Level electricians shall be graduates of a State of California Approved Electrical Apprenticeship Program.
  - b. 20 percent of Project Site(s) electrical workers shall be Occupational Safety and Health Administration (OSHA) 10-hour General Industry Safety And Health certified.
  - c. At least 1 Project Site(s) electrical worker shall be OSHA 30-hour General Industry Safety And Health Certified.
  - d. The workforce ratios indicated in Quality Assurance Article, Jobsite Workers Paragraph, subparagraphs 2a through c shall be determined by verifying the workforce composition on a daily basis.
3. Contractor shall complete Electrical Safety Policy-Implementation Plan form, located in Appendix "F" of Specifications and submit at the time required in NOTICE INVITING BIDS Section.
4. Prior to start of electrical Work, Contractor or subcontractor shall provide proof of compliance to Inspector.
5. Contractor shall continue to monitor and comply with Jobsite Workers Paragraph of this Article requirements for the duration of Contract.  
Electrical Work may be terminated at any time Contractor is found to be out of compliance.

## 1.6 MAINTENANCE

- A. Spare Parts: Deliver the following spare parts to Engineer and obtain receipts. Submit at same time as operating instructions.
  1. Spare fuses: 2 sets for each size combination fused breaker.

2. Spare fuses for low voltage fused switch: 2 sets for each size used on Project.
3. Spare pilot light lamps of each type used on Project, in quantity of 10 percent, but not less than 2 percent.
4. Overload heater elements: 2 sets for each size used on Project.
5. Spare fuses for medium voltage switches: 2 sets for each size fuse used on Project.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Materials and equipment to be installed shall be standard cataloged products of companies regularly engaged in the manufacture of such products, Underwriters Laboratories, Incorporated (UL) listed, and meet the requirements of City of Los Angeles Electrical Code. The products shall be the latest standard designs in accordance with Drawings and unless otherwise noted.
- B. Equipment and devices of the same rating shall be new, interchangeable, and of the same manufacturer. Fixtures and fittings of one classification shall be of the same manufacturer and model.
- C. Materials and equipment shall have National Electrical Manufacturers Association (NEMA) NEMA 1 rating for indoor use and NEMA 3R rating for outdoor use.

### 2.2 NAMEPLATES

- A. Furnish and install identifying and functional nameplates for the electrical fixtures and poles. Nameplates shall identify function and controlling circuits.
- B. Engrave nameplates on filled metal or 2 ply laminated acrylic and hold in place by mechanical means. Galvanize mechanical fasteners with 2 ounces of hot-dipped zinc per square foot of surface. Characters shall have a minimum height of 4 millimeters for branch circuit identification and minimum of 51 millimeters for warning signs, unless a larger minimum dimension is required by Cal-OSHA or City of Los Angeles Electrical Code.

## 2.3 ENCLOSURES

- A. Indoor: NEMA 1
- B. Outdoor: NEMA 3R
- C. Switch enclosures shall be clearly marked for maximum voltage, current, and horsepower rating.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Perform trench Work and vault excavations as shown on Drawings and in conformance with BASIC SITE MATERIALS AND METHODS and TRENCHING AND BACKFILLING Sections.

### 3.2 INSTALLATION

- A. Perform Work in conformance with City of Los Angeles Electrical Code, American Insurance Association (AIA) regulations, regulations of Industrial Safety Commission of the State of California, and any other legally constituted regulating authority having jurisdiction.
- B. Install Work in conformance with NEMA 3R rating for weather resistance.
- C. Locate and route new electrical conduits without penetrating through new or existing roof decks or electrical equipment roofs.
- D. Exposed conduit, fittings, and straps shall be PVC coated steel conduit unless noted otherwise.

### 3.3 EMPTY CONDUITS

- A. Provide a nylon pull tape in each empty conduit for future use. Secure tape at both ends and provide a minimum 48 inches of slack.
- B. Nylon pull tape shall be a 3/8 inch width nylon pull tape. Nylon pull tape shall be permanently printed with the rated tensile strength (1,250 pounds minimum) and sequential footage markings.
- C. Nylon pull tape shall be in 1 continuous length without any cuts or ties.
- D. Identify each tape at the end of each line with source and destination markers.



### 3.4 CAPPING EMPTY CONDUITS

- A. Cap underground conduits, which are to remain empty, at both ends.

### 3.5 CONDUITS CROSSING RAILROAD TRACKS

- A. Encase electrical, telephone, communications, and signal conduit duct banks crossing new railroad tracks in 3 inch concrete with minimum 2,000 pounds per square inch (psi) strength, extending a minimum of 10 feet on both sides of railroad tracks.

### 3.6 REPAIR AND RESTORATION

- A. Perform trench resurfacing Work as shown on Drawings and in conformance with BASIC SITE MATERIALS AND METHODS and TRENCHING AND BACKFILLING Sections.

### 3.7 FIELD QUALITY CONTROL

- A. Tests and Inspections:

- 1. Compliance Tests:

- a. Conduct tests at portions of the installation as may be necessary to ensure full compliance with Drawings and Specifications. Perform tests in presence of Engineer. Costs of tests shall be at sole cost and expense of Contractor. Provide instruments, equipment, labor, and materials to complete tests. Tests may be required on any item between installation of Work and end of 1 year warranty period. Should tests detect defective materials, poor workmanship, or variance with requirements of Specifications, Contractor shall make changes necessary and remedy defects at no additional cost to Department.

- 2. System Acceptance:

- a. Notify Engineer for final inspection prior to system acceptance upon:

- 1) Completion of installation of systems required under Contract Documents.
      - 2) Submission and acceptance of operating and maintenance data.
      - 3) Completion of identification markers, tags, nameplates, directory cards, and other identification mechanisms as specified in Specifications.

- b. Acceptance is contingent upon the following:
  - 1) Completion of final review and correction of deficiencies.
  - 2) Satisfactory completion of acceptance tests which demonstrate compliance with performance and technical requirements of Contract Documents.
  - 3) Satisfactory completion of training program and submission of Operation and Maintenance Manuals and As-Built Drawings required by Contract Documents.

### 3.8 CLEANING

- A. Upon completion, and at other times during the progress of Work, remove surplus materials, trash, and debris resulting from Work.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. PVC conduit and fittings

### 1.2 RELATED SECTIONS

- A. Section 26 00 01 - Basic Electrical Materials and Methods

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:

1. Payment for Work of this Section shall be paid under the 4 Inch PVC Conduits bid item of Bid Proposal Line Items.

### 1.4 REFERENCES

- A. ASME B1.20.1 - Pipe Threads, General Purpose, Inch.
- B. ASTM D1784 - Standard Classification System and Basis for Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds.
- C. ASTM D1785 - Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120.

### 1.5 SUBMITTALS

- A. Submit the following to Engineer:

1. Cut sheets for PVC conduit and fittings.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Conduit, fittings, and bends shall be of the schedules noted on Drawings, but in no case lighter than Schedule 40.
- B. Conduit bends shall be Schedule 80.
- C. Conduit bends shall be of same schedule as conduit straight runs as shown on Drawings.

- D. Conduit color is not important, except that conduit installed where visible shall be of the same color materials.
- E. Couplings, fittings, and adapters shall be of the same materials as the conduit manufacturer.
- F. Primer, solvent, sealing, and joining compounds shall be as recommended by the conduit manufacturer.
- G. Conduit and fittings shall be made from clean, virgin, Type II, Grade 1, PVC resin conforming to ASTM D1784.
- H. Dimensions and tolerances shall conform to requirements for rigid PVC conforming to both ASTM D1784 and ASTM D1785.
- I. Each piece shall be City of Los Angeles Department of Building and Safety approved or meet requirements of a recognized testing laboratory approved by City of Los Angeles Department of Building and Safety.
- J. Plastic spacers for direct burial or concrete encasement shall be of size required to fit conduit and shall be as manufactured by Carlon Products.
- K. Materials shall contain labels as may be required by City of Los Angeles Electrical Code.
- L. Joints between PVC and PVC or between PVC conduit and PVC-coated steel conduit shall be socket-type solvent weld or threaded fittings.
- M. Minimum size of conduits shall be 3/4 inch, unless noted otherwise on Drawings.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Join PVC conduit using socket type solvent weld or threaded fittings and in conformance with manufacturer's written instructions.
- B. Cut conduit square and externally chamfer approximately 10 to 15 degrees. Remove burrs and fins.

- C. Exercise care not to place stress on previously made joints. Allow to set before handling according to air temperature as follows:

| <u>Air Temperature</u>               | <u>Minimum Set Time</u> |
|--------------------------------------|-------------------------|
|                                      |                         |
| 60 degrees to 100 degrees Fahrenheit | 30 minutes              |
| below 60 degrees Fahrenheit          | 60 minutes              |

- D. Apply primer and solvent to ends in a manner such that no material is deposited on the interior surface or extruded into the interior during jointing. Excess cement on the exterior of the joint shall be wiped clean immediately after assembly.
- E. Threads for plastic conduit shall be as specified in ASME B1.20.1. Install a plug in the bore to prevent distortion prior to threading.
- F. Threaded fittings used for joints shall be made using Teflon tape or other approved jointing material. Solvent shall not be used with threaded fittings.
- G. Protect conduit from tool damage during assembly. Vises shall have padded jaws and strap wrenches shall be used for installation of fittings and nipples.
- H. Remove and replace conduit which has been nicked, scarred, or otherwise damaged at no additional cost to Department.
- I. Conduit runs for direct burial or concrete encasement shall have plastic spacers spaced at not more than 5'-0" on center. Install spacers on firm bearing surfaces before backfilling or concrete encasement.
- J. Bends and transitions from buried or encased runs to exposed runs shall be made with PVC coated steel conduit. The transition shall include as a minimum the last 5 feet of the buried or encased conduit and the first 3 feet of exposed conduit.
- K. PVC conduit runs shall contain a grounding conductor.
- L. The last 10 feet of buried conduit shall be galvanized steel conduit with PVC coating as called for on Drawings.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Underground electrical Work
- B. Plastic utilities duct
- C. Moisture sealing materials

### 1.2 RELATED SECTIONS

- A. Section 02 00 01 - Basic Site Materials and Methods
- B. Section 26 00 01 - Basic Electrical Materials and Methods
- C. Section 26 05 42 - PVC Conduit
- D. Section 32 13 14 - Concrete for Exterior Improvements
- E. Section 33 05 97.23 - Underground Utility Warning Tape

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for Work of this Section shall be paid under the Miscellaneous Utility Systems Allowance bid item of Bid Proposal Line Items.

### 1.4 REFERENCES

- A. ASTM F512 - Standard Specification for Smooth-Wall Poly(Vinyl Chloride) (PVC) Conduit and Fittings for Underground Installation.
- B. CPUC GO 128 - Public Utilities Commission of the State of California Rules for Construction of Underground Electric Supply and Communication Systems.
- C. NEMA RN 1 - Polyvinyl-Chloride (PVC) Externally Coated Galvanized Rigid Steel Metal Conduit and Intermediate Metal Conduit.
- D. NEMA TC 2 - Electrical Polyvinyl Chloride (PVC) Conduit.
- E. NEMA TC 3 - Polyvinyl Chloride (PVC) Fittings for Use with Rigid PVC Conduit and Tubing.
- F. NEMA TC 6&8 - Polyvinyl Chloride (PVC) Plastic Utilities Duct for Underground Installations.

- G. NEMA TC 9 - Fittings for Polyvinyl Chloride (PVC) Plastic Utilities Duct for Underground Installation.
- H. NFPA 70 - National Electrical Code.
- I. UL 6 - Electrical Rigid Metal Conduit-Steel.
- J. UL 514A - Metallic Outlet Boxes.
- K. UL 514B - Conduit, Tubing, and Cable Fittings.
- L. UL 651 - Schedule 40, 80, Type EB and A Rigid PVC Conduit and Fittings.

### 1.5 SUBMITTALS

- A. Submit the following to Engineer for approval:
  - 1. Product Data:
    - a. Conduit/Duct (all types)
    - b. Precast Maintenance Holes
    - c. Sealing Material for Precast Maintenance Holes
    - d. Maintenance Holes Frames and Covers
  - 2. Shop Drawings:
    - a. Precast Maintenance holes: Indicate dimensions, reinforcement, size, and locations of openings, and accessory locations for precast maintenance holes.
    - b. Submit structural calculations for precast concrete items as follows:
      - 1) Submit structural calculations for loads including traffic, soil pressure, and live loads.
      - 2) Submit buoyancy calculations based on water table at 5 feet below grade. Products shall have a buoyancy safety factor of 1.5 minimum.
      - 3) The calculations shall include a statement by the structural engineer that products are suitable for use in Seismic Zone 4 as defined by City of Los Angeles Building Code.

3. Certificates:

- a. Material and Equipment: Provide manufacturer's statement certifying that the product supplied meets or exceeds Contract requirements.

1) Precast maintenance hole and accessories.

- b. For electrical medium and high voltage splicing installer provide the following:

1) State of California Journeyman license

2) IBEW-NECA cable splicing certification

4. Details, installation procedures, sequence of Work, and supporting information to intercept electrical medium and high voltage lines.

- a. References from 3 clients where high voltage intercepting was completed. Provide description of Work and estimated value of Work.

1.6 QUALITY ASSURANCE

- A. In each standard referenced to in this Section, consider the advisory provisions to be mandatory, as though the word "shall" has been substituted for "should" wherever it appears.
- B. Electrical medium and high voltage splicing shall be installed by a qualified installer with at least 10 years experience in this type of Work.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect, and handle products to Project Site(s) under provisions of BASIC SITE MATERIALS AND METHODS Section. Inspect for damage.
- B. Store and protect in conformance with manufacturer's written instructions.

1.8 PROJECT CONDITIONS

- A. Drawings are diagrammatic and shall not be scaled for exact locations. Locations of existing underground utilities are based on record drawings and casual field observations. Contractor shall use care in excavating for the installation of new underground ducts and shall be responsible for damage to existing underground utilities. Field conditions and non-interference with other utilities and trades, shall determine exact locations of new underground electrical ducts.



- B. Conduit routing is shown on Drawings in approximate locations unless dimensioned. Route as required to complete wiring system.

## 1.9 PROJECT RECORD DOCUMENTS

- A. Submit under provisions of PROJECT RECORD DOCUMENTS Section.
- B. Accurately record actual locations of exact routing of ductbank indicating plan location and depths every 50 linear feet. Measure conduit locations from permanently fixed readily discernible landmarks such as building corners, columns, maintenance hole centerline.
- C. Accurately record actual locations of each maintenance hole.

## PART 2 - PRODUCTS

### 2.1 MATERIALS AND EQUIPMENT

- A. Materials and equipment shall be new and of high quality to give long life and reliable operation. Equipment shall be modern in design and shall not have been in prior service except as required by factory tests. Materials and equipment shall conform to the respective specifications and standards of this Section. Electrical ratings shall be as indicated on Drawings.
- B. Concrete for encasement shall be in conformance with BASIC SITE MATERIALS AND METHODS Section.

### 2.2 CONDUIT

- A. Rigid Metal Conduit: UL 6, hot-dip galvanized, threaded type.
- B. PVC Coated Rigid Steel Conduit: NEMA RN 1.
- C. Rigid Plastic Conduit: NEMA TC 2; Schedule 40 PVC.

### 2.3 PLASTIC DUCT

- A. Concrete Encased Plastic Utilities Duct: UL 651: Schedule 40 Rigid PVC Conduit.
- B. Concrete Encased Plastic Telecommunication Duct: UL 651: Schedule 40 Rigid PVC Conduit.

## 2.4 FITTINGS AND OUTLET BOXES

- A. Metal Fittings and Outlet Boxes: UL 514A and UL 514B. Fittings and boxes for use with steel conduit, rigid or flexible shall be cast-metal with gasketed closures.
- B. PVC Fittings and Conduit Bodies: NEMA TC 3.
- C. Plastic Utility Duct Fittings: NEMA TC 6&8, NEMA TC 9, and ASTM F512.

## 2.5 NYLON PULL TAPE

- A. Nylon pull tape shall be nylon having a minimum tensile strength of 1,250 pounds in each empty duct. Minimum 48 inches of slack shall be left at each end of nylon pull tape. Plug spares for future use.

## 2.6 CABLE SUPPORTS

- A. Provide a means of supporting cables running through electrical maintenance holes. This shall be in the form of vertical channels cinch anchored to the maintenance holes wall. A cantilevered support fastened to the channels shall be used to support the cable and splices. Cable racks, including rack arms and insulators, shall be adequate to accommodate the cable. A porcelain clamp shall be used to insulate and protect cables from supports. Cables smaller than 0.75 inch diameter shall be provided with supplementary means of support such as cable tray or conduit. Exposed metal parts and fasteners shall be fabricated of stainless steel or double hot-dip galvanized steel.

## 2.7 MOISTURE SEALING MATERIAL

- A. Provide a 2-part urethane foam sealant which when mixed shall expand approximately 15 times in volume to form a dense, strong, tough foam unit with density of 3 to 4 pounds per cubic foot. Sealant shall reach 60 percent full strength in 8 to 10 minutes after application.

## 2.8 GROUNDING

- A. Grounding shall conform to City of Los Angeles Electrical Code NFPA 70 Section 250.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Underground cable installation shall conform to NFPA 70, CPUC GO 128, and other state codes and City of Los Angeles Electrical Code.

### 3.2 CONCRETE

- A. Concrete for electrical requirements shall be at least 3,000 pounds per square inch (psi) concrete with 1-inch aggregate and in conformance with CONCRETE FOR EXTERIOR IMPROVEMENTS Section, unless otherwise noted on Drawings.

### 3.3 UNDERGROUND DUCT

- A. The duct bank shall be rectangular in cross-section and shall provide at least 3 inches of concrete cover surrounding the bank. Separate conduits by a minimum concrete thickness of 3 inches.
- B. Provide a minimum of 12 inches of separation between low voltage conduits from high voltage conduits.
- C. Provide a minimum of 6 inches of separation between utility crossings.
- D. Sweep bends may be made up of 1 or more curved or straight sections or combinations thereof. Manufactured bends shall have a minimum radius of 60 inches for ducts of 2 inches in diameter and larger.
- E. Use suitable spacers of high impact polystyrene installed not greater than 4 feet on center.
- F. During construction, protect partially completed duct lines from the entrance of debris such as mud, sand, and dirt by means of suitable conduit plugs.
- G. Conduit Termination to Maintenance Holes: Conduits shall terminate into maintenance hole and pull box terminators. Immediately after installation, plug or cap raceway ends with water-tight and dust-tight seals until the time for pulling in conductors.
- H. Concrete Envelope: Securely anchor duct to prevent movement during concrete or slurry placement.

- I. Underground Warning Tape: Identifying tapes shall be buried in utility line trenches. Place 1 tape above the centerline of each duct bank. Refer to UNDERGROUND UTILITY WARNING TAPE Section.
- J. Conduit Stub-up through Concrete Slab or Grade: Install raceways so that they emerge at right angles to the surface and have no curved portion of the bend exposed. Provide support during pouring of concrete to ensure that raceways remain in position. Provide PVC coated galvanized rigid steel elbows and nipples where conduit emerges from slab of concrete or grade. This requirement is for slabs and grades, regardless of whether it is permanently exposed to view or not.

### 3.4 PREPARATION FOR PULLING IN CONDUCTORS

- A. Do not install crushed or deformed raceways. Avoid traps in raceways where possible. Take care to prevent the lodging of concrete, dirt, or trash in raceways, boxes, fittings, and equipment during the course of construction. Make raceways entirely free of obstructions or replace them. Ream raceways, remove burrs, and clean raceway interior before introducing conductors or pull wires. Conduit shall be clear of particles of earth, sand, and gravel.
- B. Existing and new raceways shall be successfully mandrelled with a 12 inch long mandrel in the presence of Inspector. After successful mandrelling of raceways, pull a bristle brush through each raceway to remove debris.
- C. For existing raceways to be used in Contract, pull a mandrel of a diameter approximately 1/2 inch less than the raceway inside diameter through each raceway. Provide nylon pull tape to be used for conductor paths.
- D. For new concrete-encased raceways, after the concrete envelope has set, mandrel each completed section of a duct line from maintenance hole to maintenance hole. Pull a mandrel of a diameter approximately 1/4 inch less than the raceway inside diameter through each raceway.

### 3.5 EMPTY RACEWAYS

- A. Certain raceways shall have no conductors pulled in as part of Contract. Identify with tags at each end and at any intermediate pull point the origin and destination of each such empty raceway. Provide a removable permanent cap over each end of each empty raceway. Provide a 3/8 inch nylon pull cord in each empty raceway.

### 3.6 GROUNDING

- A. Grounding shall be in conformance with City of Los Angeles Electrical Code NFPA 70 Section 250.

END OF SECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Fiber optic cable including but not limited to:
  - 1. Underground fiber optic network installation including splicing, terminating, labeling, cable management, air blown fiber networking, testing, and cabling devices for the fiber optic cabling system.
  - 2. Connect and test fiber optic cabling network, end-to-end.
- B. This portion of Work establishes the installation and use of a fiber optic cable communications backbone.

1.2 RELATED SECTIONS

- A. Section 02 00 01 - Basic Site Materials and Methods
- B. Section 26 00 01 - Basic Electrical Materials and Methods

1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for Work of this Section shall be paid under the Miscellaneous Utility Systems Allowance bid item of Bid Proposal Line Items.

1.4 REFERENCES

- A. IEEE C2 - National Electrical Safety Code(R) (NESC(R)).
- B. TIA-526-14 - Optical Power Loss Measurement of Installed Multimode Fiber Cable Plant; IEC 61280-4.1 Edition 3.1, Fiber Optic Communications Subsystem Test Procedures- Part 4-1: Installed Cable Plant- Multimode Attenuation Measurement.
- C. TIA-568.0 - Generic Telecommunications Cabling for Customer Premises.
- D. TIA-598 - Optical Fiber Cable Color Coding.
- E. TIA-606 - Administration Standard for Telecommunications Infrastructure.

## 1.5 SUBMITTALS

- A. Submit shop drawings in completed groups of materials for cable (i.e., conduit or cable).
  - 1. Product map showing use of required products showing interconnection between system components and subsystems, and indicating conformance with National Electrical Code (NEC), Underwriters Laboratories, Incorporated (UL), Telecommunications Industry Association (TIA)/Electronic Industries Alliance (EIA) listings, certifications, and specifications. Include detail and labels per strand and proposed location per strand, microtube layout and port destination.
  - 2. Interface requirements, including connector types to external systems and systems or components not supplied by Contractor.
  - 3. Rack mounts and panel type, accessories, size, manufacturer, manufacturer code, and proposed location.
  - 4. Panel connectorization location schedule and labeling convention.
  - 5. Enclosure, rack and panel type, size, manufacturer, manufacturer code, and proposed location, including but enclosure layout assembly.
  - 6. Panel connectorization location schedule, line diagrams, connectors, and labeling convention.
- B. Required submittals for fiber optic and electrical items and equipment shall include complete catalog information such as construction ratings, insulation systems, and manufacturer's certification that items or equipment meet or exceed UL standards, trade standards, and Specifications.
- C. Contractor shall submit documented proof of licensing and certification, including individual's name, date of certification, location of certification, and certifying company.
- D. Manufacturer's written instructions shall be a part of the cable submittals for installation.
- E. Materials list of items and equipment proposed to be provided for Work of this Section. Include the bill of materials which shall note lead times and the following as applicable:
  - 1. Patch panels, connectors, and fiber optic cabling.

2. Electrical equipment layout; including electrical testing materials indicating exact location and dimensions of conduits, equipment, and clearances.
3. Cabinets for fiber optic systems, special terminals, termination panels, equipment, rack mounts, and panels including accessories of the same manufacturer.
4. List of installation equipment, including model number, licensing and license lease if necessary, manufacturer, specification sheet, price, and necessary accessories associated for Work in this Section prior to purchase for Engineer's approval.
5. List of testing equipment, including model number, manufacturer, specification sheet, and test parameters for Work in this Section prior to purchase for Engineer's approval.
6. Copy of the manufacturer's printed reel documentation, including the following:
  - a. Manufacturer's reel number
  - b. Manufacturer's traceable batch number
  - c. Length of the fiber cable on reel
  - d. Maximum attenuation
  - e. Minimum bandwidth

F. Patch Records

G. Record Drawings: Provide in conformance with PROJECT RECORD DOCUMENTS Section.

1. Accurately indicate and dimension cable lengths, splice joints, terminations, and microduct tube used per cable on Project Record Drawings.
2. Initial and identify name and telephone number of installer on sheets as being a correct and accurate record of the installation.
3. Report of fiber strand connection locations per fiber per patch panel.
4. Detailed line diagram showing each fiber with relative test reports associated per strand, per location, termination port location and final microtube layout.



- H. Operation and Maintenance Manuals for Test Equipment: Prior to final acceptance of Work by Department, furnish both in hard copy and electronic file format, Operation and Maintenance Manuals for equipment, as required in this Section. The contents shall include description of equipment, names of manufacturers, parts lists, model numbers, maintenance schedules, location of nearest facility for replacement parts or service, wiring and connection diagrams, internal schematic drawings, and other electrical/mechanical data necessary for operation and maintenance.
- I. Test results as required in this Section.
- J. Manufacturer's warranty with a minimum warranty duration of 20 years.

## 1.6 QUALITY ASSURANCE

### A. General:

- 1. Equipment and accessories shall be the product of a manufacturer regularly engaged in its manufacture.
- 2. Supply equipment and accessories new, free from defects, and listed by Underwriters Laboratories, Inc. or bearing its label. Special or custom equipment shall bear the label of laboratory recognized by City of Los Angeles Department of Building and Safety.
- 3. Supply equipment and accessories in compliance with the applicable standards listed in this Section.
- 4. Safety Policy: Prior to start of Work, Contractor shall complete Electrical Safety Policy-Implementation requirements as specified in BASIC ELECTRICAL MATERIALS AND METHODS Section.
- 5. Contractor shall employ certified system installation technicians who have experience in microduct installation, or who have received training in air blown cable installation technologies.
- 6. Material items shall be new, and conform to grade, quality, and standards specified. Equipment and materials of the same type shall be a product of the same manufacturer throughout.
- 7. The label or listing by UL shall appear on materials and equipment for which standards have been established by that agency.

- B. Contractor shall be manufacturer certified to install the proposed submitted cabling system. Provide satisfactory evidence of certification in the form of a current letter or certificate from the manufacturer within 4 days of Award.

## 1.7 WARRANTY

- A. Contractor shall furnish a warranty from the manufacturer, with a minimum 20 year coverage, for the communications cabling system. This warranty shall cover parts and labor for the duration of the extended warranty, as well as optical performance of the cabling system.

## PART 2 - PRODUCTS

### 2.1 MATERIALS - GENERAL

- A. Multimode 62.5/125  $\mu\text{m}$  fiber strands shall meet or exceed the following geometry criteria:
  - 1. Core diameter: 62.5 micrometer ( $\mu\text{m}$ ), plus or minus 3.0  $\mu\text{m}$ .
  - 2. Cladding diameter: 125  $\mu\text{m}$ , plus or minus 1.0  $\mu\text{m}$ .
  - 3. Core/Cladding Concentricity: less than or equal to 3  $\mu\text{m}$ .
  - 4. Minimum tensile strength: 100,000 pounds per square inch (psi)
- B. Multimode 62.5/125  $\mu\text{m}$  fiber strands shall meet or exceed the following performance criteria:
  - 1. Attenuation: 3.4 decibel per kilometer (dB/km) at 850 nanometer (nm) and 1.0 dB/km at 1300 nm wavelengths, minimum.
  - 2. Bandwidth: 200 mega hertz kilometer (MHz-km) at 850 and 500 MHz-km at 1300 nm wavelengths, minimum.
- C. Materials shall comply with applicable legal requirements and standards specified in this Section.
- D. Examine Drawings and Specifications and determine Work to be performed by the communications, electrical, and other trades. Provide the type and quantity of communications materials and equipment necessary to complete this Work and systems in proper operation, tested and ready for use.
- E. Provide and install incidental items not indicated on Drawings nor mentioned in Specifications that belong to Work described or are required for complete systems.

- F. Raw single mode fiber shall be coated by the same manufacturer for microduct conduit and installed in accordance with Drawings.
- G. Provide and install manufactured products with the same quality as the basis of design manufacturer, Sumitomo.
- H. Provide testing equipment for Optical Time Domain Reflectometer (OTDR) to the quality and capability of an OptiFiber OTDR by Fluke Networks Corporation.
- I. Splice trays and accessories shall be compatible with patch panel and rack housing. Splice trays shall add 24 strands and be fusion splice compatible.
- J. Contractor shall provide air compression equipment, attachments and accessories for air blown fiber installation or equivalent license lease and include in the Miscellaneous Utility Systems Allowance bid item of Bid Proposal Line Items.

## 2.2 FIBER OPTIC CABLE

### A. General:

- 1. Cable shall be suitable for outdoor installations within underground pathways system and within inner duct and sub-ducting (in basketways, cable trays, conduit and hangers).
- 2. Optical transmission performance shall not be significantly affected by environmental fluctuations, installation, or aging.
- 3. Materials shall not evolve hydrogen in quantities that shall increase light attenuation.

### B. Buffering:

- 1. Single mode fibers shall be loosely buffered, either in a core or tube or in multiple tubes around a central member.
- 2. Buffer tubes shall be dry (not contain gel).
- 3. Each buffer tube shall be color-coded for identification, and shall meet the requirements of TIA-598.

### C. Sheath:

- 1. Sheath shall consist of a strength member and an outer jacket, with non-metallic component dielectric sheath.

2. Strength member: Aramid yarn, to the quality of Kevlar or equal, or reinforced fiberglass rods.
3. Jacket: Fluoropolymer thermoplastic.
4. Flame Rating: NEC Article 770, rated as Optical Fiber Nonconductive Plenum (OFNP), and UL listed as such.
5. Rated tensile load: 600 pounds maximum rated load.
6. Operating Temperature Range: Minus 40 to 158 degrees Fahrenheit (minus 40 to 70 degrees Celsius).
7. Installation Temperature Range: Minus 22 to 140 degrees Fahrenheit (minus 30 to 60 degrees Celsius).

D. Manufacturer:

1. Corning Cable Systems.

## 2.3 FIBER OPTIC PATCH PANELS

A. General:

1. Fiber optic patch panels shall be an enclosed housing for protecting, storing, and organizing the termination of the fiber cable(s) and fiber strands; [shall provide means to strain relieve and support of the cables (for standard pull only)]shall contain facilities to store fiber slack; and shall provide patch cord management.
2. Fiber optic patch panels shall be passive physical equipment and an apparatus used in terminating, interconnecting, and cross-connecting fiber optic cabling; shall possess a minimum fire resistant rating of UL 94V-1; and shall conform to current existing Occupational Safety and Health Administration (OSHA) Health and Safety Laws.
3. Fiber optic patch panels shall be rack mountable.

- B. Fiber optic patch panels shall come equipped with safety labels such as laser identification or warning labels as required by system considerations.

C. Manufacturer:

1. Corning Cable Systems.

## 2.4 FIBER OPTIC CONNECTORS

- A. Single mode fiber optic connectors appropriate for the mode type of fiber, and compatible with the equipment. Contractor shall coordinate connectors with equipment prior to purchase, LC connectors preferred.

## 2.5 CABINETS

- A. Cabinets shall be Electrorack Enclosure products, Model 42U Eclipse, 24 inches wide by 42 inches deep (45 inches overall depth).

# PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Verification of Dimensions: Dimensions shown on Drawings (scaled, figured, or noted) are approximate, given for estimating purposes. Before proceeding with Work of this Section, carefully check and verify dimensions, sizes, and other related conditions for proper fitting in and attachment of materials and equipment to other equipment and to the structure.
- B. Contractor shall verify the cable jacket and cable coating rating before purchasing cable from manufacturer for each installation area.
- C. Provide the type and quantity of communications materials and equipment necessary to complete this Work and systems in proper operation, tested, and ready for use.

## 3.2 INSTALLATION

- A. Perform cable installation, splicing and termination in conformance with manufacturer standard and written instructions, and as specified in this Section.
- B. Optical fiber terminations shall be completed by qualified personnel utilizing state of the art equipment and techniques, who have obtained licensing approved by Engineer. Contractor shall submit documentation of licensing as described in Submittals Article of this Section.
- C. Fiber Optic Cabling and Connectors: Clean thoroughly to remove debris, dirt, and dust on both exterior of cable and connector. Cable splices, terminations, and other installations shall be in a clean enclosed area. Cable splices shall be fusion spliced and installed in fusion splice compatible splice trays.

- D. Cable pulling shall be in done in conformance with cable manufacturer's written instructions and IEEE C2 standards. The bend radius of fiber optic cables shall not be less than 20 times the outer diameter of the cable during installation, nor shall the bend radius be less than 10 times the outer diameter in a static state; and not greater than the recommended manufacturer cable bend. Manufacturer's written instructions for pulling tensions shall not be exceeded. Any tube cable bent or kinked to a radius less than recommended shall not be installed.
- E. Provide slack in each fiber bundle to allow for future re-termination in the event of connector or fiber end-face damage. Adequate slack shall be retained to allow termination at a 30 inch high workbench positioned adjacent to the termination enclosure(s). A minimum of 50 feet shall be retained in equipment rooms and telecommunication closets, and neatly coiled.
- F. Bend angles shall not exceed 180 degrees between pull boxes. Contractor shall install intermediate pull boxes where angles between pull boxes exceed 180 degrees. If 3 or more 90 degree bends in a continuous run are unavoidable cable shall be installed from a central point.
- G. Contractor shall notify and obtain approval from Engineer before adjusting or modifying termination locations, including but not limited to panels, switches, generators, telecommunication rooms, and non-fiber related items.
- H. Cable installation (within the microduct) shall meet the required strand count as listed on Drawings. Contractor shall have a minimum number of distribution tubes as required to break out to the various locations named in this Project and the required strand count capacity without splicing to provide a node to node connection.
- I. Backbone Cable Installation and Routing:
  - 1. Cable runs shall have continuous sheath continuity, homogenous in nature. Splices are not permitted anywhere, unless expressly shown on Drawings or approved in writing by Engineer prior to installation.
  - 2. Do not exceed 6,000 meters optical conductor length from the end termination equipment to the camera locations.

## J. Placement:

1. Install cables within designated pathways.
2. Do not exceed the manufacturer's pulling tension. Use a pulling tension meter when using mechanical assistance during installation. Record maximum pulling tension for each cable run, and submit to Engineer for review if requested. Replace entire run when manufacturer's maximum pulling tension is exceeded.
3. Place and suspend cables in a manner to protect cables from physical interference or damage. Place cables with no kinks, twists, or impact damage to sheath. Replace cables damaged during installation.
4. Use UL only approved cable-pulling compounds when necessary to reduce pulling tensions.
5. Provide 20 feet minimum cable slack at the pull boxes and enclosures; store slack in fiber slack storage reel. Submit product for Engineer's approval prior to purchase for storage reel and coordinate products with enclosures.
6. Place a pull rope along with cables where run in conduit and space capacity remains. Tie off ends of the pull rope.

## K. Routing:

1. Neatly dress and organize cables using designated cable routing facilities, and fasten to support devices via tie wraps or velcro-type straps.
2. Within enclosures, neatly dress and organize cables on designated cable support apparatus.

## L. Termination:

1. Properly relieve strain from cables at termination points, within enclosures and equipment.
2. Provide breakout kits to furcated fibers from buffer tubes.
3. Terminate fiber strands at both ends using the specified fiber optic connectors appropriate for the mode type of fiber, and compatible with the equipment. Contractor shall coordinate connectors with equipment prior to purchase. Perform terminations in conformance with manufacturer's written instructions.

4. Provide required accessories and consumables for complete termination of fiber strands.
5. Provide 3 feet of unsheathed fiber (including buffer tube and broken out from the buffer tube) slack within the patch panel termination equipment enclosure at each end of the link. Properly store fiber slack in rear of patch panel into the "routing rings", in conformance with manufacturer's written instructions. Include "extension" slack loop/fold in the rear of the shelf to allow for the drawer to be pulled out without putting tension on the fibers.
6. Each run shall be from equipment to enclosure with no additional splices.

M. Fiber Patch Cords:

1. Install a 7-foot length of fiber optic patch cords from the rack-mounted fiber optic termination panel to the rack-mounted fiber optic video receiver modules.

N. Fiber Optic Cable Termination Panel:

1. Install a fully assembled termination panel in designated equipment enclosure. Contractor shall submit enclosure product and layout for Engineer's approval prior to purchase and shall coordinate size and locations with other trades.
2. Provide accessories required for proper installation of each termination panel, including but not limited to, connector panels and adapters.

### 3.3 LABELING

A. General Requirements:

1. Labeling , identifier assignment, and label colors shall conform to TIA-606 Administration Standard as approved by Engineer prior to installation.
2. Provide permanent and machine generated labels. Hand written labels shall not be accepted.

B. Cable Labels:

1. Label format shall be wrap-around self laminating.
2. Label color shall be white background with clear laminating window.



3. Text color shall be black; text height shall be 1/8 inch high, minimum or number 12 font size.
4. Provide permanent and machine generated labels. Hand written labels shall not be accepted.
5. Provide label on both ends of cables. Fully wrap label around the cable jacket. Install labels no more than 4 inches from the edge of the cable jacket. Install labels such that labels are visible by a technician from a normal distance.

C. Termination Apparatus Labels:

1. Use labels included in product packaging.
2. Label color shall be white background with clear laminating window.
3. Text color shall be black; text height shall be 1/8 inch high, minimum or number 12 font size.

### 3.4 FIELD QUALITY CONTROL

A. Tests and Inspections:

1. Tests: Conduct tests at portions of the installation to ensure full compliance with Drawings and Specifications. Perform tests in presence of Engineer. Costs of tests (excluding testing equipment) shall be at sole cost and expense of Contractor. Submit instruments, equipment, labor, and materials to complete tests to Engineer. Tests may be required on any item between installation of Work and end of 1 year warranty period. Should tests detect defective materials, poor workmanship, or variance with requirements of Specifications, Contractor shall make necessary changes and remedy defects at no additional cost to Department. The following tests shall be performed:
  - a. Test fiber optic cables using a power meter and stabilized light source capable of testing 1310 nm and 1550 nm for single-mode. Contractor shall complete a fiber optic post installation report at the time of testing containing meter readings at both 1310 nm and 1550 nm for single-mode in one direction on each fiber from both ends, actual loss and pertinent data regarding the cables tested, including model and serial number of test equipment, cable part number, installed fiber length, relevant building span loss at 1310 nm and 1550 nm, and date tested.

- b. The fiber optic post installation report shall be a deliverable in an organized format. Testing is required for cabling. Testing equipment shall be of the same quality as a Noyes Products test equipment. Test fiber with an optical loss test set conforming to TIA-568.0-D.
- c. Optical Time Domain Reflectometer (OTDR) test, copy of cable summary report for each cable terminated prior to installation.  
Contractor shall complete a fiber optic post installation summary report at the time of testing containing meter readings at both 1310 nm and 1550 nm for single-mode in one direction on each fiber from both ends, actual loss and pertinent data regarding the cables tested, including model and serial number of test equipment, cable part number, installed fiber length, relevant building span loss at 1310 nm and 1550 nm and date tested.
- d. Use visual fault finder to test each strand of fiber. Contractor shall complete a fiber optic post installation summary report at the time of testing for every strand of fiber installed for acceptance for single-mode in 1 direction on each fiber from both ends. Report submittal shall include model and serial number of test equipment, cable part number, installed fiber length, location of installation, date tested, and test results.
- e. Fibers utilized in the installation shall be traceable to the manufacturer. On the reel bandwidth performance as tested at the factory shall be provided upon request.
- f. Tests shall detail the proposed test plan for each cable type including equipment used, test frequencies, wave lengths, name of the tester, and model number of test equipment used. Provide written reports of test data to Engineer.
- g. Maximum attenuation from termination point to termination point is 0.7 dB loss.
- h. Clean connections and adapters prior to taking measurements, in conformance with TIA-526-14.
- i. Test jumpers shall be of the same fiber core size, performance, and connector type as the cable system.

2. System Acceptance:

- a. Request for final review prior to system acceptance after:
  - 1) Completion of installation of systems required under Contract Documents.
  - 2) Submission and acceptance of operating and maintenance data.
  - 3) Completion of identification program.
- b. Acceptance is contingent upon the following:
  - 1) Completion of final review and correction of deficiencies.
  - 2) Satisfactory completion of acceptance tests which demonstrate compliance with performance and technical requirements of Contract Documents.
  - 3) Satisfactory completion of training program and submission of manuals and drawings required by Contract Documents.

3.5 CLEANING

- A. Remove from Project Site(s), packing cartons, scrap materials, and other rubbish relating to the installation.

3.6 PROTECTION

- A. Protect Work, materials, and equipment from damage. Provide adequate and proper storage facilities during the progress of Work. Outdoor storage shall be weather protected and shall include space heaters to prevent condensation. Provide for the safety and good condition of Work until final acceptance of Work by Department. Replace damaged or defective Work, materials and equipment at no added cost to Department.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Clearing and grubbing
- B. Excavating, scarifying, grading, filling, and compacting earth to grades and elevations shown on Drawings
- C. Testing, characterizing, furnishing, placing, and compacting import fill
- D. Removing excess earth from Project Site(s)

### 1.2 RELATED SECTIONS

- A. Section 02 00 01 - Basic Site Materials and Methods
- B. Section 02 41 13 - Selective Site Demolition
- C. Section 02 61 14 - Excavating, Stockpiling, and Disposing of Chemically Impacted Soil
- D. Section 31 23 33 - Trenching and Backfilling
- E. Section 32 11 00 - Base Courses
- F. Section 32 13 14 - Concrete for Exterior Improvements

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Subgrade Stabilization:
    - a. The quantity of qualified native replacement material for soil that is determined by Engineer to be geotechnically unsuitable as a subgrade for fill or base material shall be measured by the cubic yard of native replacement material compacted in place at Project Site(s).
    - b. Payment shall be made under the Trench Subgrade Stabilization bid item of Bid Proposal Line Items. Final payment for soil quantities shall be verified by Engineer before and after field survey topographies. Allow a minimum of 2 days in Construction Schedule for surveyors to perform before and after field topography before starting new Work.

- c. Costs for excavating, handling, stockpiling, loading, and transporting the unsuitable material and costs for filling and compacting the resultant void with native soil, in conformance with this Section, and BASIC SITE MATERIALS AND METHODS Section shall be included in the bid item's unit price per cubic yard for native replacement material compacted in place.

2. Import and Place Fill Soil:

- a. The quantity of tested and qualified import fill soil shall be measured by the cubic yard compacted in place at Project Site(s) and shall be paid under Import Fill Soil bid item of Bid Proposal Line Items.

1.4 REFERENCES

- A. ASTM C136/C136M - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
- B. ASTM D2419 - Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregate.
- C. ASTM D2487 - Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System).
- D. EPA SW-846 - Test Methods for Evaluating Solid Waste, Physical/Chemical Methods.
- E. City of Los Angeles Department of Public Works Brown Book:  
Subsection 300-3 - Structure Excavation and Backfill
- F. Reference Specifications (RS):  
Section 300 - Earthwork  
Subsection 300-2 - Unclassified Excavation  
Subsection 300-3 - Structure Excavation and Backfill  
Subsection 300-4 - Unclassified Fill  
Subsection 300-5 - Borrow Excavation

Section 301 - Subgrade Preparation, Treated Materials, and Placement of Base Materials

Subsection 301-1 - Subgrade Preparation

1.5 SUBMITTALS

- A. Submit to Engineer for review and approval written documentation to identify the proposed fill source, previous uses of the land from which the fill originated, proposed import fill volume from each source, and sampling plan with a map showing depth and location of soil sample collection. After approval of fill source and sampling plan with a map, submit results of soil characterization performed. Contractor personnel who sample stockpiles should be competent in their understanding of environmental sampling, including sample collection and handling, sample preservation and storage, decontamination, and chain of custody procedures.
  - 1. For In-situ Characterization: Provide a proposed plan for characterization including a map of borrowed site boundaries, depths of proposed excavations, depth horizons that shall be used for fill, and proposed analyses.
- B. After approval of fill source, submit the following to Engineer for review and approval 30 Calendar Days prior to the receipt of soil to Project Site(s) from Department property (re-use or borrowed soil from another area within Department property) or off Department property (import fill):
  - 1. Completed Los Angeles Harbor Department Import Material Checklist form included in Appendix "G" of Specifications. Data from the characterization efforts shall be submitted with the completed form.
  - 2. Sieve analysis conforming to ASTM C136/C136M.
  - 3. Proposed trucking delivery schedule and haul route.
  - 4. Analytical documentation submittals shall include "FINAL" analytical characterization information (Draft analytical data is not acceptable). Analytical documentation shall include the chain-of-custody noting the condition of soil samples upon arrival to the laboratory.

- C. Submit the following during placement of import soil fill:
  - 1. Documentation of daily volumes of fill material received and placement location within Project Site(s).

## 1.6 QUALITY ASSURANCE

- A. Engineer reserves the right to approve materials to be used in construction. Approved materials that are no longer in conformance with this Section shall not be used.
- B. Refer to BASIC SITE MATERIALS AND METHODS Section for sampling procedures for material to be compacted.
- C. Analytical Laboratory Qualification: State of California Environmental Laboratory Accreditation Program (ELAP) accredited.

## 1.7 PERMITS

- A. Comply with applicable South Coast Air Quality Management District (SCAQMD) permits and rules, and City of Los Angeles Department of Building and Safety permits. Obtain permits as required. Refer to REGULATORY REQUIREMENTS Section for additional requirements.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Native Fill: Excavated materials may be re-used for fill as approved by Engineer, including backfill of voids left after removals in conformance with RS Subsection 300-4 exclusive of RS Subsection 300-4.9 and RS Subsection 300-4.10. Material shall not contain vegetation or other organics, rocks, broken concrete, debris, or other solid materials larger than 4 inches, or any other deleterious materials.

- B. Import and Re-use Fill Geotechnical Requirements (from sites off and within Department property):
  - 1. Fill, where required on Drawings or in Specifications, shall conform to RS Subsection 300-5, except for RS Subsection 300-5.4, and the following:
    - a. Fill shall consist of soil classified as SW, SM, SC, or SP in conformance with ASTM D2487. Soil shall have a minimum sand equivalent value of 20 percent in conformance with ASTM D2419.
    - b. Obtain Engineer's approval of material prior to transporting to Project Site(s).
- C. Import Fill Environmental Requirements (from sites off and within Department property): Import fill material shall conform to properties described in this Section. Refer to Appendix "G" of Specifications for Los Angeles Harbor Department Import Material Checklist.
  - 1. Fill source area shall not be located in:
    - a. Industrial areas including airports.
    - b. Sites undergoing environmental cleanup.
    - c. Sites under regulatory oversight (Los Angeles Regional Water Quality Control Board (LARWQCB), Department of Toxic Substances Control (DTSC), and United States Environmental Protection Agency (US EPA))
    - d. Other sites where hazardous materials were used or hazardous wastes were generated (gasoline stations, dry cleaners, oil refineries, painting facilities, metal processing shops, and other similar sites).
  - 2. Proposed import fill shall be tested by Contractor. Import fill material shall be sampled at the place of origin and tested by an ELAP accredited analytical laboratory and certified in conformance with this Section. Additional materials shall not be added to stockpile after samples have been collected. Department retains the right to refuse any potential fill material for use at any of its construction sites.



3. Provide written documentation that identifies the proposed fill source, previous uses of the land from which the fill originated, proposed import fill volume from each source, and sampling plan with a map showing depth and location of soil sample collection. After approval of fill source and sampling plan with a map, submit results of soil characterization performed. Data shall be submitted to Engineer for review and approval 30 Calendar Days prior to the receipt of soil to Project Site(s). Upon approval by Engineer, Contractor shall deliver approved import fill to Project Site(s).

### PART 3 – EXECUTION

#### 3.1 SUBGRADE PREPARATION

- A. Subgrade preparation shall be in conformance with RS Subsection 301-1 with the exception of compaction and payment requirements.

#### 3.2 EXCAVATION

- A. Excavation, including disposal of surplus material, shall be in conformance with RS Subsections 300-2 and 300-3 exclusive of RS Subsections 300-2.9 and 300-3.6. RS Subsection 300-3 shall be as modified by Brown Book Subsection 300-3.5.1.

#### 3.3 FILL PLACEMENT, GENERAL

- A. Fill placement shall be in conformance with RS Subsections 300-4 and 300-5 except for 300-5.4.

#### 3.4 IMPORT FILL

- A. Characterization and Testing Requirements:
  1. Furnish labor, materials, laboratory analyses and reports, and equipment to characterize proposed import fill soil as defined in this Section. Data from the characterization efforts shall be submitted with the completed Los Angeles Harbor Department Import Material Checklist form included in Appendix "G" of Specifications.
  2. Notify Engineer at least 72 hours prior to start of proposed import fill soil characterization Work.

3. Characterize proposed import fill soil using procedures contained in EPA SW-846 and the following sampling requirements:

| Fill Source                                                                | Target Compounds and Analyses                                                                                                                                               |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Land adjacent to or within 250 feet from existing freeway or major highway | - TPH (modified EPA Method 8015)                                                                                                                                            |
|                                                                            | - Lead (EPA Method 6010B)                                                                                                                                                   |
|                                                                            | - PAHs (EPA Method 8310)                                                                                                                                                    |
| Mining area or rock quarry                                                 | - Heavy Metals (EPA Methods 6020 and 7471A)                                                                                                                                 |
|                                                                            | - Asbestos (polarized light microscopy)                                                                                                                                     |
| Agricultural                                                               | - Pesticides and Herbicides (Organochlorine Pesticides: EPA Method 8081A or 8080A; Organophosphorus Pesticides: EPA Method 8141A; Chlorinated Herbicides: EPA Method 8151A) |
|                                                                            | - Heavy metals (EPA Methods 6020 and 7471A), including hexavalent chromium (EPA Method 7199)                                                                                |
| Acceptable commercial land                                                 | - VOCs (EPA Method 8021 or 8260B, as appropriate and combined with collection by EPA Method 5035)                                                                           |
|                                                                            | - Semi-VOCs (EPA Method 8270SIM)                                                                                                                                            |
|                                                                            | - TPH (modified EPA Method 8015B)                                                                                                                                           |
|                                                                            | - PCBs (EPA Method 8082 or 8080A)                                                                                                                                           |
|                                                                            | - Heavy metals including lead (EPA Methods 6020 and 7471A), including hexavalent chromium (EPA Method 7199)                                                                 |

- a. Pre-approved quarries and import soil sources may be proposed to Department with supporting documentation including characterization and testing in conformance with this Section.
- b. The analytical results shall be reviewed and accepted by Engineer prior to proceeding with importing of soil.

4. The required minimum sample frequency for each unique source of fill materials shall be as follows:

| Volume of Borrow Area Stockpile | Required Number of Samples per Volume                                |
|---------------------------------|----------------------------------------------------------------------|
| Up to 1,000 CY                  | 1 sample per 250 CY                                                  |
| 1,000 to 5,000 CY               | 4 samples for first 1,000 CY +1 sample per each additional 500 CY    |
| Greater than 5,000 CY           | 12 samples for first 5,000 CY +1 sample per each additional 1,000 CY |

5. The required minimum sample frequency for each unique in-situ source of fill materials shall be based on approved documentation in conformance with Paragraph A.1 of Submittals Article of this Section. In-situ characterization typically requires approximately 2 to 3 times the number of samples required for stockpile characterization. The table in Paragraph 3.4 A.4 of this Section shows the required number of samples for stockpile characterization.
6. Proposed import fill material is considered to have a non-homogenous distribution of chemicals.
7. Composite sampling is not acceptable. Do not mix soil from different locations or different depths at 1 location into 1 sample. Do not add soil to a characterized stockpile.
- a. A borrow area or stockpile is defined as 1 contiguous source that is homogeneous in color and soil type.

B. Import Soil Transportation Requirements:

1. Select transporter with current insurance coverage, and applicable licenses as required by Department of Transportation and State of California.
2. Cover transported materials appropriately to minimize loss of material during transport.

## C. Monitoring Requirements:

1. Air monitoring shall comply with local, state, and federal regulations and guidelines.
2. Provide field screening and monitoring equipment to monitor for:
  - a. Worker safety.
  - b. Air monitoring permit requirements.
3. Monitoring activities shall include, but are not limited to:
  - a. Engineer shall evaluate the soil using a photoionization detector (PID), capable of detecting volatile organic vapors to a minimum of one part per million (ppm), to assess potential soil contamination levels. Soil with any PID readings greater than background (measured at a distance of no more than 3 inches from the surface of the soil material) shall be deemed suspect and considered potential chemical impacted soil (PCIS). Manage PCIS at Contractor's sole cost and expense in conformance with the following:
    - 1) PCIS shall be immediately removed from Project Site(s). No further import soil shall be brought in from contaminated import fill source location.
    - 2) Submit new fill material source location subject to characterization and testing requirements described in this Section.
    - 3) Resume importing fill material after Engineer approves Los Angeles Harbor Department Import Material Checklist from new import fill material source location and other submittals required prior to start of fill soil import Work.
  - b. Engineer may at times monitor the import soil for discolorations, odors, debris, and other physical or chemical characteristics. Soil not in conformance with this Section (identified by Department) shall be considered PCIS and shall be managed in conformance with Paragraph 3.4 C.3.a of this Section.

## 3.5 COMPACTION

- A. Perform compaction in conformance with BASIC SITE MATERIALS AND METHODS Section.

## 3.6 CHEMICAL ANALYSIS REQUIREMENTS FOR IMPORT FILL

- A. Import fill material shall be considered unacceptable for use if laboratory analytical results indicate an exceedance of 1 or more of the following specified concentration limits:

| Chemicals of Concern<br>(COC)<br>Industrial Land Use        | Soil/Fill<br>Material<br>Concentration<br>(mg/kg)* | Source               |
|-------------------------------------------------------------|----------------------------------------------------|----------------------|
| Total Petroleum Hydrocarbons (TPH) (EPA Method 8015M/8015B) |                                                    |                      |
| TPH (Total Petroleum Hydrocarbons)                          | 1,000                                              | Cal-EPA SWRCB**      |
| - Gasoline (if present)                                     | 180                                                | Cal-EPA SWRCB/DTSC** |
| - Diesel (if present)                                       | 180                                                | Cal-EPA SWRCB/DTSC** |
| Heavy Metals (EPA Method 6020/7471A)                        |                                                    |                      |
| Antimony                                                    | 150                                                | 10 X STLC***         |
| Arsenic                                                     | 8.7                                                | Cal-EPA SWRCB/DTSC** |
| Barium                                                      | 1,000                                              | 10 X STLC***         |
| Beryllium                                                   | 7.5                                                | 10 X STLC***         |
| Cadmium                                                     | 1.4                                                | Cal-EPA SWRCB/DTSC** |
| Chromium VI (EPA Method 7199/3060A)                         | 2.8                                                | Cal-EPA SWRCB/DTSC** |
| Total Chromium                                              | 100                                                | 20 X TCLP/STLC***    |
| Cobalt                                                      | 350                                                | Cal-EPA SWRCB/DTSC** |
| Copper                                                      | 69                                                 | Cal-EPA SWRCB/DTSC** |
| Lead                                                        | 50                                                 | 10 X STLC***         |
| Mercury                                                     | 0.69                                               | Cal-EPA SWRCB/DTSC** |
| Molybdenum                                                  | 4.4                                                | Cal-EPA SWRCB/DTSC** |
| Nickel                                                      | 200                                                | 10 X STLC***         |
| Selenium                                                    | 0.23                                               | Cal-EPA SWRCB**      |
| Silver                                                      | 3.75                                               | Cal-EPA SWRCB/DTSC** |
| Thallium                                                    | 0.95                                               | Cal-EPA SWRCB**      |
| Vanadium                                                    | 240                                                | 10 X STLC***         |
| Zinc                                                        | 680                                                | Cal-EPA SWRCB/DTSC** |

| Chemicals of Concern<br>(COC)<br>Industrial Land Use       | Soil/Fill<br>Material<br>Concentration<br>(mg/kg)* | Source                                |
|------------------------------------------------------------|----------------------------------------------------|---------------------------------------|
| BTEX (EPA Method 8260)                                     |                                                    |                                       |
| Benzene                                                    | 0.055                                              | Cal-EPA SWRCB/DTSC**                  |
| Toluene                                                    | 56                                                 | Cal-EPA SWRCB**                       |
| Ethylbenzene                                               | 3.9                                                | Cal-EPA SWRCB**                       |
| Xylene                                                     | 7.2                                                | Cal-EPA SWRCB**                       |
| Naphthalene                                                | 0.17                                               | Cal-EPA SWRCB**                       |
| Asbestos (OSHA Method ID-191)                              | ND                                                 | Laboratory Reporting Limit****        |
| Polychlorinated Biphenyls (PCBs) (EPA 8082)                | ND                                                 | Laboratory Reporting Limit****/US EPA |
| Chemicals of Concern*****                                  |                                                    |                                       |
| Volatile Organic Compounds (VOCs) (EPA Method 8260)        | ND                                                 | Laboratory Reporting Limit****        |
| Polynuclear Aromatic Hydrocarbons (PAHs) (EPA Method 8310) | ND                                                 | Laboratory Reporting Limit****        |
| Semi Volatile Organic Compounds (SVOCs) (EPA Method 8270)  | ND                                                 | Laboratory Reporting Limit****        |
| Organochlorine Pesticides (EPA Method 8081A)               | ND                                                 | Laboratory Reporting Limit****        |
| Organophosphorus Pesticides (EPA Method 8141A)             | ND                                                 | Laboratory Reporting Limit****        |
| Chlorinated Herbicides (EPA Method 8151A)                  | ND                                                 | Laboratory Reporting Limit****        |

NOTES:

\* Acceptable Soil/Fill Material concentrations may vary between regulated sites. Consult Engineer prior to analysis of samples to ensure the correct Laboratory Reporting Limits are achieved.

\*\* Cal-EPA State Water Resources Control Board & Department of Toxic Substances Control (DTSC) Action Goals for Industrial Land Use sites only. The listed concentrations/levels may not be applicable for former or active cleanup sites, public land use, or worker health & safety.

\*\*\* Soluble Threshold Limit Concentration (STLC) and Toxicity Characteristic Leaching Procedure (TCLP), California Code of Regulations (CCR), Title 22, Section 66261.24. Characteristic of Toxicity.

\*\*\*\* Laboratory Reporting Limit is based on reporting limits commonly used by Southern California laboratories (DAF = 1). Note that for some regulated sites (to be determined by Department) target Laboratory Reporting Limits may need to be provided to the laboratory prior to sampling.

\*\*\*\*\* Any other suspected constituents or contaminants not shown on this table should be discussed with Engineer

- B. Chemical analyses having a dilution factor greater than 1 or rendering the reporting limits greater than the concentration limits shown may be rejected by Department due to possible indication of elevated concentrations of one or more constituents.

### 3.7 GEOTECHNICALLY UNSUITABLE SOIL

- A. Notify Engineer upon encountering what appears to be geotechnically unsuitable soil. Upon excavating to design subgrade elevations, obtain Engineer's decision on soil's suitability and authorization to excavate geotechnically unsuitable materials to limits determined by Engineer and in conformance with Excavation Article of this Section. Unsuitable soil shall become the property of Contractor. Dispose of unsuitable soil off Department property following proper waste characterization and profiling protocols.
1. Native Soil Backfill: Maintain stockpile of native excavation soil approved by Engineer for use as fill or backfill in conformance with RS Subsection 300-2.6 until subgrade excavation is complete and the extent of geotechnically unsuitable soil is known. Backfill geotechnically unsuitable soil removal excavations with approved fill material. Compact in conformance with BASIC SITE MATERIALS AND METHODS Section.

3.8 FIELD QUALITY CONTROL

- A. Refer to BASIC SITE MATERIALS AND METHODS Section, Field Quality Control Article, for Engineer's determination of maximum dry density and optimum moisture content, and for field-testing of compacted soil.

END OF SECTION



## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Biaxial geogrid system

### 1.2 RELATED SECTIONS

- A. Section 31 00 00 - Earthwork
- B. Section 32 11 00 - Base Courses

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:

1. Measurement of geogrid shall be on a square yard basis computed on the total area of geogrid shown on Drawings, including the area of geogrid used in overlaps. Measurement of overlaps shall be made on the basis of minimum overlap specified.
2. Payment for Work of this Section shall be paid under the Biaxial Geogrid bid item of Bid Proposal Line Items. Such payment shall be considered full compensation for labor, materials, equipment, and other items necessary and incidental to completion of Work.

### 1.4 REFERENCES

- A. Reference Specifications (RS):

Section 213 - Engineering Geosynthetics

Table 213-5.2 (D) - Biaxial

### 1.5 PRE-INSTALLATION MEETINGS

- A. Prior to the installation of the geogrid, Contractor shall arrange a meeting at Project Site(s) with the geogrid material supplier and, where applicable, the geogrid installer. Notify Engineer at least 3 days in advance of the date and time of the meeting. A representative of the geogrid supplier shall be available on an "as needed" basis during construction.

### 1.6 SUBMITTALS

- A. Submit geogrid product sample approximately 4 inches by 7 inches or larger.
- B. Submit geogrid product data sheet and certification from the manufacturer that the geogrid product supplied meets the requirements of Materials Article of this Section.
- C. Submit manufacturer's installation instructions and general recommendations.

### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Contractor shall check the geogrid upon delivery to verify that the proper material has been received, free of flaws or damage occurring during manufacturing, shipping, or handling.
- B. Storage and Protection:
  - 1. Prevent excessive mud, wet concrete, epoxy, or other deleterious materials from coming in contact with and affixing to the geogrid materials.
  - 2. Store at temperatures above minus 20 degrees Fahrenheit (F) (minus 29 degrees Celsius (C)).
  - 3. Rolled materials may be laid flat or stood on end.
  - 4. Geogrid materials shall not be left directly exposed to sunlight for a period longer than the period recommended by the manufacturer.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Biaxial geogrid shall conform to RS Section 213.
- B. Geogrid shall have the typical characteristics complying with RS Table 213-5.2 (D).

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that subgrade is properly prepared in conformance with EARTHWORK Section.

### 3.2 INSTALLATION

- A. Place geogrid at the interface of the subgrade and base material as shown on Drawings.
- B. Install geogrid in conformance with geogrid manufacturer's written instructions or as directed by Engineer.
- C. Orient geogrid such that the roll length runs parallel to the longest side of Project Site(s).
- D. Temporarily secure geogrid in place with ties, staples, pins, sand bags, or backfill as required by fill properties, fill placement procedures, weather conditions, or as directed by Engineer.
- E. If 2 rolls of geogrid are to be placed side by side or end to end, overlap geogrid as noted in Table 1 of this Section or as directed by Engineer. Take care to ensure that the geogrid sections do not separate at the overlaps during construction.

| Table 1<br>Recommended Overlaps |                                |              |
|---------------------------------|--------------------------------|--------------|
| Soil Type                       | California Bearing Ratio (CBR) | Grid Overlap |
| Firm Ground                     | >2                             | 1 foot       |
| Soft Ground                     | 1-2                            | 2 feet       |
| Very Soft Ground                | <1                             | 3 feet       |

- F. Placement of geogrid around corners shall require cutting of the geogrid product and diagonal overlapping of the geogrid to ensure that excessive buckling of the geogrid material does not occur.

### 3.3 BASE COURSE PLACEMENT OVER GEOGRID

- A. Base course material shall be placed in lifts and compacted in conformance with BASE COURSES Section. Base course material shall be placed, spread, and compacted in such a manner that minimizes the development of wrinkles in the geogrid and movement of the geogrid.
- B. Crushed miscellaneous base (CMB) shall be back dumped, end dumped, or belly dumped. Do not drive tracked equipment directly on the geogrid to prevent tracks from damaging the geogrid. At least 6 inches of CMB is required between the geogrid and tracks. Rubber-tired equipment may pass over the geogrid reinforcement at slow speeds (less than 5 miles per hour) and dump CMB as they go. Avoid sudden braking and sharp turning movements. Grade material to desired thickness.
- C. If ruts are created in CMB due to construction traffic in the location of the geogrid, fill ruts with additional CMB material rather than blade out.

### 3.4 FIELD QUALITY CONTROL

- A. Tests and Inspections:
  - 1. The geogrid is subject to random inspections as directed by Engineer.
  - 2. Any damaged or defective geogrid (such as frayed coating, separated junctions, separated layers, tears, and the like) shall be repaired or replaced as specified in Repair Article of this Section.

### 3.5 REPAIR

- A. Any roll of geogrid damaged before, during, and after installation shall be replaced by Contractor at no additional cost to Department.
- B. Proper replacement shall consist of replacing the affected area and adding 3 feet overlap of geogrid beyond the limits of the affected area.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Multi-axial geogrid system

### 1.2 RELATED SECTIONS

- A. Section 31 00 00 - Earthwork
- B. Section 32 11 00 - Base Courses

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:

1. Measurement of geogrid shall be on a square yard basis computed on the total area of geogrid shown on Drawings, including the area of geogrid used in overlaps. Measurement of overlaps shall be made on the basis of minimum overlap specified.
2. Payment for Work of this Section shall be paid under the Multi-Axial Geogrid bid item of Bid Proposal Line Items. Such payment shall be considered full compensation for labor, materials, equipment, and other items necessary and incidental to completion of Work.

### 1.4 REFERENCES

- A. Reference Specifications (RS):

Section 213 - Engineering Geosynthetics

Table 213-5.2 (E) - Multi-Axial

### 1.5 PRE-INSTALLATION MEETINGS

- A. Prior to the installation of the geogrid, Contractor shall arrange a meeting at Project Site(s) with the geogrid material supplier and, where applicable, the geogrid installer. Notify Engineer at least 3 days in advance of the date and time of the meeting. A representative of the geogrid supplier shall be available on an "as needed" basis during construction.

## 1.6 SUBMITTALS

- A. Submit geogrid product sample approximately 4 inches by 7 inches or larger.
- B. Submit geogrid product data sheet and certification from the manufacturer that the geogrid product supplied meets the requirements of Materials Article of this Section.
- C. Submit manufacturer's written installation instructions and general recommendations.

## 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Contractor shall check the geogrid upon delivery to verify that the proper material has been received, free of flaws or damage occurring during manufacturing, shipping, or handling.
- B. Storage and Protection:
  - 1. Prevent excessive mud, wet concrete, epoxy, or other deleterious materials from coming in contact with and affixing to the geogrid materials.
  - 2. Store at temperatures above minus 20 degrees Fahrenheit (F) (minus 29 degrees Celsius (C)).
  - 3. Rolled materials may be laid flat or stood on end.
  - 4. Geogrid materials shall not be left directly exposed to sunlight for a period longer than the period recommended by the manufacturer.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Multi-axial geogrid shall conform to RS Section 213 and shall be integrally formed and produced from a single punched sheet of polypropylene.
- B. Geogrid shall have the typical characteristics complying with RS Table 213-5.2 (E).

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that subgrade is properly prepared in conformance with EARTHWORK Section.

### 3.2 INSTALLATION

- A. Place geogrid at the interface of the subgrade and base material as shown on Drawings.
- B. Install geogrid in conformance with geogrid manufacturer's written instructions or as directed by Engineer.
- C. Orient geogrid such that the roll length runs parallel to the longest side of Project Site(s).
- D. Temporarily secure geogrid in place with ties, staples, pins, sand bags, or backfill as required by fill properties, fill placement procedures, weather conditions, or as directed by Engineer.
- E. If 2 rolls of geogrid are to be placed side by side or end to end, overlap geogrid as noted in Table 1 of this Section or as directed by Engineer. Take care to ensure that the geogrid sections do not separate at the overlaps during construction.

| Table 1<br>Recommended Overlaps |                                |              |
|---------------------------------|--------------------------------|--------------|
| Soil Type                       | California Bearing Ratio (CBR) | Grid Overlap |
| Firm Ground                     | >2                             | 1 foot       |
| Soft Ground                     | 1-2                            | 2 feet       |
| Very Soft Ground                | <1                             | 3 feet       |

- F. Placement of geogrid around corners shall require cutting of the geogrid product and diagonal overlapping of the geogrid to ensure that excessive buckling of the geogrid material does not occur.

### 3.3 BASE COURSE PLACEMENT OVER GEOGRID

- A. Base course material shall be placed in lifts and compacted in conformance with BASE COURSES Section. Base course material shall be placed, spread, and compacted in such a manner that minimizes the development of wrinkles in the geogrid and movement of the geogrid.
- B. Crushed miscellaneous base (CMB) shall be back dumped, end dumped, or belly dumped. Do not drive tracked equipment directly on the geogrid to prevent tracks from damaging the geogrid. At least 6 inches of CMB is required between the geogrid and tracks. Rubber-tired equipment may pass over the geogrid reinforcement at slow speeds (less than 5 miles per hour) and dump CMB as they go. Avoid sudden braking and sharp turning movements. Grade material to desired thickness.
- C. If ruts are created in CMB due to construction traffic in the location of the geogrid, fill ruts with additional CMB material rather than blade out.

### 3.4 FIELD QUALITY CONTROL

- A. Tests and Inspections:
  - 1. The geogrid is subject to random inspections as directed by Engineer.
  - 2. Any damaged or defective geogrid (such as frayed coating, separated junctions, separated layers, tears, and the like) shall be repaired or replaced as specified in Repair Article of this Section.

### 3.5 REPAIR

- A. Any roll of geogrid damaged before, during, and after installation shall be replaced by Contractor at no additional cost to Department.
- B. Proper replacement shall consist of replacing the affected area and adding 3 feet overlap of geogrid beyond the limits of the affected area.

END OF SECTION



## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Composite paving geogrid system

### 1.2 RELATED SECTIONS

- A. Section 31 00 00 - Earthwork
- B. Section 32 12 17 - Asphalt Concrete Paving

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:

1. Measurement of geogrid is on a square yard basis computed on the total area of geogrid shown on Drawings, including the area of geogrid used in overlaps. Measurement of overlaps shall be made on the basis of minimum overlap specified.
2. Payment for Work of this Section shall be paid under the Composite Paving Geogrid bid item of Bid Proposal Line Items. Such payment shall be considered full compensation for labor, materials, equipment, and other items necessary and incidental to completion of Work.

### 1.4 PRE-INSTALLATION MEETINGS

- A. Prior to the installation of the geogrid, Contractor shall arrange a meeting at the site with the geogrid material supplier and, where applicable, the geogrid installer. Notify the Engineer at least 3 days in advance of the date and time of the meeting. A representative of the geogrid supplier shall be available on an "as needed" basis during construction.

### 1.5 SUBMITTALS

- A. Submit geogrid product sample approximately 4 inches by 7 inches or larger.
- B. Submit geogrid product data sheet and certification from the manufacturer that the geogrid product supplied meets the requirements of Materials Article of this Section.
- C. Submit manufacturer's written installation instructions and general recommendations.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Contractor shall check the geogrid upon delivery to verify that the proper material has been received, free of flaws or damage occurring during manufacturing, shipping, or handling.
- B. Storage and Protection:
  - 1. Prevent excessive mud, wet concrete, epoxy, or other deleterious materials from coming in contact with and affixing to the geogrid materials.
  - 2. Store at temperatures above minus 20 degrees Fahrenheit (F) (minus 29 degrees Celsius (C)).
  - 3. Rolled materials may be laid flat or stood on end.
  - 4. Geogrid materials shall not be left directly exposed to sunlight for a period longer than the period recommended by the manufacturer.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Composite paving geogrid shall be by TenCate Mirafi MPG4 as manufactured by TenCate Corporation.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that subgrade is properly prepared in conformance with EARTHWORK and ASPHALT CONCRETE PAVING Sections.

### 3.2 INSTALLATION

- A. Place geogrid in hot mix asphalt overlays over existing asphalt or concrete pavement or in new construction applications as shown on Drawings.
- B. Install geogrid in conformance with geogrid manufacturer's written instructions or as directed by Engineer.
- C. Orient geogrid such that the roll length runs parallel to the longest side of Project area.

- D. Temporarily secure geogrid in place with ties, staples, pins, sand bags, or backfill as required by fill properties, fill placement procedures, weather conditions, or as directed by Engineer.
- E. If 2 rolls of geogrid are to be placed side by side or end to end, overlap geogrid as noted in Table 4 of this Section or as directed by Engineer. Take care to ensure that the geogrid sections do not separate at the overlaps during construction.

| Table 4              |                                   |              |
|----------------------|-----------------------------------|--------------|
| Recommended Overlaps |                                   |              |
| Soil Type            | California Bearing Ratio<br>(CBR) | Grid Overlap |
| Firm Ground          | >2                                | 1 foot       |
| Soft Ground          | 1-2                               | 2 feet       |
| Very Soft Ground     | <1                                | 3 feet       |

- F. Placement of geogrid around corners shall require cutting of the geogrid product and diagonal overlapping of the geogrid to ensure that excessive buckling of the geogrid material does not occur.

### 3.3 FIELD QUALITY CONTROL

#### A. Tests and Inspections:

1. The geogrid is subject to random inspections as directed by Engineer.
2. Any damaged or defective geogrid (such as frayed coating, separated junctions, separated layers, tears, and the like) shall be repaired or replaced as specified in the Repair Article of this Section.

### 3.4 REPAIR

- A. Any roll of geogrid damaged before, during, and after installation shall be replaced by Contractor at Contractor's sole cost and expense.
- B. Proper replacement shall consist of replacing the affected area and adding 3 feet overlap of geogrid beyond the limits of the affected area.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

#### A. Scope of Work:

1. Dewatering excavations
2. Department shall not obtain a NPDES (National Pollutant Discharge Elimination System) Permit for dewatering. If Contractor chooses to dewater, Contractor shall be responsible for obtaining NPDES Permit, paying for fees, complying with the requirements, and ensures no impact to the schedule.
3. Dewatering activities not subject to a separate NPDES permit shall comply with NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit) Order WQ 2022-0057-DWQ NPDES No. CAS000002 (CGP). Activities such as mechanical pumping or syphoning of non-potable water from sources including but not limited to: excavations, trenches, foundations, vaults, groundwater removal specifically related to the construction activities, or water collected in impoundments (ponds, puddles, low points on the active site, or other similar accumulation points).

### 1.2 RELATED SECTIONS

- A. Section 33 30 00 - Sanitary Sewerage
- B. Section 33 40 01 - Storm Drainage

### 1.3 PRICE AND PAYMENT PROCEDURES

#### A. Measurement and Payment:

1. Payment for dewatering shall be considered incidental to construction of applicable items on Bid Proposal Line Items. No separate payment shall be made for Work of this Section.

### 1.4 SUBMITTALS

- A. Submit to Engineer for approval, a schedule for dewatering operations and a list of proposed methods and equipment.

## PART 2 - PRODUCTS - NOT USED

## PART 3 - EXECUTION

## 3.1 INSTALLATION

- A. Provide an adequate dewatering system for the control of surface, ground, and sea water in the trench excavations and elsewhere in Project as may be necessary during the construction period. Keep excavation dry during construction operations. Keep water table 1 foot below the bottom of the excavation until backfill has been completed.
- B. Water extracted by the dewatering shall be disposed of by Contractor off Department property in such a manner as shall not damage public or private property or create a nuisance or health menace.
- C. De-silt the water before discharging water.
- D. California State Water Resources Control Board (CSWRCB) classifies water used in construction as construction wastewater, the disposal of which is subject to Attachment J of CGP. Comply with requirements in Attachment J for discharge and monitoring of wastewater as issued by CSWRCB.
- E. Except for shut downs for maintenance of dewatering equipment, no interruptions in the dewatering system procedures shall be permitted during excavation and construction operations. Provide full-time surveillance and maintenance, 24 hours per day, to avoid breakdowns.
- F. Where possible, Contractor shall avoid removing groundwater from excavations.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Trench excavation and backfill operations
- B. Trench excavation and backfill Work includes excavation, backfill, and compaction of utility trenches.
- C. Trench excavation and backfill Work includes:
  - 1. Sawcutting
  - 2. Asphalt concrete and concrete pavement removals
  - 3. Excavation
  - 4. Slurry backfill
  - 5. Trench resurfacing with concrete and asphalt concrete

### 1.2 RELATED SECTIONS

- A. Section 02 00 01 - Basic Site Materials and Methods
- B. Section 02 61 14 - Excavating, Stockpiling, and Disposing of Chemically Impacted Soil
- C. Section 31 50 01 - Excavation Safety Requirements

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for trench excavating, backfilling, and surfacing including but not limited to sewer, storm drain, water, electrical, communications, gas, and oil pipeline trenches, shall include pavement sawcutting; asphalt concrete and concrete removals; excavation; soil backfill; slurry where used as backfill; removal and disposal of excavation spoils off of Department property; compaction; repeated compaction tests after failures; and asphalt concrete and concrete trench resurfacing, and shall be paid under the corresponding bid items of Bid Proposal Line Items:

- a. Trenches in areas of existing pavement: Trench excavation, backfill, and surfacing shall be paid under the various Asphalt Concrete Pavement bid items and Concrete Pavement bid items of Bid Proposal Line Items.
  - b. Trenches in areas of new, full depth asphalt concrete pavement and existing pavement to be overlaid with new pavement: Asphalt concrete trench excavation, backfill, and surfacing shall be paid under the various Asphalt Concrete Pavement bid items of Bid Proposal Line Items.
  - c. Trenches in areas of new, full depth concrete pavement: Concrete trench excavation, backfill, and surfacing shall be paid under the various Concrete Pavement bid items of Bid Proposal Line Items.
2. The quantity of trench subgrade stabilization material in excess of trench depths required for Work where trench subgrade is saturated, and is unsuitable as substrate for trench bedding, as determined by Engineer, shall be measured as the volume of over-excavated native material.  
Payment for purchasing, delivering, and placing the stabilization material shall be paid for under the Trench Subgrade Stabilization bid item of Bid Proposal Line Items at the unit price per cubic yard of trench subgrade stabilization material.
  3. Payment for excavating, handling, transporting, and disposing of the unsuitable material shall be paid under the Geotechnically Unsuitable Subgrade Soil bid item of Bid Proposal Line Items.

#### 1.4 REFERENCES

- A. ASTM C535 - Standard Test Method for Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.
- B. Reference Specifications (RS):  
  
Section 200 - Rock Materials  
  
Section 217 - Bedding and Backfill Materials  
  
Section 306 - Open Trench Conduit Construction
- C. Standard Plan – City of Los Angeles Department of Public Works:  
  
S-251-1 - Pipe Laying in Trenches

### 1.5 QUALITY ASSURANCE

- A. Engineer reserves the right to approve each material to be used in construction. Do not use material which, after approval, in any way becomes unfit for use.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Slurry backfill shall be as specified in BASIC SITE MATERIALS AND METHODS Section.
- B. Backfill shall consist of native material in conformance with RS Subsections 306-12.1 and 306-12.3, unless noted otherwise on Drawings.
  - 1. Imported trench backfill, where required on Drawings or in Specifications, shall conform to RS Subsection 217-2.2 and the requirements of BASIC SITE MATERIALS AND METHODS Section.
  - 2. Sand shall conform to RS Subsection 200-1.5.1.
- C. Additional trench subgrade stabilization material shall conform to RS Subsection 200-1.2 and 1 of the 2 following gradations as indicated on Drawings or as directed by Engineer:
  - 1. RS Table 200-1.2.1 (A), 1 inch nominal gradation
  - 2. The following 2 inch nominal gradation:

| <u>Sieve Size (inches)</u> | <u>Percent Passing</u> |
|----------------------------|------------------------|
|                            |                        |
| 2 1/2                      | 100                    |
| 2                          | 90-100                 |
| 1 1/2                      | 30-60                  |
| 1                          | 0-20                   |
| 1/2                        | 0-5                    |

- a. Gradation sample shall not exceed 30 percent loss by weight at 1,000 revolutions as performed under ASTM C535. Sample shall be assumed to correspond most nearly to ASTM C535, Gradings of Test Samples Table, Grading 2.



- D. Contractor may elect, at its option, to use slurry as stabilization material.

## PART 3 - EXECUTION

### 3.1 EXCAVATION

- A. Pavement removals shall conform to BASIC SITE MATERIALS AND METHODS Section.
  - 1. Except as noted otherwise on Drawings, existing asphalt concrete thickness varies throughout Project Site(s). Assume for bid purposes 12 inches for existing pavement thickness.
- B. Excavation shall conform to RS Subsection 306-3 unless otherwise specified or shown on Drawings.
- C. Perform excavations for pipe laying or conduit in accordance with Standard Plan S-251-1 unless otherwise detailed on Drawings.
- D. Perform trench excavations in conformance with EXCAVATION SAFETY REQUIREMENTS Section.
- E. Excavate to the depths shown on Drawings or as necessary for the installation. After the excavation is completed, notify Engineer for approval of excavation subgrade.
- F. Remove interfering portions of abandoned substructures and abandon remaining substructures in place in conformance with BASIC SITE MATERIALS AND METHODS Section.
- G. Positively determine the location and elevation of substructures containing hazardous or unstable substance installations prior to excavation in conformance with EXCAVATION SAFETY REQUIREMENTS Section.
- H. Maintain excavation trench wall stability during construction in conformance with EXCAVATION SAFETY REQUIREMENTS Section. Remove material that slides into the excavation.
- I. Trench excavation spoils not used as backfill shall become property of Contractor and shall be disposed of off Department property regardless of type of backfill material specified.

### 3.2 CHEMICALLY IMPACTED SOIL

- A. Handle unexpectedly discovered chemically impacted soil in conformance with EXCAVATING, STOCKPILING, AND DISPOSING OF CHEMICALLY IMPACTED SOIL Section.

### 3.3 BACKFILL AND COMPACTION

- A. Place backfill in conformance with RS Subsection 306-12, except RS Subsection 306-12.4, RS Subsection 306-12.4.2, and RS Subsection 306-12.3.2 unless otherwise specified or shown on Drawings.
- B. Each layer of earthen backfill material, where required on Drawings, shall not exceed the thickness specified in RS Subsection 306-12.3.1. Compact in conformance with BASIC SITE MATERIALS AND METHODS Section.
- C. Place slurry backfill in conformance with RS Subsection 306-12.2, except that trench width, bedding, and backfill depths shall be as shown on Drawings.

### 3.4 HIGH VOLTAGE CONCRETE ENCASEMENT

- A. Refer to BASIC SITE MATERIALS AND METHODS Section.

### 3.5 TRENCH SUBGRADE STABILIZATION MATERIAL

- A. Once the bottom of trench excavation has been reached, obtain Engineer's analysis of soil that appear saturated or that may be unsuitable as a support for trench bedding.
  - 1. Upon Engineer's authorization, perform trench subgrade stabilization in conformance with RS Section 306, to the depth directed by Engineer except that replacement bedding material shall conform to 1 of the 2 gradations specified in Paragraph 2.1C of this Section.
  - 2. Dispose of unsuitable soil off Department property.
- B. Measurement and payment shall be made in conformance with Price and Payment Procedures Article of this Section.
- C. Refer to appropriate Section listed in Related Sections Article of this Section for trench bedding requirements.

3.6 REPAIR AND RESTORATION

- A. Refer to BASIC SITE MATERIALS AND METHODS Section for surface improvements not designated to be permanently removed but which were removed or damaged as a result of Contractor's operations.

3.7 FIELD QUALITY CONTROL

- A. Refer to BASIC SITE MATERIALS AND METHODS Section Field Quality Control Article, for Engineer's determination of maximum dry density and optimum moisture content, and for field-testing of compacted backfill.

END OF SECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Dust and erosion control agent

1.2 RELATED SECTIONS

- A. Section 31 00 00 - Earthwork

1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:

- 1. Payment for Work of this Section shall be paid under the Dust and Erosion Control Agent bid item of Bid Proposal Line Items.

1.4 SUBMITTALS

- A. Submit the following to Engineer for approval:

- 1. Product Data:
    - a. Product name and type, technical data, and specifications, including active solids content, handling, storing, mixing, and application instructions.
    - b. Manufacturer's name, address, telephone number, and contact person.
    - c. Safety data sheet (SDS).
  - 2. Proposed method of applying product including application equipment.
  - 3. Proposed application rate of product.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Material shall be acrylic copolymer, water soluble, consisting of at least 30 percent active solids content or better, Envirotac II as manufactured by Environmental Products and Applications, Inc., (760) 777-8035.
  - 1. Water: Fresh water

## PART 3 – EXECUTION

### 3.1 APPLICATION

- A. Surface Preparation: In conformance with manufacturer's written instructions.
- B. Dilution: In conformance with manufacturer's written instructions.
- C. Placement: In conformance with manufacturer's written instructions.
- D. Apply dust and erosion control agent uniformly and in conformance with manufacturer's written instructions.
- E. Do not apply dust and erosion control agent in rain, mist, or temperatures below manufacturer's written instructions.
- F. Application Rate (Non-Traffic):
  - 1. For Slopes or Stockpiles (stabilization, dust control, sediment, and erosion control): Use 275 gallons of dust and erosion control agent mixed with 6 parts water per acre.
  - 2. For Flat Areas: Use 125 gallons of dust and erosion control agent mixed with 8 parts water per acre.

### 3.2 CLEANING

- A. Remove excess material from Project Site and dispose of in conformance with manufacturer's material safety data sheet and written instructions.

### 3.3 PROTECTION

- A. Protect application in conformance with manufacturer's written instructions.

END OF SECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Excavating and trenching requirements in conformance with State of California Construction Safety Orders issued by Division of Occupational Safety and Health during the course of excavating and trenching Work.

1.2 RELATED SECTIONS

- A. Section 02 61 14 - Excavating, Stockpiling, and Disposing of Chemically Impacted Soil
- B. Section 31 00 00 - Earthwork
- C. Section 31 23 33 - Trenching and Backfilling

1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for Work of this Section shall be paid under each corresponding bid item of Bid Proposal Line Items that requires excavating and trenching requirements.

1.4 SUBMITTALS

- A. Prior to excavating 5 feet or more in depth, submit to Engineer for review detailed drawings showing the design of shoring, bracing, sloping, or other provisions for worker and property protection.
  - 1. Indicate design criteria, limits of shored areas, sequence of placement and removal, and shoring system details.

PART 2 - PRODUCTS

2.1 DESIGN AND CONSTRUCTION REQUIREMENTS

- A. If such Drawings vary from the shoring system standards established by Construction Safety Orders for State Division of Occupational Safety and Health, Drawings shall be prepared and signed by a State of California registered civil or structural engineer.
- B. The use of a protective system less effective than that provided by Construction Safety Orders shall not be permitted.

- C. Contractor shall provide more extensive shoring or bracing systems than those required by Construction Safety Orders when required by conditions shown on Drawings, or in Specifications, or encountered in the field.
- D. Where excavation alignments are within 10 feet of existing buildings, streets, tanks, or other structures requiring shoring, shoring design shall accommodate surcharge loads imposed on the structure or a minimum equivalent of 2 feet in height of earth added to the active earth pressure in the upper 10 feet of shoring, whichever is greater.

### PART 3 - EXECUTION

#### 3.1 PREPARATION

- A. Do not begin excavation Work until shoring drawings are reviewed by Engineer.

#### 3.2 PROTECTION

- A. Exercise caution when excavating near flammable, high pressure, or high voltage substructures and conduits.
- B. Prior to excavating adjacent to and within 6 feet of an existing subsurface installation carrying a hazardous or unstable substance, excavate potholes in conformance with Section 62.03.1 (Notification and Location Requirements) of Los Angeles Municipal Code and positively determine the location and elevation of the subsurface installation.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Slurry seal for existing pavements and new Class W pavement
- B. Cold crack filler
- C. Hot crack seal

### 1.2 RELATED SECTIONS

- A. Section 32 12 17 - Asphalt Concrete Paving
- B. Section 32 17 23 - Pavement Markings

### 1.3 PRICE AND PAYMENT PROCEDURES

#### A. Measurement and Payment:

1. The quantity of slurry seal to be paid for shall be measured by the tonnage of dry aggregate material shown on weigh tickets from the plant. Quantity shall be paid for under the Slurry Seal bid item of Bid Proposal Line Items at the unit price per ton in place.
  - a. Payment for slurry seal shall be related to Wet Track Abrasion Test results obtained during installation as required by RS Subsection 302-4.12.1
2. The quantity of crack filler shall be measured based on linear feet of material applied to clean cracks. Quantity(ies) shall be paid for under the Crack Filler bid item of Bid Proposal Line Items at the unit price per linear foot in place.
3. The quantity of crack seal shall be measured based on linear feet of material applied to clean cracks. Quantity(ies) shall be paid under the Crack Seal bid item of Bid Proposal Line Items at the unit price per linear foot in place.
4. Other Work described in this Section shall be considered incidental. The cost of such incidental Work shall be considered to be included in the appropriate bid items and no additional or separate compensation shall be made.



## 1.4 REFERENCES

- A. ASTM C136/C136M - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
- B. ASTM D2172/D2172M - Standard Test Methods for Quantitative Extraction of Asphalt Binder from Asphalt Mixtures.
- C. ASTM D3910 - Standard Practices for Design, Testing, and Construction of Slurry Seal.
- D. ASTM D6307 - Standard Test Method for Asphalt Content of Asphalt Mixture by Ignition Method.
- E. ISSA A105 - Recommended Performance Guideline for Emulsified Asphalt Slurry Seal.
- F. Reference Specifications (RS):
  - Section 200 - Rock Materials
  - Section 203 - Bituminous Materials
  - Section 302 - Roadway Surfacing

## 1.5 SUBMITTALS

- A. Submit emulsion-aggregate slurry mix design in conformance with RS Subsection 302-4.2, including aggregate gradation, asphalt emulsion content, water, and additives. Obtain Engineer's approval of mix design prior to application.
  - 1. Resubmit mix design for aggregate source change.
- B. Submit test results for emulsion content and moisture content conforming to ASTM D2172/D2172M or ASTM D6307. Submit results for Consistency Test and Wet Track Abrasion Test in conformance with ASTM D3910.
  - 1. Submit results of tests required in RS Table 200-1.7.1 for percentage wear 500 revolutions, sand equivalent, and sulfate soundness.
- C. Submit slurry spreading schedule indicating closure periods for each area shown on Drawings to be slurried.
- D. Submit certification of calibration for gages used to calibrate mixing units.

- E. Submit certificate of calibration of mixing unit metering devices where certification is allowed by Engineer in lieu of Project Site(s) calibration.
- F. Submit proposed area(s) within slurry application limits shown on Drawings to place slurry test strips for approval prior to production slurry application.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Emulsion-aggregate slurry shall conform to RS Subsection 302-4.3.
  - 1. Emulsion shall be cationic emulsified asphalt quick set, CQS-1h, in conformance with RS Subsection 203-3.4.3.
  - 2. Aggregate gradation shall conform to RS Table 200-1.7.2: Type I.
  - 3. Slurry Stockpile Tolerances: Production Slurry Stockpile Tolerances Table establish a mix design control band which applies to Contractor's approved mix design submittal.

| Production<br>Slurry Stockpile Tolerances |                     |
|-------------------------------------------|---------------------|
| Sieve<br>Size                             | Stockpile Tolerance |
| 3/8                                       |                     |
| 4                                         | 5%                  |
| 8                                         | 5%                  |
| 16                                        | 5%                  |
| 30                                        | 5%                  |
| 50                                        | 4%                  |
| 100                                       | 3%                  |
| 200                                       | 2%                  |

- a. Production slurry tolerance percentage values for each sieve may be added to or deducted from the approved mix design percentage passing values for each sieve. The resulting values still apply if they result in a Project aggregate gradation control band outside of the aggregate gradation band in RS Table 200-1.7.2, Type I.

- b. Production slurry aggregate gradations shall not deviate from the approved mix design more than the tolerances shown in Production Slurry Stockpile Tolerances Table.
- B. Cold crack filler shall be polymer modified petroleum emulsion, CRF crack filler as distributed by Crafcro Inc., <https://crafcro.com/>.
- C. Hot crack seal shall be petroleum-based product suited to areas with slow moving traffic and with high resistance to tracking, Parking Lot Sealant as manufactured by Crafcro Inc., <https://crafcro.com/>.
- D. Herbicide shall be Bayer Roundup PowerMAX.

### PART 3 – EXECUTION

#### 3.1 PREPARATION – WEED REMOVAL

- A. Remove vegetation and apply herbicide to weed-infested cracks in conformance with manufacturer's written instructions where weed removal is shown on Drawings. Do not apply when rain is forecast to occur within 24 hours. Remove remaining dead weeds in conformance with manufacturer's written instructions.

#### 3.2 PREPARATION – CRACK FILLING AND SEALING

- A. Crack Cleaning:
  - 1. Crack sealing alone or crack sealing prior to slurry seal: Clean cracks to a minimum 1/2 inch depth for crack widths greater than or equal to 1/4 inch for cold pour crack filler and 1/8 inch for hot pour crack sealant.
  - 2. Make minimum of 2 passes with compressed air wand at 90 pounds per square inch (psi) or greater no less than 2 inches from each crack.

#### 3.3 PREPARATION – SLURRY SEAL

- A. Surface on to which the slurry is to be applied shall be thoroughly cleaned and free of dirt, water, oil stains, vegetation, loose particles, and bird droppings.
  - 1. Do not place slurry until Engineer has approved surface preparation.
- B. Existing pavement markings: Protect existing pavement markings in place where designated on Drawings to remain. Slurry seal over other existing pavement markings.

1. Exception: Remove existing thermoplastic paint in conformance with PAVEMENT MARKINGS Section prior to applying slurry seal.
- C. Calibrate mixing unit metering of each material conforming to approved mix design proportions in the presence of Engineer in conformance with RS Subsection 302-4.2 and ISSA A105, 7, "Calibration" paragraph, prior to applying slurry seal. Provide 48 hours notice of calibration to Engineer.
1. Refer also to International Slurry Surfacing Association (ISSA) Inspector's Manual for detailed calibration procedures in Articles, "Calibration of Slurry Machine", "Calibration Procedure", "Dry Additive/ Mineral Filler Calibration", and "Aggregate Calibration".
  2. Account for moisture content of field aggregate stockpile.
  3. Certificate of calibration may be accepted in lieu of Project Site(s) calibration if the mix design used in certified calibration is the same as Project mix design and certified calibration was performed no earlier than 1 year prior to Project Notice to Proceed (NTP) date. Verify with Engineer.
  4. Lay slurry test strips in area of production application approved by Engineer in conformance with ISSA A105, 7, "Calibration", "Verification" paragraph. Schedule with Engineer to obtain samples. Obtain Engineer's approval of samples prior to commencing production slurry application.

### 3.4 INSTALLATION - GENERAL

- A. Do not place crack seal if fog or rain is forecast.
- B. Comply with temperature requirements of RS Subsection 302-4.9.2.1 and the following conditions for slurry seal:
1. Do not place slurry if weather forecast is for fog, rain or for temperatures below 50 degrees for the day of application and the following day.

### 3.5 CRACK FILLING AND SEALING

- A. Fill cracks in pavement where required on Drawings or as directed by Engineer.
1. Apply cold pour crack filler to cracks greater than or equal to 1/4 inch in width.
  2. Apply hot pour crack seal to cracks greater than or equal to 1/8 inch in width.

- a. Overfill cracks with hot pour crack filler and level off to create a neat overband extending approximately 1 inch by 1/8 inch deep on each side of crack or joint.
  - 1) Do not place overbands in areas shown on Drawings to be slurry sealed.
- b. Apply Crafcro Detack over hot crack seal to prevent material pickup where Drawings show slurry seal to be applied immediately after hot pour crack seal.

### 3.6 SLURRY SEALING

- A. Apply slurry seal to:
  - 1. Existing asphalt concrete pavement where shown on Drawings.
  - 2. New asphalt concrete where Class W is specified on Drawings as the wearing surface.
- B. Perform slurry seal Work in conformance with RS Subsection 302-4 where called out on Drawings. Exceptions:
  - 1. RS Subsection 302-4.11 Measurement and RS Subsection 302-4.12 Payment shall not apply.
  - 2. Individual volume or weight control devices shall show quantities of aggregate, mineral filler, and additives as well as emulsified asphalt and water.
    - a. Adjust water proportion to account for aggregate stockpile moisture content and aggregate bulking.
- C. Slurry mix shall conform to stability requirements of ISSA A105.
- D. Perform handwork in conformance with ISSA A105, 11.4.
- E. Application rate shall be 1,636 square feet per ton (11 pounds per square yard), unless adjusted by Engineer to a different rate.

### 3.7 CURING

- A. Slurried areas shall be allowed to cure in conformance with RS Subsection 302-4.8.
  - 1. Exception: 5 Calendar Days shall be allowed prior to opening to traffic.
- B. Allow curing time prior to application of pavement markings in conformance with PAVEMENT MARKINGS Section.

### 3.8 FIELD QUALITY CONTROL

- A. Tests and Inspections:
  - 1. Slurry Seal: Engineer shall perform sieve analysis of aggregates in conformance with ASTM C136/C136M and field sampling of slurry in conformance with RS Subsection 302-4.10, except that Engineer shall make determination of emulsion and moisture contents by ASTM D6307 Ignition Method instead of Extraction Test.
    - a. Slurry failing to meet RS Subsection 302-4.10 sampling test requirements shall be replaced or corrected to conform to the requirements of this Section as determined by Engineer.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Application of sealcoat to existing pavement
- B. Application of sealcoat to new Class W pavement

### 1.2 RELATED SECTIONS

- A. Section 32 12 17 - Asphalt Concrete Paving

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for Work of this Section shall be paid under the Sealcoat bid item of Bid Proposal Line Items at the unit price per square yard.

### 1.4 REFERENCES

- A. Reference Specifications (RS):
  - Subsection 203-9 - Sealcoat – Asphalt Based
  - Subsection 302-8 - Sealcoat for Miscellaneous Areas

### 1.5 SUBMITTALS

- A. Submit samples of sealcoat material or 3 certified copies of test reports, as directed by Engineer, in conformance with RS Subsection 302-8.1.

### 1.6 QUALITY ASSURANCE

- A. Department Testing Laboratory may test sealcoat and components of sealcoat mixture, including water, before placement for conformance to RS Subsection 203-9, or for conformance to published technical data, as directed by Engineer.
- B. Major equipment items shall be available for inspection. Deficiencies in quality, quantity, or types of equipment shall be corrected prior to commencing Work. This inspection and approval shall in no way relieve Contractor from the obligation to provide the equipment required.
  - 1. Provide and maintain in operating condition equipment, tools, and machines used in the performance of Work.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Sealcoat shall be in conformance with RS Subsection 203-9 for asphalt emulsion. Sealcoat shall be GuardTop Asphalt Based Sealcoat, as manufactured by GuardTop LLC, (949) 218-4319.

## PART 3 - EXECUTION

### 3.1 SURFACE PREPARATION

- A. The surface on which the sealcoat shall be placed shall be cleaned of dirt, trash, oil, grease deposits, loose asphalt concrete debris, and vegetation and shall be free of standing water.

### 3.2 APPLICATION

- A. Apply sealcoat in conformance with RS Subsection 302-8.2, manufacturer's written instructions, and safety data sheets.

END OF SECTION



## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Cold mill asphalt paving

### 1.2 RELATED SECTIONS

- A. Section 02 00 01 - Basic Site Materials and Methods
- B. Section 32 12 17 - Asphalt Concrete Paving

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:

1. Contractor shall measure areas to be cold milled in the presence of Engineer after survey cut marks are set on existing pavement, but prior to actual cold milling Work. Submit removal volume calculations to Engineer. Cold milling shall be paid by the square yard-inch under the Cold Milling and Mini Cold Milling bid items of Bid Proposal Line Items after cold milling and mini cold milling Work is complete.

### 1.4 REFERENCES

- A. Reference Specifications (RS):

Section 404 - Cold Milling

## PART 2 - PRODUCTS - NOT USED

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Steel fence post stubs, steel guard post stubs, concrete footings with steel reinforcement, steel wheel stop pins, and other existing substructures capable of damaging cold milling equipment may be present in existing asphalt concrete grade to be cold milled.
  1. Perform visual inspection of area to be cold milled prior to start of operations.
  2. Locate buried items by sweeping entire area with metal detector. Coordinate with Engineer to witness and approve metal detector inspections.

3. Mark and protect in place substructures to remain. Remove interfering steel items as directed by Engineer or as shown on Drawings.

### 3.2 EQUIPMENT

- A. Milling equipment shall conform to RS Subsection 404-2 and shall be capable of the following:
  1. Cutting a tapered cross-slope.
  2. Cutting to daylight while maintaining design profile.
- B. Milling equipment shall include a dust suppression system that meets South Coast Air Quality Management District (SCAQMD) regulations.
- C. Do not use unequally worn cutting teeth that produce an uneven milling pattern.

### 3.3 CONSTRUCTION

- A. Perform pavement cold milling in conformance with RS Subsection 404-1 except for RS Subsections 404-11 and 404-12.
- B. Grade milled surface such that a 10 foot straight edge laid in any direction at any location reveals less than a 1/2 inch variation.
- C. Cold milling shall not gouge or otherwise damage remaining underlying pavement beyond depths exceeding cutting drum pattern.
- D. Where the pavement to be resurfaced joins existing pavement, cold milled areas shall terminate with a 2-inch minimum depth vertical shoulder or 3 inch shoulder cut for existing Class W asphalt concrete. Cut shoulder along joint lines to provide a butt joint unless shown otherwise on Drawings or directed otherwise by Engineer.

### 3.4 REPAIRS

- A. Notify Engineer of areas where visible cracks remain in existing asphalt after cold milling. Perform additional cold milling of cracked areas as directed by Engineer.

### 3.5 CLEANING

- A. Mechanically sweep cold milled areas throughout the course of milling operations in conformance with RS Subsection 404-7.
- B. Leave areas clean of cuttings at the end of each working day.
- C. Cuttings shall become property of Contractor and be disposed of off Department property.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Department-furnished crushed miscellaneous base (CMB) material
- B. Contractor-furnished crushed aggregate base (CAB) material
- C. Contractor-furnished crushed miscellaneous base (CMB) material

### 1.2 RELATED SECTIONS

- A. Section 02 00 01 - Basic Site Materials and Methods
- B. Section 32 12 17 - Asphalt Concrete Paving

### 1.3 PRICE AND PAYMENT PROCEDURES

#### A. Measurement and Payment:

1. The quantity of base material shall be measured per cubic yard compacted in place.
2. Quantities of crushed aggregate base material shall be paid for at Contract price per cubic yard compacted in place when authorized by Engineer through the Crushed Aggregate Base (Greater than 100 Cubic Yards Per Order) bid item of Bid Proposal Line Items.
3. Quantities of Contractor-furnished crushed miscellaneous base material shall be paid for at Contract price per cubic yard compacted in place when authorized by Engineer through the various Contractor-Furnished Crushed Miscellaneous Base bid items of Bid Proposal Line Items.
4. Quantities of Department-furnished crushed miscellaneous base material shall be paid for at Contract price per cubic yard compacted in place when authorized by Engineer through the various Department-Furnished Crushed Miscellaneous Base bid items of Bid Proposal Line Items.

### 1.4 REFERENCES

- A. ASTM C136/C136M - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
- B. Reference Specifications (RS):  
Section 200 - Rock Materials

Subsection 200-2.2 - Crushed Aggregate Base

Subsection 200-2.4 - Crushed Miscellaneous Base

Section 301 - Subgrade Preparation, Treated Materials, and Placement of Base Materials

Subsection 301-2 - Untreated Base

Subsection 301-2.2 - Spreading

Subsection 301-2.3 - Compacting

## 1.5 SUBMITTALS

- A. Submit to Engineer list of equipment to be used for hauling, dust control during hauling, and placing base prior to usage on Project.
- B. Submit proposed trucking delivery schedule and haul route.
- C. Submit 1 cubic foot samples of proposed CAB or CMB material to Engineer for approval prior to use.
- D. Submit the following to Engineer 30 Calendar Days prior to delivery of Contractor-furnished CAB or CMB to Project Site(s):
  - 1. Written documentation to identify the proposed CMB and CAB sources and previous uses of the site from which CMB and CAB originated.
  - 2. Sieve analysis conforming to ASTM C136/C136M.

## 1.6 QUALITY ASSURANCE

- A. Notify Engineer when base course or portion thereof has been placed and compacted in conformance with the requirements shown on Drawings and in this Section. Do not place pavement surface or ballast until so directed by Engineer.
- B. If compaction tests indicate that base course does not meet specified requirements, remove defective Work and replace. Retest costs shall be the responsibility of Contractor.

### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Load, transport, and deliver base materials to Project Site(s) from the source through approved haul routes.
- B. Control dust from loading and hauling operations by sprinkling with a water truck or utilize other methods acceptable to Engineer.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Department-furnished CMB shall consist of existing crusher product material hauled from Department stockpile.
- B. Materials shall compact to a hard, firm, unyielding surface, and shall remain stable when saturated with water. Aggregates shall be free from silt, clay, organic matter, and other objectionable materials.
  - 1. CAB shall conform to RS Subsections 200-2.2 and 200-2.2.1.
  - 2. CMB shall conform to RS Subsection 200-2.4, fine gradation.
- C. Import CAB and CMB, Environmental Requirements (from sites off of Department property):
  - 1. CAB and CMB source area shall not be located in:
    - a. Sites undergoing environmental cleanup.
    - b. Other sites where hazardous materials were used or hazardous wastes were generated (gasoline stations, dry cleaners, oil refineries, painting facilities, metal processing shops, and other similar sites).
  - 2. Department retains the right to refuse any potential CAB and CMB material for use at any of its construction sites.
  - 3. Provide written documentation that identifies proposed CAB and CMB source, previous uses of the land from where CAB and CMB shall originate. Information shall be submitted to Engineer for review and approval prior to placement of CAB and CMB material.

## PART 3 - EXECUTION

### 3.1 EQUIPMENT

- A. Provide and maintain in operating condition equipment, tools, and machines used in the performance of Work of this Section.
- B. Contractor shall have major equipment items available for inspection by Engineer. Correct deficiencies in quality, quantity, or types of equipment prior to commencing Work. This inspection and approval shall in no way relieve Contractor from the obligation to provide the equipment required to perform Work of this Section.

### 3.2 PREPARATION OF SUBGRADE

- A. Subgrade shall conform to lines, grades, cross sections, and density shown on Drawings prior to the placing of the base course. Do not place base course until the subgrade has been inspected and approved by Engineer.
- B. Do not place base course when the subgrade is sufficiently wet that its surface can be marred by construction equipment.
- C. Protect finished subgrade course from disturbance by traffic or other operations and maintain until base course is placed.

### 3.3 CONSTRUCTION

- A. Place, spread, and compact base course in conformance with RS Subsections 301-2.2 and 301-2.3 except that relative compaction shall be 97 percent.

### 3.4 FIELD QUALITY CONTROL

- A. Refer to BASIC SITE MATERIALS AND METHODS Section, Field Quality Control Article, for Engineer's determination of maximum dry density and optimum moisture content, and for field-testing of compacted crushed base.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Asphalt concrete
- B. Tack coat

### 1.2 RELATED SECTIONS

- A. Section 31 23 33 - Trenching and Backfilling
- B. Section 32 01 13.61 - Slurry Seal
- C. Section 32 01 14 - Sealcoat
- D. Section 32 01 16.71 - Cold Milling Asphalt Paving
- E. Section 32 11 00 - Base Courses
- F. Section 32 17 13 - Parking Bumpers
- G. Section 32 17 23 - Pavement Markings

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for asphalt concrete pavement shown on Drawings shall be paid under the corresponding Asphalt Concrete Pavement bid items of Bid Proposal Line Items as measured by the tonnage on the weigh tickets from the plant.
  - 2. Refer to TRENCHING AND BACKFILLING Section concerning costs for asphalt concrete trench resurfacing.

### 1.4 REFERENCES

- A. AASHTO T 312 - Standard Method of Test for Preparing and Determining the Density of Asphalt Mixture Specimens by Means of the Superpave Gyratory Compactor.
- B. ASTM C131/C131M - Standard Method of Test for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine.



- C. ASTM C136/C136M - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
- D. ASTM D2726/D2726M - Standard Test Method for Bulk Specific Gravity and Density of Non-Absorptive Compacted Asphalt Mixtures.
- E. ASTM D2950/D2950M - Standard Test Method for Density of Asphalt Mixtures in Place by Nuclear Methods.
- F. ASTM D6307 - Standard Test Method for Asphalt Content of Asphalt Mixture by Ignition Method.

G. Reference Specifications (RS):

Section 200 - Rock Materials

Subsection 200-1 - Rock Products

Section 203 - Bituminous Materials

Subsection 203-1 - Paving Asphalt

Subsection 203-3 - Emulsified Asphalt

Subsection 203-6 - Asphalt Concrete

Section 302 - Roadway Surfacing

Subsection 302-5 - Asphalt Concrete Pavement

## 1.5 DEFINITIONS

- A. Project Mix Design: Contractor's Project specific asphalt concrete formula, including individual gradation values and other data conforming to RS Subsection 203-6.3.
- B. Project Aggregate Gradation Control Band: Percentage passing sieve ranges derived by adding and deducting tolerance range values to Contractor's approved Project Mix Design percentage passing sieve values. Tolerance range values are shown in the Production W and Y Mix Tolerances Table, and Production RS Mix Tolerances Table.

## 1.6 SUBMITTALS

- A. Copies of the supplying vendor's asphalt test report required by RS Subsection 203-1.

- B. List of equipment to be used for placing asphalt concrete prior to usage on Project.
- C. Copies of the asphalt concrete Project Mix Design, including gradation and binder content required by RS Subsection 203-6.
  - 1. Include coarse aggregate percentage wear test results from RS Subsection 200-1.2 and ASTM C131/C131M.
- D. Gradation sample from mixing plant.
- E. Submit proposed area(s) within cold mill limits shown on Drawings to place crack filler for approval prior to crack filler application.

## 1.7 QUALITY ASSURANCE

- A. Have major equipment items available for inspection by Engineer. Correct deficiencies in quality, quantity, or types of equipment prior to commencing Work. This inspection and approval shall in no way relieve Contractor from the obligation to provide the equipment required to perform Work.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Tack coat shall conform to RS Subsection 203-1, either PG 64 -10 or PG 64 -16, or SS-1 emulsified asphalt in conformance with RS Subsection 203-3.
- B. Paving asphalt shall conform to RS Subsection 203-1 except reclaimed asphalt paving pavement (RAP) shall not be used.
- C. Aggregates:
  - 1. Crushed slag shall not be used for coarse or fine aggregates.
  - 2. Coarse aggregates shall conform to the requirements for maximum percentage wear in RS Subsection 200-1, Table 200-1.2.1 (B) as tested under ASTM C131/C131M.
  - 3. The minimum specific gravity of coarse aggregate shall be 2.58.
  - 4. Material passing each aggregate sieve size shall be 100 percent by weight crushed rock with 2 or more fractured faces.
  - 5. Fine aggregates shall be 100 percent by weight rock dust.

- D. Asphalt concrete shall conform to RS Subsection 203-6 except that reclaimed asphalt pavement (RAP) shall not be used.
1. Asphalt concrete class and grade shall be as designated on Drawings.
- E. Asphalt concrete for Classes W and Y shall conform to RS Subsection 203-6 except reclaimed asphalt pavement (RAP) shall not be used, and as follows:

| <u>Asphalt Concrete Properties Table</u> |                                   |                |
|------------------------------------------|-----------------------------------|----------------|
| <u>Sieve Size</u>                        | <u>Percentages Passing Sieves</u> |                |
|                                          | <u>Class W</u>                    | <u>Class Y</u> |
| 1-1/2 inches                             | 100                               | 100            |
| 1 inch                                   | 86-94                             | 100            |
| 3/4 inch                                 | 74-84                             | 87-98          |
| 1/2 inch                                 | 56-66                             | 70-87          |
| 3/8 inch                                 | 46-56                             | 55-76          |
| No. 4                                    | 28-38                             | 35-52          |
| No. 8                                    | 18-28                             | 22-40          |
| No. 30                                   | 7-14                              | 8-24           |
| No. 50                                   | 3-10                              | 5-18           |
| No. 200                                  | 3-5                               | 0-7            |
| Asphalt Binder Percent                   | 4.5-5                             | 4.5-6.5        |
| Air Voids                                | 4.0%                              | 4.0%           |

1. Production Asphalt Concrete Mix Tolerances: Production W and Y Mix Tolerances Table establishes a Project Mix Design control band which applies to Contractor's approved Project Mix Design submittal.
- a. Production asphalt concrete (AC) mix tolerance percentage values for each sieve may be added to or deducted from the approved Project Mix Design percentage passing values for each sieve. The resulting values still apply if they result in a Project Aggregate Gradation Control Band outside of Percentages Passing Sieves columns for Classes W and Y shown in Asphalt Concrete Properties Table included in this Section.

- b. Production asphalt concrete aggregate gradations, asphalt binder, and air voids shall not deviate from the approved Project Mix Design more than the tolerances shown in Production W and Y Mix Tolerances Table included in this Section.
- c. Verification shall be based on daily plant extraction in conformance with ASTM D6307. Aggregate gradation shall be determined in conformance with ASTM C136/C136M.

| <u>Production W and Y Mix Tolerances Table</u> |                                      |                                      |
|------------------------------------------------|--------------------------------------|--------------------------------------|
|                                                | <u>Class W</u>                       | <u>Class Y</u>                       |
| <u>Sieve Size</u>                              | <u>Production AC Tolerance Range</u> | <u>Production AC Tolerance Range</u> |
| 1 1/2 inch                                     | ±0                                   |                                      |
| 1 inch                                         | ±2                                   | ±0                                   |
| 3/4 inch                                       | ±4                                   | ±4                                   |
| 1/2 inch                                       | ±5                                   | ±5                                   |
| 3/8 inch                                       | ±6                                   | ±6                                   |
| No. 4                                          | ±6                                   | ±6                                   |
| No. 8                                          | ±5                                   | ±5                                   |
| No. 30                                         | ±4                                   | ±4                                   |
| No. 50                                         | ±3                                   | ±3                                   |
| No. 200                                        | ±1                                   | ±1                                   |
| Asphalt Binder Percent                         | ±0.45                                | ±0.45                                |
| Air Voids - Lab Samples                        | -1.5 to +.5%*                        | -1.5 to +.5%*                        |
| Air Voids - Field Samples                      | -2.0 to +1.0%**                      | -2.0 to +1.0%**                      |

\* The average air void volume of lab-compacted samples from a day's production shall fall between 2.5 and 4.5 percent with a standard deviation less than 0.65.

\*\* The air void volume of each in place sample shall fall between 2.0 and 5.0 percent.

- F. Asphalt concrete for class and grade shown on Drawings shall conform to RS Subsection 203-6 and as follows:
1. Production Asphalt Concrete Mix Tolerances: Production RS Mix Tolerances Table establishes a Project Mix Design control band which applies to Contractor's approved Project Mix Design submittal.
    - a. Production asphalt concrete mix tolerance percentage values for each sieve may be added to or deducted from the approved Project Mix Design percentage passing values for each sieve. The resulting values still apply if they result in Project Aggregate Gradation Control Band outside of Percentage Passing Sieves columns for the class of asphalt concrete shown on Drawings and shown in RS Subsection 203-6, Table 203-6.4.4.

- b. Production asphalt concrete aggregate gradations, asphalt binder, and air voids shall not deviate from the approved Project Mix Design more than the tolerances shown in Production RS Mix Tolerances Table included in this Section.

| Production RS Mix Tolerances Table                                                                                                                              |                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| <u>Sieve Size</u>                                                                                                                                               | <u>Tolerance Range</u> |
| 1-1/2 inches                                                                                                                                                    | ±0                     |
| 1 inch                                                                                                                                                          | ±2                     |
| 3/4 inch                                                                                                                                                        | ±4                     |
| 1/2 inch                                                                                                                                                        | ±5                     |
| 3/8 inch                                                                                                                                                        | ±6                     |
| No. 4                                                                                                                                                           | ±6                     |
| No. 8                                                                                                                                                           | ±5                     |
| No. 30                                                                                                                                                          | ±4                     |
| No. 50                                                                                                                                                          | ±3                     |
| No. 200                                                                                                                                                         | ±1                     |
| Air Binder Percent                                                                                                                                              | ±0.45                  |
| Air voids - lab samples                                                                                                                                         | -1.5 to +0.5%*         |
| Air voids - field samples                                                                                                                                       | -2.0 to +1.0%**        |
| * The average air void volume of lab-compacted samples from a day's production shall fall between 2.5 and 4.5 percent with a standard deviation less than 0.65. |                        |
| ** The air void volume of each in place sample shall fall between 2.0 and 5.0 percent.                                                                          |                        |

G. Slurry seal for Class W pavements shall conform to SLURRY SEAL Section.

H. Sealcoat for Class W pavements shall conform to SEALCOAT Section.

## 2.2 CRACK FILLER

A. Crack filler shall be as specified in SLURRY SEAL Section.

## 2.3 SOURCE QUALITY CONTROL

- A. Allow Engineer access to the mixing plant 30 Calendar Days prior to start of paving operations and at any time thereafter for verification of weights or proportions, character of materials used and determination of temperatures used in the preparation of asphalt concrete mix.
- B. Engineer shall verify acceptability of asphalt concrete aggregate gradations from plant extractions tested in conformance with ASTM D6307. Aggregate gradations shall be determined in conformance with ASTM C136/C136M Sieve Analysis.

## PART 3 – EXECUTION

### 3.1 PREPARATION

- A. Place base material in conformance with BASE COURSES Section.
- B. Cold mill prior to overlay where required by Drawings and in conformance with COLD MILLING ASPHALT PAVING Section.
- C. Clean base course prior to paving operations. Clean surfaces to receive overlay prior to tack coating. Remove dirt, trash, oil, loose asphalt concrete debris, vegetation, and standing water.
- D. Wherever asphalt concrete paving does not terminate against a curb, gutter, or another pavement, furnish and install header at the line of termination prior to placing asphalt concrete in conformance with RS Subsection 302-5.5.
- E. Carefully lay joints between existing hard-surface pavements and new pavements; between hard-surface structures permanently embedded in the grade and new pavements; or between successive days' Work in such a manner as to ensure a continuous bond between existing and new sections.
  - 1. Expose, clean, and cut edges of existing pavement or new asphalt concrete placed in the previous days asphalt concrete in place to straight, vertical surfaces.
  - 2. Lay joints between same-day successive runs adjacent to new asphalt in conformance with RS Subsection 302-5.7.
- F. At joint locations described in Paragraph E of this Article, or areas to be overlaid, apply tack coat to the existing surfaces to be joined in conformance with RS Subsection 302-5.4 prior to placing asphalt concrete.

- G. Do not place asphalt concrete until Engineer approves batch plant gradation samples.
- H. Do not place asphalt concrete until the base material has been approved by Engineer.

### 3.2 CONSTRUCTION

- A. Perform paving during daylight hours.
- B. Paving shall be continued uninterrupted and as expeditiously as possible once commenced.
- C. Construct asphalt concrete paving in conformance with RS Subsection 302-5. Exceptions:
  - 1. Mixes shown in RS Table 203-6.4.4 shall be compacted to 98 percent relative density unless indicated otherwise on Drawings.
  - 2. Classes W and Y asphalt concrete shall be compacted to 98 percent relative density as determined in conformance with AASHTO T 312 with 75 gyrations.
- D. Wherever Class W asphalt concrete is specified for the wearing surface, apply slurry seal in conformance with SLURRY SEAL Section.
- E. Wherever Class W asphalt concrete is specified for the wearing surface, apply sealcoat in conformance with SEALCOAT Section.
- F. Provide and maintain in good operating condition equipment, tools, and machines used for constructing asphalt concrete pavement.

### 3.3 FIELD QUALITY CONTROL

- A. Tests and Inspections:
  - 1. Testing and inspection of asphalt concrete paving mix and testing of placed asphalt concrete paving shall be performed by Engineer.
  - 2. Engineer shall determine in-place densities and other specified material properties by nuclear methods in conformance with ASTM D2950/D2950M and by cores in conformance with ASTM D2726/D2726M and AASHTO T 312. Remove and replace materials not complying with specified material property requirements.



3. If compaction tests indicate that the asphalt concrete paving does not meet specified requirements, re-test costs shall be at sole cost and expense of Contractor.
4. Asphalt concrete pavement that Engineer determines to be out of conformance with the gradation and compaction requirements of this Section shall be subject to removal. If, after initial rejection, non-conformance continues, stop asphalt concrete material deliveries entirely until Engineer is satisfied that future deliveries shall conform to the requirements of this Section. Contractor shall be solely responsible for any delays to Project schedule resulting from rejected asphalt concrete material.
5. Flood Test:
  - a. Flood asphalt pavement with water to check for positive drainage.
  - b. Provide materials and equipment for flood testing.
  - c. Perform test in Engineer's presence.

END OF SECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Site Work Concrete:

1. Curbs
2. Gutters
3. Concrete pavement
4. Reinforcement bars
5. Fiber reinforcement
6. Catch basins
7. Cast-in-place vaults
8. Sidewalks
9. Fence footings
10. Sign post footings
11. Concrete pads for electrical and mechanical equipment
12. Maintenance holes
13. Site furnishing footings

B. Slurry: Duct bank encasement.

C. Other non-wharf and non-building concrete structures as shown on Drawings.

1.2 RELATED SECTIONS

- A. Section 02 00 01 - Basic Site Materials and Methods
- B. Section 07 92 00 - Joint Sealants
- C. Section 26 00 01 - Basic Electrical Materials and Methods
- D. Section 31 00 00 - Earthwork
- E. Section 32 31 13 - Chain Link Fences and Gates

F. Section 33 30 00 - Sanitary Sewerage

G. Section 33 40 01 - Storm Drainage

### 1.3 PRICE AND PAYMENT PROCEDURES

A. Measurement and Payment:

1. Payment for Work of this Section shall be paid under the corresponding Concrete Pavement bid items of Bid Proposal Line Items.
2. Fiber reinforced concrete pavement shall be paid under the Fiber Reinforced Concrete Pavement bid item of Bid Proposal Line Items.
3. Reinforcement used for new concrete Work shall be paid under the Reinforcement Steel bid item of Bid Proposal Line Items.
4. Reinforcement used for joining new concrete pavement with existing concrete pavement shall be paid under the Reinforcement Bar Dowels (Appendix "H") bid item of Bid Proposal Line Items.

### 1.4 REFERENCES

- A. ACI CODE-318 - Building Code Requirements for Structural Concrete and Commentary.
- B. ACI PRC-211.1 - Selecting Proportions for Normal-Density and High-Density Concrete—Guide.
- C. ACI PRC-347 - Guide to Formwork for Concrete.
- D. ACI SPEC-301 - Specifications for Concrete Construction.
- E. ASTM A615/A615M - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement.
- F. ASTM A706/A706M - Standard Specification for Deformed and Plain Low-Alloy Steel Bars for Concrete Reinforcement.
- G. ASTM C31/C31M - Standard Practice for Making and Curing Concrete Test Specimens in the Field.
- H. ASTM C33/C33M - Standard Specification for Concrete Aggregates.
- I. ASTM C39/C39M - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.

- J. ASTM C42 - Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.
- K. ASTM C88/C88M - Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate.
- L. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete.
- M. ASTM C136/C136M - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
- N. ASTM C150/C150M - Standard Specification for Portland Cement.
- O. ASTM C470/C470M - Standard Specification for Molds for Forming Concrete Test Cylinders Vertically.
- P. ASTM C618 - Standard Specification for Coal Ash and Raw or Calcined Natural Pozzolan for Use in Concrete.
- Q. ASTM C1107/C1107M - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink).
- R. ASTM C1116/C1116M - Standard Specification for Fiber-Reinforced Concrete.
- S. Reference Specifications (RS):
  - Section 200 - Rock Materials
  - Section 201 - Concrete, Mortar, and Related Materials
  - Section 302 - Roadway Surfacing
  - Section 303 - Concrete and Masonry Construction

#### 1.5 SUBMITTALS

- A. Submit concrete mix design to Engineer for review.
- B. Submit manufacturer's data sheet, including the following items:
  - 1. Manufacturer's printed batching and mixing instructions.
  - 2. Proposed fiber reinforcement materials including application rate per cubic yard of concrete.

- C. Submit shop drawings for reinforcing steel in conformance with ACI CODE-318. Provide bending diagrams and assembly diagrams. Indicate splicing, laps of bars, shapes, dimensions, and details of bar reinforcing, accessories, and concrete cover. Do not scale dimensions from structural Drawings to determine lengths of reinforcing steel. Reproductions of Drawings are unacceptable.
- D. Submit construction joint layout showing alternating pour areas and sequential pour schedule, including 7 day cure time, prior to fabricating reinforcement.
- E. Submit delivery tickets from plant for each load of concrete placed. Each ticket shall state quantities by weight of each component of the load (cement, sand, water, and the like).
- F. Submit certificate of compliance signed by the supplier of fly ash identifying the type of fly ash and certifying that fly ash complies with ASTM C618.
- G. Submit certification that aggregates meet the requirements of ASTM C33/C33M Appendix XI for reactivity.
- H. Submit certification that the aggregates meet the soundness requirements of ASTM C33/C33M when tested in conformance with the requirements of ASTM C88/C88M using a sodium sulfate solution.
- I. Submit two 12 inch long samples of waterstops and construction joint devices.

#### 1.6 QUALITY ASSURANCE

- A. Department Testing Laboratory (Test Lab) shall perform tests in conformance with RS Subsection 201-1.7.
  - 1. Test Lab shall perform sieve analysis of aggregates in conformance with ASTM C136/C136M.
  - 2. Test Lab shall provide certificate of compliance for bottoms of footings and pads prior to placing reinforcing bar and concrete.
  - 3. Advise Test Lab 72 hours in advance of the beginning of operations to allow time for completion of quality tests and for assignment of laboratory personnel.
  - 4. Provide and deliver to Test Lab, representative samples of materials which require testing and are proposed to be used on Project (coarse and fine aggregate, cement, and the like).

5. When requested, furnish copies of test reports of shipments of concrete to Engineer and Test Lab.
- B. Schedule Engineer's registered deputy building inspection prior to placing concrete and at other times as Drawings require.
- C. In addition to test cylinders required by Contractor's own testing and quality control, Contractor shall make for Department four 6 inch diameter by 12 inch long test cylinders for each light pole foundation, for every 5,000 square feet of slab area, and every 150 cubic yards of other types of concrete placement. A minimum of 4 cylinders shall be made for each day's pour regardless of cubic yardage, or for each change in mix design. Upon notification, dispose of any cylinders not tested by Department.
1. Furnish certified technicians and equipment necessary to obtain and handle the samples at Project Site(s) or at other locations where materials are located.
  2. Make and cure cylinders in conformance with ASTM C31/C31M, standard cured method. Cylinder molds shall conform to ASTM C470/C470M.
  3. Label cylinders with the date of sampling, the class and mix proportions of the concrete, and Work location of the pour from which the sets of samples were taken. Identify parent concrete structure from which samples were taken, and Drawing page number. Identify cylinders with the same identification system used on Drawings for the parent concrete structure. Use same identification system for samples Contractor requires for its own use.
  4. Coordinate with Engineer for pick up of cylinders from field curing location between 24 to 72 hours after being cast. Avoid damage to cylinders and loss of lids and identifying labels during handling. Failure to comply with the provisions of this Section regarding cylinder handling may be cause for rejection of the concrete structure. Engineer may further require performance of any and necessary alternative strength tests at sole cost and expense of Contractor.
  5. Engineer may increase the required number of cylinders if the specified concrete strength is not being attained consistently or reduce the number if Engineer determines that high concrete strengths are consistently produced and the concrete and curing processes are uniform.

6. Contractor shall provide evidence that the concrete structures have met strength and other requirements as specified in Materials Article of this Section. Strength shall be determined by cylinder breaks after 28 days as specified by ASTM C39/C39M.
7. If the cylinders show compressive strengths below the minimum acceptable limit, Engineer may require coring of the parent concrete structure at Contractor's sole cost and expense. Cores shall conform to ASTM C42 and RS Subsection 201-1.7.
  - a. Coordinate with Test Lab through Engineer to perform additional, earlier cylinder breaks for purposes of scheduling.

## 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store fly ash separately from other components of concrete until concrete is ready to be batched.

## PART 2 – PRODUCTS

### 2.1 CONCRETE MIX DESIGN

- A. Mix shall be designed to produce a concrete that has maximum density, minimum shrinkage, and maximum smoothness of surface.
- B. Concrete mix designs shall conform to RS Subsection 201-1.3.3 where concrete class is shown on Drawings. Concrete mix design shall conform to RS Subsection 201-1.3.4 where compressive strength is shown on Drawings. Exception:
- C. Proportion concrete in conformance with ACI SPEC-301, Section 4 - Concrete Mixtures, ACI PRC-211.1, and ACI CODE-318, Chapter 5, Concrete Quality, Mixing and Placing.

### 2.2 MATERIALS

- A. Portland cement concrete shall conform to RS Subsection 201-1 unless shown otherwise on Drawings. Portland cement shall be Type II, low alkali (0.6 percent, maximum), in conformance with ASTM C150/C150M.
  1. Only 1 brand of cement shall be used.
- B. Ready-mix concrete shall conform to ASTM C94/C94M.
- C. Mortar shall conform to RS Subsection 201-5.

- D. Reinforcing bars shall be Grade 60 in conformance with ASTM A615/A615M, RS Subsection 201-2, and ACI CODE-318.
  - 1. Exceptions: Reinforcing bars shall be Grade 60 in conformance with ASTM A706/A706M:
    - a. Where bars are to be welded.
    - b. As called out on Drawings.
  - 2. Reinforcement Accessories:
    - a. Tie Wire: Annealed, minimum 16 gage, 0.0508 inch.
    - b. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for adequate support of reinforcement during concrete placement.
- E. Fiber reinforcement shall be Sika Fibermesh 300. The fibers shall conform to ASTM C1116/C1116M Type III and manufactured specifically for the secondary reinforcement of concrete.
- F. Headed steel anchors shall be by Nelson Stud Welders.
- G. Aggregate shall be normal weight in conformance with RS Subsection 200-1.4, and shall conform to ASTM C33/C33M, and ACI CODE-318, except where concrete is specified by class on Drawings in conformance with RS Subsection 201-1.3.3, or elsewhere in Specifications.
- H. Fine aggregate shall conform to RS Subsection 200-1.5.
- I. Non-shrink grout shall conform to ASTM C1107/C1107M and shall be MasterFlow 713 as manufactured by Master Builders Solutions, (800) 433-9517. Other non-masonry grouts shall conform to RS Subsection 201-7 and as indicated on Drawings.
  - 1. Grout for vault grade adjustment shall be high strength, non-shrink grout.
  - 2. Grout for fence post cores into existing concrete or asphalt concrete shall be non-shrink grout.
- J. Chemical admixtures shall conform to RS Subsection 201-1.2.6
  - 1. Calcium chloride shall not be used.
  - 2. Strength of concrete with admixture shall be, at 48 hours and more, not less than similar concrete without the admixture.



- K. Fly ash shall conform to RS Subsection, 201-1.2.7.3, Class F and ASTM C618.
- L. Forms shall conform to RS Subsection 303-1.3 and ACI PRC-347.
  - 1. Anti-bonding agent shall be Duogard II, as manufactured by W.R. Meadows, (909) 469-2606.
- M. Concrete curing shall be by water or membrane curing, Type 1-D, in conformance with RS Subsection 201-4.
- N. Sealants for expansion and control joints shall be as specified in JOINT SEALANTS Section. Joint fillers shall conform to RS Subsection 201-3.2.
- O. Epoxy adhesives shall be 2-component, 100 percent solids, 100 percent reactive suitable for use on dry or damp surfaces.
- P. Materials shall comply with City of Los Angeles Green Building Code requirements.
  - 1. Enter pertinent product data in VOC Content Verification Checklist form and provide product specification sheets. Make checklist and specifications available to City of Los Angeles Department of Building and Safety inspector through Engineer upon request. VOC Content Verification Checklist form can be found here: [https://www.ladbs.org/docs/default-source/forms/green-building-2023/grn\\_2\\_voc\\_content\\_verification\\_checklist-01.17.23.pdf?sfvrsn=19f4c153\\_10](https://www.ladbs.org/docs/default-source/forms/green-building-2023/grn_2_voc_content_verification_checklist-01.17.23.pdf?sfvrsn=19f4c153_10)
- Q. Slurry material shall be as specified in BASIC SITE MATERIALS AND METHODS Section.

## PART 3 – EXECUTION

### 3.1 PREPARATION

- A. Where concrete is to be cast against existing concrete older than 60 days, clean and roughen existing concrete by sandblasting, exposing the aggregate, and apply bonding agent.

## 3.2 CONSTRUCTION

## A. General:

1. Construct exterior concrete equipment pads in conformance with City of Los Angeles Building Code and in conformance RS Subsection 303-1 except for RS Subsections 303-1.11 and 303-1.12.
2. Construct concrete curbs, walks, gutters, cross gutters, access ramps, and driveways in conformance with RS Subsection 303-5 except for RS Subsection 303-5.9.
3. Construct concrete paving in conformance with RS Subsection 302-6 except for RS Subsection 302-6.8. Vehicular traffic closure time period shall conform to RS Subsection 302-6.7 except where Drawings state specific closure time period.
4. Sequence formwork, reinforcement, concrete placement, and other concrete Work in conformance with joint layout and pour sequence approved by Engineer.

## B. Formwork:

1. Construct formwork in conformance with RS Subsection 303-1.3.
2. Construct forms that can be removed without hammering or prying against the concrete.
3. Provide plywood sheathing for exposed concrete, whether to be painted or not.
4. Form exposed angles in concrete with neat 3/4 inch 45 degree chamfers and fillets.
5. Remove forms in conformance with RS Subsection 303-1.4.
6. Tolerances for deviation in lines, grades, and dimensions shown on Drawings shall conform to ACI PRC-347.

## C. Reinforcement Placing:

1. Place reinforcing bars in conformance with RS Subsection 303-1.7, ACI SPEC-301, and ACI CODE-318.

## D. Fiber Reinforcement Placing:

1. Place fiber reinforcement in conformance with manufacturer's written instructions.

## E. Embedded Materials:

1. Maintain 4/3 times maximum aggregate size clearance from pipes, conduits, and other embeds to reinforcing bars.
2. Place anchor bolts in templates to maintain position during concrete placement.

## F. Placing Concrete:

1. Clear water from areas where concrete is to be placed prior to placing concrete.
2. Clean dirt, grease, rust, and the like from metalwork, including steel reinforcement, that shall be in contact with concrete immediately prior to placing concrete.
3. Place concrete in conformance with RS Subsection 303-1.8 and City of Los Angeles Building Code.
  - a. Discharge of ready-mix concrete shall be completed within 90 minutes after addition of the cement to the aggregates, or before 300 revolutions of the drum, whichever occurs first.
  - b. Use of non-agitating transport equipment for ready-mixed concrete is not permitted.
  - c. Maximum length of chutes shall be 50 feet.
4. Consolidation of Concrete:
  - a. Consolidate concrete in conformance with RS Subsection 303-1.8.4. Fill corners and angles, thoroughly embed reinforcement, eliminate rock pockets and bring only a slight excess of water to exposed surface of concrete during placement.
  - b. Screed to bring the concrete surfaces to required grades with straight edge screed and scrapers as necessary.
  - c. Float to compact the surfaces evenly. Remove excess surface water before floating. Do not use mortar to level surfaces.

### 3.3 SLURRY PLACEMENT

- A. Cement slurry backfill shall be placed in a uniform manner that shall prevent voids in, or segregation of, the backfill.

### 3.4 CONCRETE SEALER

- A. Apply 2 coats of sealer over concrete slabs in conformance with sealer manufacturer's written instructions.

### 3.5 CONCRETE FINISH

- A. Exterior concrete slabs, ramps, and aprons shall be finished in conformance with RS Subsection 303-5.5.5 and shall have a non-slip light broom finish unless otherwise called for on Drawings.
- B. Curbs, gutters, cross gutters, driveways, and walks shall be finished in conformance with RS Subsection 303-5.5 except for Subsection 303-5.9.
- C. Finish concrete pavement in conformance with RS Subsection 302-6.4.
- D. Finish other exterior concrete structures above and below grade in conformance with RS Subsection 303-1.9.

### 3.6 TREATMENT OF SURFACE DEFECTS

- A. Immediately after forms are removed, rub or grind out irregularities.
- B. Fill minor voids, holes, honeycombing, tie-rod cone impressions, and other depressions with non-shrink grout. Presence of extensive defects is cause for rejection of concrete.
  - 1. Cut back defective areas a minimum of 1/2 inch depth
  - 2. Wet surfaces prior to applying repair material.

### 3.7 CURING

- A. Cure concrete in conformance with RS Subsection 303-1.10 using water cure where possible, otherwise membrane cure.

3.8 FIELD QUALITY CONTROL

A. Tests and Inspections:

1. Department shall provide City of Los Angeles registered deputy building inspector.

3.9 PROTECTION

- A. Protect finished concrete surfaces from stains, abrasions, and other damage.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Concrete wheel stops

### 1.2 RELATED SECTIONS

- A. Section 32 12 17 - Asphalt Concrete Paving
- B. Section 32 13 14 - Concrete for Exterior Improvements
- C. Section 32 17 23 - Pavement Markings

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:

1. Auto wheel stops shall be paid under the Auto Wheel Stops (Appendix "H") bid item of Bid Proposal Line Items.
2. Truck wheel stops shall be paid under the Truck Wheel Stops (Appendix "H") bid item of Bid Proposal Line Items.

### 1.4 REFERENCES

- A. Reference Specifications (RS):

Section 201 - Concrete, Mortar, and Related Materials

Subsection 201-1 - Portland Cement Concrete

Subsection 201-2 - Reinforcement for Concrete

- B. Standard Plan – City of Los Angeles Harbor Department:

H-203-01 - 4'-0" Truck Wheel Stop

H-204-01 - 4'-0" Automobile Wheel Stop

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Wheel stops shall be precast reinforced concrete in accordance with Harbor Department Standard Plans H-203-00 (for trucks) and H-204-00 (for automobiles).

1. Concrete shall conform to RS Subsection 201-1, Class 560-C-3250.
2. Reinforcing steel shall be continuous, No. 4, Grade 60, and in conformance with RS Subsection 201-2.
3. Non-shrink grout shall be in conformance with CONCRETE FOR EXTERIOR IMPROVEMENTS Section.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Pavement shall be completely cured and dry, free of dirt, loose particles, and other foreign materials.
- B. Locate wheel stops as indicated on Drawings.
- C. Secure wheel stops on asphalt concrete pavement in accordance with the referenced standard drawings.
- D. Recess steel rods and fill holes with non-shrink cement grout. Smoothly trowel to a smooth appearance.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Pavement markings and striping, including parking spaces, crosswalks, arrows, disabled access signs and symbols, curb markings, words, numbers, and other additional information.
- B. Roadway lane markings and crosswalk markings.
- C. Container yard striping including container striping and highline striping.
- D. Pavement markers.
- E. Removing existing markings on pavements and curbs prior to installing new markings.

### 1.2 RELATED SECTIONS

- A. Section 32 01 13.61 - Slurry Seal
- B. Section 32 12 17 - Asphalt Concrete Paving
- C. Section 32 13 14 - Concrete for Exterior Improvements
- D. Section 32 17 13 - Parking Bumpers

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for Work of this Section shall be paid under the Pavement Markings and Signage Allowance bid item of Bid Proposal Line Items.

### 1.4 REFERENCES

- A. 40 CFR 262 - Standards Applicable to Generators of Hazardous Waste.
- B. Reference Specifications (RS):
  - Section 214 - Traffic Striping, Curb and Pavement Markings, and Pavement Markers
    - Subsection 214-2 - Test Reports and Certificates of Compliance
    - Subsection 214-3 - Glass Beads
    - Subsection 214-4 - Paint for Striping and Markings



Subsection 214-5 - Thermoplastic Material for Traffic Striping and Markings

Subsection 214-6 - Pavement Markers

Subsection 214-7 - Adhesives for Pavement Markers

Section 314 - Traffic Striping, Curb and Pavement Markings, and Pavement Markers

Subsection 314-4 - Application of Traffic Striping and Curb and Pavement Markings

Subsection 314-5 - Pavement Markers

## 1.5 SUBMITTALS

- A. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
- B. Test Reports and Certificates: Submit for each batch of paint and glass beads stating compliance with specified requirements in conformance with RS Subsection 214-2.
- C. For pavement marker quantity less than 10,000, Contractor may submit manufacturer's certification that markers and adhesive conform to RS Subsections 214-6 and 214-7.
- D. Submit method to remove existing striping and thermoplastic striping material (thermoplastic paint). Include method to recover grindings, paint residue, blast media, and waste water.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver paint in containers of at least 5 gallons accompanied by batch certificate.
- B. Deliver glass beads in containers suitable for handling and strong enough to prevent loss during shipment accompanied by batch certificate.

- C. Store products in manufacturer's unopened packaging until ready for installation.
- D. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in conformance with 40 CFR 262 and South Coast Air Quality Management District (SCAQMD) regulations.

## 1.7 FIELD CONDITIONS

- A. Do not install products under environmental conditions outside manufacturer's absolute limits.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Line and Zone Marking Paint: Master Painters Institute (MPI) No. 97 Latex Traffic Marking Paint; color(s) as indicated.
  - 1. Roadway Markings: As required by authorities having jurisdiction.
  - 2. Parking Lots: Yellow.
  - 3. Container Yards: White, yellow, and red.
  - 4. Disabled Access Symbols: Blue and white.
- B. Paint:
  - 1. Conform to RS Subsection 214-4.2, Rapid Dry White, Yellow, or Black for traffic paint.
  - 2. Blue and red pavement striping and markings shall conform to the requirement for white paint.
  - 3. Conform to RS Subsection 214-5.1 for thermoplastic paint.
- C. Reflective Glass Beads: Conform to RS Subsections 214-3 and 214-4.1.
- D. Temporary Marking Tape: Preformed, reflective, pressure sensitive adhesive tape in color(s) required; Contractor is responsible for selection of material of sufficient durability as to perform satisfactorily during period for which its use is required.

## E. Pavement Markers:

1. Conform to RS Subsection 214-6. Type of marker as shown on Drawings. Adhesive shall conform to RS Subsection 214-7.

## PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Examine areas that shall receive markings and verify that substrates have been properly prepared.
- B. Correct unsatisfactory conditions prior to proceeding Work.

## 3.2 PREPARATION

- A. Allow new pavement surfaces to cure for a period of not less than 48 hours before application of marking materials. Allow 5 days after slurry seal or sealcoat application.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under Project conditions.
- C. Clean surfaces thoroughly prior to installation.
  1. Remove dust, dirt, and other granular surface deposits by sweeping, blowing with compressed air, rinsing with water, or a combination of these methods.
  2. Completely remove rubber deposits, existing paint markings, and other coatings adhering to the pavement, by scraping, wire brushing, sandblasting, mechanical abrasion, or approved chemicals.
  3. Sandblasting: Use equipment of size and capacity necessary, providing not less than 150 cubic feet per minute (cfm) of air at pressure not less than 90 pounds per square inch (psi) at each nozzle used.
  4. Recover and dispose of grindings, paint residue, blast media, and waste water from areas undergoing marking removals.
  5. For striping on new concrete pavement, water blast curing compound off of areas to receive markings.

- D. Where oil or grease are present, scrub affected areas with several applications of trisodium phosphate solution or other approved detergent or degreaser, and rinse thoroughly after each application; after cleaning, seal oil-soaked areas with cut shellac to prevent bleeding through the new paint.
- E. Establish survey control points to determine locations and dimensions of markings; provide templates to control paint application by type and color at necessary intervals.
- F. Temporary Pavement Markings: Apply temporary markings of the color(s), width(s) and length(s) as indicated on Drawings or as directed by Engineer.
  - 1. After temporary marking has served its purpose, remove temporary marking by carefully controlled sandblasting, approved grinding equipment, or other approved method so that surface to which the marking was applied shall not be damaged.
  - 2. At Contractor's option, temporary marking tape may be used in lieu of temporary painted marking; remove unsatisfactory tape and replace with painted markings at no additional cost to Department.
- G. Engineer shall inspect surfaces to be painted after Contractor has laid out pavement markings, and prior to application of paint materials. Correct deficiencies in layout and surface preparation prior to application of paint.
- H. Protect existing and adjacent facilities from overspray and spillage.

### 3.3 EQUIPMENT

- A. Equipment shall conform to RS Subsection 314-4.3.4.

### 3.4 INSTALLATION

- A. Begin pavement marking as soon as practicable after surface has been cleaned and dried.
- B. Do not apply paint if temperature of surface to be painted or the atmosphere is less than 50 degrees Fahrenheit (F) or more than 95 degrees F.
- C. Apply in conformance with manufacturer's written instructions using an experienced technician that is thoroughly familiar with equipment, materials, and marking layouts.

- D. Comply with California Manual on Uniform Traffic Control Devices (California MUTCD) for details not shown on Drawings.
- E. Apply markings in locations determined by measurement from survey control points; preserve control points until after markings have been accepted.
- F. Apply uniformly painted and reflective pavement markings of color(s), lengths, and widths as indicated on Drawings with true, sharp edges, and ends.
  - 1. Apply paint in 1 coat only markings show. Markings showing light spots shall receive additional coats as directed by Engineer.
  - 2. Wet Film Thickness: 0.015 inch, minimum.
  - 3. Width Tolerance: Plus or minus 1/8 inch.
  - 4. Straightness Tolerance: Plus or minus 1/2 inch in 50 feet.
- G. Roadway Traffic Lanes: Use suitable mobile mechanical equipment that provides constant agitation of paint and travels at controlled speeds.
  - 1. Conduct operations in such a manner that necessary traffic can move without hindrance.
  - 2. Place warning signs at the beginning of the wet line, and at points well in advance of the marking equipment for alerting approaching traffic from both directions. Place small flags or other similarly effective small objects near freshly applied markings at frequent intervals to reduce crossing by traffic.
  - 3. If paint does not dry within expected time, discontinue paint operations until cause of slow drying is determined and corrected.
  - 4. Skip Markings: Synchronize 1 or more paint "guns" to automatically begin and cut off paint flow; make length of intervals as indicated on Drawings.
  - 5. Use hand application by pneumatic spray for application of paint in areas where a mobile paint applicator cannot be used.
  - 6. Distribute glass beads uniformly on the paint lines within 10 seconds without any waste, applied at rate of 6 pounds per gallon of paint; if the marking equipment does not have a glass bead dispenser, use a separate piece of equipment adjusted and synchronized with the paint applicator; remove and replace markings having faulty distribution of beads.

- H. Parking Lots: Apply parking space lines, entrance and exit arrows, painted curbs, and other markings indicated on Drawings.
  - 1. Mark International Symbol of Accessibility at indicated parking spaces.
  - 2. Hand application by pneumatic spray is acceptable.
- I. Symbols: Use a suitable template that shall provide a pavement marking with true, sharp edges and ends, of the design and size indicated on Drawings.
- J. Apply thermoplastic paint in conformance with RS Subsection 314-4.4 except for RS Subsections 314-4.4.5 and 314-4.4.6.
- K. Install pavement markers in conformance with RS Subsection 314-5 except for RS Subsections 314-5.6 and 314-5.7.

### 3.5 DRYING, PROTECTION, AND REPLACEMENT

- A. Protect newly painted markings so that paint is not picked up by tires, smeared, or tracked.
- B. Provide barricades, warning signs, and flags as necessary to prevent traffic crossing newly painted markings.
- C. Allow paint to dry at least the minimum time specified by the applicable paint standard and not less than that recommended by the manufacturer.
- D. Remove and replace markings that are applied at less than minimum material rates; deviate from true alignment; exceed length and width tolerances; or show light spots, smears, or other deficiencies or irregularities.
- E. Remove markings in manner to avoid damage to the surface to which the marking was applied, using carefully controlled sandblasting, approved grinding equipment, or other approved method.
- F. Replace removed markings at no additional cost to Department.

### 3.6 CLEANING

- A. Remove paint overspray, drips, and spills from adjacent surfaces by means which shall not damage the surfaces.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Chain link fences, gates, and accessories
- B. Post footings
- C. Filler strips
- D. K-rails

### 1.2 RELATED SECTIONS

- A. Section 05 05 14 - Treating Damaged Galvanizing
- B. Section 09 90 01 - Painting for Exterior Improvements
- C. Section 32 12 17 - Asphalt Concrete Paving
- D. Section 32 13 14 - Concrete for Exterior Improvements

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for Work of this Section shall be paid under each corresponding bid item of Bid Proposal Line Items that requires chain link fencing, gates, accessories, post footings, windscreen, filler strips, and K-rails.

### 1.4 REFERENCES

- A. ASTM A47/A47M - Standard Specification for Ferritic Malleable Iron Castings.
- B. ASTM A53/A53M - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
- C. ASTM A90/A90M - Standard Test Method for Weight [Mass] of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings.
- D. ASTM A121 - Standard Specification for Metallic-Coated Carbon Steel Barbed Wire.
- E. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
- F. ASTM A307 - Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength.

- G. ASTM A392 - Standard Specification for Zinc-Coated Steel Chain-Link Fence Fabric.
- H. ASTM A641/A641M - Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire.
- I. ASTM A824 - Standard Specification for Metallic-Coated Steel Marcellled Tension Wire for Use With Chain Link Fence.
- J. ASTM F626 - Standard Specification for Fence Fittings.
- K. ASTM F1083 - Standard Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures.
- L. State of California Department of Transportation (Caltrans) Standard Plans:  
T3A - Temporary Railing (Type K)

## 1.5 SUBMITTALS

- A. Submit shop drawings of typical fence elevations showing line post, corner post, gate post, and gates for review prior to fabrication. Shop drawings shall include pipe sizes, gate sizes, bracing, locking devices, hinges or rollers, tensioning hardware, pipe embedment depths, and galvanizing.
- B. Submit fence materials for galvanizing thickness testing. Materials to be tested shall comply with ASTM A90/A90M. Obtain Engineer's review prior to installation.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. General:
  - 1. Construct chain link fencing and gates of hot-dipped galvanized materials as specified.
  - 2. Steel materials shall have a minimum galvanized coating of 2 ounces per square foot of surface area, except barbed wire, tension wire, clips, ties and hog rings which shall have a Class 3 coating in conformance with ASTM A121, unless otherwise specified.
  - 3. Fencing shall be 8 feet high plus 1 foot high (vertically), 45 degree barbed wire extension unless called out otherwise on Drawings.



## B. Fabric:

1. Fabric shall conform to ASTM A392, be helically wound and interwoven; 2-inch mesh; 6 gage for fabric 108 inches or more in height; 9 gage for fabric less than 108 inches high; fabric less than 60 inches high shall be knuckled on top. Galvanize material in conformance with ASTM A392, Class 2, zinc coating after weaving (2 ounces per square foot).
2. Furnish fence fabric in 50 foot lengths.

## C. Barbed Wire:

1. Barbed wire shall conform to ASTM A121. Wire shall consist of 3 strand pairs of 13 1/2 gage steel line wire with 0.08 inch, 4-point barbs spaced approximately 5 inches apart. Galvanize material in conformance with ASTM A121, Class 3 coating (0.70 ounces per square foot).

## D. Tension Wire:

1. Tension wire shall conform to ASTM A824 and shall be 0.177 inch diameter hot-dipped galvanized marcelled steel, Type II, Class 2 zinc coating in conformance with ASTM A824 (2.0 ounces per square foot).

## E. Hog Rings:

1. Hog rings shall conform to ASTM F626 and shall be 0.11 inch diameter, hot-dipped galvanized steel, Class 3 or A zinc coating in conformance with ASTM A641/A641M (0.8 ounces per square foot).

## F. Wire Fabric Ties:

1. Ties shall conform to ASTM F626 and shall be 0.148 diameter, hot-dipped galvanized steel, zinc coating in conformance with ASTM A641/A641M, Class 3 or A (0.9 ounces per square foot).

## G. Flat Band Fabric Ties:

1. Ties shall be 1/2 inch by 0.06 inch, hot-dipped galvanized steel, Class B3 coating in conformance with ASTM A153/A153M (1.3 ounces per square foot).

## H. Tension Bars:

1. Tension bars shall conform to ASTM F626 and shall be 3/16 inch by 3/4 inch, high carbon steel, galvanized with 1.2 ounces per square foot coating.

## I. Truss Rods:

1. Truss rods shall conform to ASTM F626 and be 3/8 inch, diameter, adjustable, threaded at one end hot-dipped galvanized steel, (1.2 ounces per square foot). Provide galvanized bracket for adjusting tension at threaded end.

## J. Turnbuckles:

1. Turnbuckles shall be wrought iron in conformance with ASTM A47/A47M, galvanized drop forged steel, Class A in conformance with ASTM A153/A153M (2 ounces per square foot).

## K. Posts and Gate Frames:

1. Posts and gate frames shall be cylindrical, welded at corners (no circumferential welds) or assembled with corner fittings. Gates with corner fitting connections shall have adjustable truss rods for gate panels 5 feet or wider. Pipe shall be hot-dipped galvanized steel conforming to ASTM A53/A53M, Schedule 40, zinc coated (1.8 ounces per square foot) or ASTM F1083, Schedule 40, zinc coated (1.8 ounces per square foot). Gate frames shall be covered with fabric to match fence.

## L. Gate Hinges and Accessories:

1. Gate hinges and accessories shall be malleable iron in conformance with ASTM A47/A47M and galvanized in conformance with ASTM A153/A153M, Class A zinc coating (2 ounces per square foot). Hinges shall be structurally capable of supporting the gate leaf and allow the gate to open and close without binding. Hinges shall be designed to permit the gate to swing a full 180 degrees.

## M. Latch Hardware:

1. Latches are required for double gates. Latch hardware shall be galvanized malleable iron in conformance with ASTM A47/A47M. Plunger bars may be tubular or bar steel and shall be capable of retaining the gate in a closed position. Latches shall have provisions for a padlock. Galvanize in conformance with ASTM A153/A153M, Class A (2 ounces per square foot).

## N. Tension Bands:

1. Tension bands shall be steel and shall conform to ASTM F626, 1/8 inch by 1 inch with beveled edges, and hot-dipped galvanized (1.2 ounces per square foot).

## O. Bolts:

1. Bolts shall be steel ASTM A307 with hot-dipped galvanized zinc coating in conformance with ASTM A153/A153M, Class C (1.25 ounces per square foot).

## P. Nuts:

1. Nuts shall be steel ASTM A307 with hot-dipped galvanized zinc coating in conformance with ASTM A153/A153M, Class C (1.25 ounces per square foot).

## Q. Sleeves:

1. Sleeves shall be 1.695-inch I.D. by 0.078-inch wall, drawn tube, 6 inches long. Sleeve shall be self centering type in conformance with ASTM A53/A53M; galvanized (1.8 ounces per square foot).

## R. Top Rails and Brace Rails:

1. Rails shall be 1 1/4-inch American Standard Schedule 40 galvanized steel pipe in conformance with ASTM A53/A53M; hot-dipped galvanized (1.8 ounces per square foot).

## S. Rail, Brace Ends, and Post Caps for Attaching Barbed Wire Extension Arm:

1. Rail, brace ends, and posts caps shall be permanent mold casting, sand casting, galvanized malleable iron in conformance with ASTM A47/A47M and galvanized in conformance with ASTM A153/A153M, Class A (2 ounces per square foot).

## T. Post Tops:

1. Post tops shall be permanent mold, sand mold, die castings, malleable iron in conformance with ASTM A47/A47M and galvanized in conformance with ASTM A153/A153M, Class A (2 ounces per square foot). Tops shall be weather tight closure caps, 1 for each post.

## U. Barbed Wire Supporting Arm:

1. Barbed wire supporting arms shall be 16 gage steel in conformance with ASTM F626 and with the arm at 45 degrees. The top wire of the 3 wires shall be 12 inches horizontally from the fence line and the other wires spaced uniformly between top of fence fabric and the outside strand. The vertical distance between the top wire and the height of the top of fence fabric shall be 12 inches.

## V. Filler Strips (Slats):

1. Fabricate filler strips from durable, semi-rigid fiberglass reinforced plastic composed of fiberglass reinforcements, high quality polyester resins, pigments, and fillers. "Dura Slatts" as manufactured by FRP Systems, Supplier: Lady Fencer (770) 288-3330. For 9 gage 2 inch mesh fabric, width shall be 1 inch to 1-3/4 inch.
2. Physical Properties: Not less than: 12,000 pounds per square inch (psi) flexural strength,  $1.0 \times 10^6$  psi flexural modulus, 8,000 psi tensile strength,  $1.0 \times 10^6$  psi tensile modulus, and 2,000 psi compression strength. Flame spread: less than 200. Ignition point: 750 degrees to 800 degrees Fahrenheit (F).
3. Color: As selected by Engineer or as indicated on Drawings.

## W. Windscreen: Polypropylene or high density polyethylene open mesh woven windscreen with finished edges and grommets. 80 percent blockage, color green or as selected by Engineer. Supplier: The Park Catalog (866) 280-9894.

## X. Concrete Barrier Units (K-Rails):

1. K-rails shall be in accordance with State of California Department of Transportation (Caltrans) Standard Plans Plan No. T3A modified with scuppers.

## Y. Water Filled Barriers (Plastic K-Rails):

1. Water filled barriers shall be orange, plastic, and 42 inches tall by 78 inches long by 24 inches wide at base narrowing to 10 inches wide at the top.

## 2.2 CONCRETE FOR SETTING POSTS

- A. Concrete for setting posts shall be in conformance with CONCRETE FOR EXTERIOR IMPROVEMENTS Section.

## 2.3 SIZES FOR POSTS, RAILS, BRACES, AND GATE FRAMES

|    | <u>Use</u>                                                                                                                 | Nominal Pipe<br>Size*<br><u>O.D. (Inches)</u> | Actual<br>O.D.<br><u>(Inches)</u> | Weight per<br>Lbs/ft<br><u>(Galv.<br/>Steel)</u> |
|----|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-----------------------------------|--------------------------------------------------|
| A. | End, corner, slope, and rolling gate posts for fences 6 feet or higher                                                     | 3                                             | 2.875                             | 5.79                                             |
| B. | End, corner, slope, and rolling gate posts, fences less than 6 feet                                                        | 2-1/2                                         | 2.375                             | 3.65                                             |
| C. | Line posts for fences 6 feet or higher                                                                                     | 2-1/2                                         | 2.375                             | 3.65                                             |
| D. | Line posts for fences less than 6 feet high                                                                                | 2                                             | 1.90                              | 2.72                                             |
| E. | Top rail and braces                                                                                                        | 1-5/8                                         | 1.66                              | 2.27                                             |
| F. | Swinging and sliding gate post for 3 feet, and 6 feet single or 12 feet double gates, 6 feet or higher;<br>Under 72 inches | 3<br>2-1/2                                    | 2.875<br>2.375                    | 5.79<br>3.65                                     |
| G. | Swinging and sliding gate posts for single gates from 6 feet to 13 feet and double gates over 12 feet but not over 26 feet | 4                                             | 4.00                              | 9.12                                             |

|                               | <u>Use</u>                                                                                 | Nominal Pipe<br>Size*<br><u>O.D. (Inches)</u> | Actual<br>O.D.<br><u>(Inches)</u> | Weight per<br>Lbs/ft<br><u>(Galv.<br/>Steel)</u> |
|-------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------|-----------------------------------|--------------------------------------------------|
| H.                            | Swinging gate posts for<br>single gates 13 to 18 feet<br>and double<br>gates 26 to 36 feet | 6-5/8                                         | 6.625                             | 18.99                                            |
| I.                            | Swinging gate posts over<br>18 feet single and<br>36 feet double                           | 8-5/8                                         | 8.625                             | 28.58                                            |
| J.                            | Gate leaf 6 feet in width,<br>frames and bracing                                           | 1-5/8                                         | 1.66                              | 2.27                                             |
| K.                            | Gates leaf greater than<br>6 feet in width<br>Frame---                                     | 2                                             | 1.90                              | 2.72                                             |
|                               | Vertical Divisions---                                                                      | 2                                             | 1.90                              | 2.72                                             |
|                               | Bracing---                                                                                 | 1-5/8                                         | 1.66                              | 2.27                                             |
| *Fence Industry Standard O.D. |                                                                                            |                                               |                                   |                                                  |

## PART 3 - EXECUTION

### 3.1 FENCE CONSTRUCTION AND INSTALLATION

#### A. Post Spacing:

1. Space line posts equidistant on a maximum of 10 feet on center. Posts shall be plumb and the tops of the posts aligned.

## B. Post Footings:

1. Post holes shall be cylindrically shaped, sized, and set to the depths shown in the following tabulation except for line posts in asphalt pavement or if shown otherwise on Drawings:

| <u>Post Type</u>                                         | <u>Post Hole Depth</u> | <u>Post Hole Diameter</u> | <u>Post Embedment</u> |
|----------------------------------------------------------|------------------------|---------------------------|-----------------------|
| Line                                                     | 36 inches              | 8 inches                  | 30 inches             |
| Terminal and Corner                                      | 42 inches              | 12 inches                 | 36 inches             |
| Gate                                                     | 42 inches              | 18 inches*                | 36 inches             |
| *or 3-1/2 times pipe diameter (O.D.) whichever is larger |                        |                           |                       |

2. Fill post holes with concrete with top of concrete shaped to drain away from post. Concrete shall extend at least 3 inches below end of post.

## C. Line Posts in Asphalt Concrete Pavement:

1. Line post holes in asphalt pavement shall be cored to a diameter no greater than 1/2 inch larger than outside diameter of post. Posts shall then be driven into ground to a 30 inch depth and plumbed true with wood wedges. Backfill remaining void with fine dry sand.

## D. Barbed Wire Extension Arms:

1. Bolt extension arms to the post caps which are to be firmly seated on top of the posts perpendicular to the fence line.

## E. Top Rail:

1. Top rails shall pass through the base of the extension arms and shall form a continuous brace from end to end of each stretch of fence. Top rail lengths shall be jointed with sleeves. Fasten top rail to terminal posts by means of rail ends and brace bands.

## F. Horizontal Braces:

1. Provide horizontal braces at terminal posts midway between top rail and tension wire. Fasten braces to the line post by brace ends and brace bands, and to the terminal posts by rail ends and brace bands.

## G. Diagonal Braces:

1. Install diagonal brace rods from the brace end on the line post back to the terminal post and fastened to it by a brace band. Securely fasten diagonal braces to the terminal post with brace ends and brace bands at the  $2/3$  point above adjacent grade (where top rails omitted) and attach other end to the adjacent line post at grade. There shall be no more than a 50 degree angle between the brace and the ground.

## H. Fence Fabric:

1. Furnish fence fabric in 50-foot continuous lengths. The fabric may be either right-hand or left-hand weave, but not both. Install fabric 2 inches above ground level and fasten line post ties at a maximum of 24 inch intervals. Tighten fabric to provide a smooth uniform appearance. Install tension bars at end posts and gate posts. Install tension bands at a maximum of 15 inch intervals.

## I. Tension Wire:

1. Stretch marcelled tension wire from post to post of each stretch of fence, at bottom. Attach tension wire to bottom of the chain link fabric by hog ring-type fasteners at 24 inch on center, maximum. Fasten wire within the bottom 6 inches of the fence fabric. Tension wire shall be taut and free of sag. Attach to terminal posts by means of brace bands.

## J. Barbed Wire:

1. Tightly stretch barbed wire to remove sag. Install firmly in the slots of the extension arms and anchor to the terminal extension arms.

## 3.2 GATE CONSTRUCTION AND INSTALLATION

- A. Provide each gate leaf over 8 feet in width with vertical stay members.
- B. Brace each panel of the gates wider than 5 feet and containing corner fittings by means of 2 diagonal truss rods. Provide tension adjustment nut for tightening threaded rod end against bracket.



- C. Do not fabricate gate leaves prior to Engineer's review of detailed shop drawings. Gate corners and tee junctions, where intermediate vertical or barbed wire extensions are required, shall be connected with electrically welded butt joints; welds shall be sound and watertight. Fit gate with the same type of fabric as the fence.
- D. Perform galvanizing after welding.
- E. Furnish fittings, including hinges and latches for each gate. One keeper or other device for holding gate open shall be furnished with each leaf 6 feet or wider. One drop bar locking assembly shall be furnished on double gates. Single gates shall have fork latch with provisions for padlock. Locking and catch fittings shall be furnished on double gates.
- F. Install gates plumb to operate with freedom through an arc of a minimum 180 degrees.
- G. Gates to be used with fencing having barbed wire extension arms shall have vertical members extended to carry the barbed wire across the gates. Barbed wires shall be in a vertical plane, above the gates, on approximately 4 inch centers. The top wire shall be approximately 12 inches above the top of the gate.
- H. Rolling gates shall be equipped as follows:
  - 1. Upper gate guides and track of Schedule 40 steel pipe.
  - 2. Trolley wheels for track of malleable cast iron with hardened steel axles and permanently lubricated steel ball bearings.
  - 3. A steel assembly mounted to the trolley wheel axle that prevents the wheel from lifting off the track.
  - 4. A 2-wheel front carriage with at least 8 inches diameter solid rubber tired wheels.
  - 5. Flared guide brackets.
  - 6. Eye bolt and chain or other locking device.
  - 7. Line posts shall be 5 feet on center in the length that supports the rolling gate.

- I. Install safety posts for rolling gates at the terminal post and at approximately 1/3 the gate width measurement back along the fence line. Center safety posts 8 inches inside the fence line and the same dimensions as line posts. The safety posts shall prevent gates from falling if they come off track.
- J. Equip swinging gates 8 feet or greater in width with double carriage wheels at the free swinging end. Carriage wheels shall be at least 8-inches in diameter with solid rubber tires and mounted in a tubular frame at the bottom of the gate.

### 3.3 BOLTED CONNECTIONS

- A. Bolted connections shall be peened, double bolted, or secured by cotter pins to prevent nuts from working loose.

### 3.4 DAMAGED GALVANIZING

- A. Repair damaged galvanizing on the materials in conformance with TREATING DAMAGED GALVANIZING Section.

### 3.5 CHAIN LINK FENCE WITH K-RAIL

- A. Chain link fence with k-rail shall be constructed and installed as indicated on Drawings.
- B. Paint k-rails in conformance with PAINTING FOR EXTERIOR IMPROVEMENTS Section.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Irrigation system and related components

### 1.2 RELATED SECTIONS

- A. Section 32 13 14 - Concrete for Exterior Improvements
- B. Section 32 90 01 - Planting and Landscaping

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:

1. Payment for Work of this Section shall be paid under the Landscaping and Irrigation System Allowance bid item of Bid Proposal Line Items.

### 1.4 REFERENCES

- A. ASTM A53/A53M - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
- B. ASTM D1785 - Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120.
- C. ASTM D2219 - Standard Specification for Poly(Vinyl Chloride) Insulation for Wire and Cable, 60 °C Operation.
- D. ASTM D2220 - Standard Specification for Poly(Vinyl Chloride) Insulation for Wire and Cable, 75 °C Operation.
- E. ASTM D2565 - Standard Practice for Xenon-Arc Exposure of Plastics Intended for Outdoor Applications.
- F. ASTM D2774 - Standard Practice for Underground Installation of Thermoplastic Pressure Piping.
- G. ASTM D2855 - Standard Practice for the Two-Step (Primer and Solvent Cement) Method of Joining Poly (Vinyl Chloride) (PVC) or Chlorinated Poly (Vinyl Chloride) (CPVC) Pipe and Piping Components with Tapered Sockets.
- H. California Health Laws Related to Recycled Water "The Purple Book":

Excerpts from the Health and Safety Code, Water Code, and Titles 22 and 17 of the California Code of Regulations – June 2001

- I. Council of Tree and Landscape Appraisers:
  - Guide for Establishing Values of Tree and Other Plants
  - Guide for Plant Appraisal, 9th Edition
  - Manual for Plant Appraisers Handbook
- J. County of Los Angeles Department of Public Health Services:
  - Guidelines for Pipeline Construction and Installation – For the Safe Use of Recycled/Reclaimed Wastewater
  - Recycled Water Urban Irrigation User's Manual, Los Angeles County Recycled Water Advisory Committee, February, 2005
- K. Reference Specifications (RS):
  - Subsection 201-1 - Portland Cement Concrete
- L. Standard Plans - City of Los Angeles Department of Public Works, Bureau of Engineering:
  - S-651-0 - Thrust Blocks for Plastic Pipe Line
  - 1. Modify note No. 2 to read 420-C-2000 in lieu of 470-B-2000.

#### 1.5 SUBMITTALS

- A. Make submittals no later than 30 Calendar Days prior to start of Work of this Section.
- B. Submit complete lists of irrigation materials and equipment for approval by Engineer; include manufacturer's name and address, specific trade names, catalog numbers complete with illustrations, and necessary descriptive literature and clearly mark or underline proposed items.
  - 1. Approval of an item, alternate, or substitute indicates only that the product or products appear to meet the requirements of Drawings and Specification on the basis of the information or samples submitted.
- C. Disapprovals: Promptly resubmit for approval necessary data concerning a substitution for a disapproved item.

- D. Procurement List: Use the approved list of irrigation materials and equipment for procurement without deviation unless otherwise authorized in writing by Engineer.
- E. Record Drawings: Accurately dimension from 2 permanent points, locations, including depths of point of connections, piping, valves, control equipment and other related equipment, as directed by Engineer, as installed. Complete and deliver Project Record Drawings in conformance with PROJECT RECORD DOCUMENTS Section.
- F. Operations and Maintenance Manuals:
  - 1. Prepare and deliver to Engineer within 10 Calendar Days prior to completion of construction, 3 hard cover 3-ring binders (submit also in electronic file or compact disc) containing the following information:
    - a. Index sheet stating Contractor's address and telephone number, list of equipment with name and addresses of local manufacturer's representatives.
    - b. Catalog and parts sheets on every material and equipment installed under Contract.
    - c. Warranty statements on equipment.
    - d. Complete operating and maintenance instruction on equipment furnished.
  - 2. In addition to the above-mentioned maintenance manuals, provide Department's maintenance personnel, through Engineer, with instructions for major equipment.
  - 3. Provide Department with a reduced legible copy of "As-Installed" Irrigation Plan hermetically sealed in a plastic cover to be affixed to the inside of each controller cover.
- G. Equipment to be furnished:
  - 1. Supply the following tools to Department:
    - a. 2 sets of special tools required for removing, disassembling, and adjusting each type of sprinkler and valve supplied.
    - b. Two 5 foot valve keys for operation of shut-off valve.

- c. 2 keys for each for automatic controller and cabinet.
- d. 2 quick coupler keys and matching hose swivels for each quick coupling valve.
- e. 1 valve box cover key or wrench
- f. 6 extra sprinkler heads of each size and type

#### 1.6 EXISTING UTILITIES AND PLANT MATERIALS

- A. Exercise care in excavating and working near existing utilities. Contractor shall be responsible for damages to utilities which are caused by Contractor's operations or neglect. Check existing utilities drawings for existing utility locations. Reference drawings are available for information and substructures purposes at Engineer's Office located at 425 S. Palos Verdes Street, San Pedro, CA (310) 732-3522.
- B. Protect in place utilities and plant materials not designated for removal or modification against damage resulting from Work of Contract.
- C. Repair or replace existing improvements not designated for removal, which are damaged or removed as a result of Contractor's operations. When a portion of a sprinkler system must be removed, the remaining lines shall be capped. Repairs and replacements shall be at least equal to existing improvements, and shall match existing improvements in finish and dimension.
- D. Existing trees, lawns, and shrubbery that are not to be removed shall be protected from damage or injury. If damaged or removed because of Contractor's operations, they shall be restored or replaced in conformance with PLANTING AND LANDSCAPING Section.
- E. When existing planted area are regraded, or removed and replaced because of Contractor's operations, the soil in these areas shall be adequately prepared and replanted in kind. Refer to PLANTING AND LANDSCAPING Section for requirements.
- F. Notify tenants or owners of adjacent property 14 Calendar Days before start of Work to allow tenants or owners to salvage or relocate plants, trees, fences, sprinklers, and other improvements within the right-of-way which are designated for removal and would be destroyed because of Work.

- G. Costs for protecting, removing, and restoring existing improvements shall be included in Contractor's bid.

#### 1.7 VERIFICATION OF DIMENSIONS AND QUANTITIES

- A. Verify scaled dimensions and quantities prior to start of Work of this Section.
- B. Notify Engineer of discrepancies between Drawings and Specifications and actual Project Site(s) conditions that would affect the execution of the irrigation Work. Do not Work in areas where discrepancies occur until instructed by Engineer.

#### 1.8 MODIFICATION OF CONTRACT DRAWINGS

- A. In each case where proposed substitute materials or equipment shall require changes to the design of Project as indicated on Drawings, proposed revision drawings prepared by a State of California licensed landscape architect, certified irrigation designer, or engineer shall be furnished by Contractor for installation of the proposed substitute materials or equipment and for construction by affected trades of the proposed revisions.
- B. Cost of Drawings and of the proposed revised construction shall be at sole cost and expense of Contractor.

#### 1.9 INTENT OF DRAWINGS

- A. Due to the scale of Drawings, it is not possible to indicate offsets, fittings, and sleeves, which may be required. Contractor shall investigate the finished conditions affecting Work and furnish fittings and other items required to provide a complete irrigation system. Drawings schematically show Work to be installed.

#### 1.10 WATER AND POWER SERVICE

- A. Upon issuance of Notice to Proceed, contact Department of Water and Power to arrange and pay for required installation of water and electrical meters and services.
- B. Service connection points shall be as shown on Drawings unless otherwise directed by the utility company.
- C. Contractor shall be responsible for labor and materials to the point of connection. If not shown on Drawings, Contractor shall estimate 100 feet to service points.

D. Upon final acceptance of Work, transfer billing to Department.

#### 1.11 WARRANTY

- A. Guarantee the entire irrigation system against defects in materials and workmanship for a period of 1 year from the date of acceptance of Work.
1. Should any deficiencies develop within the specified guarantee period due to inferior or faulty material and workmanship, correct such deficiencies to the satisfaction of Engineer at Contractor's sole cost and expense.

### PART 2 - PRODUCTS

#### 2.1 PIPE AND FITTINGS

- A. Type of pipe material and fittings shall be in conformance with the following specification unless otherwise designated on Drawings.
1. Steel pipe shall be galvanized standard Schedule 40 steel water pipe complying with ASTM A53/A53M; jointed with galvanized, threaded, standard weight malleable iron fittings, and couplings. (U.S. Steel, Kelly Pipe).
  2. Plastic pipe shall be high impact rigid unplasticized polyvinyl chloride PVC 1220 (Type 1, Grade 2), conforming to ASTM D1785, the minimum pressure rating to be not less than the working pressures indicated therein for the schedule and size listed. (PVC pipe marked with product standard PS-21-70 conforms to ASTM requirements).
    - a. Pipe to be homogeneous throughout and free from cracks, holes, foreign materials, blisters, deleterious wrinkles, and dents.
    - b. Use Schedule 40 PVC plastic pipe for installation on the discharge side of control valves and Schedule 80 PVC plastic pipe for continuously pressurized pipe on the supply side of control valves, unless otherwise indicated on Drawings.
    - c. Use Schedule 80 PVC plastic pipe when threaded joints are specified.
    - d. Continuously and permanently mark pipe with the following:  
Manufacturer's name or trademark, size, schedule, and type of pipe, working pressure at 73 degrees Fahrenheit and National Sanitation Foundation (NSF) approval.



- e. Reclaimed water PVC pipe to be color coded “purple” in color and marked on 2 sides with reclaimed water warning statements “CAUTION – RECLAIMED WATER”. Reclaimed water piping shall be accepted by the local reclaimed water governing agencies. Reclaimed water PVC pipe shall use standard PVC fittings.
  - f. Domestic piping in conjunction with a reclaimed water system shall be solvent welded Schedule 40 PVC with a continuous 3 inch wide aluminum backed, blue tape installed at the top of the pipe. The tape shall be labeled “POTABLE WATER”, with 1 inch high white letters. Attach the tape to the pipe with adhesive tape at least 5 feet from cracks in the pavement
- B. Fittings and couplings for plastic pipe shall be threaded adapters with socket pipe for connections to threaded pipe. Plastic pipe fittings and couplings shall be PVC I or PVC I/II material supplied in the same schedule and size specified for the pipe. Indicate the type of plastic material, schedule, and size on each fitting or coupling.
- C. Pressure main line piping from the recycled water system shall be installed to maintain 100 feet minimum horizontal separation from potable water piping. Where recycled and potable water pressure main line piping cross, the recycled water piping shall be installed below the potable water piping in a purple PVC CL 200 sleeve which extends a minimum of 5 feet on either side of the potable water piping. Provide a minimum vertical clearance of 12 inches. Conventional (white) PVC pipe may be used for sleeving material if it is taped with 3-inch wide purple warning tape which reads “Caution, Recycled (or Reclaimed) Water”.
- D. Brass pipe and fittings shall be used for backflow preventer.

## 2.2 VALVES AND VALVE BOXES

- A. General: Provide valves of the type and capacity designated in this Section and with the requirements specified. Valves shall be capable of satisfactory performance at a working pressure of 200 pounds per square inch (psi). Valve design shall permit disassembly for replacement of seals without removal of the valve body from the pipeline.

- B. Shut-Off Valves: In sizes 2 inch and smaller shall be bronze double disc wedge type gate valve with integral taper seats and non-rising stems. Sizes 2 1/2 inches and larger shall be iron body, brass trimmed with other features as per 2 inch size. (Aqua, Crane, Hammond HV667, NIBCO T-113).
- C. Master Valves: Electrically operated, of brass or bronze with accurately machined valve seat surface, equipped with purple handle flow control adjustment, with capability for manual operation and readily disassembled for servicing; slow opening and closing; and self-cleaning.
- D. Automatic Control Valves: Electrically operated, equipped with flow control adjustment, with capability for manual operation and readily disassembled for servicing; slow opening and closing; globe configuration; and marked for reclaimed water identification. Control valves shall be installed with union ball valves on the upstream side.
- E. Gate Valves: Line size-valves sized 2 inches and larger shall be self-restrained cast iron body, bell X bell, with 2 inch square operating nut. (Leemco, Inc., Model LMV-XXBB).
- F. Ball Valves: Flush valves for drip system flush valve assemblies shall be threaded 3/4 inch PVC type. (Spears, Model 2621-007G). QCV manifold shutoff isolation valve shall be of a Slo-Close type, a full block true union constructed of PVC with EPDM O-rings. Union nuts shall be molded of chlorinated polyvinyl chloride (CPVC) material. (LASCO, Model V14101N)
- G. Reclaimed Water Quick-Coupling Valves and Assemblies: 2-piece heavy duty brass or bronze, self-closing with built-in stainless steel internal valve spring flow control, acme threaded, and supplied in 1 inch, unless otherwise indicated on Drawings. Quick-coupler assembly shall include the valve, quick-coupler connection key, and hose swivel. (Hunter, Model HQ44-LRC-AW-R).
- H. Quick-Coupling Valves and Assemblies: 2-piece heavy duty brass or bronze, self-closing with built-in stainless steel internal valve spring flow control and supplied in 3/4 inch, unless otherwise indicated on Drawings. Quick-coupler assembly shall include the valve, quick-coupler connection key, and hose swivel. For non-potable water applications, use a quick coupler valve with an acme threaded key.

- I. Valve Boxes and Covers: Use precast concrete valve boxes with metal traffic covers for lawns, road-ways and in hard surfaces, and fiberglass reinforced plastic valve boxes, green or gray in color (unless otherwise indicated on Drawings) in planting areas, sized as required for easy access and field servicing of the valve. Use 10 inch diameter round valve box for shut-off quick couplers valves and 17 inch by 22 inch rectangular valve box for master valve and automatic control valves. Use 20 inch by 26 inch rectangular valve box for drip valve assemblies. For reclaimed water applications, the valve box cover shall be purple in color and permanently marked with the words WARNING - RECLAIMED WATER - DO NOT DRINK. Valve box cover shall be secured with a hidden latch mechanism or bolts.

### 2.3 BACKFLOW PREVENTER ASSEMBLY

- A. Backflow prevention unit as indicated in the irrigation legend with related components, as approved by County of Los Angeles, Department of Public Health Services, Cross-Connection and Water Pollution Control Program (213) 881-4140 and conforming to City of Los Angeles Plumbing Code.
- B. Backflow prevention unit assembly shall be enclosed in a stainless steel mesh enclosure with stainless steel brackets including a concrete pad sized to accommodate and secure the entire assembly in conformance with manufacturer's written instructions. (Strong Box, Smooth Touch stainless steel, Model SBBC-30SS, as manufactured by V.I.T. Products, (800) 729-1314).

### 2.4 SPRINKLER EQUIPMENT

- A. Sprinklers, bubbler heads, and spray nozzles shall be of the types and sizes shown on Drawings, with brass, bronze, or stainless steel nozzles unless otherwise indicated on Drawings.
- B. Provide equipment of 1 type and flow characteristic from the same manufacturer and bearing the manufacturer's name and identification code in a position where they can be identified in the installed position.
- C. Provide fixed head sprinklers with a one piece housing and with provisions for interior parts replacement. Pop-up sprinklers to rise at least 6 inches during operation. Make full or part circle sprinklers interchangeable in the same housing.
- D. Spray and Bubbler Head: Adjustable type from full flow to shut off unless otherwise indicated on Drawings.

- E. Check valves to be inline PVC (Hunter H, Valcon ADV or King Bros.).
- F. Water Conserving Flow Restrictor: Excess flow shut-off devices installed along streets adjacent to curbs. (Henderson, Valcon, Toro, or Flood Stop Limiter).

## 2.5 CONTROLLER UNIT

- A. Controller Unit: As called for on Drawings (Calsense ET2000) and in conformance with Specifications.
  - 1. Fully automatic with provisions for manual operation.
  - 2. Sized to accommodate the number of stations or control valves included in the system. Fit with appropriate communication device to transmit data to Central Control program.
  - 3. House outdoor pedestal models in a louver vented (upper and lower), vandal proof and weather-proof, stainless steel plate enclosure with pry-resistant piano hinged lockable door with a storage shelf.
  - 4. Contractor shall contact Calsense representative before ordering unit for controller assembly model confirmation and any additional required equipment for Central Control program.
  - 5. Flow Sensor: Flow sensor device shall be Calsense, Model FM-1B.

## 2.6 ELECTRICAL

- A. Supply line voltage conductors with THW/THWN, 600-volt insulation rating, in conformance with ASTM D2219 and ASTM D2220.
- B. Low voltage control conductors shall be Underwriters Laboratories, Incorporated (UL) approved direct burial type U.F., No. 14 AWG solid copper, unless otherwise required, in conformance with the control equipment manufacturer's written instructions. (Hatfield, Anixter, Cablex).
- C. Rigid electrical conduit shall be Schedule 40 galvanized steel, threaded and bushed with packing placed in the ends to protect the wiring. Sweep ends of conduit into pull boxes to make splices.

- D. Wire connections shall be joined by the use of an approved waterproof connector and sealer capable of satisfactory operation under continuous submersion in water. (3M, Model DBY/R and sealer capable of satisfactory operation under continuous submersion in water. (Rain Bird "Snap-Tite", Vibra-Tite 125, Scotch-Lok No. 3576).

## 2.7 THRUST BLOCKS

- A. Where required for 3-inch plastic pipe, thrust block concrete shall be in conformance with RS Subsection 201-1, Class 420-C-2000 and City of Los Angeles Standard Plan S-651-0.

## PART 3 - EXECUTION

### 3.1 IRRIGATION SYSTEM INSTALLATION

- A. General:
  - 1. Perform Work on the irrigation system, including hydrostatic and coverage tests, preliminary operational test of the automatic control system, and the backfill and densification of trenches and other excavations after topsoil Work and before planting.
  - 2. Prior to installation, stake out pressure supply line routing and locations of sprinkler heads.
  - 3. Plant large specimen plants (24 inch box or larger) before installing the irrigation system; reroute irrigation lines conflicting with specimen plant locations to clear the root ball.
  - 4. With Engineer's approval, make adjustments where necessary to conform to actual field conditions unless otherwise noted on Drawings. Irrigation system layouts shown on Drawings shall be considered schematic or diagrammatic.
  - 5. Make the irrigation system operational with uniform coverage of the areas to be irrigated, prior to planting.
  - 6. Piping on Drawings shown in paved areas running parallel or adjacent to planted areas, are intended for design clarification only and shall be installed in the planted area whenever possible.

7. Make water and utility connections as shown on Drawings or as approved by Engineer. If utility connections are not shown on Drawings, Contractor shall estimate 100 feet to each service point. Replace sidewalks, curbs, or paving removed by the installation of the water and electrical meters and service.

### 3.2 TRENCH EXCAVATING AND BACKFILLING

- A. Size trenches and other excavations to accommodate the irrigation system components, conduits, and other required facilities. Provide additional space to assure proper installation and access for inspections.
  1. Trenching for irrigation system shall be done after completion of soil conditioning, finish grading operations, and concrete sitework.
  2. Unless otherwise specified, the minimum depth of cover over pipelines and conduits shall be as follows:
    - a. Electrical conduit: 24 inches (36 inches under roadways, driveways, and parking lots).
    - b. Waterlines continuously pressurized: 24 inches (36 inches under roadways, driveways, and parking lots).
    - c. Lateral sprinkler lines: 12 inches.
  3. Make the bottom of trenches true to grade and free of protruding stones, roots, or other matter which would prevent bedding of pipe or other facilities.
- B. Trenches shall not be backfilled until required tests are performed.
  1. Backfill trenches so that the specified thickness and density of the topsoil is restored throughout the entire depth of the trench.
  2. Backfill may be flood compacted in landscaped areas to a dry density equal to adjacent soil in planting areas. Backfill shall join flush to adjacent grades without dips, sunken areas, humps, or other surface irregularities.
  3. Mechanical compacted backfill shall be by means of hand-directed mechanical tampers in 4 inch lifts or roller equipment including sheeps foot, grid, smooth wheel (non-vibratory), pneumatic-tired (non-vibratory), and segmented wheel in maximum 12 inch lifts.

- C. Compact trench backfill through paved areas in 8-inch layers to 90 percent relative compaction up to subgrade to receive paving and base material.
  - 1. Resurface trenches through paved areas to match existing pavement.
- D. If settlement occurs and subsequent adjustments of pipes, valves, irrigation heads, planting areas, or other construction are necessary, Contractor shall make required adjustments without additional cost to Department.

### 3.3 IRRIGATION PIPELINE INSTALLATION

- A. General: Execute trench excavating and backfilling, including the depth of cover over the pipeline.
  - 1. Install pipe fittings in conformance with manufacturer's written instructions and Reference Specifications. Furnish Engineer with manufacturer's written installation instructions which deviate from Specifications, for approval before pipe installation.
  - 2. Bed pipe in at least 2 inches of finely divided soil to provide a firm, uniform bearing. Surround the pipe with additional finely divided soil to at least 2 inches over the top of the pipe.
  - 3. Deposit trench backfill to anchor the pipe before the pipeline pressure testing, except that joints shall remain exposed until satisfactory completion of testing.
  - 4. When 2 or more pipelines are installed in the same trench, separate the pipelines by a minimum horizontal clear distance of 4 inches. Install pipeline so that each pipeline, valve, or other pipeline component may be serviced or replaced without disturbing the other.
  - 5. Make assemblies as specified and in conformance with manufacturer's written instructions or as detailed on Drawings.
  - 6. During installation of pipe, fittings, valves, and other pipeline components, prevent foreign matter from entering the system. Temporarily cap or plug open ends at cessation of installation operations.
  - 7. Make changes in pipeline size with reducer fittings. Do not use close nipples or bushings.
  - 8. Place mainlines under paving in Schedule 40 PVC sleeves. Oversize the sleeves to house the pipe, fittings, and control wires.

9. Separate dissimilar metals by an approved "dielectric" coupling.
10. Recycle or reclaimed pressurized waterlines shall comply with County of Los Angeles Department of Public Health recycled/reclaimed and potable waters separation requirements and as directed by Engineer.

B. Steel Pipe:

1. Square cut and ream pipe ends to full size with a long taper reamer.
2. Cut threads with clean sharp dies.
3. Make joints with a non-toxic, non-hardening joint compound applied to the male threads only.
4. Wrap steel pipe embedded in the ground with 2 layers of seamless 10 mil Safe-T-Clad tape.
  - a. Spiral wrap pipe with uniform laps. Apply second layer of wrap in the reverse direction of the first layer of wrap.
5. When wrapped pipe is specified, joints and remaining unwrapped portion of the pipeline shall be similarly wrapped after pressure testing.

C. Plastic Pipeline:

1. Join plastic pipe with socket type solvent welded fittings, threaded fitting, rubber ring fittings or by other means specified. Install steel pipe first when plastic pipe is joined to steel pipe. When connection is plastic to metal, female adapters shall be hand tightened, plus one turn with a strap wrench. Joint compound shall be non-lead base Teflon paste, tape of equivalent material approved by Engineer.
2. Cut square, externally chamfer approximately 10 to 15 degrees and remove burrs and fins.
3. Make solvent welded joints in conformance with ASTM D2855. Use the primer and solvent recommended by the pipe manufacturer. Solvent cement shall be in conformance with ASTM D2565. Cement shall be of a fluid consistency, not gel-like or ropy.
4. Install plastic pipe in conformance with ASTM D2774 and the requirements in this Section.



5. Exercise care in assembling pipeline with solvent welded joints so that stress on previously made joints is avoided. Handling of the pipe following jointing, such as lowering the assembled pipeline into the trench, shall not occur prior to the set times specified in ASTM D2855.
6. Apply primer and solvent to pipe ends so that no material is deposited on the interior surface of the pipe or extruded into the interior of the pipe during jointing. Wipe off excess cement on the exterior of the joint immediately after assembly.
7. Make threaded pipe joints using teflon tape or other approved jointing material. Do not use solvent with threaded joints.
8. Protect pipe from tool damage during assembly. Use vises with padded jaws and strap wrenches for installation of fittings and nipples.
9. Remove and replace plastic pipe which has been nicked, scarred, or otherwise damaged.
10. Snake plastic pipe from side to side in the trench to allow 1 foot of expansion and contraction per 100 feet of straight run.
11. Do not expose the pipeline to water for 24 hours after the last solvent welded joint is made.

### 3.4 INSTALLATION OF VALVES, VALVE BOXES, AND SPECIAL EQUIPMENT

- A. Install valves and equipment in conformance with the details in a normal upright position, unless otherwise recommended by the manufacturer, and make readily accessible for operation, maintenance, and replacement.
- B. Install valves of the same size as the pipeline in which they are installed, unless otherwise indicated on Drawings. Valves shall be installed in shrub areas whenever possible.
- C. Install shut-off master valve, flow sensors, and sectional automatic control valves using galvanized unions with copper or brass seats Schedule 80 unions and shut-off valves, below ground. House shut-off master valves in a 16 inch by 22 inch rectangular valve box with the cover marked "S.O.M.V". House sectional automatic control valves in a 16 inch by 22 inch rectangular valve box with the cover marked "R.C.V." and its respective station number. House flow sensor in a 16 inch by 22 inch rectangular valve box with the cover marked "FS".

- D. Install quick-coupler valves projecting above grade 12 to 18 inches from curbs, pavement, and walks when possible. In lawn areas, such equipment shall be installed in a 12 inch by 16 inch rectangular valve box with the cover marked "Q.C.V". Set flush to finish grade.
- E. Set valve boxes 1/2 inch above grade in turf and 2 inches above finish grade in shrub areas on a minimum 12 inch deep layer of smooth pea gravel and set valves at depth to provide clearance between the cover and valve handle or key when the valve is in the fully open position. Place smooth pea gravel below valve. Do not cover valve with pea gravel.
- F. Provide backflow preventers with pipe supports, enclosure, concrete, and the accessories necessary to secure the assembly. Assemble backflow preventers with pipes and fittings of galvanized steel. Install backflow preventers per prevailing codes, certified by a licensed inspector as required by Los Angeles County Department of Public Health, Cross-Connection and Water Pollution Control Program.
- G. Install a line sized shut-off valve on the pressure side of sectional automatic control valve.
- H. Each remote control valve shall have a plastic valve identification tag installed. Valve identification tag shall indicate the controller letter and station number.

### 3.5 IRRIGATION HEAD INSTALLATION AND ADJUSTMENT

- A. Flush and pressure test mains and laterals, including risers before installing irrigation heads, and before performing a water coverage test.
- B. Location, Elevation and Spacing:
  - 1. Install the sprinkler heads in accordance with Drawings.
  - 2. Spacing of sprinkler heads shall be installed for head to head coverage. In no case shall the spacing exceed the maximum recommended by the manufacturer.
  - 3. In turf areas, install sprinklers 4 inches clear of adjacent walks, curbs, paving, headers, and similar improvements. In shrub and ground cover areas, install sprinklers 6 inches from paving and 12 inches from the face of building walls or windows.

4. Install irrigation heads adjacent to curbs, walks, paving, and similar improvements on pop-up sprinkler bodies with tops set flush with finished grade in turf areas and 1/2 inch above finish grade in shrub and ground cover areas.
5. Install sprinkler heads plumb. Adjust sprays or nozzle stream to cover landscape area without overspraying onto paving, fences, walls, or buildings.

C. Riser Installation:

1. Install risers perpendicular to finished grade to obtain optimum coverage of the area.
2. Risers shall be of galvanized steel for above grade installation and, Schedule 80 PVC plastic pipe for below grade installation.
3. Provide threaded pipe between the connection to the lateral or main and the sprinkler head.
4. Support risers for oscillating sprinkler heads installed above finished grade within 24 inches of curbs, walks, roadways, and similar improvements with a 3/4 inch galvanized steel stake driven into the ground and secured with 2 stainless steel clamps. Extend the upper end of the stake up to the bottom of the head. Extend the length of the stake 24 inches below the lateral line.
5. Riser assemblies shall be triple swing joint type with Schedule 80 PVC nipples and threaded fittings.
6. Install and adjust check valves as indicated on Drawings.
7. Install flow control limiters at lateral tee or ell on lateral line prior to installing swing joint assembly.

D. Irrigation Head Adjustment:

1. When irrigation heads are installed and the irrigation system is operating, adjust and balance each zone with remote control valves fully open to obtain uniform and adequate coverage.

2. Adjust irrigation heads having adjustable pin nozzles, screws, or orifices to provide adequate distribution of water over the coverage pattern. Without additional cost to Department, install larger or smaller nozzle cores in sprinkler heads and add or omit sprinkler heads as necessary to obtain head to head water coverage.
3. At no time shall the irrigation system spray water on roadways or structures.

### 3.6 AUTOMATIC CONTROL SYSTEM INSTALLATION

- A. Install a complete automatic irrigation control system, including the automatic controller, automatic control valves and wiring, and necessary accessories and utility service connections.
- B. Install the automatic controller outside of the coverage pattern of the irrigation system at the location designated on Drawings or as directed by Engineer in conformance with the details.
- C. Operate new controller in presence of Engineer to determine working order, before commencing Work.
- D. Install flow sensor and wire to controller. Operate new flow sensor from Calsense controller in presence of Engineer to determine controller working order.
- E. Install service wiring at a minimum depth specified, in galvanized steel electrical conduit from the service point to the controller. The minimum service wire shall be No. 12 AWG copper 600 volt type THW/THWN insulation, or as required by the controller manufacturer. Locate splices only in specified pull boxes and make splices with a waterproof packaged kit approved for underground use. Set top of pull boxes flush to finish grade on a 12 inch deep layer of pea gravel.
- F. House control wiring in a conduit between the controller and an electrical pull box at the base of the controller. House control wire under paved areas in a Schedule 40 PVC pipe sleeve. Other wiring issuing from the electrical pull box shall be direct burial, installed in the main or lateral waterline trenches wherever practicable.

- G. Provide total quantities of low voltage wire for RCV control as indicated on Drawings. Color code common wire 'White' with control wires 'Black' in color. Make splices in control wire with approved waterproof connectors in conformance with the requirements for service wire. Leave at least 2 feet of coiled slack at each splice and point of connection inside the valve boxes.
- H. Test wiring for continuity, open circuits, and unintentional grounding prior to connection to equipment.
- I. Leave the control system in operating condition with an operational chart mounted within the controller cabinet upon completion of Work.
- J. Provide a minimum of 2 unused spare wires along the entire length of the mainline to each and every mainline end. Spare control wires shall be 'Red' in color. Label 'Spare' wire as such at controller.

### 3.7 FIELD QUALITY CONTROL

#### A. Tests and Inspections:

1. Notify Engineer 48 hours prior to time of the following required tests and inspections:
  - a. Pressure supply line installation and testing.
  - b. Automatic controller and wire installation.
  - c. Lateral line and sprinkler installation (and drip tubing layout).
  - d. Coverage test.
  - e. Los Angeles County Department of Public Health Services cross connection test.
  - f. Los Angeles County Department of Public Health Services inspection of purple pipe installation.
2. Notify Engineer 7 days prior to the time of final inspection.
3. Pipes jointed with rubber gaskets or threaded connections may be subjected to a pressure test at any time after partial completion of backfill. Pipelines jointed with solvent-welded PVC joints shall be allowed to cure at least 24 hours before testing
4. Subsections of mainline pipe may be tested independently, subject to the review of Engineer.

5. Furnish clean, clear water, pumps, labor, fittings, and equipment necessary to conduct tests or retest.
6. Sprinkler Layout Review:
  - a. Stake each sprinkler location, remote control valve assembly, gate valve, and other irrigation system assemblies. Different sprinkler types shall be clearly marked. Revise layout as directed by Engineer. Layout review may be repeated at discretion of Engineer.
  - b. Landscape edging, tree locations, and other known Project Site(s) features shall be staked or clearly marked prior to sprinkler layout review.
  - c. Where the irrigation system must be modified due to discrepancies between the irrigation plans and actual Project Site(s) conditions, the layout shall be modified per the discretion of Engineer.
  - d. Layout review shall occur prior to installation of irrigation systems unless otherwise directed by Engineer. Failure to comply with the staking process shall result in Contractor taking full responsibility for system component locations.
7. Pre-Plant Establishment, Maintenance, and Site Care Period inspection shall occur upon completion of irrigation system, record (as-built) drawings and controller charts. Plant Establishment, Maintenance, and Site Care Period shall begin upon Engineer's approval of pre-Plant Establishment, Maintenance, and Site Care Period inspection. Final inspection shall occur upon completion of Plant Establishment, Maintenance, and Site Care Period.
8. Flushing: After completion, and prior to the installation of terminal fittings, flush the entire pipeline system to remove dirt, scale, or other material. After flushing, conduct the following tests in the sequence listed below. Provide equipment, materials, and labor necessary to perform the tests. Conduct tests in the presence of Engineer.

- a. Pipeline Pressure Test: Perform a water pressure test on pressure mains and laterals before couplings, fittings, valves, and the likes are concealed. Cap open ends after the water is turned into the line so that the air shall be expelled. Test pressure mains with control valves to lateral lines closed. After the pressure main test, open valves to test lateral lines. The constant test pressure and the duration of the test are as follows:
  - 1) Mains: 6 hours at 125 psi.
  - 2) Laterals: 2 hours at 100 psi.
- b. Sprinkler Coverage Test: Perform the coverage test after sprinkler heads have been installed and demonstrated that each section or unit in the irrigation system is balanced to provide uniform and adequate coverage of the areas serviced. Correct deficiencies in the system.
- c. Operational Test: Evaluate the performance of components of the automatic control system for manual and automatic operation. During Plant Establishment, Maintenance, and Site Care Period, and at least 15 days prior to final inspection, set the controller on automatic operation so that the system shall operate during such period. Make repairs, replacements, and adjustments until equipment, electrical Work, controls, and instrumentation are functioning as specified.

### 3.8 REPAIR AND RESTORATION

- A. Department reserves the right to make temporary repairs as necessary to keep the irrigation equipment in operating condition. The exercise of this right by Department shall not relieve Contractor of responsibilities under the terms of the guarantee.
- B. Repair settlement of backfilled trenches including the complete restoration of damaged planting, paving, or other improvements which may occur during a 90 day period, after final acceptance by Engineer, to Engineer's satisfaction, without expense to Department.

### 3.9 FINAL INSPECTION PRIOR TO ACCEPTANCE

- A. At the time of the pre-Plant Establishment, Maintenance, and Site Care Period inspection, Engineer shall inspect Work, and if not accepted, shall prepare a list of items to be completed by Contractor. At the time of the post-Plant Establishment, Maintenance, and Site Care Period or final inspection, Work shall be re-inspected and final acceptance shall be in writing by Engineer.
- B. Inspection for final acceptance of the irrigation system shall occur together with inspection for final acceptance of plantings as specified in PLANTING AND LANDSCAPING Section.
- C. Contractor shall operate each system for Engineer at time of final inspection. Items deemed not acceptable by Engineer shall be reworked to the satisfaction of Engineer.
- D. After the system has been completed, Contractor shall instruct Engineer and Harbor Department maintenance staff in the operation and maintenance of the irrigation system and shall furnish a complete set of operating and maintenance instructions.
- E. Contractor shall show evidence to Engineer that Department has received accessories, charts, record drawings, and equipment as required before final inspection can occur.

### 3.10 CLEANING

- A. Cleanup shall be made as each portion of Work progresses. Remove refuse and excess dirt from Project Site(s). Walks and paving shall be broomed or washed down, and damage done on Work of others shall be repaired at Contractor's sole cost and expense.

### 3.11 MAINTENANCE

- A. Irrigate as necessary to maintain adequate growth and appearance in maintenance areas.
- B. Irrigate between 1:00 a.m. and 4:45 a.m. unless otherwise indicated on Drawings. Irrigation shall be scheduled to supply quantities and frequencies consistent with seasonal requirements of the plant materials in the landscape. Controller programs shall be adjusted as dictated by the weather.



- C. Provide personnel fully trained in phases of landscape irrigation systems operation, maintenance, adjustment, and repair, including copper, brass, galvanized, and plastic piping and brands of components, sprinkler heads, electrical control clocks, and valves.
- D. Adjust sprinkler heads and risers, clean and flush heads, lines, screens and remove obstructions as necessary to provide adequate coverage to landscaped areas, to prevent excessive runoff and erosion, and to prevent watering hardscape.
- E. Test irrigation systems the first and third Mondays of each month and immediately report to Engineer irrigation system problems not correctable as described in Paragraph D of Maintenance Article of this Section. Test any irrigation system when damage is suspected, observed or reported, and immediately report to Engineer any irrigation system problems not correctable.
- F. Engineer shall determine who makes repairs to landscape or to irrigation systems at Project Site(s). Provide Engineer with a written description of Work to be performed with an estimate of the cost detailing labor and material costs. Engineer may approve such estimate and authorize, in writing, Contractor to proceed with repair.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Planting and landscaping materials and accessories
- B. Hardscape materials

### 1.2 RELATED SECTIONS

- A. Section 02 00 01 - Basic Site Materials and Methods
- B. Section 31 00 00 - Earthwork
- C. Section 32 13 14 - Concrete for Exterior Improvements
- D. Section 32 84 00 - Planting Irrigation
- E. Section 32 91 01 - Planting Soil and Preparation

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for Work of this Section shall be paid under the Landscaping and Irrigation System Allowance bid item of Bid Proposal Line Items.

### 1.4 REFERENCES

- A. ANSI/AHIA Z60.2 - American Standard for Nursery Stock.
- B. ASTM A36/A36M - Standard Specification for Carbon Structural Steel.
- C. ASTM A53/A53M - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
- D. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- E. ASTM A1011/A1011M - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength.
- F. ASTM C136/C136M - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.

- A. Council of Tree and Landscape Appraisers:
  - Guide for Establishing Values of Trees and Other Plants
  - Manual for Plant Appraisers Handbook
- B. Reference Specifications (RS):
  - Section 303 - Concrete and Masonry Construction
    - Subsection 303-6 - Stamped Concrete
    - Subsection 303-8 - Pervious Concrete
- C. Standard Plans – City of Los Angeles Department of Public Works, Bureau of Engineering:
  - S-456-2 - Tree Planting and Root Control Barrier Detail

## 1.5 SEQUENCING

- A. Do not commence planting until Project Site(s) grading, soil import, and soil preparation have been completed and approved by Engineer.
- B. Coordinate planting sequence with installation of utilities, drainage, and irrigation systems. Ensure drainage swales and flow lines have been established and accepted prior to planting shrubs and groundcover.

## 1.6 SUBMITTALS

- A. Make submittals no later than 30 Calendar Days prior to start of Work of this Section.
- B. Submit complete lists of landscape materials and equipment for approval by Engineer. Include manufacturer's name and address, specific trade names, catalog numbers complete with installation instructions, illustrations and descriptive literature, list of plants, stating quantity, size, and supplier photographs of material 24-inch box size and larger. Photo shall be actual current nursery stock available for tagging for Project. Clearly mark or underline proposed items in red.
- C. Certifications: In addition to other required certification, furnish a certificate with each delivery of bulk material, stating its source, quantity, type of material furnished, and that such item or material conforms to Specifications requirements.

- D. Submit copies of manufacturer's material specifications including Safety Data Sheets (SDS) and installation or application instructions.
- E. Samples: Provide 2 samples of each of the following materials in 0.25 cubic foot clear plastic bags:
  - 1. Planting Mulch
  - 2. No. 16 Silica Sand
  - 3. Decomposed Granite
- F. Proposed schedule and sequence of Work plan for planting operation with start and completion date for trees, shrubs, and sodding.
- G. Pathologist report certifying trees to be healthy and free from fungus or vascular infections.
- H. Include the following in the schedules required by GENERAL CONDITIONS Section:
  - 1. Proposed schedule and sequence of Work plan for planting operation with start and completion date for trees, shrubs, and sodding.

#### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver to Project Site(s) fertilizing and conditioning materials in original unopened containers, bearing manufacturer's name, guaranteed chemical analysis, name, trade mark, and in conformance with State of California Food and Agricultural Code.
  - 1. Deliver bulk materials to Project Site(s) with certificate that includes manufacturer and quantity in addition to chemical analysis, trade mark, and conformance to State law.
  - 2. Deliver fertilizer and conditioners in waterproof bags showing weight, chemical analysis, and name of manufacturer.
  - 3. Deliver to the installation area only enough plants that can be planted in one day.
  - 4. Protect plant materials from damage during delivery.
- B. Unloading: Unload plant materials and trees as carefully as possible to minimize root, trunk, and frond damage.

- C. Storage and Protection: If plant materials cannot be planted immediately upon delivery to Project Site(s), store in a protected area.
- D. Decomposed granite shall be covered with plastic covering to prevent exposure to rainfall, debris, or removal by wind.

#### 1.8 EXISTING UTILITIES AND PLANT MATERIALS

- A. Exercise care in excavating and working near existing utilities. Contractor shall be responsible for damages to utilities which are caused by Contractor's operations or neglect. Check existing utility drawings for existing utility locations. Reference drawings are available for information and substructure purposes only at Engineer's Office located at 425 S. Palos Verdes Street, San Pedro, CA (310) 732-3522.
- B. Protect existing utilities, trees, lawns, and shrubbery that are not to be removed from damage or injury. If damaged or removed because of Contractor's operations, they shall be restored or replaced in, as nearly the original condition and location as is reasonably possible. Lawns shall be reseeded and covered with suitable mulch. Determine the cost of unreplaceable plant material in conformance with the "square inch" method as described by Council of Tree and Landscape Appraisers "Manual for Plant Appraisers" Handbook current edition and "Guide for Establishing Values of Trees and Other Plants".
- C. Maintain existing plant material that is to remain within Project Site(s) in healthy, thriving condition.
- D. When existing planted areas are regraded, or removed and replaced because of Contractor's operations, the soil in these areas shall be prepared and replanted in kind. Approved Class "A" Imported Topsoil Mix shall be used in planted areas that are being replaced due to Contractor's operations. Materials, topsoil, soil preparation, amendments, planting, and plant maintenance during the establishment period shall conform to this Section. Refer to PLANTING SOIL AND PREPARATION Section for additional requirements.
- E. Repair or replace existing improvements which are not designated for removal which are damaged or removed as a result of Contractor's operations. When a portion of a sprinkler system must be removed, cap the remaining lines. Repairs and replacements shall be equal to existing improvements, and shall match them in finish and dimension.

- F. Notify tenants or owners of adjacent property 14 Calendar Days before start of Work to allow tenants or owners to salvage or relocate existing plants, trees, fences, sprinklers, and other improvements within the right-of-way which are designated for removal and would be destroyed because of Work.
- G. Refer to BASIC SITE MATERIALS AND METHODS Section for additional requirements.
- H. Protect existing utilities, trees, lawns, and shrubbery that are not to be removed from damage or injury. If damaged or removed because of Contractor's operations, they shall be restored or replaced in, as nearly the original condition and location as is reasonably possible. Lawns shall be re-sodded. Determine the cost of un replaceable plant material conforming to the "square inch" method as described by Council of Tree and Landscape Appraisers "Manual for Plant Appraisers" Handbook current edition and "Guide for Establishing Values of Trees and Other Plants."

#### 1.9 WARRANTY

- A. Guarantee the life of trees for a period of 1 year, and other plant materials for a period of 6 months, from the date of Notice to Proceed (NTP) for Plant Establishment, Maintenance, and Site Care Period. Retain labor and materials bonds as a warranty.
- B. Should soil deficiencies affecting plant health develop within the specified guarantee periods, correct such deficiencies at Contractor's sole cost and expense prior to replacing the plant.
- C. During 1-year guarantee period, remove trees that are found dead or not in a satisfactory growth condition from Project Site(s) and replace with new trees at Contractor's sole cost and expense.
- D. Remove trees requiring replacement before scheduled 1-year guarantee period and replace with matching trees along with adjacent disturbed improvements, i.e. irrigation, paving, lighting, planting, and the like with the same level of quality as originally indicated on Drawings, at Contractor's sole cost and expense.

## PART 2 - PRODUCTS

## 2.1 MATERIALS

- A. Topsoil: Refer to PLANTING SOIL AND PREPARATION Section for requirements.
- B. Fertilizing and conditioning materials shall comply with the applicable requirements of State of California Food and Agricultural Code. Fertilizing materials shall be packaged, first grade, commercial quality products identified as to source, type of material, weight, and manufacturer's guaranteed analysis. Fertilizing material shall not contain toxic ingredients or fillers in quantities harmful to human, animal, or plant life.
  - 1. Fertilizing and Conditioning Materials: Submit a certificate of compliance stating that the materials meet Specifications.
    - a. Soil Sulfur: Guaranteed analysis of 99 percent sulfur (powder form).
    - b. Iron Sulfate: Guaranteed analysis of 20 percent iron derived from ferric and ferrous sulfate and 10 percent sulfur.
    - c. Gypsum: Hydrated calcium sulfate product containing 23 percent calcium and 18 percent sulfur with a guaranteed analysis of 84 percent calcium sulfate. (Powder form)
    - d. Commercial Fertilizer: Granular product having a chemical analysis of 12-12-12 unless otherwise specified on Drawings; free-flowing material delivered in unopened sacks. Do not use material which becomes caked or otherwise damaged.
    - e. Ammonium Sulfate: 21 percent ammoniacal nitrogen and 24 percent combined sulfur. (21-0-0)
    - f. Calcium Nitrate: 14.5 percent nitrate nitrogen, 1 percent ammoniacal nitrogen and 19 percent calcium
    - g. Calcium Ammonium: 13.5 percent nitrate nitrogen, 13.5. Nitrate: percent ammoniacal nitrogen and 8 percent calcium (27-0-0)
    - h. Triple Superphosphate: 45 percent P<sub>2</sub>O<sub>5</sub> and 15.5 percent calcium (0-45-0)
    - i. Potassium Sulfate: 50 percent potash and 18 percent combined sulfur (0-0-50)

- j. Ureaformaldehyde: 38 percent slow-release of methylene urea (38-0-0)
- k. 21-7-14: 9.9 percent nitrate nitrogen, 11.1 percent ammoniacal nitrogen, 7 percent P<sub>2</sub>O<sub>5</sub>, 14.0 percent K<sub>2</sub>O, 1.4 percent calcium, 5.1 percent combined sulfur
- l. Organic Soil Conditioner (no sewage sludge or biosolids):
  - 1) Humus material shall have an acid-soluble ash content of no less than 6 percent and no more than 20 percent. The organic matter content shall be at least 50 percent on a dry weight basis.
  - 2) The pH of the material shall be between 6 and 7.5.
  - 3) The salt content shall be less than 10 millimho/cm at 25 degrees C. (ECe less than 10) in a saturated paste extract.
  - 4) Boron content of the saturated extract shall be less than 1.0 part per million.
  - 5) Silicon content (acid-insoluble ash) shall be less than 50 percent.
  - 6) Calcium carbonate shall not be present if to be applied on alkaline soil.
  - 7) Types of acceptable products are composts, manures, mushroom composts, straw, alfalfa, peat mosses, and the like, low in salts, low in heavy metals, free from weed seeds, free of pathogens, and other deleterious materials.
  - 8) Composted wood products are conditionally acceptable (stable humus must be present). Wood based products are not acceptable which are based on red wood or cedar.
  - 9) Sludge-based materials are not acceptable.
  - 10) Carbon to nitrogen ratio is less than 25:1.
  - 11) Compost shall be aerobic without malodorous presence of decomposition products.
  - 12) Maximum particle size shall be 0.5 inch, 80 percent or more shall pass a No. 4 screen.



- 13) Maximum total permissible pollutant concentrations in amendment in parts per million on a dry weight basis:

|          |     |            |     |          |     |
|----------|-----|------------|-----|----------|-----|
| arsenic  | 12  | copper     | 150 | selenium | 10  |
| cadmium  | 10  | lead       | 50  | silver   | 10  |
| chromium | 50  | mercury    | 2   | vanadium | 200 |
| cobalt   | 50  | molybdenum | 20  | zinc     | 200 |
| nickel   | 100 |            |     |          |     |

m. Organic Fertilizers:

|                             |                |
|-----------------------------|----------------|
| Blood meal                  | Feather meal   |
| Bone meal                   | Rock phosphate |
| Fish emulsion               | Alfalfa meal   |
| K-Mag (sul-po-mag) (0-0-22) |                |

- C. Plants: Plants shall have a growth habit normal to the species in conformance with ANSI/AHIA Z60.2; shall be sound, healthy, vigorous and free from insect pests, plant disease, sun scalds, fresh bark abrasions, excessive abrasions, or other objectionable disfigurements. Tree trunks shall have normal well developed branch systems, and vigorous and fibrous root system, not root bound and shall be free of kinked or girdling roots.
1. Plant names shall conform to Sunset Western Garden Book latest edition.
  2. Contractor shall order plant material to ensure adequate quantities and sizes of plant material shall be available.
  3. Tag one plant of each variety for identifying purposes.
  4. Plants shall be inspected and approved prior to planting.
  5. When plants of a specified kind or size are not available, substitution may be made upon approval by Engineer.
  6. Other than normal side pruning during the growth period, no pruning shall be done prior to inspection at the nursery.
  7. Specimen plant materials shall be site acclimated prior to planting, either through purchase from local beach side nurseries or site storage for a period of 10 weeks for autumn planting.

8. Trees shall conform to type and size noted on Drawings.
  - a. Measure tree height from the root crown to the last division of the terminal leader and measure the diameter 6 inches above the root crown.
  - b. Trees shall stand erect without support.
  - c. Trees shall be boxed and established in their container for a minimum of 12 months unless noted otherwise on Drawings.
9. Shrubs and ornamental grasses shall be type and size selected from high quality well-shaped nursery stock.
10. Soil used to grow the tree or shrub shall be stable and highly decomposable to prevent subsidence of the root crown into the containers. The soil in the container shall be within 90 percent of the original volume. The container soil shall be fertile and free from excessive concentrations of nutrients and non-essential trace minerals. Herbicides shall not have been used in the production of the container plant. Soil shall be free of weeds.
11. Flatted plants shall be grown and remain in the flat until transplanted at Project Site(s). The soil and spacing of the plants in the flat shall ensure the minimum disturbance of the root system at time of transplanting. Maximum plants per flat shall be between 64 to 100 plants or as indicated on Drawings.
12. Sod (Turf Grass) shall be a mixture of specified proportions of well established lawn grass as indicated on Drawings. Sod shall be vigorous, well rooted, healthy turf, free from disease, insect pests, weeds, other grasses, stones, and other harmful, or deleterious matter.
  - a. Contractor shall use 21 inch wide sections of roll sod whenever possible to reduce seams throughout the turf area.
  - b. Soil base shall be sandy loam or loam and shall be clean topsoil.
  - c. The following weed seeds are not permissible:
    - 1) Quackgrass
    - 2) Johnsongrass
    - 3) Nutsedge

- 4) Poison ivy
  - 5) Canada thistle
  - 6) Poa annua (annual bluegrass)
  - d. Premium Grade: Not more than 1 percent undesirable grass species or clover. No more than 2 weeds per 500 square feet.
  - e. Commercial Grade: Not more than 10 percent undesirable grass species or clover. No more than 10 weeds per 500 square feet.
  - f. Thickness of soil portion of sod shall not exceed 1/2 inch.
- D. Pre-Emergent Herbicides: Selected from the broad spectrum of commercial brands available subject to approval by Engineer and not in conflict with regulations governing its use. (Surflan, Betasan, Ronstar, or Gallery).
- E. Wood Bark Mulch:
- 1. Base Feed Stock: Base feed stock material shall consist of uncontaminated clean green shredded tree trimmings and plant material native to the area, by a United States Composting Council's Seal of Testing Assurance (STA) approved facility. No inclusion of grasses of any kind, curbside material, or miscellaneous foreign debris shall be tolerated.
  - 2. Composting: Material shall be initially ground to 4-inch-minus and composted by the formation of windrows which shall be turned every 3 days at a minimum, for 15 days. During this 15 day period, moisture, aeration, and temperature shall be monitored and recorded to assure that a minimum of 132 degrees F is obtained throughout the process. The temperature detailed in this Paragraph shall ensure that weeds which can germinate and raw material contained pathogens are destroyed, and a microbial-friendly environment is formed for the production of required plant-growth nutrients. Windrows shall not become anaerobic.
  - 3. Material Particle Size: Material shall be subsequently screened to the specified 1/2 inch to 1 1/2 inch particle size in order to achieve consistency and continuity of appearance.

## F. Decomposed Granite:

1. Sieve Analysis: Washed natural crushed granite and stone free of clay, friable materials, and debris and graded in conformance with ASTM C136/C136M within the following limits:

| Sieve Size        | Percent Passing |
|-------------------|-----------------|
| 3/8-inch (9.5 mm) | 100             |
| No. 4 (4.75 mm)   | 91              |
| No. 8 (3.36 mm)   | 73              |
| No. 16 (1.16 mm)  | 52              |
| No. 30 (600 mm)   | 34              |
| No. 50 (300 mm)   | 21              |
| No. 100 (150 mm)  | 13              |
| No. 200 (75 mm)   | 10              |

2. Color: California Gold Crushed (no fines) as supplied by Gail Materials, (951) 667-6106.
3. Stabilizer binder for decomposed granite shall be by Stabilizer Solutions, Inc., (800) 336-2468.

## G. Tree Stakes: Wood or as designated on Drawings.

1. Wood tree stakes, 3 inches outside diameter (O.D.) by 10 feet long, lodgepole grade, capable of standing in the ground at least 2 years.

## H. Tree Ties:

1. Wire Type: No. 12 BWG galvanized soft steel wire covered with garden hose.
2. Cinch-Tie: Flexible vinyl with adjustable interlocking capability.

- I. Guys: Cables of 3/16-inch diameter, 7 strand cadmium plated complete with galvanized steel cable clamps and turnbuckles equal in strength to that of cable strength. Deadman stakes shall be 3/4-inch diameter steel pipe 3 feet long.

- J. Root Barrier: Provide root barrier in accordance with City of Los Angeles, Department of Public Works Standard Plan S-456-2.
- K. Boulders:
  - 1. Boulder shall be characteristic of local native materials when available or river run granite with black and white strata running throughout. Boulder selection shall be approved by Engineer prior to purchase.
  - 2. Boulder size shall be as indicated on Drawings.
  - 3. Natural irregularities in shapes are desirable; however, fractures, chips, or other unnatural damage shall not be accepted.
- L. Pavers and Base:
  - 1. Interlocking concrete paving stone made from no-slump concrete mix with fade resistant color pigments with a minimum compressive strength of 8,000 pounds per square inch (psi) and a maximum water absorption rate of 5 percent.
  - 2. Sand Base: Clean washed sand with 100 percent passing a No. 4 sieve size and a maximum of 3 percent passing a No. 2 sieve size.
- M. Metal Edge Restraints: Paving restraint edging for straight and curvilinear borders at planting areas, DuraEdge as manufactured by J.D. Russell Company, (800) 888-7425, [www.jdrussellco.com](http://www.jdrussellco.com).
  - 1. Comply with ASTM A1011/A1011M, hot-rolled, standard flexible, carbon steel landscape edging, fabricated in sections with stake pockets stamped, punched or welded to face of section approximately 30 inches apart to receive stakes.
  - 2. Size: 5 inches wide
  - 3. Thickness: 1/4 inch
  - 4. Length: 16 feet
  - 5. Connection Method: Double staked at overlap joints and designed to receive tapered steel stakes.

6. Finish: Hot dipped galvanized finish to be applied after steel landscape edging is cut to length and stake pockets are stamped, punched, or welded. Galvanization shall comply with ASTM A123/A123M. Zinc coverage shall be to a standard thickness of 3.3 mil.
7. Edging Stakes: Steel, tapered, 16 inches minimum length, and finished to match specified steel landscape edging.
8. Standard start and end sections, 90 degree corners, and splicers as required.

N. Inspection and Aeration Tube Materials:

1. Perforated polyvinyl chloride (PVC) pipe and fittings, 4 inch diameter as required for connections.
2. Structural foam polyolefin grate, 4 inch round to fit 4- inch PVC drain pipe, Model No. NDS 13S, as manufactured by NDS Inc., (887) 301-5242. Color: Sand. ADA Compliant/Heel Proof.
3. Filter Fabric: Mirafi 140 N non-woven drainage fabric as manufactured by TenCate Mirafi, (706) 693-2226.
4. Drain Rock: 3/4 inch diameter crushed stone drain rock, clean, washed, free of debris and sediment.

O. Weed Barrier: BioBarrier available from TYPAR from Berry Global, Inc. (800) 541-5519.

P. Slope Stabilization and Erosion Control Material: Commercial items available for stabilizing or controlling erosion, subject to approval by Engineer (jute netting, wire mesh, aquatain, verdyol complex Bemis erosinet, soil sealant).

Q. River Run Stone bed:

1. Stone: 7 to 18 inches in diameter, river run granite with black and white strata running throughout.
2. Sand: Washed concrete or beach sand.
3. Weed Barrier: Dewitt PRO-5 Weed Barrier fabric (800) 888-9669.
4. Grout: Cement Slurry

## R. Miscellaneous Materials:

1. Lumber: Construction heart-rough redwood.
2. Pipe: Galvanized steel, standard weight (Schedule 40) complying with ASTM A53/A53M.
3. Nails, Fasteners, and the like: Galvanized, commercial quality material.
4. Fabricated Metal Items: Galvanized steel conforming to ASTM A36/A36M.
5. Concrete Items: Standard 2,000 psi concrete or as specified in CONCRETE FOR EXTERIOR IMPROVEMENTS Section.

## S. Headers:

1. Concrete Headers (Mow Strip): 6 inches by 8 inches in size unless noted otherwise on Drawings, complete with premolded expansion joint material 10 feet apart, or as indicated on Drawings.
2. Redwood Headers: 2 inches by 4 inches or 2 inches by 6 inches except that two 1 inch by 4 inch boards shall be supplied for lamination on turns and curves. Header stock shall be supplied in lengths of at least 10 feet long. Header stakes shall be pointed, 2 inches by 4 inches and at least 18 inches long. Joint splicing lumber shall be 1 inch by 4 inches by 2 feet long.

## T. Patterned, Colored Concrete (Stamped Concrete): Conform to RS Subsections 303-6 and 303-8, Method A or B, or as indicated on Drawings.

## U. Rip-rap:

1. Quarry Rock: Maximum dimension shall be 3 inches; minimum dimension shall be 12 inches.
2. Filter Fabric: Mirafi 140N.

## 2.2 TESTS AND INSPECTIONS

## A. Engineer shall perform the following required tests and inspections:

1. Condition of soil preparation, grading, surface drainage, and related underground utility works prior to planting trees and shrubs.
2. Tree pits prior to backfill and installation.

3. Plants (24-inch box size and larger) at their source prior to delivery to Project Site(s) or elsewhere as may otherwise be directed by Engineer.
  4. Plant material at time of delivery to Project Site(s). Planting tags shall be in place from nursery and remain until time of final acceptance walk through.
  5. Condition of lawn area preparation prior to seeding or sodding.
  6. Landscape plants and construction items to issue NTP for Plant Establishment, Maintenance, and Site Care Period.
  7. Landscape plants and construction items at the end of Plant Establishment, Maintenance, and Site Care Period.
  8. Engineer may reject trees not conforming to requirements specified in this Section. Trees may be considered defective and shall be marked as rejected. Ensure that replacement trees are of same size, species, and condition as trees originally specified.
- B. Notify Engineer at least 48 hours prior to the time of required inspections listed in Paragraph 2.2A of this Article.
- C. Notify Engineer 7 Calendar Days prior to the time of final inspection.
- D. Plants shall be subject to inspection and approval of Engineer at the nursery, growing grounds, and upon delivery to Project Site(s) for conformity with Specifications. Such approval shall not impair the right of further inspection and rejection during progress of Work.
- E. Engineer reserves the right to make periodic inspections prior to final inspection. Should plant materials, installation procedures, or other conditions be observed that are not in accordance with Drawings or Specifications, Engineer shall direct Contractor to correct by repair or replace as appropriate. Engineer shall be the sole judge of the conditions of quality or acceptability and shall direct corrections in writing to Contractor. Rejected materials shall be immediately removed from Project Site(s) and replaced with specific materials at Contractor's sole cost and expense.



## PART 3 - EXECUTION

### 3.1 VERIFICATION OF DIMENSIONS AND QUANTITIES

- A. Verify scaled dimensions and quantities prior to start of Work of this Section.
- B. Notify Engineer of discrepancies between Drawings and Specifications and actual Project Site(s) conditions which would affect the execution of landscaping Work. Do not Work in areas where discrepancies occur until instructed by Engineer.
- C. Plant quantities noted on Drawings are for the convenience of Contractor only and do not limit Contractor to those specific quantities. Furnish the quantities as may be necessary to do specific Work.

### 3.2 GRADING AND SOIL PREPARATION

- A. Initial rough grading shall be as specified in EARTHWORK Section.
- B. Topsoil placement shall be as specified in PLANTING SOIL AND PREPARATION Section.
- C. In tree planting pits, remove soil 5 feet deep and 6 feet wide. For larger box trees, the width of the tree pit shall be 3 times the diameter of the rootball and 2 feet deeper than the rootball at a minimum. Rototill the top 6 inches of sub-soil to roughen up the surface. Add 2 inches of pre-amended Class "A" Imported Topsoil Mix and rototill into the existing sub-soil to a depth of 4 inches to avoid a sharp interface between the sub-soil and topsoil. Backfill tree pits with approved Class "A" Imported Topsoil Mix.
- D. Refer to PLANTING SOIL AND PREPARATION Section for additional requirements.

### 3.3 PLANTING

- A. Plant materials, including plants previously approved at the nursery, shall be inspected prior to planting. Contractor shall be responsible for the condition of plants, planted or otherwise, until final acceptance by Department.
  - 1. Perform planting with materials and equipment in conformance with procedure favorable to the optimum growth of the plant. Do not plant during windy conditions.
  - 2. Except as noted for specimen planting, start planting operations following the completion and approval of the irrigation system.

- B. Keep plant materials delivered to Project Site(s) in healthy condition for planting. Do not allow plants to dry out.
- C. Layout and Plant Locations:
  - 1. Plant locations indicated on Drawings are approximate.
  - 2. Plants may be re-spotted prior to planting as directed by Engineer, without additional compensation to Contractor.
  - 3. Make a detailed layout of plants, in the planting areas and obtain approval of Engineer prior to planting operations.
  - 4. Locate the first row of plants in areas designated for on-center spacing at 1/2 the designated spacing from the edge of the area.
- D. Plants in boxes (24 inches or larger) shall be planted before installation of lateral irrigation lines. Re-route irrigation lines in conflict with specimen plant locations to clear the root ball.
- E. Tree and Shrub Planting:
  - 1. Plant trees, shrubs, ground cover, and vines as indicated on Drawings and specified in this Section as soon as Project Site(s) and weather conditions are suitable. Planting operations shall be performed only during periods when beneficial results can be obtained. Suspend Work when drought, excessive moisture, or other unsatisfactory conditions prevail.
  - 2. Make planting holes approximately square and 3 times the width of the plant container or root ball and larger if necessary to permit handling and planting without injury to the root system.
  - 3. Prior to planting, fill planting hole with water to see if water drains in a reasonable time (approximately 4 hours). If drainage does not occur to the satisfaction of Engineer, auger a 4-inch diameter hole, to a depth 12 inches above the water table but not exceeding 12 feet deep and fill with clean drain rock. Do not penetrate water table with drain hole.
  - 4. Do not install plants with broken or cracked root ball before or during planting.
  - 5. Open and remove plant containers so that the plant root is not injured.
  - 6. Remove plant containers or wrappings after plant is positioned in the planting hole.

7. Scarify soil at the bottom of planting holes to a depth of 6 inches.
8. Backfill the bottom portion of the planting hole with the approved specified backfill mix.
9. After "water settling" the bottom portion of the planting hole, set the plant approximately in the center of the planting hole and adjust the root crown flush to finish grade.
10. At straight tree rows, each tree in line of trees shall be perfectly plumbed and aligned in a straight line relative to the rest of the trees where indicated.
11. Stake trees as shown on Drawings in conformance with tree stake manufacturer's written instructions.
12. Backfill balance of the planting hole with the specified backfill mix and "water settle".
13. Prune or remove broken or damaged limbs.
14. Form a 4-inch high circular watering basin slightly larger than the planting hole for trees. Make the bottom of the basin at finish grade or slightly lower.
15. Restore the area around the plants to finish grade and dispose of excess soil.
16. Plants shall be set plumb and held in position until sufficient soil/backfill has been firmly placed around roots or ball. Container-grown plant material shall be installed such that the collars of the plants are slightly higher than immediate adjacent grades.
17. Do not cover the surface of the rootball with backfill soil or with mulch.

F. Tree Planting on Slopes:

1. Install supplemental drainage for trees planted on slopes. Place a 4-inch perforated pipe at the bottom on the tree pit on native soil. Perforated pipe shall daylight from the slope to allow drainage.

G. Ground Cover Planting:

1. Complete soil preparation and fine grading prior to planting of ground cover materials.

2. Plant ground covers in moist soil, spaced as indicated on Drawings.
  3. Plant each plant with its proportionate amount of flat soil to minimize root disturbance.
  4. The degree of soil moisture in the flat shall be such that the soil does not crumble when removing plant.
  5. Following planting of ground cover, restore finish grade to ensure surface drainage.
- H. Sod Lawn Planting: Complete fine grading and specified soil preparation before planting lawn. Sod for the lawn or turf areas shall be planted the same day as delivered by grower to Project Site(s).
1. The type of sod and the areas to be sodded shall be in accordance with Drawings.
  2. Finished grade for sod shall conform to the sod grower's recommendation. Complete soil conditioning and fine grading before sodding. Do not operate heavy equipment over the finished grade after grading is completed. The finished grade shall be moist but not wet when sod is laid. Lay sod with closely fitted joints and stagger the ends of the strips. Plug openings with sod or topsoil.
  3. Lightly irrigate within 2 hours after installing sod and before rolling. Roll seams and joints until the sod is bonded to the sub-soil.
  4. Water the area to penetrate the subsoil at least 8 inches. Repeat watering to keep the sod moist until rooted in the subsoil. Protect sodded areas against foot traffic until the sod is well established. Re-sod damaged sod areas.
- I. Vine Planting:
1. Plant vines adjacent to structures, unless otherwise indicated on Drawing. Remove temporary staking at the start of the plant establishment period unless otherwise directed by Engineer.
  2. Affix branches to structures with 1-inch wide green plastic nursery tape or to walls with vine tie and wall tack.
  3. After planting, cut back ficus, Hedera, and parthenocissus vines to 3 to 4 inches above finished grade.

- J. Transplanting of Existing Plant Materials: In conformance with current horticultural practices:
  - 1. Box or ball root system to maintain plant materials in a healthy, growing condition.
  - 2. Transporting soil preparation shall be as specified in Planting Article of this Section.
  - 3. Contractor may plant the equivalent size and kind of plant material in lieu of transplanting the specified item upon written approval by Engineer.
  - 4. Stake or guy trees as specified in Tree Staking and Guying Article of this Section.
  - 5. Should the transplanted plant or in lieu item die within the 1 year guarantee period, it shall be replaced with an equivalent size and type plant without added expense to Department.
- K. Fertilizing:
  - 1. Lawn, Grasses and Groundcovers: Apply fertilizer in conformance with soil testing laboratory recommendations. Type of fertilizer and rate of application shall be in conformance with soil testing laboratory recommendations. Water the area after applying fertilizer. Fertilizer applications shall be done under the inspection of Engineer.

### 3.4 METAL EDGE RESTRAINT INSTALLATION

- A. Install in conformance with manufacturer's written instructions and as shown on Drawings.

### 3.5 WOOD MULCH APPLICATION

- A. Depth of mulch shall be 3-inch uniform distribution unless otherwise indicated on Drawings.
- B. Keep mulch at least 6 inches clear for tree trunks and stems of shrubs, ornamental grasses, and groundcovers unless shown otherwise on Drawings.

### 3.6 INSPECTION TUBE INSTALLATION

- A. Install filter-wrapped inspection and aeration tubes at tree as indicated on Drawings.

### 3.7 DECOMPOSED GRANITE INSTALLATION

- A. Contractor shall furnish and place decomposed granite on compacted and sterilized subgrade in areas as indicated on Drawings.
- B. Thoroughly blend the stabilizer into the decomposed granite by mechanical means in conformance with manufacturer's written instructions.
- C. Prior to placing the decomposed granite surfacing, subgrade shall be cleaned of foreign substances. Ruts or soft, yielding spots that may appear in subgrade, areas having inadequate compaction, and deviations of the surface from requirements specified or shown on Drawings shall be corrected by loosening, removing, and by adding approved materials, reshaping to line and grade, and recompacting to specified density requirements and as approved by Engineer.
- D. Apply soil sterilant in conformance with manufacturer's written instructions and applied by or under the direct supervision of someone holding a State of California Qualified Application Certificate.
- E. Material shall be level to a uniform thickness so that the layer, after compaction, shall not be less than the indicated thickness.
- F. Decomposed granite shall be compacted to at least 85 percent of maximum density obtainable.
- G. Finish surface shall not vary more than 0.02 foot from required grades adjacent to both paved and unpaved areas.
- H. Adjustments shall be made in placing, spreading, or finishing procedures as may be directed by Engineer to obtain a uniform layer thickness and true grades, to minimize segregation and degradation where pertinent, to reduce or increase water content, and to ensure a satisfactory course.
- I. Materials found unsatisfactory shall be replaced or reworked at Contractor's sole cost and expense to produce satisfactory material.

### 3.8 APPLICATION OF PRE-EMERGENT HERBICIDES

- A. Immediately after planting, treat non-seeded planting areas with a pre-emergent weed and grass seed control agent; spray or spread on in conformance with the manufacturer's written instructions including approved species and time of application.

- B. Check manufacturer's list of ornamental to determine toxicity with regard to selection of type of material used.

### 3.9 HEADER INSTALLATION

- A. Install headers at the location and grades shown on Drawings, prior to planting.
- B. Locate stakes at spliced corners and at intervals not to exceed 5 feet and drive slightly below the top of the header.
- C. Nail splice plates centered on joints with 4 galvanized 10d box nails to secure butt joints.
- D. Nail headers to stakes with 2 galvanized nails, clinched 1/2 inch.

### 3.10 TREE STAKING AND GUYING

- A. Tree Staking: Stake trees with wood lodgepole materials in conformance with the following:
  - 1. Install stake vertically on the windward side of the tree. Position the stake at least 6 inches from the trunk at ground level and 30 inches into the soil, avoiding injury to the roots or breaking the root ball.
  - 2. Secure plant trunk to the stake with 2 ties; one just below the head of the tree and one 2 feet above finish grade.
  - 3. Make tie loop 1 inch greater in diameter than the trunk.
  - 4. Attach tie to wooden stake with 1 furring nail at the tie locations.
  - 5. Secure wire ties by twisting the ends.
  - 6. In parkways, locate the stake on the side away from the roadway.
- B. Guying shall be done immediately after planting. Install 3 guys per tree in conformance with the following:
  - 1. Secure each guy wire to a driven stake located at a horizontal distance from the tree equal to the vertical distance from ground to the connection of guy wire on the tree branch.
  - 2. Anchor each guy wire to a driven stake located at a horizontal distance from the tree equal to the vertical distance from ground to the connection of guy wire on the tree branch.

3. Cover each guy wire with white colored garden hose or plastic tubing to a height of 6 feet above grade. Remove slack in each guy wire by hand adjusting the turn-buckle so as not to bend the tree.

### 3.11 SLOPE STABILIZATION AND EROSION CONTROL

- A. Protect slopes with a 2 to 1 slope ratio or greater with an approved erosion control netting. Install erosion control netting in conformance with manufacturer's written instructions. Submit 3 copies of manufacturer's printed installation specifications to Engineer for review prior to start of Work.
- B. Topsoil grading and conditioning shall be in conformance with Grading and Soil Preparation Article of this Section, unless otherwise indicated on Drawings.

### 3.12 RIVER-RUN STONE BED

- A. Construct river run stone bed in accordance with Drawings and to the satisfaction of Engineer.
- B. Size distribution shall be 40 percent 8 inch, 40 percent 12 inch, and 20 percent 18 inch.
- C. Install weed barrier fabric on subgrade and secure in conformance with manufacturer's written instructions prior to stone placement.
- D. Place stone as close together as possible to provide a textured dry river bed appearance.
- E. Backfill with dry, washed concrete, or beach sand to fill the voids and for stabilization to the satisfaction of Engineer. Brush or water blast out excess sand.
- F. Grout with cement slurry when grouting is indicated on Drawings or as directed by Engineer.

### 3.13 BOULDER PLACEMENT

- A. Place boulder under the supervision of Engineer.
- B. Boulders shall be set 12 inches deep for stabilization or as directed by Engineer.



### 3.14 WATERING

- A. Keep planted areas moist. Provide whatever system is necessary to provide adequate water at the planted areas without causing erosion detrimental to the planting area.
- B. Water plants immediately after planting.

### 3.15 PLANT ESTABLISHMENT, MAINTENANCE, AND SITE CARE

- A. General:
  - 1. Maintain planted areas on a continuous basis as areas are completed during the progress of Work until issuance of NTP for Plant Establishment, Maintenance, and Site Care. Continue to maintain planted areas until acceptance by Engineer to start Plant Establishment, Maintenance, and Site Care. Maintenance shall include continuous operation of watering, weeding, trimming, and rodent control, reseeding, plant replacement (irrespective of cause) or other operations necessary to ensure normal plant growth.
- B. Request an observation of Work by Engineer to begin Plant Establishment, Maintenance, and Site Care after planting and related work has been completed. A prime requirement is that ground cover and turf areas be planted and show a consistent and healthy appearance. Mow turf at least 2 times, no closer than 1 week apart. Plant Establishment, Maintenance, and Site Care shall not begin until any and damaged failed plant material is replaced and correctly installed and irrigation systems are installed and properly functioning. If such criteria are met to satisfaction of Engineer, a field report may be issued to Engineer recommending effective date to start the Plant Establishment, Maintenance, and Site Care.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Topsoil and preparation

### 1.2 RELATED SECTIONS

- A. Section 31 00 00 - Earthwork
- B. Section 32 13 14 - Concrete for Exterior Improvements
- C. Section 32 84 00 - Planting Irrigation
- D. Section 32 90 01 - Planting and Landscaping

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for Work of this Section shall be paid under the Class "A" Imported Topsoil bid item of Bid Proposal Line Items.

### 1.4 REFERENCES

- A. Soil Science Society of America (SSSA):
  - Methods of Soil Analysis, Part 1, Physical and Mineralogical Methods, 1986 Chapter 15, pages 383 to 411, Soil Texture and Particle Size
  - Methods of Soil Analysis, Part 3, Chemical Methods, 1996 Chapter 34, pages 965 to 977 and pages 1001 to 1002, Determination of Organic Carbon Chapter 37, pages 1088, Determination of Total Nitrogen Various Chapters, Determination of Fertility and Presence of Non-Essential Trace Minerals
- B. United States Department of Agriculture (USDA):
  - Agricultural Handbook No. 60
  - Method 2, page 84 - Preparation of Saturation Extract
  - Method 21a, page 102 - pH Determination
  - Method 18, pages 100-101 - Determination of Cation Exchange Capacity
  - Method 34b - Hydraulic Conductivity

### 1.5 SUBMITTALS

- A. Make submittals no later than 30 Calendar Days prior to start of Work of this Section.
- B. Submit the following to Engineer:
  - 1. List sources of landscape topsoil with horticultural soil report.
  - 2. Certification: In addition to other required certification, furnish a certificate with each delivery of bulk material, including topsoil, stating its source, quantity, type of material furnished and that such item or material conforms to specification requirements.
  - 3. Manufacturer's product data sheets, material specifications including Safety Data Sheets (SDS) and installation instructions or application.
  - 4. Proposed source of Class "A" topsoil accompanied by the written report from a soil testing laboratory. The horticultural suitability report for Class "A" topsoil shall also contain the test results for the additional parameters listed in Article 2.1 (Paragraph A) of this Section. A minimum of 4 samples shall be taken for testing from evenly distributed areas at the import source.
    - a. Soil testing report for site soil to be compared to test for imported topsoil for structural, agricultural, and chemical suitability.  
Recommended testing to be done at one of the following locations:
      - 1) Wallace Laboratories 365 Coral Circle El Segundo, CA 90245, (310) 615-0116, [us.wlabs.com](http://us.wlabs.com)
      - 2) Soils and Plant Laboratory, Inc. 4741 East Hunter Avenue, Suite A Anaheim, CA 92807, (714) 282-8777, [www.soilandplantlaboratory.com](http://www.soilandplantlaboratory.com)
    - b. Comply with other testing requirements for import fill as specified in EARTHWORK Section.

### 1.6 EXISTING UTILITIES AND PLANT MATERIALS

- A. Refer to PLANTING AND LANDSCAPING Section for requirements.

## 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver fertilizing and conditioning materials to Project Site(s) in original unopened containers, bearing manufacturer's name, guaranteed chemical analysis, name, trade mark, and in conformance with State of California Food and Agricultural Code.
  - 1. Deliver bulk materials to Project Site(s) with certificate that includes name of manufacturer and quantity in addition to chemical analysis, trade mark, and conformance to State law.
  - 2. Deliver fertilizers and conditioners in waterproof bags showing weight, chemical analysis, and name of manufacturer.

## 1.8 WARRANTY

- A. Should soil deficiencies affecting plant health develop within the specified guarantee periods, correct such deficiencies to the satisfaction of Engineer at no additional cost to Department.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Topsoil: Designated as Class A (imported) and referred to in this Section as Class "A" topsoil. Engineer shall determine the suitability of topsoil prior to use. Transport topsoil from the source to its final position unless stockpiling is called for.
  - 1. At least 30 days before scheduled use, submit the proposed source of topsoil to Engineer for approval. Submit a written request for approval, accompanied by a written report from a soil testing laboratory registered by State of California for agricultural soil evaluation which states that the proposed source complies with Specifications and that the soil is agriculturally suitable. Contractor shall comply with recommendation of the soil testing laboratory and add additional soil amendments, necessary to achieve nutrient levels to support healthy plant growth, at no additional cost to Department.
  - 2. Class "A" topsoil shall be from a source outside the limits of Project selected by Contractor and in compliance with the requirements. A minimum of 3 tests are required. Engineer may make inspections and require tests as deemed necessary to determine that the material meets the requirements.

- a. Class "A" topsoil shall be of a uniform composition and structure, fertile and friable sandy loam garden soil character suitable for sustaining and promoting the growth of the plants; and be free of roots, clods and stones larger than 1-inch in greatest dimension, pockets of coarse sand, noxious weeds, sticks, brush and other litter and not be infested with nematodes or other undesirable insects and plant disease organisms. It shall be friable and have sufficient structure in order to give good tilth and aeration to the soil. Continuous, air-filled pore space content on a volume/volume basis shall be at least 15 percent on a dry weight basis. Class "A" topsoil shall meet the following additional requirements:
- 1) Soil shall be sandy loam or loam. The definition of soil texture shall be USDA classification scheme. Gravel over 1/4 inch in diameter shall be less than 10 percent by weight.
  - 2) Hydraulic conductivity rate shall not be less than 1 inch per hour nor more than 20 inches per hour when tested in conformance with USDA Handbook Number 60, Method 34b or other approved methods.
  - 3) Fertility: The range of essential elemental concentration in soil shall be as follows:

|            | Ammonium Bicarbonate/DTPA Extraction<br>parts per million (mg/kilogram) dry weight<br>basis |
|------------|---------------------------------------------------------------------------------------------|
|            |                                                                                             |
| phosphorus | 2 to 40                                                                                     |
| potassium  | 40 to 220                                                                                   |
| iron       | 2 to 35                                                                                     |
| manganese  | 0.3 to 6                                                                                    |
| zinc       | 0.6 to 8                                                                                    |
| copper     | 0.1 to 5                                                                                    |
| boron      | 0.2 to 1                                                                                    |
| magnesium  | 50 to 150                                                                                   |
| sodium     | 0 to 100                                                                                    |
| sulfur     | 25 to 500                                                                                   |
| molybdenum | 0.1 to 30                                                                                   |

- a) Class "A" topsoil may need to be amended and conditioned to optimize plant growth.
- 4) The soil pH range measured in the saturation extract (Method 21a, USDA Handbook Number 60) shall be in the range of 6.0 to 7.9.
- 5) The salinity range measured in the saturation extract (Method 3a, USDA Handbook Number 60) shall be 0.5 to 2.0 dS/m at 25 degrees centigrade. If calcium and sulfate ions both exceed 20 milliequivalents per liter in the saturation extract, the maximum salinity shall be 3.0 dS/m.
- 6) The maximum concentration of soluble chloride in the saturation extract (Method 3a, USDA Handbook Number 60) shall be 150 mg/l (parts per million).
- 7) Boron content shall be no greater than 1.0 mg/l (parts per million) as measured on the saturation extract (Method 3a Handbook Number 60).
- 8) Sodium Absorption Ratio (SAR) shall be 3 (Method 20b, USDA Handbook Number 60).
- 9) Available aluminum shall be less than 5 parts per million.
- 10) Sufficient soil organic matter shall be present to impart good physical soil properties but not be excessive to cause toxicity or cause excessive reduction in volume of soil due to decomposition of the organic matter.
- 11) Free calcium carbonate (limestone) shall not be present.

- 12) Heavy Metals: The maximum permissible elemental concentration in the soil shall not exceed the following concentrations:

|          | Ammonium Bicarbonate/DTPA Extraction parts per million (mg/kilogram) dry weight basis |
|----------|---------------------------------------------------------------------------------------|
| arsenic  | 1                                                                                     |
| cadmium  | 1                                                                                     |
| chromium | 10                                                                                    |
| cobalt   | 2                                                                                     |
| lead     | 30                                                                                    |
| mercury  | 1                                                                                     |
| nickel   | 5                                                                                     |
| selenium | 3                                                                                     |
| silver   | 0.5                                                                                   |
| vanadium | 3                                                                                     |

- a) If the soil pH is between 6 and 7, the maximum permissible elemental concentration shall be reduced to 50 percent. If the soil pH is less than 6.0, the maximum permissible elemental concentration shall be reduced 75 percent. No more than three metals shall be present at 50 percent more of the above values.
- 13) Germination and growth of monocots and dicots shall not be restricted more than 10 percent. Total petroleum hydrocarbons shall not exceed 50 mg/kg dry soil measured in conformance with the modified U.S. Environmental Protection Agency (US EPA) Method No. 8015. Total aromatic volatile organic hydrocarbons (benzene, toluene, xylene, and ethylbenzene) shall not exceed 0.5 mg/kg dry soil measured in conformance with US EPA Method No. 8020.
- 14) Correct iron deficiency where needed with Becker Underwood Sprint 138 Fe or other commercial FeEDDHA except use Sprint 330 Fe or commercial FeDTPA for palms.
- 15) Topsoil shall be blended with organic matter. No sewage sludge.
- 16) Class "A" topsoil shall meet other requirements as specified in EARTHWORK Section.

- b. Suppliers: Aguinaga Green (877) 626-8524, Whittier Fertilizer, (562) 699-3461, Cal Blend (800) 425-3631, EarthWorks Soil Amendments, Inc. (951) 782-0260
- B. Fertilizing and conditioning materials shall comply with the applicable requirements of State of California Food and Agricultural Code. Fertilizing materials shall be packaged, first grade, commercial quality products identified as to source, type of material, weight, and manufacturer's guaranteed analysis. Materials shall not contain toxic ingredients or fillers in quantities harmful to human, animal, or plant life.
  - 1. Fertilizing and Conditioning Materials (all other plant materials except palms): Submit a certificate of compliance stating that the materials meet Specifications.
    - a. Soil Sulfur: Guaranteed analysis of 99 percent sulfur (powder form).
    - b. Iron Sulfate: Guaranteed analysis of 20 percent iron derived from ferric and ferrous sulfate and 10 percent sulfur.
    - c. Gypsum: Hydrated calcium sulfate product containing 23 percent calcium and 18 percent sulfur with a guaranteed analysis of 84 percent calcium sulfate (powder form)
    - d. Commercial Fertilizer: Granular product having a chemical analysis of 12-12-12 unless otherwise specified on Drawings; free-flowing material delivered in unopened sacks. Do not use material which becomes caked or otherwise damaged.
    - e. Ammonium Sulfate: 21 percent ammoniacal nitrogen and 24 percent combined sulfur. (21-0-0)
    - f. Calcium Nitrate: 14.5 percent nitrate nitrogen, 1 percent ammoniacal nitrogen and 19 percent calcium
    - g. Calcium Ammonium: 13.5 percent nitrate nitrogen, 13.5, Nitrate: percent ammoniacal nitrogen and 8 percent calcium (27-0-0)
    - h. Triple Superphosphate: 45 percent P<sub>2</sub>O<sub>5</sub> and 15.5 percent calcium (0-45-0)
    - i. Potassium Sulfate: 50 percent potash and 18 percent combined sulfur (0-0-50)



- j. Ureaformaldehyde: 38 percent slow-release of methylene urea (38-0-0)
- k. 21-7-14: 9.9 percent nitrate nitrogen, 11.1 percent ammoniacal nitrogen, 7 percent P<sub>2</sub>O<sub>5</sub>, 14.0 percent K<sub>2</sub>O, 1.4 percent calcium, 5.1 percent combined sulfur
- l. Organic soil conditioner (no sewage sludge or biosolids):
  - 1) Humus material shall have an acid-soluble ash content of no less than 6 percent and no more than 20 percent. The organic matter content shall be at least 50 percent on a dry weight basis.
  - 2) The pH of the material shall be between 6 and 7.5.
  - 3) The salt content shall be less than 10 millimho/cm at 25 degrees C (ECe less than 10) in a saturated paste extract.
  - 4) Boron content of the saturated extract shall be less than 1.0 part per million.
  - 5) Silicon content (acid-insoluble ash) shall be less than 50 percent.
  - 6) Calcium carbonate shall not be present if to be applied on alkaline soil.
  - 7) Types of acceptable products are composts, manures, mushroom composts, straw, alfalfa, peat mosses etc. low in salts, low in heavy metals, free from weed seeds, free of pathogens and other deleterious materials.
  - 8) Composted wood products are conditionally acceptable (stable humus must be present). Wood based products are not acceptable which are based on red wood or cedar.
  - 9) Sludge-based materials are not acceptable.
  - 10) Carbon to nitrogen ratio shall be less than 25:1.
  - 11) Compost shall be aerobic without malodorous presence of decomposition products.
  - 12) Maximum particle size shall be 0.5 inch, 80 percent or more shall pass a No. 4 screen.

- 13) Maximum total permissible pollutant concentrations in amendment in parts per million on a dry weight basis:

|          |     |        |     |            |     |         |     |
|----------|-----|--------|-----|------------|-----|---------|-----|
| arsenic  | 20  | copper | 150 | selenium   | 30  | cadmium | 15  |
| lead     | 100 | silver | 10  | chromium   | 100 | mercury | 10  |
| vanadium | 200 | cobalt | 50  | molybdenum | 20  | zinc    | 200 |
| nickel   | 100 |        |     |            |     |         |     |

m. Organic Fertilizers:

|                             |                |
|-----------------------------|----------------|
| Blood meal                  | Feather meal   |
| Bone meal                   | Rock phosphate |
| Fish emulsion               | Alfalfa meal   |
| K-Mag (sul-po-mag) (0-0-22) |                |

- C. Backfill Soil: Rates below are for bidding purposes only. Actual rates shall be in conformance with soils laboratory recommendations based on topsoil testing results:

1. General Planting:

- a. 90 percent sandy textured Class "A" topsoil.
- b. Amend topsoil to a depth of 24 inches at a uniform rate per 1,000 square feet of planting area with the following:
  - 1) 12 cubic yards of organic soil amendment, sufficient for 3 percent to 6 percent soil organic matter on a dry weight basis
  - 2) 40 pounds of soil sulfur
  - 3) 60 pounds of a 12-12-12 commercial fertilizer
  - 4) 200 pounds gypsum
2. To ensure conformance to this Section, provide soil sampling testing of backfill soil when requested by Engineer. Testing cost of these samples shall be at sole cost and expense of Contractor.

## PART 3 - EXECUTION

### 3.1 VERIFICATION OF DIMENSIONS AND QUANTITIES

- A. Verify scaled dimensions and quantities prior to start of Work of this Section.
- B. Notify Engineer of discrepancies between Drawings and Specifications and actual Project Site(s) conditions which would affect the execution of the landscaping Work. Do not Work in areas where discrepancies occur until instructed by Engineer.

### 3.2 GRADING AND SOIL PREPARATION

- A. Initial rough grading shall be as specified in EARTHWORK Section.
- B. Earth and topsoil placement shall include removing existing soil as required to allow for backfilling, spreading, densifying, cultivating, raking, fertilizing and conditioning of topsoil to within 1/10 of a foot of the finish grade.
- C. Test existing soil in designated planting areas to determine horticultural suitability. The number of soil samples taken and locations of the samples shall be as directed by Engineer. A minimum of 1 sample shall be taken per 10,000 square feet. Testing cost of these samples shall be at sole cost and expense of Contractor.
- D. For bidding purposes, assume the top 24 inches of existing soil in planting areas shall be removed and disposed of off Department property. Replace with Class "A" topsoil to achieve finish grade in accordance with Drawings. Place topsoil in 8 inch maximum lifts. Topsoil shall be amended in conformance with soil testing report and approved by Engineer prior to importing on Project Site(s). Actual amount of existing soil to be removed and replaced or the amount and type of soil conditioning shall be determined by the soil laboratory recommendations based on the soil samples tested. If the soil testing report deems the soil unsuitable to sustain plant growth, a minimum of 24 inches of existing soil shall be removed and replaced in the planting areas.
- E. Sub-soil Preparation: After excavation and prior to backfilling, test sub-soil for compatibility with the Class "A" import topsoil. Amend sub-soil in conformance with soil laboratory recommendations. After amending sub-soil, add 2 inches of pre-amended Class "A" topsoil and rototill into existing sub-soil to a depth of 4 inches to avoid a sharp interface between the sub-soil and topsoil.

- F. After sub-soil preparation, backfill planting areas with approved Class "A" topsoil 24 inches deep unless otherwise indicated on Drawings.
- G. In areas where the existing topsoil is approved for use by Engineer, scarify and cultivate topsoil in planting areas to a finely divided condition to a minimum depth of 8 inches below finish grade. Remove during preliminary grading operation stones over 1 inch in greatest dimension. Condition the soil in conformance with the recommendations given in the soil laboratory reports. After the existing topsoil has been amended, the soil shall be retested to ensure compliance with the soil laboratory recommendations. The number of soil samples taken and locations of the samples shall be directed by Engineer. A minimum of 1 sample shall be taken per 10,000 square feet. Testing cost of these samples shall be at sole cost and expense of Contractor.
- H. Do not Work topsoil when it is so wet or dry as to cause excessive compaction or forming of hard clods or dust.
- I. Finish Grading:
  - 1. Make finish grade smooth, uniform, and free of abrupt grade changes and depressions to ensure surface drainage.
  - 2. Finish grade below adjacent paving, curbs, or headers shall be 2 inches in shrub or ground cover areas and 1 inch in lawn areas unless otherwise shown on Drawings.
  - 3. Finished surfaces shall be clean of litter and debris prior to planting.
- J. Trenching when done after completion of soil conditioning or finish grading shall be backfilled so that the specified topsoil thickness in the trench is restored.

### 3.3 FIELD QUALITY CONTROL

#### A. Tests and Inspections:

1. Notify Engineer at least 48 hours prior to time of the following required inspections:
  - a. Soil sampling for horticultural suitability of the proposed topsoil at the source site.
  - b. Soil sampling of the approved topsoil after it has been placed on Project location.
2. Refer to PLANTING AND LANDSCAPING Section for additional requirements.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Warning tape to mark the location of electrical conduits, water lines, sewer lines, storm drains, gas lines, telephone lines, and other conduits and lines

### 1.2 RELATED SECTIONS

- A. Section 31 23 33 - Trenching and Backfilling
- B. Section 33 40 01 - Storm Drainage

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for Work of this Section shall be paid under each corresponding bid item of Bid Proposal Line Items that requires underground utility warning tape.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Warning tape shall be acid, alkaline, and corrosion resistant detectable marking tape Terra Tape Diamond Detectable as manufactured by Reef Industries, Incorporated, (800) 231-6074 or equivalent product as manufactured by T. Christy Enterprises, <https://tchristy.com/>.
- B. Warning tape shall be 6 inches wide by 5 to 6 mils thick. The tape shall be made of 1 layer of metalized foil laminated between 2 layers of inert plastic film.
- C. Tape shall bear a continuous printed message to conform to the utility within the trench the tape is being installed in. The message shall be as indicated on Drawings or as may be the standard from the manufacturer for that utility.
- D. Tape color and legend combination shall be in conformance with American Public Works Association (APWA) color coding or local requirements. Color codes are as follows:
  - 1. Red: Electric power, distribution, and transmission installations or municipal electric installations.

2. Yellow: Gas distribution, oil distribution, petroleum, or installations containing dangerous materials, products or steam.
3. Orange: Telephone, telegraph installations, police and fire communications installations, and cable television.
4. Blue: Water installations and slurry pipelines.
5. Green: Sewer and storm drain installations.
6. Purple: Reclaimed water.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Where crushed miscellaneous base is used in the pavement structural section, install tape a minimum of 12 inches below bottom of the base material parallel and directly above the buried line unless indicated to be deeper on Drawings.
- B. Where cement-sand slurry is used as backfill directly under asphalt concrete, place tape on top of slurry material parallel to and directly above the buried line unless indicated to be deeper on Drawings.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Domestic water distribution systems
- B. Fire suppression water service
- C. Fire suppression water service shall be in conformance with City of Los Angeles Department of Water and Power (LADWP) Water Distribution Division Design Standards and Installation Requirements (DSIR) for Contractors available at: <https://www.ladwp.com/engineering-standards-manual-and-standard-specifications>

### 1.2 RELATED SECTIONS

- A. Section 02 00 01 - Basic Site Materials and Methods
- B. Section 09 90 01 - Painting for Exterior Improvements
- C. Section 31 23 33 - Trenching and Backfilling
- D. Section 31 50 01 - Excavation Safety Requirements
- E. Section 32 12 17 - Asphalt Concrete Paving
- F. Section 32 13 14 - Concrete for Exterior Improvements
- G. Section 33 05 97.23 - Underground Utility Warning Tape

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for Work of this Section shall be paid under the corresponding bid items of Bid Proposal Line Items.

### 1.4 REFERENCES

- A. ASME B16.1 - Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250.
- B. ASTM A53/A53M - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
- C. ASTM B88 - Standard Specification for Seamless Copper Water Tube.
- D. AWWA C104/A21.4 - Cement-Mortar Lining for Ductile-Iron Pipe and Fittings.



- E. AWWA C110/A21.10 - Ductile-Iron and Gray-Iron Fittings.
- F. AWWA C111/A21.11 - Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.
- G. AWWA C115/A21.15 - Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges.
- H. AWWA C151/A21.51 - Ductile-Iron Pipe, Centrifugally Cast.
- I. AWWA C511 - Reduced-Pressure Principle Backflow Prevention Assembly.
- J. AWWA C600 - Installation of Ductile-Iron Mains and Their Appurtenances.
- K. AWWA C651 - Disinfecting Water Mains.
- L. Reference Specifications (RS):
  - Section 209 - Pressure Pipe
    - Subsection 209-1 - Iron Pipe and Fittings
  - Section 306 - Open Trench Conduit Construction
- M. Standard Plan - City of Los Angeles Department of Public Works:
  - S-251-1 - Pipe Laying in Trenches

## 1.5 SUBMITTALS

- A. Submit to Engineer the following:
  - 1. Complete materials list including pipe, position indicators, backflow preventers, valves, valve boxes, fittings, thrust blocks, anchor devices, joints, fire hydrants, and appurtenances.
  - 2. Copy of certified statements from the pipe and fitting manufacturers that the pipes and fittings are cement lined and satisfy the referenced standards.
  - 3. Copy of the disinfection test reports.
  - 4. Proposed schedule detailing the line segments to be tested, the methods of isolating the testing from the rest of the system, the schematic diagram of the system for pressurizing monitoring techniques showing the hydrostatic test pump, the safety relief valves, and any other equipment used for the test.

5. A test report of pressure tests on piping and equipment shall be forwarded in duplicate to Engineer. This report shall show date of test, lines tested, length of time the test pressure was held, pressure drop or rise, volume leakage, and extent of venting or repressuring.
6. As-built drawings showing the coordinates and elevations of underground tees, bends, crosses, valves, plugs, and caps.
7. Backflow preventer assemblies shall be tested in conformance with County of Los Angeles Department of Public Health requirements. Backflow Prevention Device Field Testing and Maintenance Report shall be forwarded in duplicate to Engineer. Electronic file of the report can be found at: <http://www.publichealth.lacounty.gov/eh/docs/permit/backflow-prevention-device-testing-monitoring.pdf>.

## 1.6 DELIVERY, STORAGE, AND HANDLING

### A. Pipes:

1. Store pipe in stock piles built on a flat base.
2. Keep rubber gaskets from excessive heat and free from oil and grease.

### B. Store fittings, hydrants, and valves on wooden platforms above ground.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Materials shall be approved by City of Los Angeles Department of Building and Safety, City of Los Angeles Fire Department, Factory Mutual (FM) approved, and UL listed.
- B. Pipes, pipe fittings or fixtures, solder or flux intended to convey or dispense water for human consumption shall be lead-free in conformance with State of California Health and Safety Code, Section 116875 and Section 94.604.10 of City of Los Angeles Plumbing Code. Pipe, pipe fittings or fixtures, solder or flux shall be certified by a testing laboratory recognized by City of Los Angeles Department of Building and Safety (LADBS) for testing in conformance with the referenced Code Section.

## 2.2 PIPING

### A. Ductile iron shall be in conformance with RS Subsection 209-1.1.

1. Pipe 4 inch in diameter and larger shall be Class 52 in conformance with AWWA C151/A21.51, double cement mortar lined in conformance with AWWA C104/A21.4.
2. Pipe ends shall be factory machined or, if field cut, shall be beveled as required.
3. Flanged pipe shall be Class 53 in conformance with AWWA C115/A21.15 unless otherwise called for on Drawings.
4. Furnish pipe in standard lengths.
5. Lining and coating of pipe and fittings shall be in conformance with RS Table 209-1.1.2.
6. Joints for ductile iron pipes and fittings shall be in conformance with RS Table 209-1.1.2.
7. Pipe shall have the letters "U.L." or "FM" marking in conformance with AWWA C151/A21.51 Section 51-11.

### B. Copper pipe shall be hard pipe in conformance with ASTM B88.

1. Pipes 3 inch in diameter and smaller shall be Type "K".

### C. Fittings:

1. Fittings 1/2 inch to 3 inch in diameter shall be wrought copper or cast red bronze, close grained, and nonporous. Cast fittings permitted only in sizes and type not available in wrought fittings.
2. Fittings 4 inch in diameter and larger shall be ductile-iron in conformance with AWWA C110/A21.10 and double cement mortar lined in conformance with AWWA C104/A21.4.
  - a. Mechanical joints: Class 350
  - b. Ductile iron pipe flanged fittings shall be Class 125 with 250 pounds per square inch (psi) rated pressure. Fittings shall be in conformance with AWWA C104/A21.4. These flanges match those of the Class 125 flanges shown in ASME B16.1 and shall be joined with valve, hydrants, or other fittings having Class 125, ASME B16.1 flanges.

## D. Joints:

1. Underground Installation: Pipes 4 inch in diameter and larger shall have push-on joints, unless indicated otherwise on Drawings.
2. Above Ground Installation: Pipe fittings and joints 4 inch in diameter and larger shall be flanged in conformance with AWWA C110/A21.10.
3. Provide restraining glands at change in directions and where mechanical joints are used or as indicated on Drawings.
4. Restraining glands for mechanical joints shall be Megalug Series 1100 and Megalug Bell Restraint Harness Series 1700 for push-on joints, as manufactured by EBAA Iron, Inc., (800) 433-1716.
5. Flange adaptor shall be Megaflange Restrained Flange Adapter Series 2100 with bolts, nuts, and gasket, as manufactured by EBAA Iron, Inc.
6. Flexible expansion joints shall be double ball flanged, Flex-Tend, as manufactured by EBAA Iron, Inc.
7. Nuts and bolts shall be coated with Trenton wax-tape primer available from Farwest Corrosion Control Company, (888) 532-7937.

## 2.3 VALVES AND APPURTENANCES

- A. Valves shall be right hand turn in closing direction.
- B. Underground valves, 6-inches to 12-inches, shall be NRS, resilient wedge gate valves, Model F-6100, as manufactured by Clow Valve Company, (888) 889-2411. Provide position indicator as indicated on Drawings.
- C. Above ground valves for fire suppression water service system shall be OS and Y, resilient wedge gate valves, Model F- 6136, as manufactured by Clow Valve Company.
- D. Above ground valves for domestic water system shall be NRS, flanged, resilient wedge gate valves, Model F-6102, as manufactured by Clow Valve Company.
- E. Backflow preventer shall conform to AWWA C511, and shall be reduced pressure type, Wilkins Model 375XL for 1/2 inch to 2 inch and Wilkins Model 375 for 2 1/2 inch to 10 inch. The 10 inch model shall have a maximum head loss of 12.00 psi at 2,300 gallons per minute (gpm).

- F. Valve box for valve with position indicator shall be cast iron, complete with top, extension, bottom, and drop lid with 1/2-inch skirt, Series 6855, Item 662A, as manufactured by Tyler Pipe, (866) 527-8471.
- G. Valve box for fire hydrant control valve shall be cast iron valve box Model A-3009 and valve box cap shall be Model A-29600, as manufactured by EJ, <https://www.ejco.com/global>.
- H. Fire hydrant break off spool shall be 6-inch by 6-inch, flanged. Spool shall be delivered without bolt holes in one flange. Bolt holes shall be drilled in the field to facilitate orientation of fire hydrant outlets as indicated on Drawings.
- I. Check valves shall be swing type, bronze mounted with bronze faced disc, Kennedy Valve Figure No. 1126.
- J. Fire department inlet connections shall be 2 way straight (back outlet) with double clappers, 4 by 2-1/2 inch by 2-1/2 inch female hose inlets, brass pin lug swivel, cast brass body with no lettering, Potter-Roemer Figure No. 5721. Provide each inlet with brass pin lug plug with attached chain, Potter-Roemer Figure No. 5941.
- K. Water meters 2 inches to 10 inches shall be Neptune High Performance Turbine, direct reading in cubic feet.

## 2.4 FIRE HYDRANTS

- A. Fire hydrants shall be 2-1/2 inch by 4 inch outlets with caps and chains Model 850, as manufactured by Clow Valve Company. Provide 1-3/4 inch pentagonal nuts on stems and protective caps.
- B. Fire hydrant extension shall be ductile iron flanged extension, 6 inch diameter, cement lined and asphalt coated, without break-off groove, complete with 6 sets of bolts and nuts.

## 2.5 MISCELLANEOUS MATERIALS

- A. Solid plug shall be ductile iron and mechanical joint, Series 1261, manufactured by NAPPCO.
- B. Adapter shall be ductile iron, NAPPCO Series 1255.

## 2.6 POSITION INDICATORS

- A. Valve position indicators shall be Trumbull planetary gear design sealed with 2 neoprene O-rings installed in a valve box at ground level as manufactured by Trumbull Industries, Inc., (800) 677-1799.

## 2.7 CORROSION CONTROL

- A. Outside surfaces of underground pipe and fittings shall be corrosion protected with 8 mil thick polyethylene tube encasement.
- B. Paint the above ground water system in conformance with PAINTING FOR EXTERIOR IMPROVEMENTS Section with color as follows:
  - 1. Fire suppression water distribution: Fire Engine Red
  - 2. Domestic water distribution: OSHA Blue
- C. Apply modified aluminum epoxy mastic to underground metals not otherwise protected against corrosion.

## 2.8 RUBBER GASKETS

- A. Furnish rubber gaskets and gasket lubricant with rubber gasket joint pipe in sufficient quantity for the amount of pipe ordered.
- B. Rubber gaskets for flanged joints shall be full face 1/8 inch thick neoprene rubber and in conformance with AWWA C111/A21.11.

## 2.9 BEDDING MATERIALS

- A. Pipe bedding shall be Case I bedding in accordance with Standard Plan S-251-1 with a Type A (sand or gravel) bedding material unless shown otherwise on Drawings.

## 2.10 MASONRY BLOCK SUPPORTS

- A. Masonry block supports for services shall be as detailed on Drawings.

## 2.11 WELDED STEEL PIPE CASING

- A. Welded steel pipe casing shall be in conformance with ASTM A53/A53M, Grade B, standard weight, minimum yield strength of 36,000 psi with butt weld joints. Pipe thickness shall be capable of withstanding a Cooper E-80 railroad loading. Coat the exterior surface of the pipe casing with a modified aluminum epoxy mastic.

## PART 3 - EXECUTION

## 3.1 INSTALLATION

- A. Construct water distribution system after grading and compacting of the surrounding areas to the top of the rough grade elevation has been completed.
- B. Install in conformance with the requirements of City of Los Angeles Department of Building and Safety, City of Los Angeles Fire Department, AWWA C600, and RS Subsection 306-8.2. The existing water system shall be maintained in service until new service has been activated, except for making connections. Coordinate any fire protection system shutdowns with City of Los Angeles Fire Department, Department's insurance agent – FM Global, Department Construction and Maintenance Division, Port Police, affected tenants, and Engineer. Shut downs shall be limited to the minimal time required to complete connections to existing systems.
- C. Coordinate installation of backflow preventers with the installation of meters by City of Los Angeles Department of Water and Power (LADWP).
- D. Protect excavations and trenches against caving-in by shoring or otherwise in conformance with EXCAVATION SAFETY REQUIREMENTS Section.
- E. Thrust Blocks:
  - 1. Thrust blocks, restraining, and anchorage devices that change in direction shall be approved by Engineer for size and detail wherever such details are not shown on Drawings.
  - 2. Perform concrete Work in accordance with the details shown on Drawings or approved shop drawings and conform with the requirements of CONCRETE FOR EXTERIOR IMPROVEMENTS Section.
- F. Backfilling shall be in conformance with TRENCHING AND BACKFILLING Section.
- G. Depth of Cover:
  - 1. Where no profile information is shown on Drawings, the minimum cover on pipes 16 inches in diameter or smaller shall be 4 feet measured from top of pipe to finished grade. In the event of local interference or adjustments to meet existing pipe elevations, permission may be granted by Engineer to drop below these elevations to avoid the obstruction.

2. Realigning piping (to avoid localized interference and to meet grade of existing piping, where the resultant depth of cover in localized areas does not exceed 24 inches below the specified depth), shall be done at Contractor's sole cost and expense. Deflection in piping at any one joint resulting from grade change shall not exceed recommendation of pipe manufacturer.
- H. Install underground utility warning tape as specified in UNDERGROUND UTILITY WARNING TAPE Section.
- I. Paint in conformance with PAINTING FOR EXTERIOR IMPROVEMENTS Section.
  1. Paint fire hydrants safety yellow.
- J. Furnish to Engineer an accurate table of each buried valve showing manufacturer's name, model number, size, stations, elevations, and number of turns from fully opened to totally closed position.

### 3.2 CLEANING AND DISINFECTING

- A. Prior to installation, clean piping interior by wire brush or other means to remove scale, sand, cutting chips, and the like. Remove loose material by compressed air. After construction and prior to testing, flush piping with clean water to remove construction debris.
- B. Disinfect that portion of the water distribution systems installed in Project, including any existing waterlines, if necessary, at either end of the system back to the first available valves. Conform to AWWA C651 for disinfecting water mains. Furnish and install and remove upon completion of testing, blind flanges, valves, pressure connections, and chlorination inlet point(s) required to test and chlorinate the water distribution system. Arrange for sampling and testing of the new water system with a certified testing laboratory and submit test results to Engineer in compliance with AWWA C651.

### 3.3 PIPE CASING INSTALLATION

- A. Design and construct supports, insulators, and centering devices for the carrier pipe so that no railroad loadings are transmitted to the water pipe.



### 3.4 FIELD QUALITY CONTROL

#### A. Tests and Inspections:

##### 1. General:

- a. Prior to backfilling waterline trenches, test new sections of the water distribution system in conformance with RS Subsection 306-7.8.2.1 (g) and the requirements of City of Los Angeles Plumbing Code, except that the water lines shall be hydrostatically pressure tested at 200 pounds per square inch gage (psig), in the presence of City of Los Angeles Plumbing Inspector and Engineer.
2. Reduced pressure backflow devices shall not be pressure tested.
3. Maximum allowable leakage shall be in conformance with RS Subsection 306-8.9.2.3.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Sanitary sewer system

### 1.2 RELATED SECTIONS

- A. Section 31 00 00 - Earthwork
- B. Section 31 23 33 - Trenching and Backfilling
- C. Section 33 05 97.23 - Underground Utility Warning Tape

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:

- 1. Payment for Work of this Section shall be paid under the Miscellaneous Utility Systems Allowance bid item of Bid Proposal Line Items.

### 1.4 REFERENCES

- A. City of Los Angeles Department of Public Works Standard Plan:

- S-251-1 - Pipe Laying in Trenches

- B. Reference Specifications (RS):

- Section 207 - Gravity Pipe

- Subsection 207-8 - Vitrified Clay Pipe (VCP)

- Section 209 - Pressure Pipe

- Subsection 209-1 - Iron Pipe and Fittings

- Section 306 - Open Trench Conduit Construction

- Subsection 306-1 - General

- Subsection 306-7 - Prefabricated Gravity Pipe

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Sanitary sewer shall be cast-iron pipe in conformance with RS Subsection 209-1.
- B. Sanitary sewer shall be vitrified clay pipe in conformance with RS Subsection 207-8.

### 2.2 BEDDING MATERIALS

- A. Bedding materials shall be in accordance with Standard Plan S-251-1.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Trench excavation, bedding, pipe installation, backfill, densification, and testing shall be in accordance with Standard Plan S-251-1, Case I bedding and RS Subsection 306-1, unless shown otherwise on Drawings.
- B. Backfill shall be compacted to 90 percent relative density except for the top 12 inches of backfill which shall be compacted to 95 percent relative density.
- C. Install underground utility warning tape as specified in UNDERGROUND UTILITY WARNING TAPE Section.

### 3.2 FIELD QUALITY CONTROL

- A. Tests and Inspections:
  - 1. Obtain inspection by City of Los Angeles Department of Building and Safety and Engineer of installations prior to concealment and completion of Work.
  - 2. The sanitary sewer shall be pressure tested in conformance with RS Subsection 306-7.8.
  - 3. Prior to start of Work, Contractor shall conduct a closed circuit television (CCTV) inspection of the existing sewer or structure where connections are to be made to document the existing condition.

4. Contractor shall also perform a post-installation CCTV inspection of the sewer after backfill of the trench and before completion of trench resurfacing, to determine if Work was completed in conformance with Contract Documents.
5. CCTV equipment shall include television cameras, a television monitor, cables, power sources, and other equipment. Focal distance shall be adjustable through a range from 6 inches to infinity. The remote-reading footage counter shall be accurate to less than one percent error over the length of the particular section of pipeline being inspected. This distance shall be measured from the centerline of the upstream maintenance hole to the centerline of the downstream maintenance hole. The camera and television monitor shall produce a minimum 350 lines per inch resolution. The inspection shall be performed using a remote-focus stationary lens camera, a rotating-lens camera or a pan-and-tilt camera, which shall be mounted on a skid, floatable raft system, or transporter based on the conditions of the pipeline to be televised.
6. The pipeline shall be CCTV inspected during optimum low-flow level conditions. CCTV inspection camera shall be moved through the pipeline in a downstream direction at a uniform rate no greater than 30 feet per minute, stopping when necessary to ensure proper documentation of the sewer's condition.
7. Documentation shall consist of a colored digital recording, log sheets, and written report detailing the post installation condition of the pipeline and lateral connections or openings. The report and digital recording shall note the time and date of CCTV inspection, street name or sewer line identification, upstream and downstream maintenance hole stations, direction of view, direction of flow, pipe size, pipe material, and footage station or counter.
8. Video inspections shall be recorded on a digital storage device. Original digital recordings, log sheets, and reports shall be submitted to Engineer for review and acceptance of Work, and shall become property of Harbor Department.

END OF SECTION

## PART 1 - GENERAL

### 1.1 SECTION INCLUDES

- A. Storm drainage materials and accessories
- B. Bedding for pipes

### 1.2 RELATED SECTIONS

- A. Section 31 23 19 - Dewatering
- B. Section 31 23 33 - Trenching and Backfilling
- C. Section 31 50 01 - Excavation Safety Requirements
- D. Section 32 13 14 - Concrete for Exterior Improvements
- E. Section 33 05 97.23 - Underground Utility Warning Tape

### 1.3 PRICE AND PAYMENT PROCEDURES

- A. Measurement and Payment:
  - 1. Payment for Work of this Section shall be paid under the Miscellaneous Utility Systems Systems Allowance bid item of Bid Proposal Line Items.

### 1.4 REFERENCES

- A. Reference Specifications (RS):

Section 207 - Gravity Pipe

Subsection 207-2 - Reinforced Concrete Pipe (RCP)

Subsection 207-18 - Annular, High-Density Polyethylene Pipe with Smooth Interior, Corrugated Exterior, with Bell and Spigot Joints (Type S)

Section 208 - Pipe Joint Types and Materials

Subsection 208-3 - Gaskets For Concrete Pipe

Section 217 - Bedding and Backfill Materials

Subsection 217-1 - Bedding Material

Section 306 - Open Trench Conduit Construction

Subsection 306-6 - Bedding

B. Standard Plan – City of Los Angeles Department of Public Works, Bureau of Engineering:

S-111-0 - House Connection Remodeling

S-241-0 - Reinforced Concrete Pipe

S-251-1 - Pipe Laying in Trenches

S-253-0 - Supports for Storm Drain and Sewer Pipes Across Trenches

S-255-1 - Blanket Protection for Pipes

S-281-3 - Maintenance Hole Frame and Cover 24-Inch

S-312-1 - Pavement Remodeling at Catch Basins

S-320-0 - Sidewalk Outlet Structure

S-322-2 - Sidewalk Culvert with Steel Plate Top

S-331-1 - Monolithic Connection

S-341-0 - Catch Basin Reinforcement

S-349-2 - Catch Basin Protection Bar and Support

S-372-1 - Transition Structure "C"

S-381-0 - Manhole "EZ"

S-791-1 - Advance Construction Notice Signs

C. Standard Plan – City of Los Angeles Harbor Department:

H-101-01 - Catch Basin – Grate – Frame

D. Standard Plans for Public Works Construction (SPPWC):

SPPWC 300-3 - Curb Opening Catch Basin

SPPWC 302-3 - Curb Opening Catch Basin with Grating(s)

SPPWC 303-3 - Curbside Grating Catch Basin

SPPWC 310-3 - Catch Basin Face Plate Assembly and Protection Bar

SPPWC 312-4 - Catch Basin Manhole Frame and Cover

SPPWC 313-3 - Local Depressions at Catch Basins

SPPWC 320-2 - Manhole Pipe-to-Pipe Main Line ID=36" (900 mm) or Larger

SPPWC 321-2 - Manhole Pipe-to-Pipe (One or Both Main Line ID's 33" (825mm) or Smaller)

SPPWC 322-2 - Manhole Pipe-to-Pipe (Large Side Inlet)

SPPWC 324-2 - Manhole Shaft with Eccentric Reducer

SPPWC 331-3 - Junction Structure - Pipe to Pipe Inlet ID = 24" (600 mm) or OD > 1/2 Main Line ID

SPPWC 332-2 - Junction Structure - Pipe to Pipe ID = 24" (600 mm)

SPPWC 333-2 - Junction Structure - Pipe to RCB

SPPWC 335-2 - Pipe Connections to Existing Storm Drains

SPPWC 340-2 - Transition Structure Pipe to Pipe

SPPWC 342-2 - Transition Structure RCB to Pipe

SPPWC 380-4 - Concrete Collar for RCB 12" (300 mm) through 72" (1800 mm)

SPPWC 630-4 - 24" (610 mm) Manhole Frame and Cover

SPPWC 635-3 - Steel Step

SPPWC 636-2 - Polypropylene Plastic Step

## 1.5 SUBMITTALS

- A. One-cubic foot samples of proposed bedding materials for approval prior to use.
- B. Pipeline layout diagram in conformance with RS Subsection 207-2.1.
- C. Shop drawings and calculations for storm drain castings and fabrications signed by a civil engineer registered in State of California.
- D. Detail for concrete pipe joint in conformance with RS Subsection 207-2.5.
- E. Material manufacturer's certificate of compliance with Specifications.

- F. Shop drawings indicating layout of trench drain system with connections and accessories.
- G. Original digital recordings of closed circuit television inspections, log sheets, and reports for review and acceptance of Work, which shall become property of Department.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Cast-in-place concrete materials shall conform to the applicable requirements of CONCRETE FOR EXTERIOR IMPROVEMENTS Section and as specified in this Section. Cement shall be Type II.
- B. Bedding shall conform to RS Subsection 217-1, Standard Plan S-251-1, and as called for on Drawings.
- C. Reinforced concrete pipe shall conform to RS Subsection 207-2.
- D. Joints shall be rubber-gasketed type conforming to RS Subsection 208-3.
- E. Upon encountering groundwater in trench excavation zone, refer to Drawings and TRENCHING AND BACKFILLING Section for additional trench subgrade stabilization requirements.
- F. High density polyethylene (HDPE) pipe shall be in conformance with RS Subsection 207-18. Perforation of HDPE pipe, where required on Drawings, shall be in conformance with American Association of State Highway and Transportation Officials (AASHTO) Class II Perforation.
- G. Catch basin screens and filters shall be as noted on Drawings.
- H. Materials shall be from a City of Los Angeles Department of Public Works Bureau of Engineering pre-approved manufacturer or supplier.
- I. Sidewalk culverts shall be in accordance with Standard Plan S-322-2.
- J. Geotextile shall be Mirafi 140N Filter Fabric.

### 2.2 FABRICATIONS AND CASTINGS

- A. Grates shall conform with Department Standard Plan H-101-01, included in Appendix "H" of Specifications, incorporating any changes that may be shown on Drawings. Design grates for 125,000 pounds wheel loading.



- B. Maintenance hole covers shall conform with Standard Plan S-281-3, with "L.A.H.D." and "SD" lettering, except that covers shall be adequate for 125,000 pounds wheel loading.

## 2.3 TRENCH DRAIN

- A. Cast-in-place trench drain forms, rails, grates, and frames shall be Trench Former XHD Series pre-manufactured forming system, manufactured by ABT, Incorporated (800) 438-6057 [www.ABTDrains.com](http://www.ABTDrains.com).
- B. Forms shall provide dimensional accuracies within 1/16 inch. Forms shall establish coplanar relationship between opposing trench rails for precise grate width dimension. Forms shall be sloped as required by Drawings.
- C. Grates shall be locked down to steel angle frame with non-rigid retainers on the 4 corners.
- D. Grate top shall be flush with tops of support rails and concrete trench drain walls.

## PART 3 - EXECUTION

### 3.1 EXCAVATION AND BACKFILL

- A. Excavation and backfill for drainage structures shall be in conformance with TRENCHING AND BACKFILLING Section.
- B. Perform trench excavation to the depths shown on Drawings or as necessary for installation. Install pipes and other precast materials without dewatering (in the wet). Groundwater can be anticipated at plus 3 to plus 4 feet elevation in backland areas and at or near tidal elevation adjacent to the rock dikes. If Contractor chooses to dewater, it shall be at no additional cost to Department. Refer to DEWATERING Section for requirements.

### 3.2 INSTALLATION

- A. Construct and install underground structures in conformance with RS Section 306.
- B. Bedding Material and Drainage Structure Bases:
  - 1. Bedding shall conform to RS Subsection 306-6 and Standard Plan S-251-1. Case shall be as shown on Drawings.
  - 2. Compact bedding material to 95 percent relative density.

## C. Structures:

1. Place and cure cast-in-place concrete structures in conformance with CONCRETE FOR EXTERIOR IMPROVEMENTS Section.

## D. Trench drain construction shall be as shown on approved manufacturer's details and Drawings. A minimum of 6 inches of concrete shall be placed around the forms. Trench drain walls and floor shall be a monolithic concrete pour. No cold joints, keyways, or water stops shall be constructed between 6 inches below concrete floor and walls.

## E. Metal Castings and Grates:

1. Set frames, grates, and covers to the finish elevations shown on Drawings.

## F. Install underground utility warning tape as specified in UNDERGROUND UTILITY WARNING TAPE Section.

## 3.3 FIELD QUALITY CONTROL

## A. Tests and Inspections:

1. Department Testing Laboratory (Test Lab) shall perform bedding compaction tests 1 time at no expense to Contractor. Retests because of failed tests shall be performed by Department and at sole cost and expense of Contractor. Allow time for tests to be run and results returned.
2. Prior to start of Work, Contractor shall conduct a closed circuit television (CCTV) inspection of the existing storm drain or structure where connections are to be made to document the existing condition.
3. Contractor shall also perform a post-installation CCTV inspection of the storm drain after backfill of the trench and before completion of trench resurfacing, to determine if Work was completed in conformance with Contract Documents.

4. CCTV equipment shall include television cameras, a television monitor, cables, power sources, and other equipment. Focal distance shall be adjustable through a range from 6 inches to infinity. The remote-reading footage counter shall be accurate to less than 1 percent error over the length of the particular section pipeline being inspected. This distance shall be measured from the centerline of the upstream maintenance hole to the centerline of the downstream maintenance hole. The camera and television monitor shall produce a minimum 350 lines per inch resolution. The inspection shall be performed using a remote-focus stationary lens camera, a rotating-lens camera or a pan-and-tilt camera, which shall be mounted on a skid, floatable raft system, or transporter based on the conditions of the pipeline to be televised.
5. The pipeline shall be CCTV inspected during optimum low-flow level conditions. CCTV inspection camera shall be moved through the pipeline in a downstream direction at a uniform rate no greater than 30 feet per minute, stopping when necessary to ensure proper documentation of the storm drain's condition.
6. Documentation shall consist of a colored digital recording, log sheets, and written report detailing the post installation condition of the pipeline and lateral connections or openings. The report and digital recording shall note the time and date of CCTV inspection, street name or storm drain line identification, upstream and downstream maintenance hole stations, direction of view, direction of flow, pipe size, pipe material, and footage station or counter.
7. Record video inspections on a digital storage device.

END OF SECTION

## **APPENDIX "A"**

# **PROJECT LABOR AGREEMENT (PLA) AND POLA CONSTRUCTION CAREERS POLICY**

# CITY OF LOS ANGELES

Harbor Department



2017-2027



## Project Labor Agreement (PLA)

*WITH*

LOS ANGELES/ORANGE COUNTIES  
BUILDING AND CONSTRUCTION TRADES COUNCIL  
Affiliated with the Building & Construction Trades Department (AFL/CIO)  
Craft International Unions and any other craft labor Unions signatory to this  
Agreement

PROJECT LABOR AGREEMENT  
CITY OF LOS ANGELES HARBOR DEPARTMENT

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Attachment "A" - Letter of Assent

Attachment "B" – Los Angeles/Orange Counties Building and Construction Trades Council Approved  
Drug and Alcohol Testing Policy

Attachment "C" - Craft Request Form

Attachment "D" - Trade Union Contact Numbers

Attachment "E" – Five-Year Capital Improvement Program ("CIP") Project List

**PROJECT LABOR AGREEMENT  
CITY OF LOS ANGELES**

**HARBOR DEPARTMENT**

**INTRODUCTION AND FINDINGS**

The purpose of this Project Labor Agreement ("Agreement") is to promote efficiency of construction operations during the construction of various projects within the Harbor Department's Capital Improvement Program (CIP) and provide for the orderly settlement of labor disputes and grievances without strikes or lockouts, thereby promoting the public interest in assuring timely and economical completion of these Projects.

WHEREAS, the Port of Los Angeles is among the world's premier ports and is a critical hub for global trade; and

WHEREAS, the Port of Los Angeles is the nation's busiest container port, and the Port's 7,500 acres, 43 miles of waterfront, 270 berths and 26 cargo terminals represent a critical segment of the U.S. trade infrastructure and the global supply chain; and

WHEREAS, in addition to containerized cargo, the Port's diverse maritime operations handle bulk products, scrap metal, steel, and cruise passengers, with regularly scheduled vessel calls increasing the need for more terminal acreage and more efficient operations, as well as transforming the Port into a model environmental-friendly gateway through the implementation of the San Pedro Bay Ports Clean Air Action Plan; and

WHEREAS, the Harbor Department is responsible for construction, renovation, maintenance and operation of the facilities and infrastructure of the Port of Los Angeles, including capital improvement projects throughout the Port; and

WHEREAS, the safe, timely and successful completion of these projects with a trained workforce is of utmost importance to the Harbor Department and the general public in the City; and

WHEREAS, the work to be done will require maximum cooperation from the many Parties who will be involved; and

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

WHEREAS, the interests of the Harbor Department, the general public, the City, the Unions, contractors, subcontractors, employers and workers would be best served if the construction work proceeded in an orderly manner free of disruption because of strikes, sympathy strikes, work stoppages, picketing, lockout, slowdowns or other interferences with work; and

WHEREAS, large numbers of workers of various skills will be required in the performance of the construction work, including those to be represented by the Unions affiliated with the Los Angeles/Orange Counties Building and Construction Trades Council and any other craft labor organization which are signatory to this Agreement, employed by contractors and subcontractors who are signatory to agreements with said labor organizations; and



WHEREAS, the Contractor/Subcontractor/Employer(s) (C/S/E) and the Unions desire to mutually establish and stabilize wages, hours and working conditions for the workers employed on these Projects by the C/S/Es, and further, to encourage close cooperation among the C/S/Es, and the Unions to the end that a satisfactory, continuous and harmonious relationship will exist among the Parties to this Agreement; and

WHEREAS, this Agreement is not intended to replace, interfere with, abrogate, diminish, or modify existing local or national collective bargaining agreements in effect during the duration of this Agreement, insofar as a legally binding agreement exists between the C/S/Es and the affected Unions, except to the extent that the provisions of this Agreement are inconsistent with said collective bargaining agreements, in which event, the provisions of this Agreement shall prevail; and further, it is understood that C/S/Es are bound and shall remain bound, for the duration of this Agreement by the terms of this Agreement and applicable local and national collective bargaining agreements for the craft work performed, established between the signatory Unions and C/S/Es, in effect and covering the area of these Projects; and

WHEREAS, this Agreement is not intended to have an adverse impact on the policy of the City to maximize business opportunities for minority, women and other business enterprises in City contracts; and

WHEREAS, increasing access to employment opportunities with prevailing wages is one way for the Harbor Department to directly combat poverty and stimulate economic reinvestment; and

WHEREAS, the Harbor Department has adopted a departmental Agreement which will provide construction employment and training opportunities in ways calculated to mitigate the harms caused by poverty, unemployment and underemployment; and

WHEREAS, this Agreement reflects a commitment by all parties to the diversity in the workforce hiring that reflect levels of minority, women and other worker utilization at levels which are representative of the relevant workforce of these groups in the Greater Los Angeles Area as determined by the U.S. Census Bureau; and

WHEREAS, the contracts for the construction of Projects will be awarded in accordance with the applicable provisions of the Harbor Department's Administrative Policies and Procedures; and

WHEREAS, the Parties signatory to this Agreement pledge to work towards a mutually satisfactory completion of Projects;

NOW, THEREFORE, IT IS AGREED BETWEEN AND AMONG THE PARTIES HERETO, AS FOLLOWS:

## **ARTICLE I**

### **DEFINITIONS**

1.1 "Agreement" means this Project Labor Agreement and its applicability to all Projects.

1.2 "Apprentice" means any worker who is indentured in a bona fide Labor/Management construction apprenticeship program, registered and approved by the State of California Department of Industrial Relations (DIR) Division of Apprenticeship Standards (DAS) or in the case of Projects with federal funding,

indentured in a bona fide Labor/Management construction apprenticeship program, approved by the US Department of Labor (DOL) and California DAS.

**1.3** "Apprenticeship Program" means any Labor/Management construction apprenticeship program certified and approved by the California Division of Apprenticeship Standards (DAS) or in the case of Projects with federal funding, approved by the US DOL and California DAS.

**1.4** "Awarding Authority" means the City of Los Angeles, acting by and through the Board of Harbor Commissioners, or any employee or officer of the Board that is authorized to award or enter into any contract on behalf of the Board.

**1.5** "Board" means the Los Angeles Board of Harbor Commissioners.

**1.6** "Bureau of Contract Administration" (BCA) means the designated bureau within the City's Department of Public Works which may provide support services to the Harbor Department in administering this Agreement.

**1.7** "City" means the City of Los Angeles, a municipal corporation, and all City awarding authorities.

**1.8** "Committee" means the Joint Administrative Committee as described in Article XII of this Agreement.

**1.9** "Construction contract" means a City contract which has been awarded by the Board, and is necessary to complete the Harbor Department Project.

**1.10** "Contractor/Subcontractor/Employer(s)" (C/S/E) means any individual firm, partnership, owner operator, or corporation, or combination thereof, including joint ventures, which is an independent business enterprise and has entered into a contract with the Harbor Department or any of its contractors or subcontractors/owner operators

of any tier, with respect to the construction of any part of the Project(s) under contract terms and conditions approved by the Board and which incorporate this Agreement.

**1.11** "Core Worker" means a verifiable member of a C/S/E's core workforce for the purpose of this Agreement if the worker's name appears on the C/S/E's active payroll for 60 of 100 working days immediately prior to the award of the construction contract and meets all standards required by applicable local, state or federal law or regulation.

**1.12** "Covered Project(s)" or "Project" means a project or projects which have been included within the Ten-Year Capital Improvement Program ("CIP") Project List and covered by this Agreement or so designated by the Board. The Board may identify additional projects that are appropriate for coverage by the Agreement for inclusion under the CIP and include such projects by Board Resolution. The Board shall request an annual review of the Harbor Department Capital Improvement Program to identify any new projects appropriate for inclusion with in the CIP.

**1.13** "Department" means the Harbor Department of the City of Los Angeles.

**1.14** "Employment Hiring Plan" (EHP) means a C/S/E's detailed hiring plan as described in BCA's Targeted Hiring Guidelines for Contractors and the Policy or other applicable Department policy.

**1.15** "Engineer" means the Chief Harbor Engineer of the City of Los Angeles Harbor Department, Construction Division, or its authorized representative.

**1.16** "FHWA Project" means a Harbor Department Project that is funded in whole or in part by the Federal Highway Administration (FHWA).

**1.17** "Ten year (10) Capital Improvement Program ("CIP") Project List" means the list of Harbor Department projects included as Attachment E hereto that will operate under

the Harbor Department PLA, as well as other projects that may be added in the sole discretion of the Department.

**1.18** "Jobs Coordinator" means the Prime Contractor's designated person, agent or agency that will facilitate the local hire referral process with the C/S/E, Unions and other referral organization, as described in the Construction Careers Policy. The Jobs Coordinator must be able to demonstrate or document to the Department or its designee that it has the requisite qualification and/or experience to fulfill the duties and responsibilities as outlined in the Policy.

**1.19** "LA/OCBTC" (Trades Council) means the Los Angeles/Orange Counties Building and Construction Trades Council.

**1.20** "Letter of Assent" means the document that each C/S/E (of any tier) must sign and submit to the Engineer or designated administrator, which formally binds them to adherence to all the forms, requirements and conditions of this Agreement and Policy.

**1.21** "Local Resident" means an individual whose primary residence is within the Tier 1 or 2 zip code areas.

**1.22** "Long-Term Unemployment" as defined by the Bureau of Labor Statistics means being jobless for 21 weeks or more, or as defined.

**1.23** "Plan" means the Plan for the Settlement of Jurisdictional Disputes in the Construction Industry as referenced in Article XIV of this Agreement.

**1.24** "Policy" means the Harbor Department Construction Careers Policy.

**1.25** "Subscription Agreement" means the contract between a C/S/E and a Union's Labor/Management Trust Fund(s) that allows the C/S/E to make the appropriate fringe benefit contributions in accordance with the terms of the contract.

**1.26** "Targeted Hiring Guidelines for Contractors" means the document provided by the Department to assist C/S/E's in implementing the targeted hiring procedures.

**1.27** "Tier 1" means the zip codes identified in Article 7.4 of the PLA, which fall within an approximate ten mile radius of the Port and in which the rate of unemployment is in excess of 105% of the County of Los Angeles' unemployment rate at the time of application and/or are within the area of Port-related operations and activity and/or are within the area of Port-related operations and activity.

**1.28** "Tier 2" means the zip codes within the City, identified in Article 7.5 of this Agreement, that includes at least 2 census tracts (or a portion thereof) in which the median annual household income is less than \$62,627 per and/or where the rate of unemployment is in excess of 100% of the County of Los Angeles' unemployment rate at the time of application.

**1.29** "Transitional Worker" means any individual whose primary place of residence is within a Tier 1 or Tier 2 zip code of the City of Los Angeles, and who prior to commencing work on a Project has been certified as satisfying at least one of the following criteria:

(1) having Veteran status; having a documented history of involvement with the criminal justice system; being homeless; or,

(2) is an individual facing two or more of the following barriers to employment: having a household income less than 50% of the Los Angeles County median annual household income, receiving public assistance, lacking a GED or high school diploma, being a custodial single parent, suffering from long term unemployment, being emancipated from the foster care system, or being an apprentice, in a program



described in Section 1.3 above, with less than 15% of the apprenticeship hours required to graduate to journey level.

(3) If the Jobs Coordinator or Employer is not able to identify anyone using criteria (1), criteria (2) may be used.

**1.30** "Union(s)" or "Signatory Unions" means the Los Angeles/Orange Counties Building and Construction Trades Council affiliated with the Building & Construction Trades Department (AFL/CIO) Craft International Unions or any other craft labor organization signatory to this Agreement, acting in their own behalf and on behalf of their respective affiliates and member organizations whose names are subscribed hereto and who have through their officers executed this Agreement.

## **ARTICLE II**

### **SCOPE OF AGREEMENT**

**2.1** Parties: The Agreement shall apply and is limited to all C/S/Es performing construction on a Harbor Department Project, the Board, and the Unions (signatory Unions or otherwise).

**2.2** Project Description: The Agreement shall apply to all CIP construction contracts awarded by the Board. The Board has the absolute right to combine, consolidate or cancel contracts or portions of contracts identified as part of the Project. Should the Board remove any contract from the Project and thereafter authorize that construction work be commenced on the contract, the contract may, at the discretion of the Board, be performed under the terms of the Agreement.

**2.3** Project Labor Disputes: The provisions of this Agreement, including the Schedule A Agreements, (which are the local collective bargaining agreements of the signatory

Unions having jurisdiction over the work on the Project, as such may be changed from time-to-time and which are incorporated herein by reference) shall apply to the work covered by this Agreement. It is understood that this is a self-contained, stand alone Agreement and that by virtue of having become bound to this Agreement, neither the Prime Contractor, Employer, nor the Subcontractor (of any tier) or owner-operator will be obligated to sign any other local, area, or national agreement, except as may be provided under Section 8.2, below. It is further agreed that, where there is conflict, the terms and conditions of this Agreement shall supersede and override terms and conditions of any and all other national, area, or local collective bargaining agreements (Schedule A Agreements) except for all work performed under the NTL Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, all instrument calibration work and loop checking shall be performed under the terms of the UA/IBEW Joint National Agreement for Instrument and control systems Technicians, and the National Agreement of the International Union of Elevator Constructors, with the exception of Article IV (Work Stoppages, Strikes, Sympathy Strikes and Lockouts), Article XIII (Grievance and Arbitration Procedure) and Article XIV (Jurisdictional Disputes) of this Agreement, which shall apply to such work. All disputes relating to the interpretation or application of this Agreement shall be subject to resolution by the grievance arbitration procedure set forth in Article XIII of this Agreement except for those disputes exempted from the grievance procedure pursuant to Article 13.1. Where a subject is covered by a provision in a Schedule A Agreement and not covered by this Agreement, the provision of the Schedule A Agreement shall prevail. Any dispute as to the applicable source between this Agreement and any



Schedule A Agreement for determining the wages, hours of working conditions of employees on a Project shall be resolved under the grievance procedures established in this Agreement.

#### **2.4 Exclusions:**

(1) This Agreement shall be limited to construction work on a Project which is approved by the Board, and is not intended to, and shall not apply to any construction work performed at any time prior to the effective date, or after the expiration or termination of the Agreement, or on other City projects.

(2) This Agreement is not intended to, and shall not, affect or govern the award of contracts by the Board, which are outside the approved scope of the Project.

(3) This Agreement is not intended to, and shall not, affect the operation or maintenance of any facilities whether related or not to Projects.

(4) This Agreement shall not apply to a C/S/E's executives, managerial employees, engineering employees, supervisors (except those covered by Schedule A collective bargaining agreements), office and clerical employees, or any other employee not performing construction craftwork.

(5) Notwithstanding the foregoing, it is understood and agreed that Building/Construction Inspector and Field Soils and Material Testers (inspectors) are a covered craft under this Agreement. This inclusion applies to the scope of work defined in the State of California Wage Determination for that Craft. This shall not cover quality assurance work or material testing performed by or on behalf of the Department. Every Inspector performing under the wage classification of Building/Construction Inspector and Field Soils and Material Tester under a professional services agreement or a

construction contract shall be bound to all applicable requirements of this Agreement. Notwithstanding the provisions of this sub-section, the Department may engage consultants for limited periods of time in the event of an urgent need for specialized inspection services. The Department must provide prior notice to the Trades Council that despite good faith efforts, it is unable to obtain qualified inspector(s) under the provisions of this Agreement. Such engagement shall be only to meet immediate and limited needs until such qualified inspectors working under this Agreement are available.

(6) This Agreement shall not apply to material suppliers or delivery by any means of material, supplies, or equipment required to any point of delivery.

(7) This Agreement shall not apply to City employees.

(8) This Agreement shall not apply to the work of persons, firms and other entities that perform consulting, planning, scheduling, management or other supervisory services on the Project, provided such entities do not perform craft employee construction work on the Project with their own employees or to customer service work performed post completion by an entity other than the C/S/E that performed the original construction work.

(9) This Agreement shall not apply to Harbor Department construction contracts or Projects, if the federal funding source has established provisions or rules that forbid the inclusion of a Project Labor Agreement.

(10) FHWA Projects: All provisions of this Agreement shall apply to the project, in accord with the policies and conditions under which the FHWA funds are received from the U.S. Department of Transportation.

(11) Out-of-State Workers: Hours worked by residents of states other than California shall not be included in calculation of total hours of Project work for purposes of the percentage requirements set forth by the Agreement.

(12) Notwithstanding the foregoing, demolition and asbestos abatement shall constitute work covered by the Project Labor Agreement when such work is part of a Covered Project.

**2.5** The Harbor Department and/or the C/S/Es, as appropriate, have the absolute right to award contracts on this project to any C/S/E, notwithstanding the existence or non-existence of any agreements between such C/S/E and any Union parties, provided only that such C/S/E is ready, willing and able to execute and comply with this Agreement should such C/S/E be awarded work covered by this Agreement.

### **ARTICLE III**

#### **EFFECT OF AGREEMENT**

**3.1** By executing the Agreement, the Unions and the Board agree to be bound by each and all of the provisions of the Agreement.

**3.2** By accepting the award of a construction contract for a Project, whether as a C/S/E, the C/S/E agrees to be bound by each and every provision of the Agreement.

**3.3** At the time that any C/S/E enters into a subcontract with any subcontractor of any tier providing for the performance on the construction contract, the C/S/E shall provide a copy of this Agreement to said subcontractor and shall require the subcontractor as a part of accepting the award of a construction subcontract to agree in writing in the form of a Letter of Assent to be bound by each and every provision of this Agreement prior to the commencement of work. See Attachment "A" for a sample

Letter of Assent.

(1) Approval of any C/S/E to perform work on the Project will be contingent upon the submittal of its Letter of Assent and its Employment Hiring Plan to the Chief Harbor Engineer and the Council.

**3.4** This Agreement shall only be binding on the signatory C/S/Es hereto and shall not apply to the parents, affiliates, subsidiaries, or other ventures of any construction contract prior to the execution of this Agreement.

#### **ARTICLE IV**

##### **WORK STOPPAGES, STRIKES, SYMPATHY STRIKES AND LOCKOUTS**

**4.1** The Unions, Board and C/S/Es agree:

(1) During the existence of this Agreement, there shall be no strike, sympathy strike, picketing, hand billing, slowdown, withholding of work, refusal to work, lockout, sick-out, walk-off, sit-down, stand-in, wobble, boycott, or other work stoppage, disruption, advising the public that a labor dispute exists, or other impairment of any kind for any reason by the Unions or employees employed on the Project, at the job site of the Project, or at any other facility of the City because of a dispute on this Project.

(2) As to employees employed on the Project, there shall be no lockout of any kind by any C/S/E(s) covered by the Agreement. The C/S/E(s) may lay off employees for lack of work or delay of work on the Project.

(3) The Unions agree that they shall not sanction in any way any picket line or other impairment of the work on the Project and will affirmatively take all measures necessary to effectively induce their respective members to cross any and all picket lines and report for work as scheduled and that responsible representatives of the

Unions who are employed on the Project will also do so themselves.

(4) The Unions agree that they shall not sanction, aid or abet, encourage or continue any work stoppage, strike, picketing or other disruptive activity at the Project site or C/S/E's business site that will economically and/or materially affect the completion of the Project. Any such costs that economically and/or materially harm the City shall be borne by the affected Union and made payable to the City.

(5) Notwithstanding any provision of this Agreement to the contrary, it shall not be a violation of this Agreement for any Union to withhold the services of its members (but not the right to picket) from a particular C/S/E who:

(i) fails to timely pay its weekly payroll; or

(ii) fails to make timely payments to the Union's Labor/Management Trust Funds in accordance with the provisions of the applicable Schedule A Agreements. Prior to withholding its members services for the C/S/E's failure to make timely payments to the Union's Labor/Management Trust Funds, the Union shall give at least ten (10) days (unless a lesser period of time is provided in the Union's Schedule A Agreement, but in no event less than forty-eight (48) hours) written notice of such failure to pay by registered or certified mail, return receipt requested, and by facsimile transmission to the involved contractor, the prime contractor, and the BCA. Union will meet within the ten (10) day period to attempt to resolve the dispute.

(iii) Upon the payment of the delinquent C/S/E of all monies due and then owing for wages and/or fringe benefit contributions, the Union shall direct its members to return to work and the C/S/E shall return all such members back to work.

**4.2** Expiration of Local Agreements: If the Schedule A Agreement, or any local,

regional, and other applicable collective bargaining agreements expire during the term of the Project, the Union(s) agree that there shall be no work disruption of any kind as described in Section 4.1 above as a result of the expiration of any such agreement(s) having application on this Project and/or failure of the involved Parties to that agreement to reach a new contract. Terms and conditions of employment established and set for purposes of prevailing wage requirements under this Agreement at the time of bid shall remain established and set. Otherwise to the extent that such agreement does expire and the Parties to that agreement have failed to reach concurrence on a new contract, work will continue on the Project on one of the following two (2) options, both of which will be offered by the Unions involved to the Contractors affected:

(1) Each of the Unions with a contract expiring must offer to continue working on the Project under interim agreements that retain all the terms of the expiring contract, except that the Unions involved in such expiring contract may each propose wage rates and employer contribution rates to employee benefit funds under the prior contract different from what those wage rates and employer contributions rates were under the expiring contracts. The terms of the Union's interim agreement offered to Contractors will be no less favorable than the terms offered by the Union to any other employer or group of employers covering the same type of construction work in Los Angeles County.

(2) Each of the Unions with a contract expiring must offer to continue working on the Project under all the terms of the expiring contract, including the wage rates and employer contribution rates to the employee benefit funds, if the C/S/E affected by that expiring contract agrees to the following retroactive provisions: if a new Schedule A Agreement, local, regional or other applicable labor agreement for the industry having



application at the Project is ratified and signed during the term of this Agreement and if such new labor agreement provides for retroactive wage increases, then each affected C/S/E shall pay to its employees who performed work covered by this Agreement at the Project during the hiatus between the effective dates of such expired and new labor agreements, an amount equal to any such retroactive wage increase established by such new labor agreement, retroactive to whatever date is provided by the new labor agreement for such increase to go into effect, for each employee's hours worked on the Project during the retroactive period. All Parties agree that such affected C/S/Es shall be solely responsible for any retroactive payment to its employees and that neither the Project, nor the Board, nor the Board's designee, nor any other C/S/E has any obligation, responsibility or liability whatsoever for any such retroactive payments or collection of any such retroactive payments, from any such C/S/E.

(3) Some C/S/Es may elect to continue to work on the Project under the terms of the interim agreement option offered under paragraph (1) above and other C/S/Es may elect to continue to work on the Project under the retroactivity option offered under paragraph (2) above. To decide between the two options, C/S/Es will be given one week after the particular labor agreement has expired or one week after the Union has personally delivered to the Contractors in writing its specific offer of terms of the interim agreement pursuant to paragraph (1) above, whichever is the later date. If the C/S/E fails to timely select one of the above options, the C/S/E will be deemed to have selected paragraphs 4.2(2), above.

**4.3** Expedited Arbitration will be utilized for all work stoppages and lockouts. In lieu of

or in addition to any other action at law or equity, any party may institute the following procedure when a breach or violation of this Article IV is alleged to have occurred:

(1) The party invoking this procedure shall notify the permanent arbitrator next in sequence from the following list:

1. Joseph Gentile
2. Michael Rappaport
3. Walter Daugherty
4. Paul Greenberg
5. Lou Zigman

The Parties agree these shall be the five permanent Arbitrators under this procedure. In the event that none of the five permanent Arbitrators are available for a hearing within 24 hours, the party invoking the procedure shall have the option of delaying until one of the five permanent Arbitrators is available or of asking the permanent Arbitrator that would normally hear the matter to designate an arbitrator to sit as a substitute Arbitrator for this dispute. If any of the permanent Arbitrators ask to be relieved from their status as a permanent Arbitrator, the Parties shall mutually select a new permanent Arbitrator from the following list of arbitrators:

1. John Kagel
2. Fred Horowitz
3. Wayne Estes

Selection shall be made by each party alternately striking from the foregoing list until one name remains who shall be the replacement permanent Arbitrator. Expenses incurred in arbitration shall be borne equally by the Union and the Contractor involved



and the decision of the Arbitrator shall be final and binding on both Parties, provided, however, that the Arbitrator shall not have the authority to alter or amend or add to or delete from the provisions of this Agreement in any way. Notice to the Arbitrator shall be by the most expeditious means available, including by telephone and by facsimile or e-mail to the party alleged to be in violation and to the Trades Council and involved local Union if a Union is alleged to be in violation.

(2) Upon receipt of said notice, the Arbitrator shall convene a hearing within twenty-four (24) hours if it is contended that the violation still exists.

(3) The Arbitrator shall notify the Parties by telephone and by facsimile or telegram of the place and time for the hearing. Notice shall be given to the individual Unions alleged to be involved; however, notice to the Trades Council shall be sufficient to constitute notice to the Unions for purposes of the arbitration being heard by the Arbitrator. Said hearing shall be completed in one session, which, with appropriate recesses at the Arbitrator's discretion, shall not exceed twenty-four (24) hours unless otherwise agreed upon by all Parties. A failure of any party to attend said hearings shall not delay the hearing of evidence or the issuance of any decision by the Arbitrator.

(4) The sole issue at the hearing shall be whether or not a violation of Section 4.1 or 4.2 of this Article IV has in fact occurred. The Arbitrator shall have no authority to consider any matter of justification, explanation or mitigation of such violation or to award damages, which issue is reserved for court proceedings, if any. The decision shall be issued in writing within three (3) hours after the close of the hearing, and may be issued without a written opinion. If any party desires a written opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with or

enforcement of the decision. The Arbitrator may order cessation of the violation of this Article and other appropriate relief and such decision shall be served on all Parties by hand or registered mail upon issuance.

(5) Such decision may be enforced by any Court of competent jurisdiction upon the filing of this Agreement and all other relevant documents referred to above in the following manner. Written notice of the filing of such enforcement proceedings shall be given to the other party. In the proceeding to obtain a temporary order enforcing the Arbitrator's decision as issued under Section 4.3 (4) of this Article, all Parties waive the right to a hearing and agree that such proceedings may be ex parte. Such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the Arbitrator's decision shall be served on all Parties by hand or delivered by registered mail.

(6) Any rights created by statute or law governing arbitration proceedings inconsistent with the above procedure or which interfere with compliance therewith are hereby waived by the Parties to whom they accrue.

(7) The fees and expenses incurred in arbitration shall be divided equally by the Parties to the arbitration, including Union(s) and the C/S/E(s) involved.

**4.4** The procedures contained in Section 4.3 shall be applicable to alleged violations of Article IV to the extent any conduct described in Section 4.1 or 4.2 occurs on the Project. Disputes alleging violation of any other provision of this Agreement, including any underlying disputes alleged to be in justification, explanation, or mitigation of any violation of Section 4.1 or Article IV shall be resolved under the applicable grievance adjudication procedures for these other Articles.

## **ARTICLE V**

### **NO DISCRIMINATION**

**5.1** The C/S/Es and Unions agree not to engage in any form of discrimination, including in the hiring and dispatching of workers, on the grounds of, or because of, race, religion, national origin, ancestry, sex, sexual orientation, age, physical handicap, domestic partner status, medical condition, political affiliation, membership in a labor organization, being a party to a collective bargaining agreement, color, or disability.

## **ARTICLE VI**

### **UNION SECURITY**

**6.1** The C/S/Es recognize the Unions as comprising the respective sole bargaining representatives for all craft employees working within the scope of this Agreement.

**6.2** No employee covered by this Agreement shall be required to join any Union as a condition of being employed, or remaining employed, for the completion of Project work; provided, however, that any employee who is a member of the referring Union at the time of referral shall maintain that membership in good standing while employed under this Agreement. All employees shall, however, be required to comply with the Union security provisions for the period during which they are performing on-site Project work to the extent, as permitted by law, of rendering payment of the applicable monthly and working dues.

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## ARTICLE VII

### REFERRAL

7.1 The Union(s) shall be the primary source of all craft labor employed on the Project(s) and will exert their best efforts to recruit and identify individuals, particularly residents residing in the Tier 1 or 2 zip code areas, as well as those referred by the Jobs Coordinator, for entrance into joining labor/management apprenticeship programs, and to assist individuals in qualifying and becoming eligible for such programs.

In the event that the C/S/E has his or her own Core Worker(s), and wishes to employ such workers to perform covered work, the C/S/E shall employ such workers in accord with the provisions of this Article VII. The following process shall govern the employment of workers at the Project:

(1) A worker shall be considered a member of a C/S/E's core workforce for the purposes of this Article if the worker meets the required definition of 1.11 above. The C/S/E shall identify Core Workers in their Employment Hiring Plan and shall provide payroll records evidencing the worker's qualification as a Core Worker upon request by the City. Prior to each C/S/E, which utilizes any core employees, performing any work on the Project, each such C/S/E shall provide a list of its core employees to the Department and the Trades Council. Failure to do so will prohibit the C/S/E from using any core employees. The number of Core Workers on this Project shall be governed by the following procedure: one Core Worker shall be selected and one worker from the hiring hall of the affected trade or craft and this process shall repeat until such C/S/E's requirements are met or until such C/S/E has hired five (5) such Core Workers for that craft, whichever occurs first. Thereafter, all additional employees in the affected trade

or craft shall first be requisitioned from the hiring hall in accordance with other provisions in Article VII.

(2) In the event of a reduction-in-force or layoff, such will take place in a manner to assure that the number of Core Workers in the affected craft does not exceed, at any time, the number of others working in that craft who were employed pursuant to other procedures available to the C/S/E under this Agreement. This provision applies only to employees who were not working under the terms of a Schedule A Agreement at the time of their transfer to the work covered under this Agreement and is not intended to limit transfer provisions of the Schedule A Agreements of any Union.

**7.2** C/S/Es shall be bound by and utilize the registration facilities and referral systems established or authorized by the signatory Unions for all job site craft employee(s) before such employee(s) begin work, when such procedures are not in violation of Federal or State law or in conflict with provisions set forth in this Agreement.

**7.3** In the event that referral facilities maintained by the Unions are unable to fill the requisition of a C/S/E for Local Residents and/or Transitional Workers within a forty-eight (48) hour period after such requisition is made by the C/S/E (Saturdays, Sundays, and holidays excepted), the C/S/E shall be free to obtain Local Residents and/or Transitional Workers from any source. However, for all other requisitions by a C/S/E for non-Local Residents or non-Transitional Workers, only after a forty-eight (48) hour period (Saturdays, Sundays and holidays excepted) after such requisition is made by the C/S/E shall the C/S/E be free to obtain work persons from any source if the Unions are unable to fill the requisition. However, the C/S/E is still responsible for complying

with conditions and requirements of the Targeted Hiring Guidelines for Contractors and the Policy.

(1) The C/S/E's must document, from the applicable Tiers, all efforts made to comply with the targeted hiring process to locate and hire Local Residents and/or Transitional Workers. The C/S/E may employ Local Residents and/or Transitional Workers referred by the Jobs Coordinator. However, in the event the Jobs Coordinator is unable to fill the requisition of a C/S/E for Local Residents and/or Transitional Workers, the C/S/E may utilize any organization, such as those listed in the Targeted Hiring Guidelines for Contractors, to assist them in satisfying the requirements of the Targeted Hiring Guidelines for Contractors and the Policy.

(2) The C/S/E shall inform the Unions, Job Coordinator and the BCA of the name, address, worker craft classification and social security number of any worker hired from other sources upon their employment on the Project(s).

(3) No Local Resident and/or Transitional Worker, having been pre-screened and/or pre-qualified by the Jobs Coordinator, and employed by the C/S/E to work on the Project, shall be required to participate in any Joint Labor/Management "boot camp" or pre-apprentice program that will unnecessarily delay the Local Resident and/or Transitional Worker's start of work or cause said worker's termination due to having to participate in such "boot camps" or pre-apprentice programs.

(4) Any work person hired under this Section 7.3, as well as all other workers hired under this Article VII, shall be obligated to register with the appropriate Union hiring hall within five (5) working days prior to their first day of employment on the project and comply with the Union Security provisions of this Agreement.



**7.4** The Unions will exert their best efforts to refer/recruit sufficient numbers of skilled craft Local Residents and Transitional Workers to fulfill the requirements of the C/S/E(s). In recognition of the fact that the communities within the boundaries of the City and the Port's impact zone will be impacted by the construction of the Project, the Parties agree to support the development and graduation of transitional construction apprentices and workers from residents within Tiers 1 or 2 zip code areas. Towards that end, the Unions agree to encourage and provide referrals and utilization of qualified workers residing preferably within the Tier 1 zip code areas identified in the following:

Tier 1 Zip Codes

|       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 90001 | 90222 | 90501 | 90732 | 90804 |
| 90002 | 90242 | 90502 | 90744 | 90805 |
| 90003 | 90247 | 90503 | 90745 | 90806 |
| 90044 | 90249 | 90505 | 90746 | 90807 |
| 90059 | 90255 | 90710 | 90748 | 90808 |
| 90061 | 90262 | 90717 | 90755 | 90810 |
| 90220 | 90280 | 90723 | 90802 | 90813 |
| 90221 | 90303 | 90731 | 90803 | 90815 |

**7.5** When the Unions cannot provide the C/S/Es, having documented their efforts in the attainment of Local Residents and/or Transitional Workers within the Tier 1 zip code areas as listed in Article 7.4 above, the Unions will exert their best efforts to recruit and identify Local Residents and/or Transitional Workers within Tier 2 zip code areas identified in the following and Transitional Workers in the remaining zip code areas of the City:

Tier 2 Zip Codes

|       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 90004 | 90023 | 90045 | 91042 | 91364 |
| 90005 | 90024 | 90046 | 91302 | 91367 |
| 90006 | 90026 | 90007 | 91303 | 91401 |
| 90007 | 90027 | 90048 | 91304 | 91402 |

|       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 90008 | 90028 | 90049 | 91306 | 91403 |
| 90010 | 90029 | 90057 | 91324 | 91405 |
|       | 90031 | 90058 | 91325 | 91406 |
| 90012 | 90033 | 90062 |       | 91411 |
| 90013 | 90034 | 90063 | 91331 | 91423 |
| 90014 | 90035 | 90065 | 91335 | 91505 |
| 90015 | 90036 | 90066 | 91340 | 91601 |
| 90016 | 90037 | 90068 | 91342 | 91602 |
| 90017 | 90038 | 90071 | 91343 | 91604 |
|       |       | 90073 | 91344 | 91605 |
| 90019 |       | 90089 | 91345 | 91606 |
| 90020 | 90042 |       | 91352 | 91607 |
| 90021 | 90043 | 91040 | 91356 |       |

The Unions will exert their best efforts to recruit and identify Local Residents and/or Transitional Workers of the City and assist individuals in qualifying and becoming eligible for such apprenticeship programs.

**7.6** The Prime Contractor is responsible for ensuring compliance with the targeted hiring process for the Project(s) to achieve the following anticipated levels of participation:

(1) The following percentages shall be the targeted hiring for the Project:

(a) At least 30% of total work hours shall be performed by Local Residents residing within Tier 1 described in Article 7.4. If the 30% local hire is not attained utilizing the Tier 1, the outreach shall expand to the Tier 2 as described in Article 7.5 of this Agreement.

(b) At least 10% of total work hours shall be performed by Transitional Workers residing within Tier 1 or Tier 2 zip code areas described in Articles 7.4 and 7.5 respectively and the remaining zip code areas within the City of Los Angeles. These hours shall be applied towards the 30% Local Resident targeted hiring.



(c) At least 20% of total work hours on each project will be performed by apprentices, but the hours performed by apprentices in each individual craft shall not exceed the ratio to journeymen established by the applicable craft union's DAS approved apprenticeship standards. The Parties agree that residents in the Tier 1 or 2 zip code areas will perform 50% of all apprenticeship hours worked on the Project.

An apprentice who begins his/her period of apprenticeship as a resident in the Tier 1 or 2 zip code areas will retain that status for the entire apprenticeship, regardless of any changes in the apprentice's residence provided the Unions submit to BCA the necessary identifying information to enable the tracking of such apprentices, if requested by BCA.

(d) The C/S/Es shall document their compliance efforts through the utilization of the Craft Request Form, hiring hall procedures, the resources of organizations listed in BCA's Targeted Hiring Guidelines for Contractors, Jobs Coordinator or any other organization/agency that can assist the C/S/E in meeting this requirement. The provisions to address the non-attainment of the targeted hiring participation and/or apprenticeship hiring participation levels on a Project are addressed in the Policy.

(2) The employer retains authority in making individual hiring decisions.

(3) Hours worked by residents of states other than California shall not be included in calculation of total hours of Project work for purposes of the percentage requirements set forth above.

(4) The above referenced targeted hiring shall apply to FHWA projects in accord with the policies and conditions under which the FHWA funds are received from the U.S. Department of Transportation.

**7.7** The Transitional Workers, as also defined also in Section 1.29, above, may be referred to the Unions from the Jobs Coordinator qualified to perform construction jobs coordination and related services. The Jobs Coordinator shall pre-screen and/or pre-qualify any applicant prior to referral to the Unions. Drug screening will be a prerequisite to employment. The following criteria will be used to identify the Transitional Worker:

- a. Being a Veteran;
- b. Having a documented history of involvement with the justice system;
- c. Being homeless; or

(2) Faces at least two of the following barriers to employment:

- a. Having household income below 50% of the Los Angeles County's median annual household income;
- b. Emancipated from the foster care system ;  
Receiving public assistance;  
Lacking a GED or high school diploma;  
Being an apprentice with less than 15% of the apprenticeship hours
- c. required to graduate to journey level in a program described in Section 1.3;
- d. Being a custodial single parent
- e. Suffering from long-term unemployment

To qualify under this section, the Jobs Coordinator shall verify and certify that the

individual's primary place of residence is within the City and that such individual satisfies the criteria set forth above.

**7.8** The C/S/Es and the Unions recognize a desire to facilitate the entry into the building and construction trades of veterans who are interested in careers in the building and construction industry. The C/S/Es and Unions agree to utilize the services of the Center for Military Recruitment, Assessment and Veterans Employment (hereinafter "Center") and the Center's "Helmets to Hardhats" program to serve as a resource for preliminary orientation, assessment of construction aptitude, referral to apprenticeship programs or hiring halls, counseling and mentoring, support network, employment opportunities and other needs as identified by the Parties.

**7.9** The Unions and C/S/Es agree to coordinate with the Center to create and maintain an integrated database of veterans interested in working on a Project and of apprenticeship and employment opportunities for a Project. To the extent permitted by law, the Unions will give credit to such veterans for bona fide, provable past experience.

**7.10** C/S/Es agree to only use the Craft Request Form (See Attachment C) and the procedures written therein to request any and all workers from Unions with a concurrent transmittal of such request to the Jobs Coordinator, including workers qualified as Local Residents, Transitional Workers, and/or general dispatch.

(1) When Local Residents and/or Transitional Workers are requested by the C/S/Es, the Unions will refer such workers regardless of their place in the Unions' hiring halls' list and normal referral procedures.

(2) In the event that a C/S/E, having not achieved its targeted hiring participation levels, requests a Local Resident and/or Transitional Worker from the

Union hiring facility, and is referred a worker who is not a Local Resident and/or Transitional Worker, the C/S/E is under no obligation to hire the referred worker for the Project work and shall notify the Union hiring facility and the Jobs Coordinator.

(3) The C/S/Es, Unions and Jobs Coordinator agree to maintain copies of all Craft Request Forms used on the Project submitted or received including transmission verification reports that are date/time imprinted. All Craft Request Forms and transmission verification reports shall be available for inspection and copies provided, upon request by the Harbor Department representative as described in Article XI of this Agreement.

#### **7.11 Apprentices**

(a) The Parties recognize the need to maintain continuing support of the programs designed to develop adequate numbers of competent workers in the construction industry, the obligation to capitalize on the availability of the Harbor Department's and the City's local work force, and the opportunities to provide continuing work for Projects covered by this Agreement. To these ends, the Parties shall facilitate, encourage, and assist Local Residents and/or Transitional Workers within Tier 1 or 2 zip code areas to commence and progress in Labor/Management apprenticeship and/or training programs in the construction industry leading to participation in such apprenticeship programs. The Harbor Department, Jobs Coordinator, Work Source Centers, other non-profit entities, organizations and the Unions, will work cooperatively to identify, or establish and maintain effective programs and procedures for persons interested in entering the construction industry and which will help prepare them for the

formal joint Labor/Management apprenticeship programs maintained by the signatory unions.

(b) Unions shall track retention of Apprentices hired through this program for so long as those Apprentices participate in a joint labor/management apprenticeship program. The signatory unions shall collect and compile information on the retention of these Apprentices and submit this information to the Department and the BCA on a quarterly basis. The City will use the information provided to generate a quarterly report on the retention of Apprentices on the Department's PLA projects.

(c) All apprentices shall work under the direct supervision of a journeyman from the trade in which the apprentice is indentured. A journeyman shall be defined as set forth in the California Code of Regulations, Title 8 [apprenticeship] section 205, which defines a journeyman as a person who has either completed an accredited apprenticeship in his or her craft, or has completed the equivalent of an apprenticeship in length and content of work experience and all other requirements in the craft which has workers classified as journeyman in the apprenticeable occupation. Should a question arise as to a journeyman's qualification under this subsection, the C/S/E shall provide adequate proof evidencing the worker's qualification as a journeyman.

## **ARTICLE VIII**

### **WAGES AND BENEFITS**

**8.1 Wages.** All employees covered by this Agreement shall be classified in accordance with work performed and paid the hourly wage rates for those classifications in compliance with the applicable prevailing wage rate determination established pursuant to the California Labor Code by the Department of Industrial

Relations or as established by the US DOL if applicable. If a prevailing rate increases during the term of this Agreement under State law or Federal law, the Contractor shall pay the rate as of its effective date under the applicable law. C/S/Es directly signatory to one or more of the Schedule A Agreements are required to pay all wages set forth in those Schedule A Agreements without reference to the foregoing. If the prevailing wage laws are repealed during the term of this Agreement, the contractor shall pay the wage rates established under the Schedule A Agreements, except as otherwise provided in this Agreement.

## **8.2 Benefits.**

(a) C/S/Es not signatory to the established Labor/Management Trust Fund agreements, as specified in the Schedule A Agreements for the craft workers in their employ, shall sign a "Subscription Agreement" with the appropriate Labor/Management Trust Fund covering the work performed under this agreement.

(b) C/S/Es shall pay contributions to the established employee benefit funds on behalf of all employees performing Project work under this Agreement in the amounts designated in the appropriate Schedule A Agreement and make all employee-authorized deductions in the amounts designated in the appropriate Schedule A Agreement; provided, however, that such contributions shall not exceed the contribution amounts set forth in the applicable prevailing wage determination. C/S/Es directly Signatory to one or more of the Schedule A Agreements are required to make all contributions set forth in those Schedule A Agreements without reference to the forgoing. Bona fide jointly-trusted benefit plans or authorized employee deductions programs established or negotiated under the applicable Schedule A Agreement or by



the Parties to this Agreement during the life of this Agreement may be added, provided that the contributions do not exceed the amounts set forth in the applicable prevailing wage determination.

(c) The C/S/E adopts and agrees to be bound by the written terms of the applicable, legally established, trust agreement(s) specifying the detailed basis on which payments are to be made into, and benefits paid out of, such trust funds for its employees. The C/S/E authorizes the Parties to such trust funds to appoint trustees and successors' trustees to administer the trust funds and hereby ratifies and accepts the trustees so appointed as if made by the C/S/E.

## **ARTICLE IX**

### **EMPLOYEE GRIEVANCE PROCEDURE**

**9.1** Should a grievance arise regarding the imposition of discipline of an employee, or the dismissal of an employee, working on Project work, all such grievance(s) shall be processed, exclusively, under the grievance procedure contained in the applicable Schedule A Agreement for the craft Union representing such employee(s) and not under the provisions of the Grievance Arbitration provisions of Article XIII. C/S/Es shall not discipline or dismiss its employees except for good cause.

## **ARTICLE X**

### **DEPARTMENT POLICIES AND PROCEDURES**

**10.1** All construction contracts identified by the Harbor Department as part of the Project shall include the following provisions. Such provisions include, but are not limited to:

(1) All persons who perform labor in the execution of a construction contract shall be paid the prevailing rate of wages applicable to the classification as provided in Article III, Section 377 of the Los Angeles City Charter.

(2) All C/S/Es shall provide information concerning their experience, financial qualifications, including proof of a current State Contractor's License, Business Tax Registration Certificate, and ability to perform said contract or subcontract.

**10.2** In addition to the above requirements, the C/S/Es and Unions understand and agree that all construction contracts shall be awarded in accordance with other applicable provisions of the Los Angeles City Charter ("Charter") (effective July 1, 2000), and the Los Angeles Administrative Code ("Administrative Code") (and any future amendments applicable thereto), including but not limited to:

(1) Los Angeles City Charter Article III, Section 371 (award of construction contracts to the lowest responsible bidder);

(2) Harbor Department policies providing Small Business Enterprises ("SBE"), Very Small Businesses ("VSBE"), and Minority-Owned, Women-Owned and all Other Business Enterprises ("MBE"/"WBE"/"OBE") an equal opportunity to participate in the performance of all City contracts in all areas where such contracts afford such participation opportunities.

## **ARTICLE XI**

### **COMPLIANCE**

**11.1** It shall be the responsibility of the C/S/Es and Unions to investigate and monitor compliance with the provisions of the Agreement contained in Article VIII (Wages and Benefits). The Board shall appoint the BCA or its designee to investigate and monitor



compliance with Article VIII, the applicable provisions of the Charter and the Administrative Code, including, but not limited to, the prevailing wage requirements of the Charter, Local Residents, and Disadvantaged Worker hiring compliance and the Policy, and the affirmative action provisions of the Administrative Code, and to recommend to the Board or designee enforcement measures to ensure the C/S/E's compliance with the general conditions of a construction contract and the Policy. At the conclusion of any six-month period, the Parties to the Agreement shall report to the Board with a status update on the Agreement with regard to that Project, including a description of any obstacles or barriers faced. The provisions of this Article shall not substitute for or preclude any employee or Union from filing a grievance for any violation of Article VIII under the provisions of the Grievance Arbitration Procedure provisions of Article XIII.

**11.2** Each C/S/E shall cooperate fully and promptly with any inquiry or investigation the City or its designated representatives deems necessary in order to monitor compliance with the provisions in this Agreement and the Policy.

## **ARTICLE XII**

### **JOINT ADMINISTRATIVE COMMITTEE**

**12.1** The Parties to this Agreement may establish an eight (8) person Joint Administrative Committee (JAC). This JAC shall be comprised of three (3) representatives selected by the Department and one (1) representative of the prime contractor, and four (4) representatives of the signatory Unions to be appointed by the Trades Council to be chaired jointly by a representative of the Department and the Council.

Each representative shall designate an alternate who shall serve in his or her absence.

**12.2** The JAC shall meet at the call of either of the joint chairs to discuss the implementation and administration of this Agreement, the progress of the Project, general labor management problems that may arise, and any other matters consistent with this Agreement. A unanimous decision of the JAC shall be final and binding upon all Parties. However, the JAC shall have no authority to make determinations upon or to decide grievances arising under this Agreement.

**12.3** A quorum will consist of at least two (2) City and two (2) signatory union representatives. For voting purposes, only an equal number of City and signatory union representatives present may constitute a voting quorum.

### **ARTICLE XIII**

#### **GRIEVANCE ARBITRATION PROCEDURE**

**13.1** The Parties hereby agree that all grievances and disputes that may arise concerning the meaning, application or the interpretation of the terms of this Agreement, other than disputes arising from conduct described in Article IV (Work Stoppages, Strikes, Sympathy Strikes and Lockouts), Article IX (Employee Grievance Procedure) and Article XIV (Jurisdictional Disputes), shall be settled in accordance with the following procedures set out herein. Grieving parties are encouraged to meet as soon as possible and try to resolve the dispute. However, if a resolution cannot be reached, the following procedure shall be used.

**13.2** Grievances and disputes shall be settled according to the following procedures:

Step 1: The business representative of the local Union involved shall first attempt to settle the matter by oral discussion with the particular C/S/E's representative no later than five (5) working days after the Union submitting the grievance first became aware of, or by the use of reasonable diligence should have been aware of, the occurrence first giving rise to the dispute or grievance. If the matter is not resolved with the C/S/E's representative within five (5) working days after the oral discussion with said C/S/E's representative, the dispute or grievance shall be reduced to writing by the grieving Union.

Step 2: In the event that the representatives (C/S/E and Union) are unable to resolve the grievance after its referral to Step 1, either involved party may submit the grievance, within five (5) business days of the Step 1 meeting of the parties to the grievance, to the Joint Administrative Committee (JAC), which shall meet within five (5) business days after such referral (or such longer time as is mutually agreed upon by all representatives of the JAC), to confer in an attempt to resolve the grievance. If the grievance is not resolved by the parties to the grievance within five (5) business days after its referral (or such longer time as is mutually agreed on by all representatives of the JAC) to the JAC, it may be referred within five (5) business days by either party to Step 3 by written notice of the submittal of the grievance to arbitration in accordance with the provisions set forth below.

Step 3: After notice by any party of intent to submit a grievance to arbitration, the Parties shall have five (5) working days to attempt, by mutual agreement, to

select as the Arbitrator to hear the dispute, one of the Arbitrators listed under the Expedited Arbitration provisions of Article 4.3 of this Agreement. If the Parties are unable to reach such agreement, the first arbitrator from the list, on a rotational basis, shall be the arbitrator to hear the dispute. The decision of the Arbitrator shall not have the authority to alter, amend, add to or delete from the provisions of this Agreement in any way. A failure of any party to attend said hearing shall not delay the hearing of evidence or the issuance of any decision by the Arbitrator. Should any party seek confirmation of the award made by the Arbitrator, the prevailing party shall be entitled to receive its reasonable attorney fees and costs.

**13.3** The time limits specified in any step of the Grievance Arbitration Procedure set forth in Section 13.2 may be extended by mutual agreement of the Parties. However, failure to process a grievance, or failure to respond in writing within the time limits provided above, without a request for an extension of time, shall be deemed a waiver of such grievance without prejudice, or without precedent to the processing and/or resolution of like or similar grievances.

**13.4** Grievances which are settled directly by the Parties to such grievance shall not be precedent setting.

**13.5** The Harbor Department or its designated representative shall be given advance notification of all proceedings of all actions at Steps 2 and 3 and may observe such proceedings upon request.

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## ARTICLE XIV

### JURISDICTIONAL DISPUTES

**14.1** The assignment of work will be solely the responsibility of the C/S/E performing the work involved; and such work assignments will be in accordance with the Plan for the Settlement of Jurisdictional Disputes in the Construction Industry (the "Plan") or any successor plan.

**14.2** All jurisdictional disputes on this Project, between or among Building and Construction Trades Unions and employers shall be settled and adjusted according to the present Plan established by the Building and Construction Trades Department or any other plan or method of procedure that may be adopted in the future by the Building and Construction Trades Department. Decisions rendered shall be final, binding and conclusive on the C/S/Es and Unions. A decision shall not award back pay or any other damages for a misassignment of work, nor may any party bring an independent action for back pay or any other damages based upon a decision.

(1) If a dispute arising under this Article involves the Southwest Regional Council of Carpenters or any of its subordinate bodies, an Arbitrator shall be chosen by the procedures specified in Article V, Section 5 of the Plan from a list composed of John Kagel, Thomas Angelo, Robert Hirsch and Thomas Pagan. The Arbitrator's hearing on the dispute shall be held at the offices of the Council within fourteen (14) days of the selection of the Arbitrator. All other procedures shall be as specified in the Plan.

**14.3** No Work Disruption Over Jurisdiction. All jurisdictional disputes shall be resolved without the occurrence of any strike, work stoppage, disruption, or slow down of any nature and the C/S/E's assignments shall be adhered to until the dispute is resolved.

Individuals violating this section shall be subject to immediate discharge.

**14.4 Pre-Job Conference.** A pre-job conference shall be held with all parties prior to the start of work by the prime contractor for the Project covered by this Agreement. The purpose of the conference will be to, among other things, determine craft manpower needs, schedule of work for the contract and Project work rules/owner rules. The subcontractors/owner operators of any tier will be advised in advance of all such conferences and shall participate. The Trades Council and the BCA's Office of Contract Compliance shall be advised in advance of all such conferences and may participate if they wish. All work assignments shall be disclosed by the C/S/E at a pre-job conference. Any formal jurisdictional dispute raised under Article XIV must be raised at the pre-job conference upon disclosure of the work assignments. If the C/S/E intends to change the work assignment after the pre-job conference or to make an assignment of work not previously known, the C/S/E must notify the appropriate affected craft union(s) prior to the commencement of work. The C/S/E performing all project work that was not previously assigned at the pre-job conference will conduct a separate pre-job conference for such newly assigned work prior to commencing such work.

## **ARTICLE XV**

### **MANAGEMENT RIGHTS**

**15.1** The C/S/Es shall retain full and exclusive authority for the management of their operations including, but is not limited to, the right to direct their working force and to establish coordinated working hours and starting times, which shall not be in conflict with the Schedule A Agreements of the Unions.



**15.2** There shall be no limit on production by workers or restrictions on the full use of tools or equipment. Craftsmen using tools shall perform any of the work of the trades and shall work under the direction of the craft foremen. There shall be no restrictions on efficient use of manpower other than as may be required by safety regulations. The C/S/Es may utilize the most efficient methods or techniques of construction, tools or other labor-saving devices to accomplish the work. Restrictive practices not a part of the terms and conditions of this Agreement will not be recognized.

**15.3** The C/S/Es shall be the sole judge of the number and classifications of employees required to perform work subject to this Agreement and shall have the absolute right to hire, promote, suspend, discharge or lay off employees at their discretion and to reject any applicant for employment, subject to the provisions of the respective craft collective bargaining agreement between the particular C/S/E and Union and pursuant to this Agreement.

**15.4** Nothing in this Agreement shall be construed to limit the right of any of the C/S/Es' to select the lowest bidder they deem qualified for the award of contracts or subcontracts or material, supplies, or equipment purchase orders on the Project. The right of ultimate selection remains solely with the C/S/E in accordance with the construction contract.

**15.5** It is recognized that certain materials, equipment and systems of a highly technical and specialized nature will have to be installed at the Project. The nature of the materials or the nature of the equipment and systems, together with requirements of manufacturer's warranty, dictate that it will be pre-fabricated, pre-piped, pre-wired and/or installed under the supervision and direction of the Harbor Department, City

and/or manufacturer's personnel. The Unions agree that such materials, equipment and systems shall be installed without the occurrence of any conduct described in Section 4.1 or 4.2.

## **ARTICLE XVI**

### **SAFETY, PROTECTION OF PERSON AND PROPERTY**

**16.1** It shall be the responsibility of each C/S/E to ensure safe working conditions and employee compliance with any safety rules contained herein or established by the Harbor Department, City, the state and the C/S/E. It is understood that the employees have an individual obligation to use diligent care to perform their work in safe manner and to protect themselves and the property of the C/S/E and the Harbor Department.

**16.2** Employees shall be bound by the safety, security and visitor rules established by the C/S/E and the Harbor Department. These rules will be published and posted in conspicuous places throughout the work site. An employee's failure to satisfy his/her obligations under this Section will subject him/her to discipline, including discharge.

**16.3** The Parties acknowledge that the Harbor Department and the C/S/E have a policy, which prohibits the use, sale, transfer, purchase and/or possession of a controlled substance, alcohol and/or firearms while on the Harbor Department's premises. Additionally, the C/S/E has a "drug free" work place policy, which prohibits those working on the Harbor Department's premises from having a level of alcohol in their system, which could indicate impairment, and/or any level of controlled substances (i.e., illegal drugs) in their system.

**16.4** To that end, the Parties agree to adopt the Los Angeles/Orange Counties Building and Construction Trades Council Approved Drug and Alcohol Testing Policy, a



copy of which is attached hereto as Attachment "B" which shall be the policy and procedure utilized under this Agreement.

## **ARTICLE XVII**

### **SAVINGS CLAUSE**

**17.1** The Parties agree that in the event any article, provision, clause, sentence or work of the Agreement is determined to be illegal or void as being in contravention of any applicable law, by a court of competent jurisdiction, the remainder of the Agreement shall remain in full force and effect. The Parties further agree that if any article, provision, clause, sentence or word of the Agreement is determined to be illegal or void, by a court of competent jurisdiction, the Parties shall substitute, by mutual agreement, in its place and stead, an article, provision, sentence or word which will meet the objections to its validity and which will be in accordance with the intent and purpose of the article, provision, clause, sentence or word in question.

**17.2** The Parties also agree that in the event that a decision of a court of competent jurisdiction materially alters the terms of the Agreement such that the intent of the Parties is defeated, then the entire Agreement shall be null and void.

**17.3** If a court of competent jurisdiction determines that all or part of the Agreement is invalid and/or enjoins the City or the Harbor Department from complying with all or part of its provisions and the Board accordingly determines that the Agreement will not be required as part of an award to a C/S/E, the Unions will no longer be bound by the provisions of Article IV to the extent that such C/S/E is no longer bound. The Unions and their members shall remain bound to Article IV with respect to all other C/S/Es who remain bound to this Agreement, and no action taken by the Unions or their members

shall disrupt the work of such C/S/Es.

**17.4** The provisions of this Agreement shall not be applicable where prohibited by Presidential Executive Order, Federal or State law, or where the application would be inconsistent with terms and conditions of a grant or a contract with the agency of the United States, State of California, or the instruction of an authorized representative of any of these agencies with respect to any grant or contract.

## **ARTICLE XVIII**

### **STEWARD**

**18.1** Each Union shall have the right to designate a working craft employee as steward for each C/S/E employing such craft on the Project. Such designated steward shall be a qualified workman assigned to a crew and shall perform the work of the craft. The steward shall not perform supervisory duties. Under no circumstances shall there be nonworking stewards. Stewards shall be permitted a reasonable amount of time during working hours to perform applicable Union duties related to the work being performed by the craft employees of his/her C/S/E and not to the work being performed by other C/S/Es or their employees.

**18.2** Authorized representatives of the Union(s) shall have access to the Covered Project, provided that such representatives fully comply with posted visitor, security, and safety rules and the environmental compliance requirements of the Covered Project, provided that they do not unnecessarily interfere with the employees or cause them to neglect their work. The Contractor recognizes the right of access set forth in this Section and such access will not be unreasonably withheld from an authorized representative of the Union.

## ARTICLE XIX

### TERM

**19.1** This Agreement shall commence upon execution by all Parties (the City of Los Angeles Harbor Department and the Los Angeles/Orange Counties Building and Construction Trades Council and the Craft Unions signatory to this Agreement) and shall continue in full force and effect from the date of execution by all Parties for a period of ten (10) years. During the term of this Agreement, upon request by either Party or by mutual consent, the Parties will meet to discuss the application of and their experience with this Agreement. As a result of any such meeting, the Parties may, but shall not be obligated to, mutually agree to amendments or modification of this Agreement.

**19.2** The Agreement shall continue in full force and effect for each covered Project until project acceptance by the Board. Either party desiring to renew, extend or to negotiate changes to this Agreement upon expiration, shall make such intention known to the other party by written notice thereof not less than six (6) months prior to the expiration of this Agreement.

**19.3** Any covered Project awarded during the term of this Agreement shall continue to be covered hereunder, until completion of the Project, notwithstanding the expiration date of this Agreement.

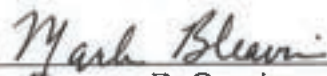
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IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the day and year written below.

THE UNION OFFICIALS signing this Agreement warrant and represent that they are authorized to collectively bargain on behalf of the organizations whom they represent and the members of such organizations.

**THE CITY OF LOS ANGELES HARBOR DEPARTMENT**

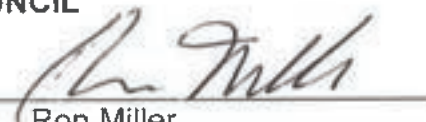
By:   
Eugene D. Seroka  
Executive Director

Date: 12-11-17

By:   
Amber Klesges  
Commission Secretary

Date: 12-11-17

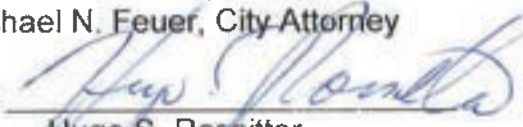
**LOS ANGELES/ORANGE COUNTY BUILDING AND CONSTRUCTION TRADES COUNCIL**

By:   
Ron Miller  
Executive Secretary  
Los Angeles/Orange County Building  
And Construction Trades Council

Date: 5-17-17

APPROVED AS TO FORM:

Michael N. Feuer, City Attorney

By:   
Hugo S. Rossitter  
Deputy City Attorney

Date: 5/17/2017

Union Signatory Page

Asbestos Heat & Frost Insulators (Local 5)  
 Boilermakers (Local 92)  
 Bricklayers & Allied Craftworkers (Local 4)  
 Cement Masons (Local 500)  
 District Council of Laborers  
 Electricians (Local 11)  
 Elevator Constructors (Local 18)  
 Gunite Workers (Local 345)  
 Iron Workers (Reinforced - Local 416)  
 Iron Workers (Structural - Local 433)  
 Laborers (Local 1309)  
 Laborers (Local 300) (Remediation)  
 Operating Engineers (Local 12)  
 Operating Engineers (Local 12)  
 Operating Engineers (Local 12)  
 Painters & Allied Trades DC 36  
 Pipe Trades (Local 250)  
 Pipe Trades (Local 345)  
 Pipe Trades (Plumbers Local 78)  
 Pipe Trades (Sprinkler Fitters Local 709)  
 Plasterers (Local 200)  
 Plaster Tenders (Local 1414)  
 Roofers & Waterproofers (Local 36)  
 Sheet Metal Workers (Local 105)  
 Teamsters (Local 986)  
 Southwest Regional Council of Carpenters

*Victor Lopez*  
*Mark Thos (B)*  
*John P...*  
*David Gray*  
*Alvin E...*  
*Man...*  
*Ed Dean*  
*M...*  
*Mitchell...*  
*John...*  
*Ronald...*  
*Dan...*  
*Carl L. Mendel...*  
*Mark...*  
*Greg...*  
*Daryl H. Ma...*  
*Rich...*  
*...*  
*Sam...*  
*Cal...*  
*John...*  
*Greg...*



**ATTACHMENT "A"**  
COMPANY LETTERHEAD

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

Mr. Shaun Shahrestani  
Chief Harbor Engineer  
Construction Division  
Port of Los Angeles  
425 S. Palos Verdes Street  
San Pedro, CA. 90731

SUBJECT: LETTER OF ASSENT

Dear Mr. Shahrestani:

This is to certify that the undersigned Contractor/Employer has examined a copy of the subject Project Labor Agreement entered into by and between the City of Los Angeles Harbor Department and Los Angeles/Orange Counties Building and Construction Trades Council and the signatory Unions dated \_\_\_\_\_. The undersigned Contractor/Employer hereby agrees to comply with all of the terms and conditions of the aforementioned Project Labor Agreement as such labor Agreement may, from time to time, be amended by the parties or interpreted pursuant to its terms.

It is understood that the signing of the letter of Assent shall be as binding on the undersigned Contractor/Employer as though the Contractor/Employer had signed the above referred Agreement and shall require all its subcontractors, of whatever tier, to become similarly bound for all work within the scope of this Agreement.

This Letter of Assent shall become effective and binding upon the undersigned Contractor/Employer the \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, and shall remain in full force and effect until the completion of the above stated project.

Sincerely,

(Name of Construction Company)

By: \_\_\_\_\_  
(Name and Title of Authorized Executive)

Contractor's State License No.: \_\_\_\_\_

cc:

## **ATTACHMENT B**

**LOS ANGELES/ORANGE COUNTIES  
BUILDING AND CONSTRUCTION TRADES COUNCIL  
APPROVED  
DRUG AND ALCOHOL TESTING POLICY**

The Parties recognize the problems which drug and alcohol abuse have created in the construction industry and the need to develop drug and alcohol abuse prevention programs. Accordingly, the Parties agree that in order to enhance the safety of the work place and to maintain a drug and alcohol free work environment, individual Employers may require applicants or employees to undergo drug and alcohol testing.

1. It is understood that the use, possession, transfer or sale of illegal drugs, narcotics, or other unlawful substances, as well as being under the influence of alcohol and the possession or consuming alcohol is absolutely prohibited while employees are on the Employer's job premises or while working on any jobsite in connection with work performed under the Project Labor Agreement ("PLA").

2. No Employer may implement a drug testing program which does not conform in all respects to the provisions of this Policy.

3. No Employer may implement drug testing at any jobsite unless written notice is given to the Union setting forth the location of the jobsite, a description of the project under construction, and the name and telephone number of the Project Supervisor. Said notice shall be addressed to the office of each Union signing the PLA. Said notice shall be delivered in person or by registered mail before the implementation of drug testing. Failure to give such notice shall make any drug testing engaged in by

the Employer a violation of the PLA, and the Employer may not implement any form of drug testing at such jobsite for the following six months.

4. An employer who elects to implement drug testing pursuant to this Agreement shall require all employees on the Project to be tested. With respect to individuals who become employed on the Project subsequent to the proper implementation of this drug testing program, such test shall be administered upon the commencement of employment on the project, whether by referral from a Union Dispatch Office, transfer from another project, or another method. Individuals who were employed on the project prior to the proper implementation of this drug testing program may only be subjected to testing for the reasons set forth in Paragraph 5(f) (1) through 5(f) (3) of this Policy. Refusal to undergo such testing shall be considered sufficient grounds to deny employment on the project.

5. The following procedure shall apply to all drug testing:

a. The Employer may request urine samples only. The applicant or employee shall not be observed when the urine specimen is given. An applicant or employee, at his or her sole option, shall, upon request, receive a blood test in lieu of a urine test. No employee of the Employer shall draw blood from a bargaining unit employee, touch or handle urine specimens, or in any way become involved in the chain of custody of urine or blood specimens. A Union Business Representative, subject to the approval of the individual applicant or employee, shall be permitted to accompany the applicant or employee to the collection facility to observe the collection, bottling, and sealing of the specimen.



b. The testing shall be done by a laboratory approved by the Substance Abuse & Mental Health Services Administration (SAMHSA), which is chosen by the Employer and the Union.

c. An initial test shall be performed using the Enzyme Multiplied Immunoassay Technique (EMZT). In the event a question or positive result arises from the initial test, a confirmation test must be utilized before action can be taken against the applicant or employee. The confirmation test will be by Gas Chromatography Mass Spectrometry (GC/MS). Cutoff levels for both the initial test and confirmation test will be those established by the SAMHSA. Should these SAMHSA levels be changed during the course of this agreement or new testing procedures are approved, then these new regulations will be deemed as part of this existing agreement. Confirmed positive samples will be retained by the testing laboratory in secured long-term frozen storage for a minimum of one year. Handling and transportation of each sample must be documented through strict chain of custody procedures.

d. In the event of a confirmed positive test result the applicant or employee may request, within forty-eight (48) hours, a sample of his/her specimen from the testing laboratory for purposes of a second test to be performed at a second laboratory, designated by the Union and approved by SAMHSA. The retest must be performed within ten (10) days of the request. Chain of custody for this sample shall be maintained by the Employer between the original testing laboratory and the Union's designated laboratory. Retesting shall be performed at the applicant's or employee's expense. In the event of conflicting test results the Employer may require a third test.

e. If, as a result of the above testing procedure, it is determined that an applicant or employee has tested positive, this shall be considered sufficient grounds to deny the applicant or employee his/her employment on the Project.

f. No individual who tests negative for drugs or alcohol pursuant to the above procedure and becomes employed on the Project shall again be subjected to drug testing with the following exceptions:

1. Employees who are involved in industrial accidents resulting in damage to plant, property or equipment or injury to him/herself or others may be tested pursuant to the procedures stated hereinabove.

2. The Employer may test employees following thirty (30) days advance written notice to the employee(s) to be tested and to the applicable Union. Notice to the applicable Union shall be as set forth in Paragraph 3 above and such testing shall be pursuant to the procedures stated hereinabove.

3. The Employer may test an employee where the Employer has reasonable cause to believe that the employee is impaired from performing his/her job. Reasonable cause shall be defined as exhibiting aberrant or unusual behavior, the type of which is a recognized and accepted symptom of impairment (i.e., slurred speech, unusual lack of muscular coordination, etc.). Such behavior must be actually observed by at least two persons, one of whom shall be a Supervisor who has been trained to recognize the symptoms of drug abuse or impairment and the other of whom shall be the job steward. If the job steward is unavailable or there is no job steward on the project the other person shall be a member of the applicable Union's bargaining unit. Testing shall be pursuant to the procedures stated hereinabove. Employees who

are tested pursuant to the exceptions set forth in this paragraph and who test positive will be removed from the Employer's payroll.

g. Applicants or employees who do not test positive shall be paid for all time lost while undergoing drug testing. Payment shall be at the applicable wage and benefit rates set forth in the applicable Union's Master Labor Agreement. Applicants who have been dispatched from the Union and who are not put to work pending the results of a test will be paid waiting time until such time as they are put to work. It is understood that an applicant must pass the test as a condition of employment. Applicants who are put to work pending the results of a test will be considered probationary employees.

6. The employers will be allowed to conduct periodic job site drug testing on the Project under the following conditions:

a. The entire jobsite must be tested, including any employee or subcontractor's employee who worked on that project three (3) working days before or after the date of the test;

b. Jobsite testing cannot commence sooner than thirty (30) days after start of the work on the Project;

c. Prior to start of periodic testing, a business representative will be allowed to conduct an educational period on company time to explain periodic jobsite testing program to affected employees;

d. Testing shall be conducted by a SAMHSA certified laboratory, pursuant to the provisions set forth in Paragraph 5 hereinabove.

e. Only two periodic tests may be performed in a twelve month period.

7. It is understood that the unsafe use of prescribed medication, or where the use of prescribed medication impairs the employee's ability to perform work, is a basis for the Employer to remove the employee from the jobsite.

8. Any grievance or dispute which may arise out of the application of this Agreement shall be subject to the grievance and arbitration procedures set forth in the PLA.

9. The establishment or operation of this Policy shall not curtail any right of any employee found in any law, rule or regulation. Should any part of this Agreement be found unlawful by a court of competent jurisdiction or a public agency having jurisdiction over the parties, the remaining portions of the Agreement shall be unaffected and the parties shall enter negotiations to replace the affected provision.

10. Present employees, if tested positive, shall have the prerogative for rehabilitation program at the employee's expense. When such program has been successfully completed the Employer shall not discriminate in any way against the employee. If work for which the employee is qualified exists he/she shall be reinstated.

11. The Employer agrees that results of urine and blood tests performed hereunder will be considered medical records held confidential to the extent permitted or required by law. Such records shall not be released to any persons or entities other than designated Employer representatives and the applicable Union. Such release to the applicable Union shall only be allowed upon the signing of a written release and the information contained therein shall not be used to discourage the employment of the individual applicant or employee on any subsequent occasion.

12. The Employer shall indemnify and hold the Union harmless against any and all claims, demands, suits, or liabilities that may arise out of the application of this Agreement and/or any program permitted hereunder.

13. Employees who seek voluntary assistance for substance abuse may not be disciplined for seeking such assistance. Requests from employees for such assistance shall remain confidential and shall not be revealed to other employees or management personnel without the employee's consent. Employees enrolled in substance abuse programs shall be subject to all Employer rules, regulations and job performance standards with the understanding that an employee enrolled in such a program is receiving treatment for an illness.

14. This Memorandum, of Understanding shall constitute the only Agreement in effect between the parties concerning drug and alcohol abuse, prevention and testing. Any modifications thereto must be accomplished pursuant to collective bargaining negotiations between the parties.

## DRUG ABUSE PREVENTION AND DETECTION

### APPENDIX A

#### CUTOFF LEVELS

| DRUG                | SCREENING METHOD | SCREENING LEVEL ** | CONFIRMATION METHOD | CONFIRMATION LEVEL |
|---------------------|------------------|--------------------|---------------------|--------------------|
| Alcohol             | EMIT             | 0.02%              | CG/MS               | 0.02%              |
| Amphetamines        | EMIT             | 1000 ng/ml*        | CG/MS               | 500 ng/ml*         |
| Barbiturates        | EMIT             | 300 ng/ml          | CG/MS               | 200 ng/ml          |
| Benzodiazepines     | EMIT             | 300 ng/ml          | CG/MS               | 300 ng/ml          |
| Cocaine             | EMIT             | 300 ng/ml*         | CG/MS               | 150 ng/ml*         |
| Methadone           | EMIT             | 300 ng/ml          | CG/MS               | 100 ng/ml          |
| Methaqualone        | EMIT             | 300 ng/ml          | CG/MS               | 300 ng/ml          |
| Opiates             | EMIT             | 2000 ng/ml*        | CG/MS               | 2000 ng/ml*        |
| PCP (Phencyclidine) | EMIT             | 25 ng/ml*          | CG/MS               | 25 ng/ml*          |
| THC (Marijuana)     | EMIT             | 50 ng/ml*          | CG/MS               | 15 ng/ml*          |
| Propoxyphene        | EMIT             | 300 ng/ml          | CG/MS               | 100 ng/ml          |

\* SAMHSA specified threshold

\*\* A sample reported positive contains the Indicated drug at or above the cutoff level for that drug. A negative sample either contains no drug or contains a drug below the cutoff level.

EMIT - Enzyme Immunoassay

CC/MS - Gas Chromatography/Mass Spectrometry

SIDE LETTER OF AGREEMENT  
TESTING POLICY FOR DRUG ABUSE

It is hereby agreed between the parties hereto that an Employer who has otherwise properly implemented drug testing, as set forth in the Testing Policy for Drug Abuse, shall have the right to offer an applicant or employee a "quick" drug screening test. This "quick" screen test shall consist either of the "ICUP" urine screen or similar test or an oral screen test. The applicant or employee shall have the absolute right to select either of the two "quick" screen tests, or to reject both and request a full drug test.

An applicant or employee who selects one of the quick screen tests, and who passes the test, shall be put to work immediately. An applicant or employee who fails the "quick" screen test, or who rejects the quick screen tests, shall be tested pursuant to the procedures set forth in the Testing Policy for Drug Abuse. The sample used for the "quick" screen test shall be discarded immediately upon conclusion of the test. An applicant or employee shall not be deprived of any rights granted to them by the Testing Policy for Drug Abuse as a result of any occurrence related to the "quick" screen test.



## Attachment C

**CITY OF LOS ANGELES HARBOR DEPARTMENT  
REQUEST/VERIFICATION FOR CRAFT EMPLOYEES  
(INSERT NAME OF PROJECT)**

**INSTRUCTIONS****To the Contractor:**

Please complete and fax this form to the applicable union to request craft workers that fulfill all hiring requirements for the City of Los Angeles project. After faxing your request, call the Local to verify receipt and substantiate their capacity to furnish local, at-risk or general dispatch as requested. Contact information for Locals is listed on back of form. Please print your Fax Transmission Verification Report and keep a copy of this request for your records.

**To the Union:**

Please complete the "Union Use Only" section and fax form back to the requesting contractor. Retain form for your records.

|                     |       |                    |       |
|---------------------|-------|--------------------|-------|
| To:                 | Local | Fax# ( )           | Date: |
| From – Company Name |       |                    |       |
| Person Sending:     |       | Contact Phone: ( ) |       |

Please provide me with union craft workers per the City of Los Angeles PLA that fulfills the requirements for this project as defined below:

**30% Local Requirement** (Union craft employees, including apprentices, who reside in the local metropolitan area zip codes listed below. If unavailable, can be dispatched from any one of the Citywide zip codes listed in Attachment).

**SEE ATTACHED TIER 1 AND TIER 2 ZIP CODES**

**10% "Transitional Worker" Requirement** (Union craft employees, including apprentices, who live in one of the Citywide zip codes listed in Attachment, and are certified to fulfill the "Transitional worker" hiring requirement).

**General Dispatch** (Union craft employees dispatched per normal dispatch procedures, not including the 30% Local or 10% Transitional Worker requirements)

| Employee Name | Address | Zip Code |
|---------------|---------|----------|
|               |         |          |
|               |         |          |
|               |         |          |
|               |         |          |

| Craft Employees Requested |                                         |                     |                     |                     |                |                |
|---------------------------|-----------------------------------------|---------------------|---------------------|---------------------|----------------|----------------|
| Job/Craft Description     | Journeyman /<br>Apprenticeship<br>Level | Number(s) Requested |                     |                     | Report<br>Date | Report<br>Time |
|                           |                                         | 30%<br>Local        | 10%<br>Transitional | General<br>Dispatch |                |                |
|                           |                                         |                     |                     |                     |                |                |
|                           |                                         |                     |                     |                     |                |                |
|                           |                                         |                     |                     |                     |                |                |

**Total Workers Requested**

Please have worker(s) report to the following address indicated below:

Site Address: \_\_\_\_\_ Report to (On-Site Contact): \_\_\_\_\_

On-Site Tel.#: ( ) \_\_\_\_\_ Fax: ( ) \_\_\_\_\_

Comments or special requirements:

**Union Use Only**

(Fax the Completed Form Back to Contractor)

Reception Date: \_\_\_\_\_ Dispatch Date: \_\_\_\_\_ Received By: \_\_\_\_\_

**Requested Dispatch****Available for Dispatch****Unavailable for Dispatch**

30% Local ☐ ☐ ☐

10% Transitional ☐ ☐ ☐

General Dispatch ☐ ☐ ☐

Comments:



## ATTACHMENT D

### Harbor Department PLA Construction Trade Unions Contact Numbers

#### Asbestos Heat & Frost Insulators (Local 5)

670 E. Foothill Blvd.  
Azusa, CA 91702  
Tel: (626) 815-9794  
Fax: (626) 815-0165

#### Boilermakers (Local 92)

2260 S. Riverside Avenue  
Bloomington, CA 92316  
Tel: (909) 877-9382  
Fax: (909) 877-8318

#### Bricklayers & Allied Craftworkers (Loc. 4)

11818 Clark St., Suite A  
Arcadia, CA 91706  
Tel: (626) 739-5600  
Fax: (626) 739-5610

#### Drywall Finishers Local 1136

Corporate Center Drive  
Monterey Park, CA 91754  
Tel: (626) 296-8003  
Fax: (626) 296-8076

#### Electricians (Local 11)

297 N. Marengo Avenue  
Pasadena, CA 91101  
Tel: (626) 243-9700  
Fax: (626) 793-9743

#### Elevator Constructors (Local 18)

100 S. Mentor Avenue  
Pasadena, CA 91106  
Tel: (626) 449-1869  
Fax: (626) 577-1055

#### Operating Engineers (Local 12)

150 E. Corson  
Pasadena, CA 91103  
Tel: (626) 792-8900  
Fax: (626) 792-9039

#### Glaziers (Local 636)

1155 Corporate Center Dr.  
Monterey Park, CA 91754  
Tel: (626) 448-1565  
Fax: (626) 797-8395

#### Gunit Workers (Local 345)

P.O. Box 3345  
Burbank, CA 91508  
Tel: (818) 846-1303  
Fax: (818) 846-1226

#### Iron Workers (Reinforced – Local 416)

13830 San Antonio Dr.  
Norwalk, CA 90650  
Tel: (562) 868-1251  
Fax: (562) 868-1429

#### Iron Workers (Structural – Local 433)

17495 Hurley St. East  
City of Industry, CA 91744  
Tel: (626) 964-2500  
Fax: (626) 964-1754

#### Laborers Local 1309

3971 Pixie Ave.  
Lakewood, CA 90712  
Tel: (562) 421-9346  
Fax: (562) 421-5964

#### Laborers Local 300

2005 W. Pico Blvd.  
Los Angeles, CA 90006  
Tel: (213) 385-3550  
Fax: (213) 385-6985

**Painters & Allied Trades DC 36**

1155 Corporate Center Drive  
Monterey Park, CA 91754  
Tel: (626) 584-9925  
Fax: (626) 584-1949

**Plaster Tenders**

1055 W. Second Street  
Pomona, CA  
Tel.: (909) 622-8500  
Fax: (909) 623-5244

**Plumbers (Local 78)**

1111 West James Wood Boulevard  
Los Angeles, CA 90015  
(213) 688-9000  
(213) 627-4624

**Pipe Trades (Local 250)**

*Steamfitters/Air Conditioning/  
Refrigeration / Industrial Pipefitters*  
18355 S. Figueroa St.  
Gardena, CA 90248  
*Steamfitters:* Tel: (310) 660-0035  
Fax: (310) 329-2465  
*AC/Refrig.* Tel: (310) 660-0045  
FAX: (310) 329-2465

**Pipe Trades (Local 345)**

*Landscape, Irrigation, Underground &  
Specialty Piping*  
1430 Huntington Dr.  
Duarte, CA 91010  
Tel: (626) 357-9345  
Fax: (626) 359-0359

**Pipe Trades (Sprinkler Fitters – Local 709)**

12140 Rivera Road  
Whittier, CA 90606  
Tel: (562) 698-9909  
Fax: (562) 698-7255

**Plasterers (Local 200)**

1610 W. Holt Ave.  
Pomona, CA 91768  
Tel: (909) 865-2240  
Fax: (909) 865-9392

**Cement Masons #500**

1605 N. Susan St.  
Santa Ana, CA 92703  
Tel.: (714) 554-0730  
Fax: (714) 265-0780

**Resilient Floor & Dec. Cov. (Local 1247)**

8051 Pioneer Blvd.  
Whittier, CA 90606  
Tel: (562) 695-7402  
Fax: (562) 695-6337

**Roofers & Waterproofers (Local 36)**

5380 Poplar Blvd.  
Los Angeles, CA 90032  
Tel: (323) 222-0251  
Fax: (323) 222-3585

**Sheet Metal Workers (Local 105)**

2120 Auto Centre Dr., Suite 105  
Glendora, CA 91740  
Tel: (909) 305-2800  
Fax: (909) 305-2822

**Teamsters (Local 986)**

1198 Durfee Avenue  
So. El Monte, CA 91733  
Tel: (626) 350-9860  
Fax: (626) 448-0986

**Tradeshaw and Sign Crafts**

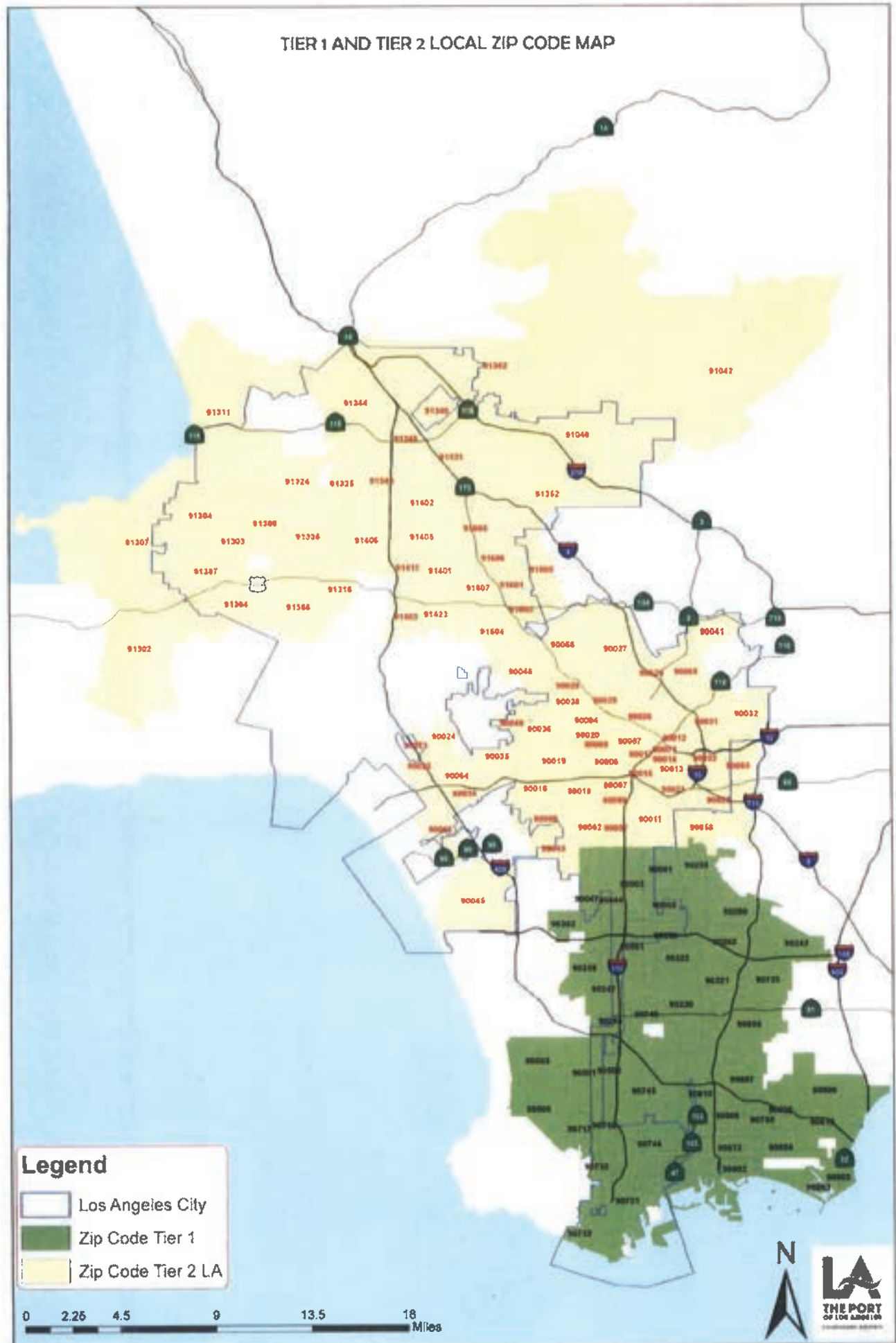
1155 Corporate Center Drive  
Monterey Park, CA 91754  
Tel: (626) 296-8086  
Fax: (626) 584-1949

ATTACHMENT E  
Harbor Department Calendar Years 2017 Thru 2027  
Capital Improvement Program (CIP) Project List

| Project Title                                                                           | Anticipated Start |
|-----------------------------------------------------------------------------------------|-------------------|
| 2017 - 2019 Site Improvements                                                           | 2017/2018         |
| B. 196-199 & 200A - Wharf Rehabilitation (2516600)                                      | 2017/2018         |
| B. 212-224 - Intermodal Container Transfer Facility (ICTF) Expansion (2533300)          | 2017/2018         |
| B. 93 - Cruise Terminal - Customs and Border Protection Improvements (2525300)          | 2017/2018         |
| B.187-190 - MOTEMS Repairs (2524600)                                                    | 2017/2018         |
| Front Street Beautification (2504700)                                                   | 2017/2018         |
| North Gaffey Street Beautification -Phase II (7934500)                                  | 2017/2018         |
| B. 240 A, B, & C - Seawall Improvements - ExxonMobil (2637600)                          | 2017/2018         |
| San Pedro Waterfront - Ports O' Call Promenade and Town Square (2632100)                | 2017/2018         |
| B. 200 - Rail Yard and Track Connections Enhancements (2540800)                         | 2017/2018         |
| B. 214 - 220 - Concrete Wharf Improvements (2537800)                                    | 2018/2019         |
| B. 167-169 - MOTEMS- Shell (2493600)                                                    | 2018/2019         |
| B. 226-236 Terminal Improvements - Wharf and Backlands (2531200)                        | 2018/2019         |
| B. 228-230 - Alternative Maritime Power (AMP) Upgrade and Retrofit (2529400)            | 2018/2019         |
| Wilmington Waterfront Pedestrian Bridge (2637700)                                       | 2018/2019         |
| Wilmington Waterfront Promenade (2533000)                                               | 2018/2019         |
| San Pedro Waterfront - Sampson Way (7th St. to 22nd St.) Roadway Improvements (2488200) | 2018/2019         |
| 2018 - 2020 Marine Improvements                                                         | 2018/2019         |
| B. 148-151 - MOTEMS- Phillips 66 (2493800)                                              | 2018/2019         |
| B. 238 - MOTEMS- ExxonMobil (2489900)                                                   | 2018/2019         |
| West Basin Lead Track Gap Closure (2536600)                                             | 2018/2019         |
| B. 226-236- Terminal Infrastructure Reconstruction (2539400)                            | 2018/2019         |
| San Pedro Waterfront - Harbor Boulevard From Miner Street to SP Slip (2543000)          | 2018/2019         |
| San Pedro Waterfront - B. 57 - Wharf Retrofit and Signal Street Improvements (2500600)  | 2019/2020         |
| San Pedro Waterfront - B. 80-83 - Waterside Improvements (2539000)                      | 2019/2020         |
| 2019 - 2021 Site Improvements                                                           | 2019/2020         |
| B. 164 - MOTEMS - Valero (2493900)                                                      | 2019/2020         |
| B. 100-102 Marine Operations Building (2454300)                                         | TBD               |
| B. 100-102 Crane Maintenance Building (2502800)                                         | TBD               |
| B. 121-131 Wharf Upgrades (2449000)                                                     | TBD               |
| B. 121-131 West Basin Intermodal Container Transfer Facility (WBICTF)(24810000)         | TBD               |
| RB 301-305 Buildings, Gates and Backland Development(2489000)                           | TBD               |
| B. 306 Wharf and Backland Development (2489100)                                         | TBD               |
| B. 306 Alternative Maritime Power (AMP) (2506800)                                       | TBD               |
| B. 163 MOTEMS-NuStar (2493700)                                                          | TBD               |
| B. 187-191 MOTEMS-Vopak (2494000)                                                       | TBD               |
| B. 161 Marine Ways Modifications (2486100)                                              | TBD               |
| Harbor Administration Building-HVAC Replacement (2509600)                               | TBD               |

All Projects on this list are subject to change. The anticipated starts are the best estimate at the time this document was prepared.

# TIER 1 AND TIER 2 LOCAL ZIP CODE MAP



Transmittal 2



**CONSTRUCTION  
CAREERS POLICY  
(Revision 1)**

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## **SECTION I. DEFINITIONS**

1. "Apprentice" means any worker who is indentured in a bona fide Labor/Management construction apprenticeship program, registered and approved by the State of California Department of Industrial Relations, Division of Apprenticeship Standards (DAS) or in the case of Projects with federal funding, indentured in a bona fide Labor/Management apprenticeship program approved by the US Department of Labor (DOL) and California DAS.
2. "Apprenticeship Program" means any Labor/Management construction apprenticeship program certified and approved by the California DAS or in the case of Projects with federal funding, approved by the US DOL and California DAS.
3. "Awarding Authority" means the City of Los Angeles, acting by and through the Board of Harbor Commissioners, or any employee or officer of the Board that is authorized to award or enter into any contract on behalf of the Board.
4. "Board" means the Los Angeles Board of Harbor Commissioners.
5. "Bureau of Contract Administration" (BCA) means the designated bureau within the City's Department of Public Works which may provide support services to the Harbor Department in administering the Policy and the PLA.
6. "City" means the City of Los Angeles, a municipal corporation, and all City awarding authorities.
7. "Construction Contract" means a City contract which has been awarded by the Board, and is necessary to complete the Project.
8. "Contractor/Subcontractor/Employer (C/S/E)" means any individual firm, partnership, owner operator, or corporation, or combination thereof, including joint ventures, which is an independent business enterprise and has entered into a contract with the Harbor Department or any of its contractors or subcontractors/owner operators of any tier, with respect to the construction of any part of the Project(s) under contract terms and conditions approved by the Board.
9. "Core Worker" means a verifiable member of a C/S/E's core workforce for the purpose of the PLA and this Policy if the worker's name appears on the C/S/E's active payroll for 60 of 100 working days immediately prior to award of the construction contract and meets all standards required by applicable local, state or federal law or regulation.
10. "Covered Project(s)" or "Project" means a project or projects that have been included in the Ten-Year "Capital Improvement Program (CIP) Project List" included as Attachment "E" to the PLA, or so designated by the Board. The Board may identify additional projects that are appropriate for coverage by the Agreement for

inclusion under the CIP and include such projects by Board Resolution. The Board shall request an annual review of the Harbor Department Capital Improvement Program to identify any new projects appropriate for coverage by the Agreement.

11. "Craft Request Form" means the document through which a C/S/E shall request workers from the Union and/or Jobs Coordinator, in the form set forth in the PLA and/or Policy.
12. "Employment Hiring Plan" (EHP) means a C/S/E's detailed hiring plan as described in BCA's Targeted Hiring Guidelines for Contractors and the Policy or other applicable Department policy.
13. "Engineer" means the Chief Harbor Engineer of the City of Los Angeles Harbor Department, Construction Division, or its authorized representative.
14. "Executive Director" shall mean the Executive Director of the City of Los Angeles Harbor Department, or his or her designee.
15. "FHWA Project" means a Harbor Department Project that is funded in whole or in part by the Federal Highway Administration (FHWA).
16. "Harbor Department" means the city of Los Angeles Harbor Department.
17. "Jobs Coordinator" means the Prime Contractor's designated person, agent or agency that will facilitate the local hire referral process with the C/S/E, Unions and other referral organizations, such as those listed in the BCA's Targeted Hiring Guidelines for Contractors. The Jobs Coordinator must be able to demonstrate or document to the BCA that it has the requisite qualification and/or experience to fulfill the duties and responsibilities as outlined in the Policy.
18. "LA/OCBTC" (Trades Council) means the Los Angeles /Orange Counties Building and Construction Trades Council.
19. "Letter of Assent" means the document that each C/S/E (of any tier) must sign and submit to the Engineer or designated administrator, which formally binds them to adherence to all the forms, requirements and conditions of the PLA and this Policy.
20. "Liquidated Damages" means disputed funds withheld from the Prime Contractor until they are found to be in compliance, the contract is terminated, or the Covered Project is completed.
21. "Local Resident" means an individual whose primary residence is within the Tier 1 or Tier 2 zip code areas.
22. "Long-Term Unemployment" as defined by the Bureau of Labor Statistics means being jobless for 21 weeks or more, as defined.



24. "PLA" means the Project Labor Agreement entered into between the Harbor Department of the City of Los Angeles and Unions, applicable to Covered Projects.
25. "Policy" means this Harbor Department Construction Careers Policy.
26. "Port" means the Port of Los Angeles.
27. "Project Work" means construction work performed as part of a Covered Project.
28. "Prime Contractor" means any individual firm, partnership, owner-operator, or corporation, or combination thereof, including joint-ventures, that is an independent business enterprise and that has entered into a Construction Contract with the Harbor Department.
29. "Reporting Period" means the Harbor Department's indicated reporting period for measuring the targeted hiring efforts of the C/S/Es. These reporting periods shall be at the Harbor Department's determination of 10%, 30%, 50%, 70% and 90% construction completion phases.
30. "Targeted Hiring Guidelines for Contractors" means the document provided by the Department to assist C/S/E's in implementing the targeted hiring procedures.
31. "Tier 1" means the zip codes identified in Article 7.4 of the PLA, which fall within an approximate ten mile radius of the Port and in which the rate of unemployment is in excess of 105% of the County of Los Angeles' unemployment rate at the time of application and/or are within the area of Port-related operations and activity.
32. "Tier 2" means the zip codes within the City, identified in Article 7.5 of the PLA, that includes at least 2 census tracts (or a portion thereof) in which the median annual household income is less than \$62,627 per and/or where the rate of unemployment is in excess of 100% of the County of Los Angeles' unemployment rate at the time of application.
33. "Transitional Worker" means any individual whose primary place of residence is within a Tier 1 or Tier 2 zip code of the City of Los Angeles, and who prior to commencing work on a project has been certified as satisfying at least one of the following criteria:
  - (1) having a Veteran status; having a documented history of involvement with the criminal justice system; being homeless; or
  - (2) is an individual facing two or more of the following barriers to employment: having a household income less than 50% of the Los Angeles County median annual household income, receiving public assistance, lacking a GED or high school diploma, being a custodial single parent, suffering from long term unemployment, being emancipated from the foster care system, or being an

apprentice, in a program described in Section I Number 1 above , with less than 15% of the apprenticeship hours required to graduate to journey level.

34. "Underemployment" means a situation in which a worker (i) is employed only part-time when one needs and desires full-time employment, and/or (ii) is inadequately employed at a low-paying job that requires less skill or training than one possesses.
35. "Unemployment" means, in accordance with the Bureau of Labor Statistics definition, a situation in which a person does not have a job, has actively looked for work in the prior 4 weeks, and is currently available for work and chronic Unemployment means unemployment lasting 27 weeks or longer.
36. "Union(s)" or "Signatory Unions" means the Los Angeles/Orange Counties Building and Construction Trades Council affiliated with the Building & Construction Trades Department (AFL/CIO) Craft International Unions or any other craft labor organization signatory to the PLA, acting in their own behalf and on behalf of their respective affiliates and member organizations whose names are subscribed hereto and who have through their officers executed the PLA.

## **SECTION II. COVERAGE OF PROJECTS**

1. Covered Projects:
  - (a) Except as provided otherwise herein, this Policy applies to all Covered Projects contained in the 10-Year CIP list, and awarded by the Board.
  - (b) The Board may identify additional projects that are appropriate for coverage by the Policy and the PLA and include such projects by Board Resolution based on specific findings that such coverage will advance the Harbor Department's legitimate proprietary and policy interests and promote the public interest in assuring completion of the project in question in a safe and cost-effective manner while minimizing or negating any adverse impact to the public welfare.
2. FHWA Projects: In the event that the Harbor Department determines that a project to which this Policy applies is an FHWA Project or other grant-funded project, the Department shall modify or not enforce any aspect of the Policy or PLA in accordance with a valid and binding instruction from the U.S. Department of Transportation or applicable funding authority.

### **SECTION III. IMPLEMENTATION**

Prior to bid, Harbor Department staff shall review each Covered Project's bid specifications to ensure the following provisions are incorporated:

1. That the Request for Bid Package Authorization from the Executive Director specifies that the Covered Project contains the PLA and this Policy;
2. That the Bid specifications require all contractors submitting bids or proposals agree to the terms of the PLA and this Policy;
3. That a provision exists in the prime contract obligating the Prime Contractor and all its C/S/Es (of any tier) to comply with the terms of the PLA and this Policy and require compliance with PLA and Policy terms through a Letter of Assent or any other form or legally enforceable obligation to the City.
4. That the Construction Contract shall include provisions establishing liquidated damages amounts as described in Section VIII of this Policy.

### **SECTION IV. EXCLUSIONS AND/OR MODIFICATIONS**

1. Funding Source: this Policy shall not apply to construction contracts or projects where the funding source has established provisions or rules that forbid the inclusion of a PLA and/or Local Hire provision. If the project is listed as part of the CIP, Harbor Department staff must present the reason(s) to the Board prior to final determination to exclude the Covered Project.
2. This Policy shall not apply to work performed by a C/S/E's executives, managerial employees, engineering employees, supervisors (except those covered by Schedule A collective bargaining agreements), office and clerical employees, or any other employee not performing construction craftwork.
3. Out-of-State Workers: hours worked by residents of states other than California shall not be included in calculation of total hours of project work for purposes of determining compliance with the Section 5 below.

### **SECTION V. TARGETED HIRING**

1. Requirements for Covered Projects:

The Prime Contractor shall ensure that the following targeted hiring requirements are met for each Covered Project:

- (a) At least 30% of total work hours on each project shall be performed by Local Residents residing within Tier 1 as described in Article 7.4 of the PLA. If the 30% local hire is not attained utilizing Tier 1, the outreach shall expand to the Tier 2 as described in Article 7.5 of the PLA.
- (b) At least 20% of total work hours on each project will be performed by apprentices, but the hours performed by apprentices in each individual craft shall not exceed the ratio to journeymen established by the applicable craft union's DAS approved apprenticeship standards. The parties agree that residents in the Tier 1 or 2 zip code areas will perform 50% of all apprenticeship hours worked on the Project.
- (c) At least 10% of total hours worked on each project shall be performed by Transitional Workers residing within Tier 1 or Tier 2 zip code areas described in Articles 7.4 and 7.5 of the PLA respectively and the remaining zip code areas within the City of Los Angeles. These hours shall be applied towards the 30% Local Resident targeted hiring.

## **SECTION VI. RESPONSIBILITIES OF HARBOR DEPARTMENT, C/S/Es, UNIONS, and JOBS COORDINATOR**

### **1. Harbor Department Responsibilities:**

- (a) Work with BCA or the Harbor Department's designated PLA administrator to monitor and enforce the targeted hiring measures of the PLA and Policy and issue Notices of Non-Compliance where appropriate.
- (b) Review, approve or disapprove submitted Employment Hiring Plans prior to a C/S/E's estimated start of work. Approval of a C/S/E to work on a Covered Project is contingent on the C/S/E's submittal of an approved EHP.
- (c) Ensure, prior to a C/S/E's approval to work on a Covered Project, its submittal of a duly signed Letter of Assent.
- (d) Work with BCA or the Harbor Department's designated PLA administrator to post local hire status reports on the BCA website (<http://bca.lacity.org>) for Covered Projects.
- (e) Inform the Board on a quarterly basis regarding the status of all Covered Projects.
- (f) Determine any withholding from payments as disputed funds and make recommendations for assessment of Liquidated Damages.

2. Prime Contractor and C/S/Es:

- (a) Employment Hiring Plan (EHP): Prime Contractor shall ensure that its C/S/Es (of any tier), at least 20 business days prior to starting their work on the Covered Project, shall submit their plan(s) to the Harbor Department for approval by the Executive Director or his/her designee. Each C/S/E shall include in its EHP a description of how it will meet the targeted hiring requirements set forth in the PLA and Policy. No C/S/E (of any tier) shall be approved to work on a Covered Project without an approved EHP.
- (b) PLA and Policy: Prime Contractor shall ensure that its C/S/Es (of any tier), prior to start of work, (i) read and understand the requirements of the PLA and Policy; (ii) submit their Employment Hiring Plans at least 20 business days prior to their subcontractors' start of work and (iii) sign and submit their Letters of Assent prior to start of work. No C/S/E (of any tier) shall be approved to work on a Covered Project without having submitted a signed Letter of Assent.
- (c) Prior to start of work on the project, the Prime Contractor shall:
  - (i) Recommend a Jobs Coordinator for approval by the Harbor Department.
  - (ii) Upon Department's approval of its Jobs Coordinator, notify its subcontractor (of any tier) who the Jobs Coordinator is.
  - (iii) Provide within 10-calendar days upon request by the Department or its designated representative, documentation of their Jobs Coordinator's qualifications.
- (d) The Prime Contractor and its C/S/Es (of any tier) shall coordinate with the Jobs Coordinator for services to support their efforts in meeting the targeted hiring percentages as described in Article 7 of the PLA and Section 5 of the Policy.
- (e) Pre-Job Conference: The Prime Contractor and its C/S/Es (of any tier), prior to start of work, shall hold a pre-job conference. The purpose of the pre-job conference is to determine craft personnel needs, schedule of work for the contract and all other matters as described in the PLA and the Policy. All work assignments shall be disclosed by the Prime Contractor and/or C/S/Es (of any tier) at the pre-job conference. Any formal jurisdictional dispute(s) raised under Article 14 of the PLA must be raised at the pre-job conference upon disclosure of the work assignments. If the Prime Contractor and/or C/S/Es intend to change the work assignment after the pre-job conference or to make an assignment of work not previously known, the Prime Contractor and/or C/S/Es must notify the appropriate affected craft union(s) prior to the commencement of work.

- (f) Craft Request Form: The Prime Contractor and its C/S/Es (of any tier) shall only use the Craft Request Form (Attachment “C” of the PLA) and the procedures written therein to request workers from the affected Union(s). All C/S/Es must transmit a concurrent Craft Request transmittal of such request to the Jobs Coordinator.
- (g) The Prime Contractor and its C/S/Es (of any tier) must satisfactorily document their contact with the Jobs Coordinator when the Unions have not been able to refer a Local Resident and/or Transitional Worker within the 48-hour window of referral.
- (h) The Prime Contractor and its C/S/Es (of any tier) shall maintain proof of transmittal of the Craft Request forms to the Union hiring halls and Jobs Coordinator. Upon request by the Harbor Department or its designated representative, copies shall be provided within 10-calendar days of request.
- (i) The Prime Contractor and its C/S/Es (of any tier) shall make available to the Harbor Department, BCA, or designated representatives, records and information that are deemed relevant to monitoring and enforcement of the provisions of the PLA and the Policy.
- (j) The Prime Contractor and its C/S/Es (of any tier) shall cooperate fully and promptly with any inquiry or investigation the Harbor Department, BCA or designated representatives deem necessary in order to monitor compliance with the provisions of the PLA and the Policy.
- (k) The Prime Contractor and its C/S/Es (of any tier), within 60 calendar days after concluding work on the Covered Project, shall submit to the Harbor Department a verified statement of the number of journeypersons and apprentices who worked on the project, their classifications and the hours worked (per California Labor Code 1777.5(e)).

**Upon request of the BCA, or the Harbor Department, the Prime Contractor and its C/S/Es (of any tier) must provide documentation of their Local Resident, Apprentice and Transitional Workers targeted hiring participation level efforts within 10-calendar days of the request for documentation.**

### 3. Union Responsibilities:

- (a) Ensure that its dispatchers properly adhere to the use of the Craft Request Form and the procedures written therein.
- (b) Refer Local Residents and/or Transitional Workers requested through the Craft Request Form regardless of their place on the hiring hall list and normal referral procedures.

- (c) Exert their best efforts to recruit and identify Local Residents residing in Tier 1, and then Tier 2 zip code areas, as well as those referred by the Jobs Coordinator for entrance, indentureship into a union apprenticeship program, and assisting such individuals in graduating into eligible journeypersons.
- (d) Upon receiving a request from a C/S/E for a Local Resident, exhaust the available list of individuals residing the Tier 1 zip codes before referring an individual residing in the Tier 2 zip codes.
- (e) Track retention of Local Residents and/or Transitional Worker apprentices participating in joint Labor/Management apprenticeship programs and provide the Harbor Department with the necessary information as requested.

4. Jobs Coordinator:

- (a) Criteria for Selecting a Jobs Coordinator: The Jobs Coordinator plays an integral part in the success of its partners in obtaining the targeted hiring percentages. It is the responsibility of the Prime Contractor to designate a Jobs Coordinator possessing, but not limited to, the following demonstrable experience and qualifications:
  - (i) Developing, creating, designing and marketing specific programs targeting Local Residents and/or Transitional Workers for construction opportunities at the Covered Project (e.g. handouts and fliers for “walk-ins” demonstrating program entrance procedures).
  - (ii) Coordinating services for contractors to assist in their local worker, transitional worker and apprentice utilization.
  - (iii) Educating and assisting contractors on incentives provided by State or federal programs for On-the-Job Training and employer tax credits.
  - (iv) Conducting orientations, job fairs and community outreach meetings to the local community.
  - (v) Providing supportive services such as skills training, child care, transportation, education remediation, assistance with union fees and tools.
  - (vi) Screening and certifying the Transitional Worker status of workers.
  - (vii) Establishing a referral and retention tracking mechanism for placed local and/or transitional workers and apprentices.
  - (viii) Networking with the various Work Source Centers, community and faith based organizations and other non-profit entities that provide qualified local workers and/or transitional workers.

(ix) Liaising with the various building trades crafts for referral and placement of local hire and/or transitional workers.

(b) Jobs Coordinator Responsibilities. The Jobs Coordinator shall:

- (i) Coordinate the local hire referral process with the C/S/Es, Unions, City Work Source Centers, Faith and Community Based Organizations, and other organizations that can provide qualified local hire referrals.
- (ii) Certify the Transitional Worker status.
- (iii) Maintain a database of pre-qualified Local Residents for referral to work on a Covered Project and/or indentureship into a bona fide Labor/Management apprenticeship program.
- (iv) Facilitate relationships among approved apprenticeship programs and the C/S/Es to enable prompt referral.
- (v) Be the point of contact to provide information about available job opportunities on Covered Projects.
- (vi) Educate and provide financial incentives information to the C/S/Es whom hire eligible workers under Work Opportunity Tax Credit (WOTC) and On-the-Job Training (OJT) and other benefits for which a C/S/E may be eligible based on their implementation of the Local Hire requirements.
- (vii) Assist the C/S/Es with their local hire effort documentations and other reports as it relates to their Local Resident and/or Transitional Worker targeted hiring requirements.
- (viii) Work closely with Harbor Department staff, the building trades and C/S/Es in achieving the targeted hiring.

**Parties with responsibilities under the PLA and/or Policy, shall maintain those responsibilities regardless of the performance of the Jobs Coordinator at the tasks described in the PLA and the Policy.**

## **SECTION VII. COMPLIANCE**

The Harbor Department or its authorized representatives shall determine whether a Prime Contractor and its C/S/Es have complied with the requirements of the PLA and the Policy. The Prime Contractor is ultimately responsible for its and its C/S/Es (of any tier) compliance with the PLA and Policy requirements.



In determining compliance with the Apprentice Targeted Hiring, project hours performed by trades who do not have approved training under Chief of the Division of apprenticeship standards, and/or do not have written apprentice agreements under Chapter 4(commencing with Section 3070) will be excluded in calculations determining compliance with the Targeted Hiring requirements as applicable.

1. If, after the Harbor Department or its authorized representatives takes into account all applicable hours of Project Work performed up to that point in time of the Reporting Period, the targeted hiring requirements of the PLA and Policy have been satisfied for a Project, then the Prime Contractor and its subcontractors (of any tier) working on that Project shall be deemed to be in compliance.
2. If the targeted hiring requirements of the PLA and the Policy have not been satisfied for a Project, the Prime Contractor nonetheless may be deemed to be in compliance if it demonstrates both (a) that it and each of its C/S/Es (of any tier) have complied with all other requirements of the PLA and the Policy, and (b) that it and each C/S/E (of any tier) have either (i) satisfied the targeted hiring requirements of the PLA and this Policy with regard to the Project Work that it has performed or (ii) satisfactorily demonstrated the following:
  - (a) Adherence to procedures contained in its Employment Hiring Plan as approved by the Harbor Department.
  - (b) Requests to Unions, through Craft Request Forms, of sufficient numbers of Local Residents and Transitional Workers to meet the targeted hiring percentages set forth in Section 5 of the Policy for that C/S/E's Project Work.
  - (c) Documented contact with the Jobs Coordinator in each instance when the relevant Union did not refer qualified Local Residents or Transitional Workers within the 48 hours following the C/S/E's request and the C/S/E's fair consideration of any Local Resident or Transitional Worker subsequently referred by the Jobs Coordinator.
  - (d) Accurate records documenting the C/S/E's compliance efforts that include (but are not limited to):
    - (i) A listing by name and address of all local recruitment sources contacted by the C/S/E;
    - (ii) The date of the local recruitment contact and the identity of the person contacted, the trade and classification and number of hire referrals requested;
    - (iii) The number of Local Residents and/or Transitional Workers hires made as a result of the contact;

- (iv) The identity and address of the worker(s) hired pursuant to the contact;
- (v) (v) Documentation when a referral was not hired (reason for non-hire) and/or premature termination.

## **SECTION VIII. ENFORCEMENT**

The Prime Contractor for every Project agrees:

1. To be liable to the Harbor Department for Liquidated Damages as provided in this section;
2. That the Prime Contractor and its C/S/Es (of any tier) commitment to comply with the targeted hiring requirements of PLA and Policy is a material element of the Covered Project;
3. That the failure of the Prime Contractor and its C/S/Es (of any tier) to comply with the targeted hiring requirements in accordance with Section VII of this Policy will cause harm to the Harbor Department and the public which is significant and substantial but extremely difficult to quantify. The harm to the City includes the difficult-to-quantify harm that the community and its families suffer as a result of high unemployment and concentrated poverty;
4. Liquidated Damages: Due to the difficulty of estimation of damages for violation(s) of requirements of this Policy, Construction Contracts shall have provisions establishing liquidated damage to be assessed as follows:
  - (a) The Prime Contractor shall pay liquidated damages equal to the average journeyperson project wage for each applicable work hour the Project fell short of the targeted hiring, or \$200 per day, whichever is greater. When more than one targeted hiring requirement is not in compliance, the liquidated damages will not be assessed cumulatively; however, the highest violation will govern.
  - (b) If the Covered Project's targeted hiring requirements are out of compliance during any Reporting Period, the Prime Contractor shall meet with the Harbor Department or their designated representative to develop a recovery plan for compliance. The Prime Contractor has until the next Reporting Period to effectuate the recovery compliance plan or Liquidated Damages shall be withheld.
  - (c) Before Liquidated Damages are sought, the Prime Contractor shall be notified of the proposed Liquidated Damages and served with a summary of the information upon which the Liquidated Damages are based.
  - (d) Liquidated Damages shall be withheld from all subsequent monthly progress payment request(s) as disputed funds until such time as Prime Contractor is

found to be in compliance, the Covered Project contract is terminated, or the Covered Project is completed.

- (e) Should the Covered Project be terminated or completed before the Prime Contractor is found to be in compliance, the Engineer will evaluate the data and determine if Liquidated Damages are recommended. If the Engineer recommends assessment of Liquidated Damages, then the amount of the Liquidated Damages shall be returned to the fund from whence they came.

5. Liquidated Damages Appeal:

- (a) A Prime Contractor that has received a Liquidated Damages assessment letter, which includes the targeted hiring data and Liquidated Damages calculations, may send a written appeal to the Engineer, within fourteen(14) calendar days. The Prime Contractor shall provide documentation supporting the appeal of the assessment.
- (b) A meeting with the Engineer, Harbor Department staff, and the Prime Contractor will be held to present any relevant information. The Prime Contractor will be allowed to provide evidence that it has made all of the showings required under Section 7 of the Policy during the meeting. The decision of the Engineer on the Liquidated Damages assessment shall be final when rendered. The Contractor shall be notified of the final decision in writing by the Engineer.
- (c) Failure to submit a written request for an appeal within the time frame stipulated in this Section will be deemed a waiver of the right to appeal and the recommendation for assessment of Liquidated Damages will be implemented.

6. Termination of Contract(s): Consistent, substantial violations of the PLA and/or this Policy by any Prime Contractor and/or C/S/E may result in a recommendation to the Board that the contract of the offending Prime Contractor and/or C/S/E be terminated per Section 00405 of the Master General Conditions.

## **SECTION IX. APPLICABLE LAW AND SEVERABILITY**

The provisions of this Policy shall not be applicable where prohibited by federal or state law, or where the application would violate or be inconsistent with the terms and conditions of a grant or a contract with an agency of the United States or the State of California, or the valid instructions of an authorized representative of any of these agencies with respect to any grant or contract. If enforcement of any provision of this Policy is enjoined by a court of competent jurisdiction, the remaining provisions shall remain in full force and effect.

## **APPENDIX "B"**

# **RAILROAD FLAGGING AGREEMENT, FLAGGING POLICY, AND RATE SCHEDULE**



Pacific Harbor Line, Inc. (PHL)

*For PHL Use Only*

Job Code: \_\_\_\_\_ Job Name: \_\_\_\_\_

Company Name: \_\_\_\_\_

Branch/MP: \_\_\_\_\_ Work Start Date: \_\_\_\_\_

## Railroad Flagging Agreement

Today's Date: \_\_\_\_\_

PHL Permit No\*: \_\_\_\_\_

Permit Holder: \_\_\_\_\_

**\*BE ADVISED - A valid Right-of-Entry (ROE) Permit is required for any activity on the PHL Right-of-Way.***If you do not have a valid PHL ROE permit, please contact the PHL Roadmaster at (310) 984-5778*

### **REQUESTING PARTY INFORMATION:**

Name: \_\_\_\_\_ Company: \_\_\_\_\_

Phone: (\_\_\_\_) \_\_\_\_\_ Cell: (\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

Onsite Contact (if different from above): \_\_\_\_\_ Cell: (\_\_\_\_) \_\_\_\_\_

### **BILLING INFORMATION:**

*Flagging is billed at the rates listed in the PHL Flagging Policy & Rate Schedule (attached hereto).*

Billing Contact Name &amp; Company: \_\_\_\_\_

Billing Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Company Phone: (\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_) \_\_\_\_\_

### **PROJECT INFORMATION:**

Work Days – Check all that apply *It will take 14 calendar days to schedule flagging, please plan accordingly*☐ Sunday ☐ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐ Saturday

Estimated Start Date: \_\_\_\_\_ Estimated Completion Date: \_\_\_\_\_

Shift Start/End Times: \_\_\_\_\_ Total Duration (days/hours): \_\_\_\_\_

Location (including PHL Branch &amp; Milepost, if known): \_\_\_\_\_

Description of work (including number of personnel and type of equipment): \_\_\_\_\_

### **ACKNOWLEDGEMENT:**

This Railroad Flagging Agreement and attached Rate Schedule set forth the terms and conditions for PHL's provision of flagging and related services to the Requesting Party. In consideration of the premises and mutual covenants contained herein PHL and the Requesting Party agree to be bound by the terms in this Agreement.

Requesting Party Signature: \_\_\_\_\_ Date: \_\_\_\_\_

PHL Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## PHL Flagging Policy & Rate Schedule

- Timing of Requests:** Any request from a Requesting Party shall be submitted fourteen (14) calendar days in advance of any work within twenty (20) feet of nearest rail.
- Safety Policy:** A PHL flagman will be required when equipment is within ten (10) feet from the track centerline. This includes any equipment in the vicinity with the potential to tip over or encroach within ten (10) feet of the nearest rail. A PHL watchman may be required when men or equipment is within twenty (20) feet from the nearest rail. Once the request has been approved, the flagman/watchman shall be provided by PHL at the cost of the Requesting Party.
- Cost:** The 2025 cost of the flagman/watchman is \$969.00 per 8-hour shift. **The minimum assignment for a flagman is one (1) eight (8) hour shift. For any shift that extends beyond 8 hours, up to a maximum of 12 hours, there is a flat fee of \$1,102.00.**
- Cancellation:** Any cancellations must be **submitted in writing to PHL at [jrodriguez@anacostia.com](mailto:jrodriguez@anacostia.com)** a minimum of 48 hours in advance of the scheduled day of flagging or the Requesting Party will be charged for all shifts that were originally scheduled.
- Contact:** The PHL contact is Jose Rodriguez (310-984-5778). Please return a signed copy of this Flagging Agreement to [jrodriguez@anacostia.com](mailto:jrodriguez@anacostia.com).
- Insurance:** **Requesting Party will not be allowed to enter PHL controlled property until a valid ROE agreement and the required certificate of insurance for the work/project are provided to Jose Rodriguez.**

### PHL Flagman Rate Schedule

**For any minimum 8-hour shift (Mon-Sun), the rates are as follows:**

Calendar Year 2025: \$969.00  
Calendar Year 2026: \$1008.00  
Calendar Year 2027: \$1048.00

**For any shift (Mon-Sun) that extends beyond 8 hours, up to a maximum of 12 hours, the all-inclusive rates as follows:**

Calendar Year 2025: \$1,102.00  
Calendar Year 2026: \$1146.00  
Calendar Year 2027: \$1192.00

PHL's Flagging Rates are determined by the Operating Permit with the City of Los Angeles, dated December 1, 1997, as amended, and the Operating Agreement with the City of Long Beach, dated June 1, 1998, as amended. (See Section 12.4 and 2<sup>nd</sup> Amendment Section 8.7). Each rate increase is directly correlated to the standard five-year labor agreement currently in effect through the end of the calendar year 2027.

## **APPENDIX "C"**

# **SAMPLE BEST MANAGEMENT PRACTICES PLAN FOR SMALL PROJECTS**

# BEST MANAGEMENT PRACTICES PLAN

[Project Name]

[CONTRACTOR's NAME]

[SPECIFICATION No.]

1. **Provide BMP Implementation Schedule for Construction Activities:** Examples of activities include but not limited to :Dewatering Operations, Paving Operations, Structure Construction, Painting, Utility Trenches, Concrete, Curb and Gutter work, Demolition, Removals, Storm Drain, Sewer, Materials Delivery and Storage, Material Use, Solid Waste, Hazardous Waste, Concrete Waste, Sanitary/Septic Waste, Vehicle/Equipment Fueling, Vehicle/Equipment Maintenance.

## BMP Implementation Schedule

|                                               | BMP                                      | Implementation        | Duration            |
|-----------------------------------------------|------------------------------------------|-----------------------|---------------------|
| Erosion Control                               | EC-1, Scheduling                         | Prior to Construction | Entirety of Project |
|                                               |                                          |                       |                     |
|                                               |                                          |                       |                     |
|                                               |                                          |                       |                     |
| Sediment Controls                             | TC-1, Stabilized Construction Entrance   |                       |                     |
|                                               |                                          |                       |                     |
|                                               |                                          |                       |                     |
|                                               |                                          |                       |                     |
| Waste Management                              | WM-1 , Material Delivery and Storage     |                       |                     |
|                                               | WM-8 , Concrete Waste Management         |                       |                     |
|                                               |                                          |                       |                     |
| Non-Storm Water Management<br>Non-Storm Water | NS-10, Vehicle and Equipment Maintenance |                       |                     |
|                                               |                                          |                       |                     |
|                                               |                                          |                       |                     |
|                                               |                                          |                       |                     |

Please fill out the BMP Implementation form completely and add to the list as needed.

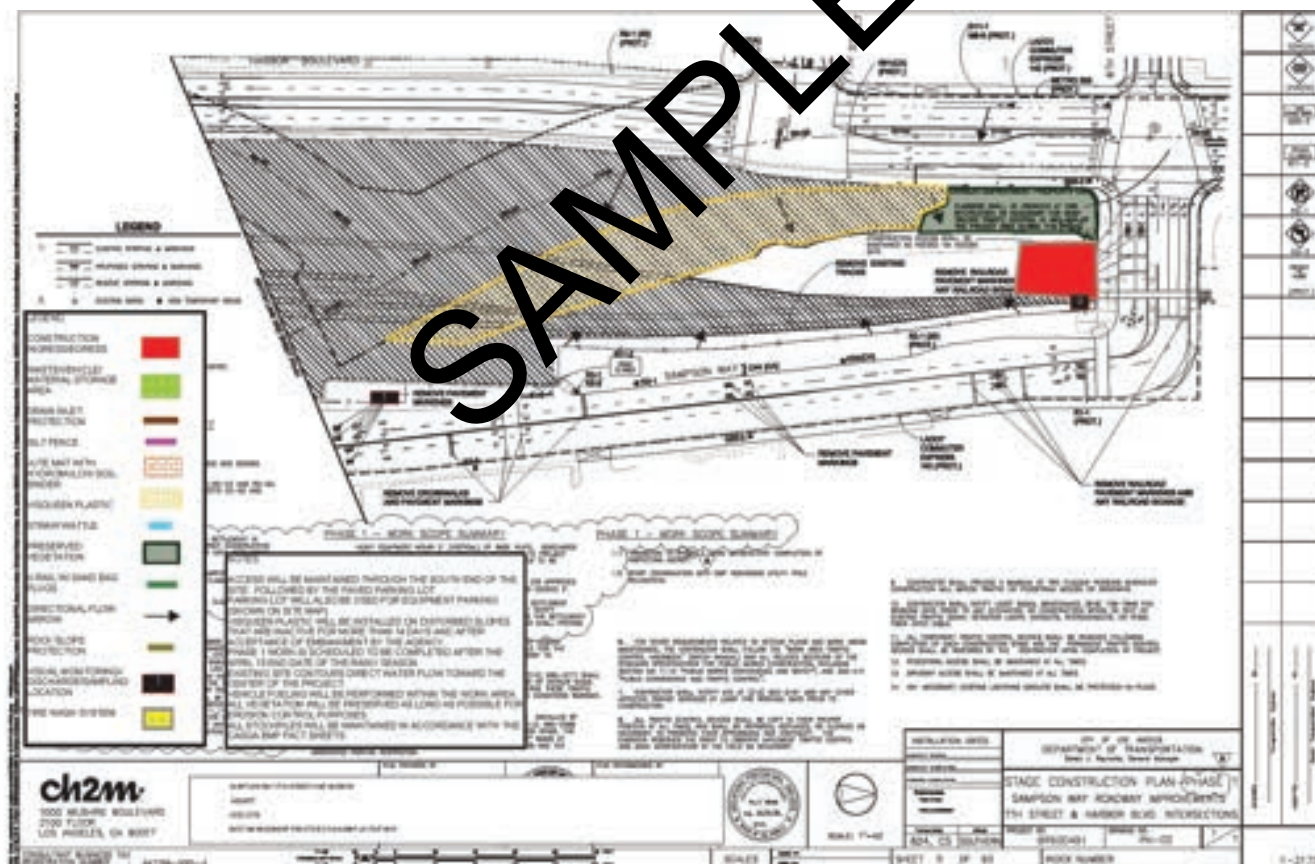
2. **Provide BMP Layout Map**



### Required BMP Map Information

| Included on Map/Plan Sheet No. | Required Element                               |
|--------------------------------|------------------------------------------------|
|                                | The project's surrounding area(Vicinty)        |
|                                | Site Layout                                    |
|                                | Construction site boundaries                   |
|                                | Active Areas                                   |
|                                | Locations of erosion control BMPs              |
|                                | Locations of sediment control BMPs             |
|                                | Locations of runoff and storm drain inlet BMPs |
|                                | Location of all post construction BMPs         |
|                                | Waste storage areas                            |
|                                | Vehicle storage areas                          |
|                                | Material storage areas                         |
|                                | Entrance and Exits                             |
|                                | Fueling Locations                              |

### BMP LAYOUT MAP(Minimum Size (11X17))



## **APPENDIX "D"**

### **WASTE MANAGEMENT PLAN (WMP) AND SOLID WASTE DIVERSION AND DISPOSAL (SWDD) REPORT FORMS**

## **ATTACHMENT A - INSTRUCTION SHEET FOR WASTE MANAGEMENT PLAN**

1. For assistance, contact the Solid Resources Citywide Recycling Division of LA Sanitation & Environment at (213) 485-3460 or sansrcrd\_cdrecycling@lacity.org.
  2. Please print very clearly or type.
  3. Waste Management Plan (WMP) is to be completed and approved prior to start of construction. Along with the WMP, the Contractor is to include a copy of the waste hauler's waste hauler permit.
  4. Attachment A includes: **Part 1**-Inert Debris and **Part 2**-Metal, Wood, C&D waste, and all other materials.
  5. Must meet ≥80% recycling rate in **Part 1** – Inert Debris such as concrete, asphalt, dirt, rock, and brick.
  6. Must meet ≥65% recycling rate in **Part 2** – Metal, wood, green waste, C&D waste, and all other materials.
  7. The information required includes but is not limited to, the following:
    - a. Contractor and project work order number.
    - b. Permitted solid waste hauler(s) and permit number(s).
    - c. Facility names and addresses that are to process the C&D materials.
    - d. Estimated quantities of **all** C&D materials listed in **tons**.
    - e. Verify whether the Waste Management Plan meets the minimum recycling requirement of 80% for inert debris in Part 1. Verify whether the Waste Management Plan meets the minimum recycling requirement of and 65% for other C&D waste.
  8. **\*\*Calculating recycling and disposal for mixed C&D waste taken to a certified processing facility:** the total tons taken to certified processing facility times the recycling rate = amount to be recycled. Total tons taken to facility minus amount to be recycled = amount for disposal. E.g. 100 tons x 0.80 (80% recycling rate) = 80 tons diverted and 20 tons disposed.
-

**ATTACHMENT A**  
**WASTE MANAGEMENT PLAN (PART 1-INERT DEBRIS)**

|                                                                                                                                                                                                                                  |                           |                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------|
| Project Title:                                                                                                                                                                                                                   | W. O. Number:             | Date Submitted: |
| Name & Title of Responsible Person:                                                                                                                                                                                              | Signature:                |                 |
| Permitted Waste Hauler Name(s) and Permit No(s):                                                                                                                                                                                 |                           |                 |
| Material                                                                                                                                                                                                                         | Facility Name and Address | Tons Diverted   |
| <b>RECYCLING/REUSE</b>                                                                                                                                                                                                           |                           | Tons Disposed   |
| Asphalt                                                                                                                                                                                                                          |                           |                 |
| Concrete                                                                                                                                                                                                                         |                           |                 |
| Brick                                                                                                                                                                                                                            |                           |                 |
| Dirt                                                                                                                                                                                                                             |                           |                 |
| Mixed Inerts                                                                                                                                                                                                                     |                           |                 |
| Other (Describe)                                                                                                                                                                                                                 |                           |                 |
| Other (Describe)                                                                                                                                                                                                                 |                           |                 |
| <b>DISPOSAL</b>                                                                                                                                                                                                                  |                           |                 |
| Other (Describe)                                                                                                                                                                                                                 |                           |                 |
| Other (Describe)                                                                                                                                                                                                                 |                           |                 |
| Other (Describe)                                                                                                                                                                                                                 |                           |                 |
| <b>DIVERSION AND DISPOSAL TOTALS</b>                                                                                                                                                                                             |                           | <b>=</b>        |
| Percent Recycling = $\frac{\text{Total diversion}}{\text{Total diversion} + \text{Total disposed}} \times 100 =$                                                                                                                 |                           |                 |
| Percent Recycling = $\frac{\quad}{\quad + \quad} \times 100 = \quad \%$                                                                                                                                                          |                           |                 |
| Does Part 1 (Inert Debris) of this Waste Management Plan meet the minimum recycling requirement of 80% for Inert Debris?<br><div style="text-align: center;">YES <input type="checkbox"/>      NO <input type="checkbox"/></div> |                           |                 |

**ATTACHMENT A**  
**WASTE MANAGEMENT PLAN (PART 2-ALL OTHER C&D WASTE)**

|                                                                                                                                                                                                      |                           |                 |               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------|---------------|
| W. O. No.:                                                                                                                                                                                           |                           | Date Submitted: |               |
| Contractors Name:                                                                                                                                                                                    |                           |                 |               |
| Street address:                                                                                                                                                                                      |                           |                 |               |
| City, State, Zip:                                                                                                                                                                                    |                           |                 |               |
| Phone:                                                                                                                                                                                               |                           | Fax:            |               |
|                                                                                                                                                                                                      |                           | Email:          |               |
| Permitted Waste Hauler Name(s) and Permit No(s):                                                                                                                                                     |                           |                 |               |
| Material                                                                                                                                                                                             | Facility Name and Address | Tons Diverted   | Tons Disposed |
| <b>RECYCLING/REUSE</b>                                                                                                                                                                               |                           |                 |               |
| Glass                                                                                                                                                                                                |                           |                 | X             |
| Wood/Greenwaste                                                                                                                                                                                      |                           |                 | X             |
| Metal                                                                                                                                                                                                |                           |                 | X             |
| Cardboard                                                                                                                                                                                            |                           |                 | X             |
| Other (Describe)                                                                                                                                                                                     |                           |                 | X             |
| <b>DISPOSAL</b>                                                                                                                                                                                      |                           |                 |               |
| Other (Describe)                                                                                                                                                                                     |                           | X               |               |
| Other (Describe)                                                                                                                                                                                     |                           | X               |               |
| <b>CERTIFIED PROCESSING**</b>                                                                                                                                                                        |                           |                 |               |
| Mixed C&D Waste                                                                                                                                                                                      |                           |                 |               |
| Mixed C&D Waste                                                                                                                                                                                      |                           |                 |               |
| <b>DIVERSION AND DISPOSAL TOTALS</b>                                                                                                                                                                 |                           | <b>=</b>        |               |
| Percent Recycling = $\frac{\text{Total Diversion}}{\text{Total Diversion} + \text{Total Disposed}} \times 100 =$                                                                                     |                           |                 |               |
| Percent Recycling = _____ X 100 = %<br><div style="text-align: center;">+</div>                                                                                                                      |                           |                 |               |
| Does Part 2 (All Other C&D Waste) of this Waste Management Plan meet the minimum recycling requirement of 65% for all other C&D Waste?      YES <input type="checkbox"/> NO <input type="checkbox"/> |                           |                 |               |

**\*\*Recycling tonnages for mixed C&D waste taken to a certified processing facility = total tonnage x recycling rate. Remaining tonnage counts as disposal. Example: 200 tons x 0.80 = 160 tons diverted and 40 tons disposed.**

**EXAMPLE WASTE MANAGEMENT PLAN**  
**ATTACHMENT A**  
**WASTE MANAGEMENT PLAN (PART 1-INERT DEBRIS)**

| Project<br>Title: <i>Big Street Overcrossing</i>                                                                                                                                                                                                          | W. O.<br>Number: <i>XYZ12345</i>                              | Date<br>Submitted: <i>01/01/2020</i> |               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------|---------------|
| Name & Title of Responsible Person:<br><i>Bobby Lee, Project Manager</i>                                                                                                                                                                                  | Signature: <i>Bobby Lee</i>                                   |                                      |               |
| Permitted Waste Hauler Name(s) and Permit No(s): <i>Grava Gravel Haulers, PER-22-333</i>                                                                                                                                                                  |                                                               |                                      |               |
| Material                                                                                                                                                                                                                                                  | Facility Name and Address                                     | Tons Diverted                        | Tons Disposed |
| <b>RECYCLING/REUSE</b>                                                                                                                                                                                                                                    |                                                               |                                      |               |
| Asphalt                                                                                                                                                                                                                                                   | <i>Inert Recycling Facility A, 888 Valle Valley, CA 12345</i> | <i>600</i>                           | X             |
| Concrete                                                                                                                                                                                                                                                  | <i>Inert Recycling Facility A, 888 Valle Valley, CA 12345</i> | <i>55</i>                            | X             |
| Brick                                                                                                                                                                                                                                                     | <i>Inert Recycling Facility B, 777 Valle Valley, CA 12345</i> | <i>6</i>                             | X             |
| Dirt                                                                                                                                                                                                                                                      | <i>The Landscaping Co., 222 Valle Valley, CA 12345</i>        | <i>200</i>                           | X             |
| Mixed Inerts                                                                                                                                                                                                                                              |                                                               |                                      | X             |
| Other (Describe)                                                                                                                                                                                                                                          |                                                               |                                      | X             |
| Other (Describe)                                                                                                                                                                                                                                          |                                                               |                                      | X             |
| <b>DISPOSAL</b>                                                                                                                                                                                                                                           |                                                               |                                      |               |
| Other (Describe)                                                                                                                                                                                                                                          |                                                               | X                                    |               |
| Other (Describe)                                                                                                                                                                                                                                          |                                                               | X                                    |               |
| Other (Describe)                                                                                                                                                                                                                                          |                                                               | X                                    |               |
| <b>DIVERSION AND DISPOSAL TOTALS</b>                                                                                                                                                                                                                      |                                                               | <b>=</b>                             | <i>861</i>    |
| Percent Recycling = $\frac{\text{Total diversion}}{\text{Total diversion} + \text{Total disposed}} \times 100 =$                                                                                                                                          |                                                               |                                      |               |
| Percent Recycling = $\frac{861}{861 + 0} \times 100 = 100.00 \%$                                                                                                                                                                                          |                                                               |                                      |               |
| Does Part 1 (Inert Debris) of this Waste Management Plan meet the minimum recycling requirement of 80% for Inert Debris?<br><div style="text-align: center;">             YES <input checked="" type="checkbox"/>      NO <input type="checkbox"/> </div> |                                                               |                                      |               |

**ATTACHMENT A**  
**WASTE MANAGEMENT PLAN (PART 2-ALL OTHER C&D WASTE)**

|                                                                                                                                                                                                                      |                                                                    |                            |               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------|---------------|
| W. O. No.: XYZ12345                                                                                                                                                                                                  |                                                                    | Date Submitted: 01/01/2020 |               |
| Contractors Name: Awesome Engineering Contractors                                                                                                                                                                    |                                                                    |                            |               |
| Street address: Circular Drive                                                                                                                                                                                       |                                                                    |                            |               |
| City, State, Zip: Ciudad City, CA 12345                                                                                                                                                                              |                                                                    |                            |               |
| Phone: (123) 456-7891                                                                                                                                                                                                |                                                                    | Fax: (321) 123-4567        |               |
| Email: AEC@zmail.com                                                                                                                                                                                                 |                                                                    |                            |               |
| Permitted Waste Hauler Name(s) and Permit No(s):                                                                                                                                                                     |                                                                    |                            |               |
| Material                                                                                                                                                                                                             | Facility Name and Address                                          | Tons Diverted              | Tons Disposed |
| <b>RECYCLING/REUSE</b>                                                                                                                                                                                               |                                                                    |                            |               |
| Glass                                                                                                                                                                                                                |                                                                    |                            |               |
| Wood/Greenwaste                                                                                                                                                                                                      | <i>The Landscaping Co., 222 Valle Valley, CA 12345</i>             | 50                         |               |
| Metal                                                                                                                                                                                                                | <i>Kim Loai Metal Recycling, 333 Camino St, CA 12345</i>           | 6                          |               |
| Cardboard                                                                                                                                                                                                            |                                                                    |                            |               |
| Other (Describe)                                                                                                                                                                                                     |                                                                    |                            |               |
| <b>DISPOSAL</b>                                                                                                                                                                                                      |                                                                    |                            |               |
| Other (Describe)                                                                                                                                                                                                     | <i>Municipal Landfill, 456 Montana Mountains, CA 12345</i>         |                            | 15            |
| Other (Describe)                                                                                                                                                                                                     |                                                                    |                            |               |
| <b>CERTIFIED PROCESSING**</b>                                                                                                                                                                                        |                                                                    |                            |               |
| Mixed C&D Waste                                                                                                                                                                                                      | <i>Certified Processor A (Recycling Rate = 75% = 0.75)</i>         | 18.75                      | 6.25          |
| Mixed C&D Waste                                                                                                                                                                                                      | <i>25 tons x 0.75 = 18.75 tons recycled and 6.25 tons disposed</i> |                            |               |
| <b>DIVERSION AND DISPOSAL TOTALS</b>                                                                                                                                                                                 |                                                                    | <b>= 74.75</b>             | <b>21.25</b>  |
| Percent Recycling = $\frac{\text{Total Diversion}}{\text{Total Diversion} + \text{Total Disposed}} \times 100 =$                                                                                                     |                                                                    |                            |               |
| Percent Recycling = $\frac{74.75}{74.75 + 21.25} \times 100 = 77.86 \%$                                                                                                                                              |                                                                    |                            |               |
| Does Part 2 (All Other C&D Waste) of this Waste Management Plan meet the minimum recycling requirement of 65% for all other C&D Waste?           YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> |                                                                    |                            |               |

**\*\*Recycling tonnages for mixed C&D waste taken to a certified processing facility = total tonnage x recycling rate. Remaining tonnage counts as disposal. Example: 200 tons x 0.80 = 160 tons diverted and 40 tons disposed.**

## **ATTACHMENT B - INSTRUCTION SHEET FOR SOLID WASTE DIVERSION & DISPOSAL REPORT**

1. For assistance, contact the Solid Resources Citywide Recycling Division of LA Sanitation & Environment at (213) 485-3460 or sansrcrd\_cdrecycling@lacity.org.
  2. Please print very clearly or type.
  3. All **three (3) pages** of Attachment B and **all** manifests, weight tickets, receipts, reports, invoices, and other supporting documents specifically identifying the projects, the recyclables and solid waste generated by the project, and where the material was sent must be submitted to the inspector with each application for progress payment.
  4. Attachment B includes: **Part 1** - Inert Debris, **Part 2** - All Other C&D Waste, **Part 3** - Project Cumulative Total.
  5. Must meet  $\geq 80\%$  recycling rate for Inert Debris by end of construction.
  6. Must meet  $\geq 65\%$  recycling rate in Metal, wood, green waste, C&D waste, and all other materials by end of construction.
  7. In **Part 1 and Part 2**, record:
    - a. Material type generated.
    - b. Permitted solid waste hauler(s) and permit number(s).
    - c. Facility names and addresses where materials were delivered.
    - d. Tons diverted/disposed for a particular pay period.
    - e. Verify whether Part 1 meets the minimum recycling requirement of 80% for Inert Debris. Verify whether Part 2 meets the minimum recycling requirement of 65% for other C&D Waste. Contractor is to meet the minimum recycling requirements by the end of construction.
  8. In **Part 3**, record:
    - a. Pay period beginning and period ending
    - b. Diversion and disposal for the pay period and cumulative diversion and disposal for the project
    - c. Cumulative waste generated (diversion + disposal) for the project
    - d. Cumulative recycling rate for the project (diverted/generated)\*100
  9. The information required includes but is not limited to, the following:
    - a. Contractor and project identification information
    - b. Actual quantities of **all** materials listed in tons
  10. Source-separated material taken to a recycling facility or certified processing facility is 100% recycled.
  11. \*\*Calculating recycling and disposal for mixed material taken to a certified processing facility: the total tons taken to certified processing facility times the recycling rate = amount to be recycled. Total taken to facility minus amount to be recycled = amount for disposal. E.g. 100 tons  $\times$  0.80 (80% recycling rate) = 80 tons diverted and 20 tons disposed.
-



**ATTACHMENT B**  
**SOLID WASTE DIVERSION AND DISPOSAL REPORT**  
**PART 1 OF 3 - INERT DEBRIS**

| Project Title:                                   | W. O. Number:             | Date Submitted:       | Progress Payment # |
|--------------------------------------------------|---------------------------|-----------------------|--------------------|
| Company Name:                                    |                           | Daytime Phone Number: |                    |
| Period Covered In This Report:                   |                           |                       |                    |
| From:                                            |                           | To:                   |                    |
| Permitted Waste Hauler Name(s) and Permit No(s): |                           |                       |                    |
| Material                                         | Facility Name and Address | Tons diverted         | Tons Disposed      |
| <b>RECYCLING/REUSE</b>                           |                           |                       |                    |
| Asphalt                                          |                           |                       | X                  |
| Concrete                                         |                           |                       | X                  |
| Brick                                            |                           |                       | X                  |
| Dirt                                             |                           |                       | X                  |
| Mixed Inerts                                     |                           |                       | X                  |
| Other (Describe)                                 |                           |                       | X                  |
| Other (Describe)                                 |                           |                       | X                  |
| <b>DISPOSAL</b>                                  |                           |                       |                    |
| Other (Describe)                                 |                           | X                     |                    |
| Other (Describe)                                 |                           | X                     |                    |
| Other (Describe)                                 |                           | X                     |                    |
| <b>DIVERSION AND DISPOSAL TOTALS *    =</b>      |                           |                       |                    |

**\*Copy the Tons Diverted and Tons Disposed totals to Part 3 Project Cumulative Total. Each Report needs to have the totals from every previous Diversion and Disposal Report documented on it, as well as the totals from this Report.**

---

**ATTACHMENT B**  
**SOLID WASTE DIVERSION AND DISPOSAL REPORT**  
**PART 2 OF 3 - ALL OTHER C&D WASTE**

| W. O. Number:                                    |                           | Date Submitted: |               |
|--------------------------------------------------|---------------------------|-----------------|---------------|
| Permitted Waste Hauler Name(s) and Permit No(s): |                           |                 |               |
| Material                                         | Facility Name and Address | Tons Recycled   | Tons Disposed |
| <b>RECYCLING/REUSE</b>                           |                           |                 |               |
| Metal                                            |                           |                 | X             |
| Wood / Lumber                                    |                           |                 | X             |
| Greenwaste / Landscaping                         |                           |                 | X             |
| Glass                                            |                           |                 | X             |
| Cardboard                                        |                           |                 | X             |
| Other (Describe)                                 |                           |                 | X             |
| Other (Describe)                                 |                           |                 | X             |
| <b>DISPOSAL</b>                                  |                           |                 |               |
| Mixed Solid Waste                                |                           | X               |               |
| Other (Describe)                                 |                           | X               |               |
| Other (Describe)                                 |                           | X               |               |
| <b>CERTIFIED PROCESSING**</b>                    |                           |                 |               |
| Mixed C&D Waste                                  |                           |                 |               |
| Mixed C&D Waste                                  |                           |                 |               |
| Mixed C&D Waste                                  |                           |                 |               |
| <b>DIVERSION AND DISPOSAL TOTALS*    =</b>       |                           |                 |               |

**\*Copy the Tons Diverted and Tons Disposed totals to Part 3 Project Cumulative Total. Each Report needs to have the totals from every previous Diversion and Disposal Report documented on it, as well as the totals from this Report.**

**\*\*Recycling tonnages for mixed C&D waste taken to a certified facility = total tonnage x recycling rate. Remaining tonnage counts as disposal. Example: 200 tons x 0.80 = 160 tons diverted and 40 tons disposed.**

---

**ATTACHMENT B**  
**SOLID WASTE DIVERSION AND DISPOSAL REPORT**  
**PART 3 OF 3 - PROJECT CUMULATIVE TOTAL**

| W. O. Number:                                                                                                                                                                                                                                                                                                                                                                                     |                  |                      |                                                 | Date Submitted:     |                                                |                                                  |                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------------|-------------------------------------------------|---------------------|------------------------------------------------|--------------------------------------------------|---------------------------------------------------|
| Period<br>Beginning                                                                                                                                                                                                                                                                                                                                                                               | Period<br>Ending | *Period<br>Diversion | Cumulative<br>Project<br>Diversion,<br><u>R</u> | *Period<br>Disposal | Cumulative<br>Project<br>Disposal,<br><u>D</u> | Cumulative<br>Waste<br>Generated<br><u>R + D</u> | Cumulative<br>Recycling<br>%<br>( <u>R/G</u> )100 |
| <b><u>INERT DEBRIS CUMULATIVE PROJECT HISTORY, REFER TO ATTACHMENT B PART 1 OF 3</u></b>                                                                                                                                                                                                                                                                                                          |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
| <b><u>ALL OTHER C&amp;D WASTE CUMULATIVE PROJECT HISTORY, REFER TO ATTACHMENT B PART 2 OF 3</u></b>                                                                                                                                                                                                                                                                                               |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
| Does this Report meet the minimum recycling requirement of 80% for Inert Debris and 65% for All Other C&D Waste? Contractor is to meet the minimum recycling requirements of 80% for Inert Debris and 65% for All Other C&D Waste by the end of construction.<br><div style="text-align: center;">           YES <input type="checkbox"/>                      NO <input type="checkbox"/> </div> |                  |                      |                                                 |                     |                                                |                                                  |                                                   |
| Name & title of person responsible for the information in this form:                                                                                                                                                                                                                                                                                                                              |                  |                      |                                                 |                     | Signature:                                     |                                                  |                                                   |

**\*From appropriate Part 1 or 2 during each period.**  
**Each Attachment B Part III Report needs to have the Tons Diverted and Tons Disposed from every previous Diversion and Disposal Report documented in it, as well as the totals from this Report.**  
**Attach another Part III form and continue information if more rows are needed.**

**EXAMPLE SOLID WASTE DIVERSION AND DISPOSAL REPORT FOR  
PROGRESS PAYMENT #1**

**ATTACHMENT B  
SOLID WASTE DIVERSION AND DISPOSAL REPORT  
PART 1 OF 3 - INERT DEBRIS**

| Project Title: <i>Big Street Overcrossing</i>                                            |                                                               | W. O. Number:<br><i>XYZ12345</i>                                                      | Date Submitted:<br><i>03/15/2020</i>                                                  | Progress Payment #<br><i>1</i> |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------|
| Company Name: <i>Awesome Engineering Contractors</i>                                     |                                                               | Daytime Phone Number: <i>(123)456-7891</i>                                            |                                                                                       |                                |
| Period Covered In This Report:<br>From: <i>2/1/2020</i> To: <i>2/28/2020</i>             |                                                               |                                                                                       |                                                                                       |                                |
| Permitted Waste Hauler Name(s) and Permit No(s): <i>Grava Gravel Haulers, PER-22-333</i> |                                                               |                                                                                       |                                                                                       |                                |
| Material                                                                                 | Facility Name and Address                                     | Tons diverted                                                                         | Tons Disposed                                                                         |                                |
| <b>RECYCLING/REUSE</b>                                                                   |                                                               |                                                                                       |                                                                                       |                                |
| Asphalt                                                                                  | <i>Inert Recycling Facility A, 888 Valle Valley, CA 12345</i> | <i>45</i>                                                                             |    |                                |
| Concrete                                                                                 | <i>Inert Recycling Facility A, 888 Valle Valley, CA 12345</i> | <i>10</i>                                                                             |                                                                                       |                                |
| Brick                                                                                    | <i>Inert Recycling Facility B, 777 Valle Valley, CA 12345</i> | <i>6</i>                                                                              |                                                                                       |                                |
| Dirt                                                                                     | <i>The Landscaping Co., 222 Valle Valley, CA 12345</i>        | <i>150</i>                                                                            |                                                                                       |                                |
| Mixed Inerts                                                                             |                                                               |                                                                                       |                                                                                       |                                |
| Other (Describe)                                                                         |                                                               |                                                                                       |                                                                                       |                                |
| Other (Describe)                                                                         |                                                               |                                                                                       |                                                                                       |                                |
| <b>DISPOSAL</b>                                                                          |                                                               |                                                                                       |                                                                                       |                                |
| Other (Describe)                                                                         |                                                               |  |  |                                |
| Other (Describe)                                                                         |                                                               |  |                                                                                       |                                |
| Other (Describe)                                                                         |                                                               |  |                                                                                       |                                |
| <b>DIVERSION AND DISPOSAL TOTALS * =</b>                                                 |                                                               |                                                                                       | <i>211</i>                                                                            |                                |

**\*Copy the Tons Diverted and Tons Disposed totals to Part 3 Project Cumulative Total. Each Report needs to have the totals from every previous Diversion and Disposal Report documented on it, as well as the totals from this Report.**

**ATTACHMENT B**  
**SOLID WASTE DIVERSION AND DISPOSAL REPORT**  
**PART 2 OF 3 - ALL OTHER C&D WASTE**

| W. O. Number: <i>XYZ12345</i>                                                            |                                                                   | Date Submitted: <i>03/15/2020</i> |               |
|------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------|---------------|
| Permitted Waste Hauler Name(s) and Permit No(s): <i>Grava Gravel Haulers, PER-22-333</i> |                                                                   |                                   |               |
| Material                                                                                 | Facility Name and Address                                         | Tons Recycled                     | Tons Disposed |
| <b>RECYCLING/REUSE</b>                                                                   |                                                                   |                                   |               |
| Metal                                                                                    | <i>Kim Loai Metal Recycling, 333 Camino St, CA 12345</i>          | <i>2</i>                          | <i>X</i>      |
| Wood / Lumber                                                                            | <i>The Landscaping Co., 222 Valle Valley, CA 12345</i>            | <i>15</i>                         | <i>X</i>      |
| Greenwaste / Landscaping                                                                 |                                                                   |                                   | <i>X</i>      |
| Glass                                                                                    |                                                                   |                                   | <i>X</i>      |
| Cardboard                                                                                |                                                                   |                                   | <i>X</i>      |
| Other (Describe)                                                                         |                                                                   |                                   | <i>X</i>      |
| Other (Describe)                                                                         |                                                                   |                                   | <i>X</i>      |
| <b>DISPOSAL</b>                                                                          |                                                                   |                                   |               |
| Mixed Solid Waste                                                                        | <i>Municipal Landfill, 456 Montana Mountains, CA 12345</i>        | <i>X</i>                          | <i>1</i>      |
| Other (Describe)                                                                         |                                                                   | <i>X</i>                          |               |
| Other (Describe)                                                                         |                                                                   | <i>X</i>                          |               |
| <b>CERTIFIED PROCESSING**</b>                                                            |                                                                   |                                   |               |
| Mixed C&D Waste                                                                          | <i>Certified Facility A (Recycling Rate = 75% = 0.75)</i>         | <i>9</i>                          | <i>3</i>      |
| Mixed C&D Waste                                                                          | <i>12 tons x 0.75 = 9.00 tons recycled and 3.00 tons disposed</i> |                                   |               |
| Mixed C&D Waste                                                                          |                                                                   |                                   |               |
| Mixed C&D Waste                                                                          |                                                                   |                                   |               |
| <b>DIVERSION AND DISPOSAL TOTALS*    =</b>                                               |                                                                   | <b>26</b>                         | <b>4</b>      |

\*Copy the Tons Diverted and Tons Disposed totals to Part 3 Project Cumulative Total. Each Report needs to have the totals from every previous Diversion and Disposal Report documented on it, as well as the totals from this Report.

\*\*Recycling tonnages for mixed C&D waste taken to a certified facility = total tonnage x recycling rate. Remaining tonnage counts as disposal. Example: 200 tons x 0.80 = 160 tons diverted and 40 tons disposed.

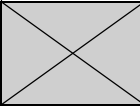
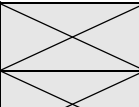
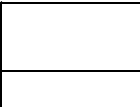
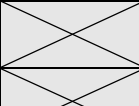
**ATTACHMENT B**  
**INERT SOLID WASTE DIVERSION AND DISPOSAL REPORT**  
**PART 3 OF 3 - PROJECT CUMULATIVE TOTAL**

| W. O. Number: <i>XYZ12345</i>                                                                                                                                                                                                                                                                                                                                                            |                  |                      |                                                 | Date Submitted: <i>03/15/2020</i> |                                                |                                                  |                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------------|-------------------------------------------------|-----------------------------------|------------------------------------------------|--------------------------------------------------|------------------------------------------------|
| Period<br>Beginning                                                                                                                                                                                                                                                                                                                                                                      | Period<br>Ending | *Period<br>Diversion | Cumulative<br>Project<br>Diversion,<br><u>R</u> | *Period<br>Disposal               | Cumulative<br>Project<br>Disposal,<br><u>D</u> | Cumulative<br>Waste<br>Generated<br><u>R + D</u> | Cumulative<br>Recycling %<br>( <u>R/G</u> )100 |
| <b>INERT DEBRIS CUMULATIVE PROJECT HISTORY, REFER TO ATTACHMENT B PART 1 OF 3</b>                                                                                                                                                                                                                                                                                                        |                  |                      |                                                 |                                   |                                                |                                                  |                                                |
| <i>2/1/2020</i>                                                                                                                                                                                                                                                                                                                                                                          | <i>2/28/2020</i> | <i>211</i>           | <i>211</i>                                      | <i>0</i>                          | <i>0</i>                                       | <i>211</i>                                       | <i>100(211/211)=<br/>100.00</i>                |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                      |                                                 |                                   |                                                |                                                  |                                                |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                      |                                                 |                                   |                                                |                                                  |                                                |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                      |                                                 |                                   |                                                |                                                  |                                                |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                      |                                                 |                                   |                                                |                                                  |                                                |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                      |                                                 |                                   |                                                |                                                  |                                                |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                      |                                                 |                                   |                                                |                                                  |                                                |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                      |                                                 |                                   |                                                |                                                  |                                                |
| <b>ALL C&amp;D OTHER WASTE CUMULATIVE PROJECT HISTORY, REFER TO ATTACHMENT B PART 2 OF 3</b>                                                                                                                                                                                                                                                                                             |                  |                      |                                                 |                                   |                                                |                                                  |                                                |
| <i>2/1/2020</i>                                                                                                                                                                                                                                                                                                                                                                          | <i>2/28/2020</i> | <i>26</i>            | <i>26</i>                                       | <i>4</i>                          | <i>4</i>                                       | <i>26+4=30</i>                                   | <i>100(26/30)=<br/>86.67</i>                   |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                      |                                                 |                                   |                                                |                                                  |                                                |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                      |                                                 |                                   |                                                |                                                  |                                                |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                      |                                                 |                                   |                                                |                                                  |                                                |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                      |                                                 |                                   |                                                |                                                  |                                                |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                      |                                                 |                                   |                                                |                                                  |                                                |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                      |                                                 |                                   |                                                |                                                  |                                                |
| <p>Does this Report meet the minimum recycling requirement of 80% for Inert Debris and 65% for All Other C&amp;D Waste? Contractor is to meet the minimum recycling requirements of 80% for Inert Debris and 65% for All Other C&amp;D Waste by the end of construction.</p> <p style="text-align: center;">YES <input checked="" type="checkbox"/>      NO <input type="checkbox"/></p> |                  |                      |                                                 |                                   |                                                |                                                  |                                                |
| Name & title of person responsible<br>for the information in this form: <i>Bobby Lee, Project Manager</i>                                                                                                                                                                                                                                                                                |                  |                      |                                                 |                                   |                                                | Signature:<br><i>Bobby Lee</i>                   |                                                |

\*From appropriate Part 1 or 2 during each period.  
 Each Attachment B Part III Report needs to have the Tons Diverted and Tons Disposed from every previous Diversion and Disposal Report documented in it, as well as the totals from this Report.  
 Attach another Part III form and continue information if more rows are needed.

**EXAMPLE SOLID WASTE DIVERSION AND DISPOSAL REPORT FOR  
PROGRESS PAYMENT #2**

**ATTACHMENT B  
SOLID WASTE DIVERSION AND DISPOSAL REPORT  
PART 1 OF 3 - INERT DEBRIS**

| Project Title: <i>Big Street Overcrossing</i>                                                   |                                                               | W. O. Number:<br><i>XYZ12345</i>                                                      | Date Submitted:<br><i>04/15/2020</i>                                                  | Progress Payment #<br><i>2</i> |
|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------------------------|
| Company Name: <i>Awesome Engineering Contractors</i> Daytime Phone Number: <i>(123)456-7891</i> |                                                               |                                                                                       |                                                                                       |                                |
| Period Covered In This Report:<br>From: <i>3/1/2020</i> To: <i>3/31/2020</i>                    |                                                               |                                                                                       |                                                                                       |                                |
| Permitted Waste Hauler Name(s) and Permit No(s): <i>Grava Gravel Haulers, PER-22-333</i>        |                                                               |                                                                                       |                                                                                       |                                |
| Material                                                                                        | Facility and Location                                         | Tons diverted                                                                         | Tons Disposed                                                                         |                                |
| <b>RECYCLING/REUSE</b>                                                                          |                                                               |                                                                                       |                                                                                       |                                |
| Asphalt                                                                                         | <i>Inert Recycling Facility A, 888 Valle Valley, CA 12345</i> |                                                                                       |   |                                |
| Concrete                                                                                        | <i>Inert Recycling Facility A, 888 Valle Valley, CA 12345</i> | <i>300</i>                                                                            |                                                                                       |                                |
| Brick                                                                                           | <i>Inert Recycling Facility B, 777 Valle Valley, CA 12345</i> |                                                                                       |                                                                                       |                                |
| Dirt                                                                                            | <i>The Landscaping Co., 222 Valle Valley, CA 12345</i>        | <i>100</i>                                                                            |                                                                                       |                                |
| Other (Describe)                                                                                |                                                               |                                                                                       |                                                                                       |                                |
| Other (Describe)                                                                                |                                                               |                                                                                       |                                                                                       |                                |
| <b>DISPOSAL</b>                                                                                 |                                                               |                                                                                       |                                                                                       |                                |
| Other (Describe)                                                                                |                                                               |  |  |                                |
| Other (Describe)                                                                                |                                                               |  |                                                                                       |                                |
| Other (Describe)                                                                                |                                                               |  |                                                                                       |                                |
| <b>DIVERSION AND DISPOSAL TOTALS * =</b>                                                        |                                                               | <i>400</i>                                                                            |                                                                                       |                                |

**\*Copy the Tons Diverted and Tons Disposed totals to Part 3 Project Cumulative Total. Each Report needs to have the totals from every previous Diversion and Disposal Report documented on it, as well as the totals from this Report.**

**ATTACHMENT B**  
**SOLID WASTE DIVERSION AND DISPOSAL REPORT**  
**PART 2 OF 3 - ALL OTHER C&D WASTE**

| W. O. Number: <i>XYZ12345</i>                                                            |                                                                 | Date Submitted: <i>04/15/2020</i> |               |
|------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------|---------------|
| Permitted Waste Hauler Name(s) and Permit No(s): <i>Grava Gravel Haulers, PER-22-333</i> |                                                                 |                                   |               |
| Material                                                                                 | Facility and Location                                           | Tons Recycled                     | Tons Disposed |
| <b>RECYCLING/REUSE</b>                                                                   |                                                                 |                                   |               |
| Metal                                                                                    | <i>Kim Loai Metal Recycling, 333 Camino St, CA 12345</i>        | <i>1</i>                          | <i>X</i>      |
| Wood / Lumber                                                                            | <i>The Landscaping Co., 222 Valle Valley, CA 12345</i>          | <i>16</i>                         | <i>X</i>      |
| Greenwaste / Landscaping                                                                 |                                                                 |                                   | <i>X</i>      |
| Glass                                                                                    |                                                                 |                                   | <i>X</i>      |
| Cardboard                                                                                |                                                                 |                                   | <i>X</i>      |
| Other (Describe)                                                                         |                                                                 |                                   | <i>X</i>      |
| Other (Describe)                                                                         |                                                                 |                                   | <i>X</i>      |
| <b>DISPOSAL</b>                                                                          |                                                                 |                                   |               |
| Mixed Solid Waste                                                                        | <i>Municipal Landfill, 456 Montana Mountains, CA 12345</i>      | <i>X</i>                          | <i>1</i>      |
| Other (Describe)                                                                         |                                                                 | <i>X</i>                          |               |
| Other (Describe)                                                                         |                                                                 | <i>X</i>                          |               |
| Other (Describe)                                                                         |                                                                 | <i>X</i>                          |               |
| <b>CERTIFIED PROCESSING**</b>                                                            |                                                                 |                                   |               |
| Mixed C&D Waste                                                                          | <i>Certified Processor A (Recycling Rate = 75% = 0.75)</i>      | <i>7.5</i>                        | <i>3.5</i>    |
| Mixed C&D Waste                                                                          | <i>10 tons x 0.75 = 7.5 tons recycled and 2.5 tons disposed</i> |                                   |               |
| Mixed C&D Waste                                                                          |                                                                 |                                   |               |
| Mixed C&D Waste                                                                          |                                                                 |                                   |               |
| <b>DIVERSION AND DISPOSAL TOTALS*    =</b>                                               |                                                                 | <b>24.5</b>                       | <b>4.5</b>    |

\*Copy the Tons Diverted and Tons Disposed totals to Part 3 Project Cumulative Total. Each Report needs to have the totals from every previous Diversion and Disposal Report documented on it, as well as the totals from this Report.

\*\*Recycling tonnages for mixed C&D waste taken to a certified facility = total tonnage x recycling rate. Remaining tonnage counts as disposal. Example: 200 tons x 0.80 = 160 tons diverted and 40 tons disposed.



**ATTACHMENT B**  
**INERT SOLID WASTE DIVERSION AND DISPOSAL REPORT**  
**PART 3 OF 3 - PROJECT CUMULATIVE TOTAL**

| W. O. Number: <i>XYZ12345</i>                                                                                                                                                                                                                                                                                                                                                            |                  |                   |                                        | Date Submitted: <i>04/15/2020</i> |                                       |                                         |                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|----------------------------------------|-----------------------------------|---------------------------------------|-----------------------------------------|------------------------------------------|
| Period Beginning                                                                                                                                                                                                                                                                                                                                                                         | Period Ending    | *Period Diversion | Cumulative Project Diversion, <u>R</u> | *Period Disposal                  | Cumulative Project Disposal, <u>D</u> | Cumulative Waste Generated <u>R + D</u> | Cumulative Recycling % ( <u>R/G</u> )100 |
| <b><u>INERT DEBRIS CUMULATIVE PROJECT HISTORY, REFER TO ATTACHMENT B PART 1 OF 3</u></b>                                                                                                                                                                                                                                                                                                 |                  |                   |                                        |                                   |                                       |                                         |                                          |
| <i>2/1/2020</i>                                                                                                                                                                                                                                                                                                                                                                          | <i>2/28/2020</i> | <i>211</i>        | <i>211</i>                             | <i>0</i>                          | <i>0</i>                              | <i>211</i>                              | <i>100(211/211)=<br/>100.00</i>          |
| <i>3/1/2020</i>                                                                                                                                                                                                                                                                                                                                                                          | <i>3/31/2020</i> | <i>400</i>        | <i>211+400=611</i>                     | <i>0</i>                          | <i>0</i>                              | <i>211+400=611</i>                      | <i>100(611/611)=<br/>100.00</i>          |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                   |                                        |                                   |                                       |                                         |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                   |                                        |                                   |                                       |                                         |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                   |                                        |                                   |                                       |                                         |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                   |                                        |                                   |                                       |                                         |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                   |                                        |                                   |                                       |                                         |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                   |                                        |                                   |                                       |                                         |                                          |
| <b><u>ALL OTHER C&amp;D WASTE CUMULATIVE PROJECT HISTORY, REFER TO ATTACHMENT B PART 2 OF 3</u></b>                                                                                                                                                                                                                                                                                      |                  |                   |                                        |                                   |                                       |                                         |                                          |
| <i>2/1/2020</i>                                                                                                                                                                                                                                                                                                                                                                          | <i>2/28/2020</i> | <i>26</i>         | <i>26</i>                              | <i>4</i>                          | <i>4</i>                              | <i>26+4=30</i>                          | <i>100(26/30)=<br/>86.67</i>             |
| <i>3/1/2020</i>                                                                                                                                                                                                                                                                                                                                                                          | <i>3/31/2020</i> | <i>24.5</i>       | <i>26+24.5=50.5</i>                    | <i>4.5</i>                        | <i>4+4.5=8.5</i>                      | <i>50.5+8.5=59</i>                      | <i>100(50.5/59)=<br/>85.59</i>           |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                   |                                        |                                   |                                       |                                         |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                   |                                        |                                   |                                       |                                         |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                   |                                        |                                   |                                       |                                         |                                          |
|                                                                                                                                                                                                                                                                                                                                                                                          |                  |                   |                                        |                                   |                                       |                                         |                                          |
| <p>Does this Report meet the minimum recycling requirement of 80% for Inert Debris and 65% for All Other C&amp;D Waste? Contractor is to meet the minimum recycling requirements of 80% for Inert Debris and 65% for All Other C&amp;D Waste by the end of construction.</p> <p style="text-align: center;">YES <input checked="" type="checkbox"/>      NO <input type="checkbox"/></p> |                  |                   |                                        |                                   |                                       |                                         |                                          |
| Name & title of person responsible for the information in this form: <i>Bobby Lee, Project Manager</i>                                                                                                                                                                                                                                                                                   |                  |                   |                                        |                                   |                                       | Signature: <i>Bobby Lee</i>             |                                          |

\*From appropriate Part I or II during each period.

Each Attachment B Part III Report needs to have the Tons Diverted and Tons Disposed from every previous Diversion and Disposal Report documented in it, as well as the totals from this Report.

Attach another Part III form and continue information if more rows are needed.

## **APPENDIX "E"**

# **ENVIRONMENTAL COMPLIANCE TRACKING (ECT) FORM**

# Environmental Compliance Tracking (ECT) Form

PORT OF LOS ANGELES CONSTRUCTION DIVISION

## 2026-2028 SITE IMPROVEMENTS

SPECIFICATION No. 2852

CONTRACT No. ####

|                                         |  |                          |                              |          |                    |                       |                                      |
|-----------------------------------------|--|--------------------------|------------------------------|----------|--------------------|-----------------------|--------------------------------------|
| Contractor                              |  |                          |                              | ECT No.: |                    |                       |                                      |
| <b>Section I: Equipment Information</b> |  |                          |                              |          |                    |                       |                                      |
| Equipment Description                   |  |                          | Equipment Make and Model No. |          |                    | Est. Hours on Project |                                      |
|                                         |  |                          |                              |          |                    |                       |                                      |
| On-Road Equipment                       |  | <input type="checkbox"/> | Engine Model Year            |          | License Plate No.  |                       |                                      |
|                                         |  |                          |                              |          |                    |                       |                                      |
| Non-Road Construction Equipment         |  | <input type="checkbox"/> | Tier Level                   | CARB EIN | Engine Family Name |                       | Executive Order No.<br>(Attach Form) |
| Harbor Craft Equipment                  |  | <input type="checkbox"/> | Tier Level                   | CARB UVI | Engine Family Name |                       | Fleet Operator                       |

## Section II: Compliance Status

Does the above piece of equipment comply with the environmental measures, including but not limited to regulatory compliance certifications, mitigation measures and project conditions, set forth in the contract? ***If no, please state circumstance in Section III.***

Yes ☐

No ☐

## Section III: Non-Compliance Circumstance

- ☐ A piece of specialized equipment is unavailable, in a controlled form, or within the required Tier level, within the state of California, including through a leasing agreement.
- ☐ Contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the project, but the application process is not yet approved, or the application has been approved, but funds are not yet available.
- ☐ Contractor has ordered a control device for a piece of equipment planned for use on the Project, or Contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the Contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the Project has the controlled equipment available for lease.

## Section IV: Steps Taken (Explain Below)

|  |
|--|
|  |
|--|

I certify to the best of my knowledge that the above information is true and in accordance with the contract requirements.

Signature

Date

## **APPENDIX "F"**

# **ELECTRICAL SAFETY POLICY – IMPLEMENTATION PLAN**

LOS ANGELES HARBOR DEPARTMENT  
CONSTRUCTION DIVISION

**ELECTRICAL SAFETY POLICY – IMPLEMENTATION PLAN**

PROJECT: 2026-2028 SITE IMPROVEMENTS

SPECIFICATION NO: 2852

INSPECTOR: \_\_\_\_\_ DATE: \_\_\_\_\_

THE CONTRACTOR SHALL:

IMPLEMENT THE ELECTRICAL SAFETY POLICY IN ACCORDANCE WITH THE BOARD OF HARBOR COMMISSIONERS' RESOLUTION NO. 6315, ADOPTED OCTOBER 27, 2004.

**APPRENTICES AND JOURNEYMEN:**

|  |                                                                                              |
|--|----------------------------------------------------------------------------------------------|
|  | All apprentices will be registered in a State of California Approved Apprenticeship Program. |
|  | The use of "Journeymen" will comply with all State of California labor laws.                 |

**THE WORKFORCE OF PROJECTS DESIGNATED AS REQUIRING "ELECTRICAL SAFETY CRITERIA" SHALL COMPLY WITH THE FOLLOWING:**

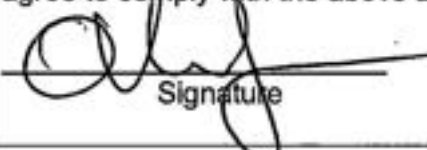
|  |                                                                                                                        |
|--|------------------------------------------------------------------------------------------------------------------------|
|  | 70% of all "Journeymen Wiremen" will be graduates of a State of California Approved Electrical Apprenticeship Program. |
|  | 20% of the jobsite electrical workers will be OSHA 10-hour General Industry Safety and Health Certified.               |
|  | At least one jobsite electrical worker will be OSHA 30-hour General Industry Safety and Health Certified.              |
|  | The required workforce ratios will be determined by verifying the workforce composition on a daily basis.              |

**FAILURE TO FULLY IMPLEMENT AND MONITOR THE ELECTRICAL SAFETY POLICY MAY RESULT IN AN ASSESSMENT OF PENALTIES AND/OR POSSIBLE SANCTIONS AGAINST THE CONTRACTOR.**

Distribution:

Contractor  
Job File  
Inspector

As the contractor's representative, I understand and agree to comply with the above Electrical Safety Policy.

   
Signature Date

## **APPENDIX "G"**

# **LOS ANGELES HARBOR DEPARTMENT IMPORT MATERIAL CHECKLIST**



# LOS ANGELES HARBOR DEPARTMENT IMPORT MATERIAL CHECKLIST

## GENERAL INFORMATION

**POLA Project Name:** \_\_\_\_\_ **Contract Spec No.:** \_\_\_\_\_

POLA Project Address: \_\_\_\_\_

Source of Import Material\*

Name/Address of Source: \_\_\_\_\_ Unique Identifier (if any): \_\_\_\_\_

\*For stockpiled materials, enter information for the source and staging of the stockpiles.

Origin of Import Material: Quarry: \_\_\_\_\_ Industrial/Commercial: \_\_\_\_\_ Other: \_\_\_\_\_

Current/Historical Operations of the Source: \_\_\_\_\_

## SAMPLING INFORMATION

**Sampling Firm Name:** \_\_\_\_\_

Firm Address: \_\_\_\_\_

Sampler's Name(s): \_\_\_\_\_

Sample Type: Grab from within stockpile(s): \_\_\_\_\_ In-Situ (Contractor should have a Port-Approved sampling plan): \_\_\_\_\_

**Analytical Laboratory Name/Address:** \_\_\_\_\_

Laboratory Report Number (s): \_\_\_\_\_

## CERTIFICATION

I certify that all information, sampling, and analytical laboratory data and results provided regarding the subject material are representative, accurate, correct, and complete to the best of my knowledge and belief.

\_\_\_\_\_  
Contractor Signature – Licensed Professional

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

\_\_\_\_\_  
Print Contractor Name – Licensed Professional

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

**Note: Contractor must attach copies of all pertinent information, including approved sampling plan (if applicable), sample location map, laboratory reports, and photographs for checklist verification.**

## POLA ACCEPTANCE

\_\_\_\_\_ Approved \_\_\_\_\_ Reject (Explain): \_\_\_\_\_

\_\_\_\_\_  
POLA Authorization Signature

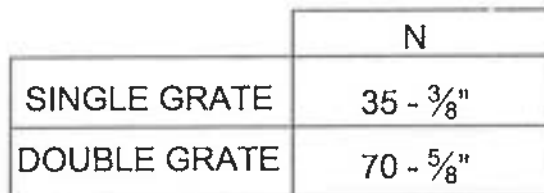
\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Date

## **APPENDIX "H"**

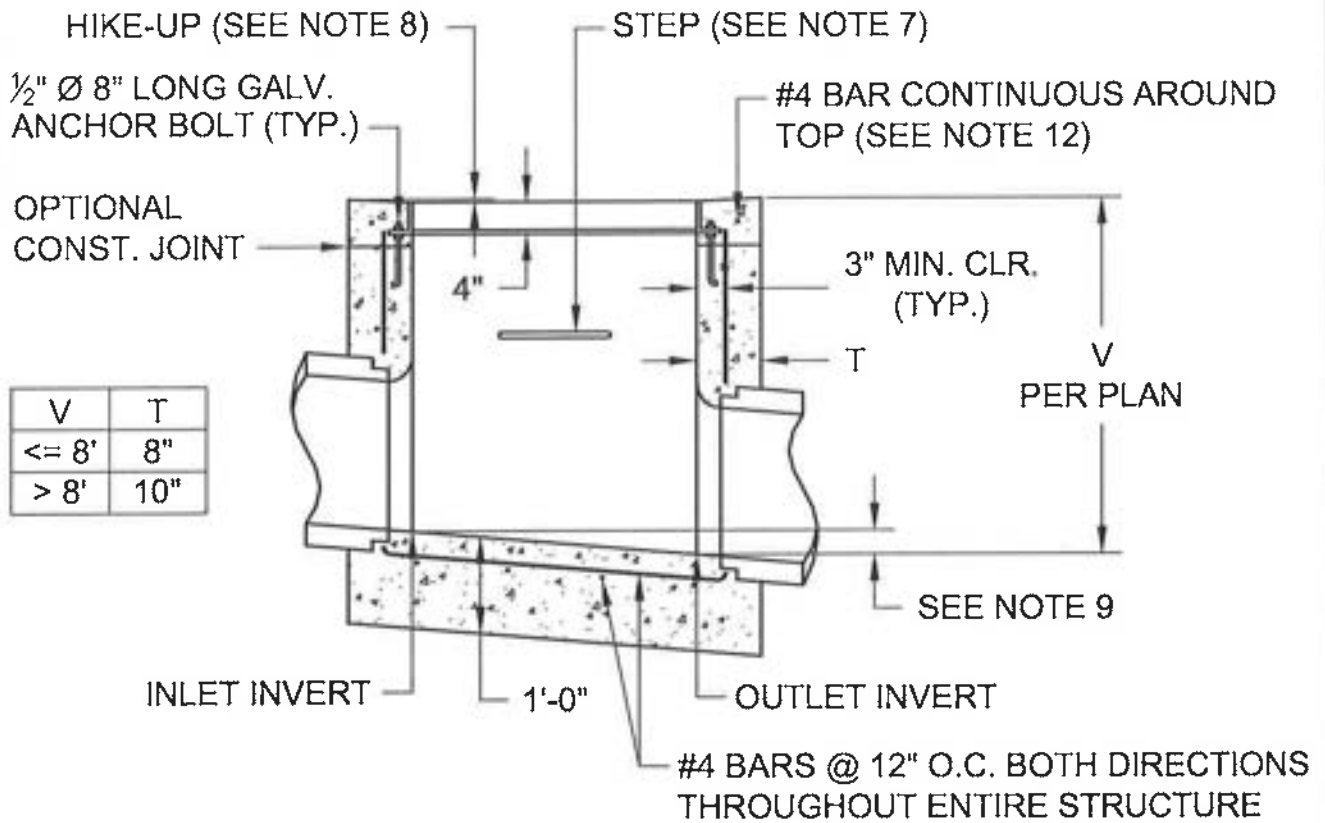
# **LOS ANGELES HARBOR DEPARTMENT STANDARD PLANS**





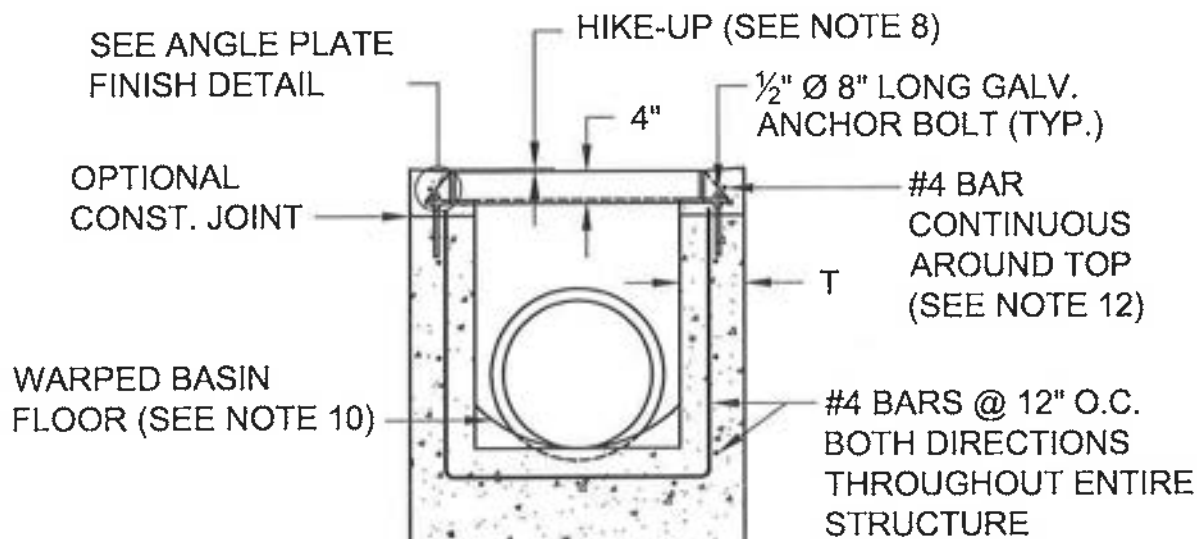
SCALE:  $\frac{1}{2}" = 1'-0"$

|                                 |                                                                  |                                                                                                                                                                                                   |
|---------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SCALE:<br>AS-SHOWN              | CHIEF ENGINEER<br><i>[Signature]</i>                             | LAHD STANDARD PLAN H-101-01                                                                                                                                                                       |
| DRAWN: F ZINKEWICH              | ASSISTANT CHIEF<br>HARBOR ENGINEER<br><i>[Signature]</i>         | CATCH BASIN GRATE AND FRAME                                                                                                                                                                       |
| DESIGNED: F. ZINKEWICH          | <i>[Signature]</i>                                               |                                                                                                                                                                                                   |
| CHECKED: C. BROWN               | <i>[Signature]</i>                                               |                                                                                                                                                                                                   |
| ENGR/ARCH<br><i>[Signature]</i> | APPROVED<br><i>[Signature]</i> 12-13-12<br>CHIEF HARBOR ENGINEER |  <p>THE PORT OF LOS ANGELES<br/>ENGINEERING DIVISION<br/>425 S. PALMS VERDE STREET SAN PEDRO CA 90731-3300</p> |
|                                 |                                                                  | SHEET NUMBER<br>1 OF 5                                                                                                                                                                            |



## SECTION A-A

SCALE:  $\frac{1}{2}$ " = 1'-0"



## SECTION B-B

SCALE:  $\frac{1}{2}$ " = 1'-0"

SCALE:  
AS-SHOWN

DRAWN: F. ZINKIEWICH

DESIGNED: F. ZINKIEWICH

CHECKED: C. BROWN

ENGINEER

*[Signature]*

CHIEF OF DESIGN

*[Signature]*

ASSISTANT CHIEF  
HARBOR ENGINEER

*[Signature]*

CHIEF HARBOR ENGINEER

LAHD STANDARD PLAN H-101 -01

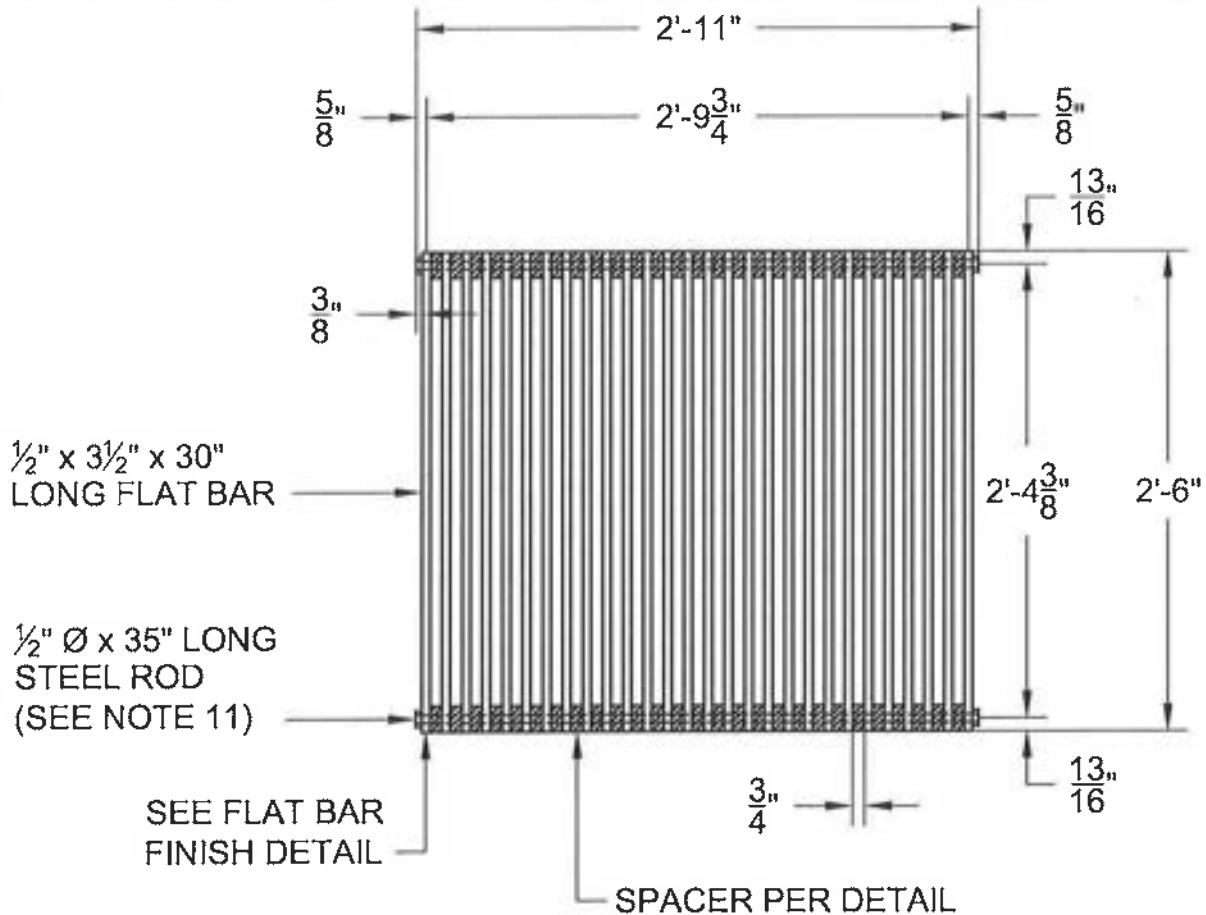
# CATCH BASIN GRATE AND FRAME



THE PORT OF LOS ANGELES  
ENGINEERING DIVISION  
425 S. PALMS VERDES STREET SAN PEDRO CA 90731-3309

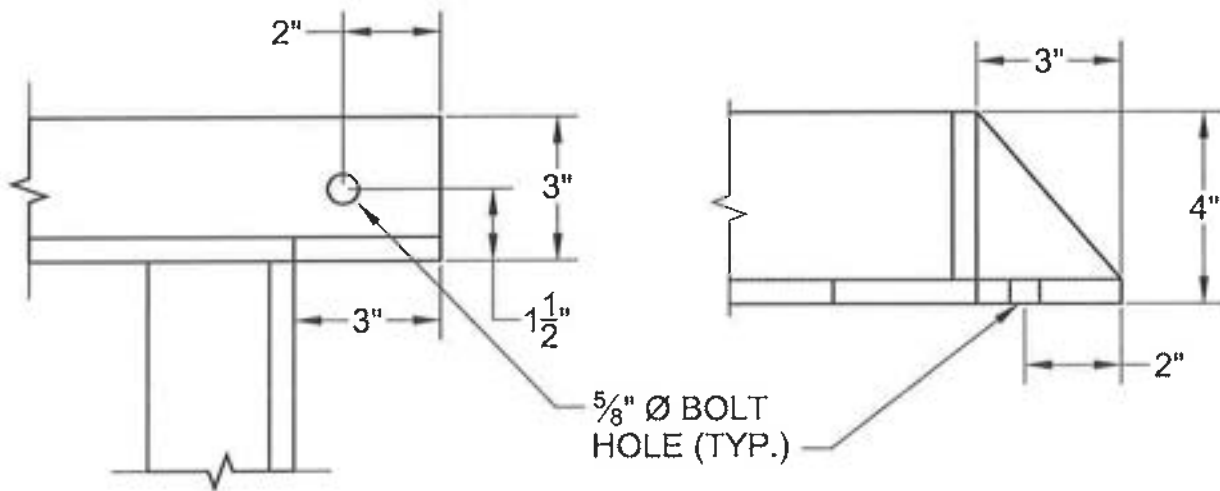
SHEET NUMBER

2 OF 5



## CATCH BASIN GRATE

SCALE: 1" = 1'-0"



## ANGLE PLATE FINISH DETAIL

SCALE: 3" = 1'-0"

|                        |              |
|------------------------|--------------|
| SCALE:                 | AS-SHOWN     |
| DRAWN:                 | F. ZINKEWICH |
| DESIGNED:              | F. ZINKEWICH |
| CHECKED:               | C. BROWN     |
| ENGINEER:              | [Signature]  |
| CHIEF OF DESIGN:       | [Signature]  |
| ASSISTANT CHIEF:       | [Signature]  |
| CHIEF HARBOR ENGINEER: | [Signature]  |

LAHD STANDARD PLAN H-101 -01

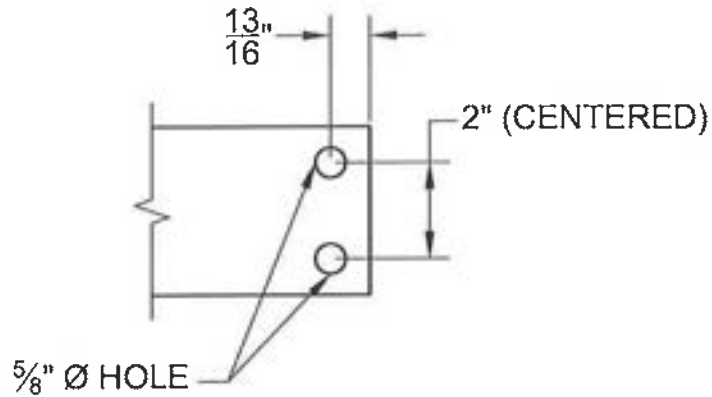
## CATCH BASIN GRATE AND FRAME



THE PORT OF LOS ANGELES  
ENGINEERING DIVISION  
426 S. PALOS VERDES STREET SAN PEDRO CA 90731-3309

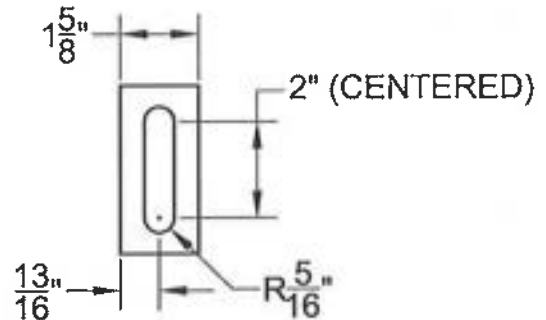
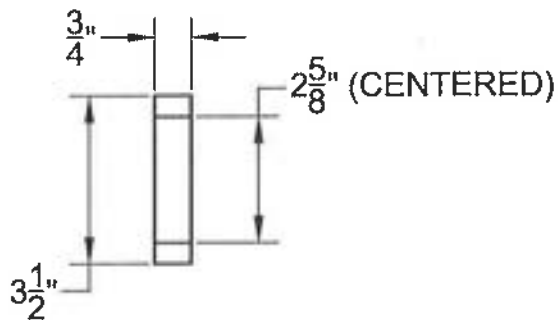
SHEET NUMBER

3 OF 5



## FLAT BAR FINISH DETAIL

SCALE: 3" = 1'-0"



## GRATE SPACER DETAIL

SCALE: 3" = 1'-0"

SCALE:

AS-SHOWN

DRAWN: F. ZINKEWICH

DESIGNED: F. ZINKEWICH

CHECKED: C. BROWN

ENGINEER

*PCA*

CHIEF OF DESIGN  
*[Signature]*  
ASSISTANT CHIEF  
HARBOR ENGINEER  
*[Signature]*  
CHIEF HARBOR ENGINEER  
*[Signature]* 12/13/12

LAHD STANDARD PLAN H-101 -01

# CATCH BASIN GRATE AND FRAME



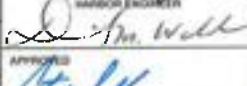
THE PORT OF LOS ANGELES  
ENGINEERING DIVISION  
425 S. PALOS VERDES STREET SAN PEDRO CA 90731-3308

SHEET NUMBER

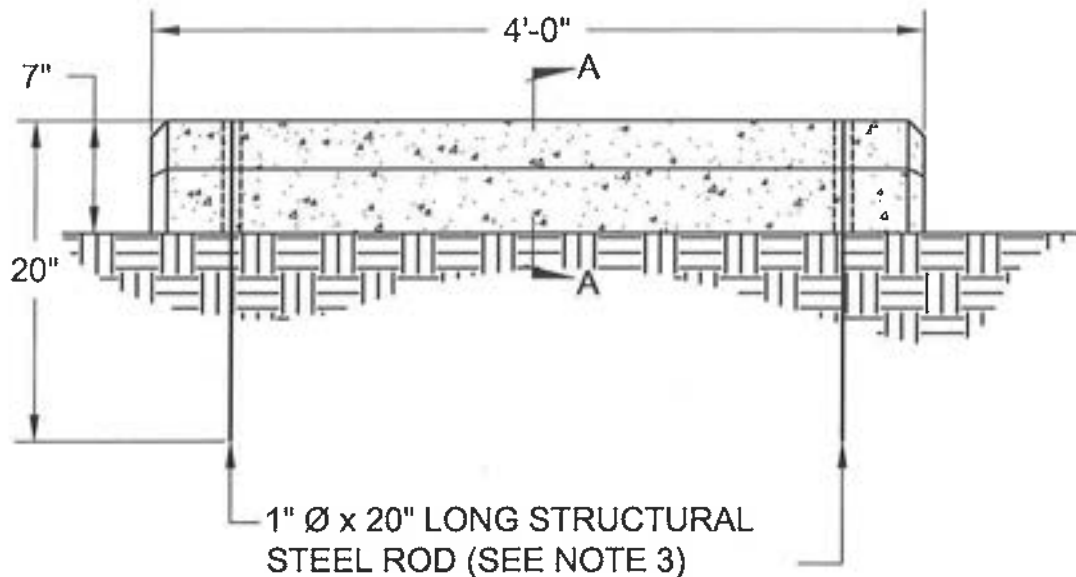
4 OF 5

## NOTES

1. ALL METAL PARTS AND REINFORCING STEEL SHALL BE OF STRUCTURAL GRADE STEEL EXCEPT SPACERS, WHICH MAY EITHER BE CAST IRON OR STEEL (STRUCTURAL STEEL A.S.T.M. DESIGNATION A-36) AND SHALL HAVE A MINIMUM 3" CLR. TO NEAREST CONCRETE EDGE.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF  $f_c = 3,000$  PSI.
3. ALL REQUIRED WELDS SHALL BE E70XX
4. ALL REQUIRED SPLICES SHALL BE 27 BAR Ø.
5. ALL EXPOSED METAL PARTS SHALL BE ZINC-COATED (HOT DIPPED) PER A.S.T.M. A-386 PRIOR TO ASSEMBLY. WELDING, MACHINING, AND DRILLING SHALL BE DONE BEFORE GALVANIZING
6. ALL DIMENSIONS ARE FINISHED DIMENSIONS AND INCLUDE GALVANIZING
7.  $\frac{3}{4}$ " Ø GALVANIZED STEPS PLACED 17" APART SHALL BE USED WHEN "V" IS GREATER THAN 4'-0".
8.  $\frac{3}{8}$ " HIKE-UP. WHEN CONSTRUCTED WITH LONGITUDINAL CONC. GUTTER, SEE LAHD STANDARD PLAN H-201
9. THE DIFFERENCE BETWEEN THE INLET AND OUTLET INVERTS SHALL BE 3" UNLESS OTHERWISE NOTED.
10. FLOOR OF BASIN SHALL BE WARPED AT OUTLET TO PREVENT PONDING. THE WARPED FLOOR SHALL HAVE A TRANSITION LENGTH OF 9".
11. STEEL RODS SHALL BE THREADED AT EACH END AND SECURED WITH A NUT DURING ASSEMBLY OF THE GRATE. AFTER ASSEMBLY, THE NUTS SHALL BE TACK WELDED ONTO THE STEEL RODS. FOUR (4) RODS AND EIGHT (8) NUTS ARE REQUIRED PER GRATE.
12. #4 BAR CONTINUOUS ALL AROUND THE TOP OF THE BASIN SHALL HAVE A MINIMUM CLEARANCE OF 2" FROM THE CONCRETE EDGES.
13. A MONOLITHIC CONNECTION PER LOS ANGELES DEPARTMENT OF PUBLIC WORKS STANDARD PLAN S-331-1 SHALL BE CONSIDERED A PART OF THIS PLAN AND SHALL BE CONSTRUCTED WHEN SPECIFIED ON THE PROJECT PLANS.

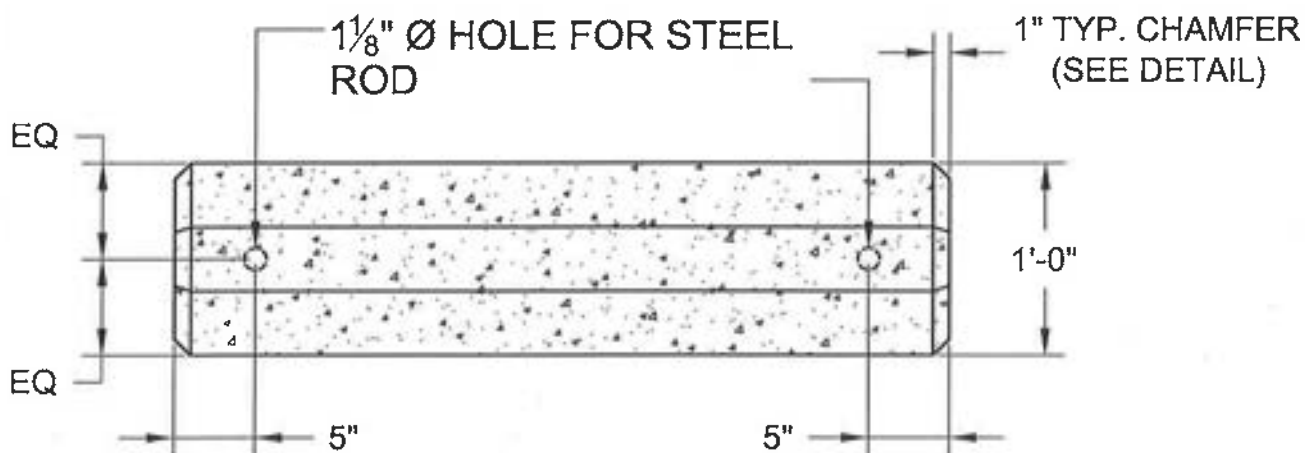
|                                                                                                                                                                                                                                              |  |                                                                                                                                                                                                  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| SCALE:<br>AS-SHOWN                                                                                                                                                                                                                           |  | LAHD STANDARD PLAN H-101 -01                                                                                                                                                                     |  |
| DRAWN: F. ZINKEWICH                                                                                                                                                                                                                          |  | CATCH BASIN GRATE AND FRAME                                                                                                                                                                      |  |
| DESIGNED: F. ZINKEWICH                                                                                                                                                                                                                       |  |                                                                                                                                                                                                  |  |
| CHECKED: C. BROWN                                                                                                                                                                                                                            |  | SHEET NUMBER                                                                                                                                                                                     |  |
| ENGR/ARCH                                                                                                                                                                                                                                    |  | 5 OF 5                                                                                                                                                                                           |  |
| <br>CHIEF ENGINEER<br><br>ASSISTANT CHIEF ENGINEER<br>12/13/11<br>DATE |  |  THE PORT OF LOS ANGELES<br><b>ENGINEERING DIVISION</b><br>425 S. PALOS VERDES STREET SAN PEDRO CA 90731-3309 |  |





## 4'-0" TRUCK WHEEL STOP

SCALE: 1" = 1'-0"



## TOP VIEW

SCALE: 1" = 1'-0"

|                       |                             |
|-----------------------|-----------------------------|
| SCALE:                | AS-SHOWN                    |
| DRAWN:                | F. ZINKEWICH                |
| DESIGNED:             | F. ZINKEWICH                |
| CHECKED:              | C. BROWN                    |
| ENGR/ARCH:            | <i>[Signature]</i>          |
| APPROVED:             | <i>[Signature]</i> 12/13/12 |
| CHIEF HARBOR ENGINEER |                             |

LAHD STANDARD PLAN H-203-01

## 4'-0" TRUCK WHEEL STOP



THE PORT OF LOS ANGELES  
ENGINEERING DIVISION  
426 S. PALOS VERDES STREET SAN PEDRO CA 90731-3308

SHEET NUMBER

1 OF 3



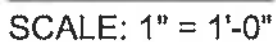
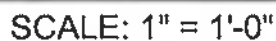
## NOTES

1. WHEEL STOP SHALL BE CLASS 560-C-3250 PRECAST CONC.
2. ALL REINFORCING STEEL SHALL BE OF STRUCTURAL GRADE STEEL (STRUCTURAL STEEL A.S.T.M. DESIGNATION A-36) .
3. WHERE 20" ROD CANNOT BE DRIVEN, USE 12" ROD DRILLED AND EPOXIED INTO PAVEMENT WITH A CITY OF L.A.-APPROVED STRUCTURAL EPOXY ADHESIVE.

DWG: M:\0416\ENGINEERING DIVISION\STANDARD PLANS\Standard Plans\B DATE: Nov-05-2012 2:53PM XREFS: IMAGES PCUPAPRO-570 PLAN VER 1 2012 CIVIL-11-203 - 4' Truck Wheel Stop CAD94-200-01 4' Truck Wheel Stop.dwg USER: browning

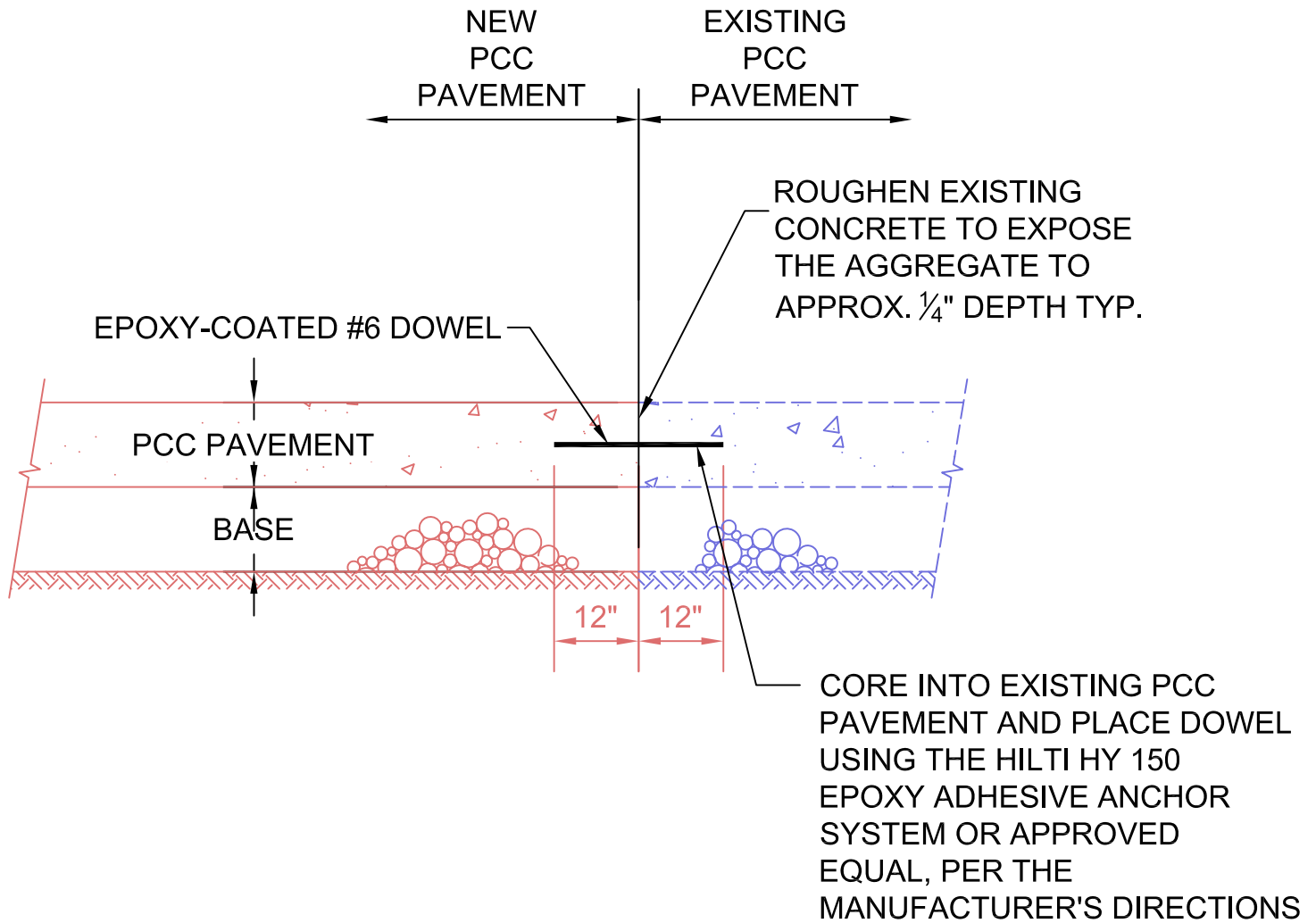
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|--------------------------------|--|---------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| SCALE:<br>AS-SHOWN             |  | CHIEF OF DESIGN<br><i>[Signature]</i>       |  | LAHD STANDARD PLAN H-203 -01                                                                                                                                                                                   |  |
| DRAWN: F. ZINKEWICH            |  | ASSISTANT CHIEF<br><i>[Signature]</i>       |  | 4'-0" TRUCK WHEEL STOP                                                                                                                                                                                         |  |
| DESIGNED: F. ZINKEWICH         |  | HARBOR ENGINEER                             |  |                                                                                                                                                                                                                |  |
| CHECKED: C. BROWN              |  | APPROVED<br><i>[Signature]</i>              |  |  <b>THE PORT OF LOS ANGELES<br/>ENGINEERING DIVISION</b><br><small>425 S. PALM VERDE STREET SAN PEDRO CA 90731-3309</small> |  |
| ENGINEER<br><i>[Signature]</i> |  | CHIEF HARBOR ENGINEER<br><i>[Signature]</i> |  |                                                                                                                                                                                                                |  |
|                                |  |                                             |  | SHEET NUMBER<br>3 OF 3                                                                                                                                                                                         |  |







2 OF 2



|                    |                                    |                                                                                                                                                                                                   |                |
|--------------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| SCALE: NTS         | CHIEF OF DESIGN                    | PORT OF LOS ANGELES                                                                                                                                                                               |                |
| DRAWN: A. RAGUSA   | ASSISTANT CHIEF OF HARBOR ENGINEER | DOWEL FOR JOINING EX PCC PAVEMENT                                                                                                                                                                 |                |
| CHECKED: C. BROWN  |                                    |                                                                                                                                                                                                   |                |
| DESIGNED: C. BROWN |                                    |                                                                                                                                                                                                   |                |
| ENGR/ARCH          | CHIEF HARBOR ENGINEER              |  <b>THE PORT OF LOS ANGELES<br/>ENGINEERING DIVISION</b><br>425 S. PALOS VERDES STREET SAN PEDRO CA 90731-3309 | DRAWING NUMBER |
|                    |                                    |                                                                                                                                                                                                   |                |
|                    | DATE                               |                                                                                                                                                                                                   |                |