ATTACHMENT B

DRAFT INVITATION FOR BIDS (IFB) 4-2666 BOOK 1 OF 2

## **CONSTRUCTION OF THE INLAND SLOPE REHABILITATION - PHASE II**



## ORANGE COUNTY TRANSPORTATION AUTHORITY

550 South Main Street P.O. Box 14184 Orange, CA 92863-1584 (714) 560-6282

Key IFB Dates

Issue Date:	July 14, 2025
Pre-Bid Conference:	July 31, 2025
Questions/Approved Equal Submittal:	August 4, 2025
Bid Submittal Date:	August 18, 2025

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#### SUBJECT: NOTICE INVITING SEALED BIDS IFB 4-2666, "CONSTRUCTION OF THE INLAND SLOPE REHABILITATION - PHASE II"

#### TO: ALL BIDDERS

#### FROM: ORANGE COUNTY TRANSPORTATION AUTHORITY

The Orange County Transportation Authority (Authority) invites sealed bids for CONSTRUCTION OF THE INLAND SLOPE REHABILITATION - PHASE II. This Slope rehabilitation project to repair erosion damage to various areas within the Orange County Transportation Authority's owned right of way. Planned work will include regrading slopes, placing shotcrete, and improving trackside drainage and culverts.

The estimated construction cost for this project is \$5,000,000.00. Bidders will be required to hold a valid State of California A – General Engineering and B –General Building license.

Please note that by submitting a Bid, Bidder certifies that it is not subject to any Ukraine/Russia-related economic sanctions imposed by the State of California or the United States Government including, but not limited to, Presidential Executive Order Nos. 13660, 13661, 13662, 13685, and 14065. Any individual or entity that is the subject of any Ukraine/Russiarelated economic sanction is not eligible to submit a Bid. In submitting a Bid, all Bidders agree to comply with all economic sanctions imposed by the State or U.S. Government.

Bids must be submitted at or before 11:00 a.m., August 18, 2025.

Bids delivered in person or by a means other than the U.S. Postal Service shall be submitted to the following:

Orange County Transportation Authority Contracts Administration and Materials Management 600 South Main Street, (Lobby Receptionist) Orange, California 92868 Attention: Gustavo Valle, Senior Contract Administrator Or bids delivered using the U.S. Postal Service shall be addressed as follows:

Orange County Transportation Authority Contracts Administration and Materials Management 550 South Main Street P.O. Box 14184 Orange, California 92863-1584 Attention: Gustavo Valle, Senior Contract Administrator

Bids and amendments to bids received after the date and time specified above will be returned to the bidders unopened.

Bidders interested in obtaining a copy of this Invitation for Bids (IFB) may do so by downloading the IFB from CAMM NET the Authority's on-line website at <u>https://cammnet.octa.net</u>.

All bidders and subcontractors interested in doing business with the Authority are required to register their business on-line at CAMM NET. The website can be found at <u>https://cammnet.octa.net</u>. From the site menu, click on CAMM NET to register.

To receive all further information regarding this IFB, bidders and subcontractors must be registered on CAMM NET with at least one of the following commodity codes for this solicitation selected as part of the vendor's on-line registration profile:

<u>Category:</u> Facility; Equipment, Supplies Construction	<u>Commodity:</u> Concrete & Cement Concrete Construction (General)
	Earthwork / Paving
	General Contractor
	Masonry
	Road / Highway building materials
	Right of Way Services
Professional Consulting	Construction Consulting
Rail Services	Rail - Right of Way
	Maintenance

An on-site/in-person pre-bid conference will be held on July 31, 2025, at 10:30 a.m. at the Authority's Administrative Office, 550 South Main Street, Orange, CA 92868 in Conference Room 09.

Participation via teleconference will also be available. Prospective bidders may join or call-in using the following credentials:

Join the meeting now OR Call-in Number: +1 916-550-9867 Conference ID: 565 712 149#

A copy of the pre-bid conference presentation slides and registration sheet(s) will be issued via addendum prior to the date of the pre-bid conference.

There will be no job walk for this project, as the space is open to the public.

All prospective bidders are encouraged to attend the pre-bid conference.

Bidders will be required to submit the name, business address, and California contractor license number of each subcontractor who will perform work or labor or render service to the bidder in or about the work in an amount in excess of one-half of one percent (1/2 of 1 %) of the bidder's total bid. If a subcontractor's California contractor license number is submitted incorrectly, it will not be grounds for filing a bid protest or grounds for considering the bid nonresponsive if the corrected subcontractor's California contractor icense number is submitted incorrectly, it will not be grounds for filing a bid protest or grounds for considering the bid nonresponsive if the corrected subcontractor's California contractor license number is submitted to the Authority within 24 hours after the bid opening.

All bidders are encouraged to subcontract with small businesses to the maximum extent possible.

The successful Bidder will be required to comply with all applicable equal opportunity laws and regulations.

All bidders must register with the Department of Industrial Relations pursuant to Labor Code Section 1725.5. A bidder is exempt from this requirement pursuant to Labor Code Section 1771.1(a) if the bidder submits a bid authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the bidder is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

A bid submitted by a contractor or subcontractor will not be accepted or entered into without proof of the contractor or subcontractor's current registration to perform public work pursuant to Labor Code Section 1725.5.

Award of this contract is subject to receipt of federal, state and/or local funds adequate to carry out the provisions of the agreement including the project specification.

## SECTION I: INSTRUCTIONS TO BIDDERS

#### SECTION I. INSTRUCTIONS TO BIDDERS

#### A. PRE-BID CONFERENCE

An on-site/in-person pre-bid conference will be held on July 31, 2025, at 10:30 a.m. at the Authority's Administrative Office, 550 South Main Street, Orange, CA 92868 in Conference Room 09.

Participation via teleconference will also be available. Prospective bidders may join or call-in using the following credentials:

Join the meeting now OR Call-in Number: +1 916-550-9867 Conference ID: 565 712 149#

A copy of the pre-bid conference presentation slides and registration sheet(s) will be issued via addendum prior to the date of the pre-bid conference.

There will be no job walk for this project, as the space is open to the public.

#### B. EXAMINATION OF DOCUMENTS

By submitting a bid, the bidder represents that it has thoroughly examined and become familiar with the work required under this IFB and that it is capable of performing quality work to achieve the authority's objective.

A Bid Booklet has been furnished as Book 2 of this IFB.

#### C. ADDENDA

The Authority reserves the right to revise the IFB documents. Such, if any, will be made by written addendum to this IFB. Any written addenda issued pertaining to this IFB shall be incorporated into the terms and conditions of any resulting Agreement. The Authority will not be bound to any modifications to or deviations from the requirements set forth in this IFB as the result of oral instructions. Bidders shall acknowledge receipt of Addenda in their bids. Failure to acknowledge receipt of Addenda may cause the bid to be deemed non-responsive to this IFB and be rejected.

#### D. AUTHORITY CONTACT

All communication and/or contacts with Authority staff regarding this IFB are to be directed to the following Contract Administrator:

Gustavo Valle, Senior Contract Administrator Contracts Administration and Materials Management Department 600 South Main Street P.O. Box 14184 Orange, CA 92863-1584 Phone: 714.560. 5670, Fax: 888.404.6282 Email: gvalle@octa.net

Commencing on the date of the issuance of this IFB and continuing until award of the contract or cancellation of this IFB, no bidder, subcontractor, lobbyist or agent hired by the proposer shall have any contact or communications regarding this IFB with any Authority's staff; member of the evaluation committee for this IFB; or any contractor or consultant involved with the procurement, other than the Contract Administrator named above or unless expressly permitted by this IFB. Contact includes face-to-face, telephone, electronic mail (e-mail) or formal written communication. Any bidder, subcontractor, lobbyist or agent hired by the bidder that engages in such prohibited communications may result in disqualification of the proposer at the sole discretion of the Authority.

#### E. CLARIFICATIONS OF SPECIFICATIONS AND APPROVED EQUALS

#### 1. Specifications Review

Should a bidder find discrepancies in, or omissions from, the drawings or specifications, or be in doubt as to their meaning, the bidder shall notify the Authority in writing in accordance with item 3 ("Submitting Requests"), below. Should it be found that the point in question is not clearly and fully set forth; a written addendum clarifying the matter will be sent to all firms registered on CAMM NET under the commodity codes specified in the IFB.

#### 2. **Preference for Materials**

In accordance with the California Public Contract Code Section 3400, reference to any equipment, material, article or patented process, by trade name, make, or catalog number, shall not be construed as limiting competition. In those cases where the specifications call for a designated material, product, or service by specific brand or trade name and there is only one brand or trade name listed, the item involves a unique or novel product application required to be used in the public interest or is the only brand or trade name known to the Authority.

Where the specifications or drawings identify any material, product or service by one or more brand names, whether or not "or equal" is added, and the bidder wishes to propose the use of another item as being equal, approval shall be requested as set forth in below.

#### 3. Submitting Requests

- **a.** All requests for approved equals, clarification of specifications, or questions must be put in writing and must be received by the Authority no later than 5:00 p.m., on August 4, 2025.
- **b.** Requests for approved equals, clarifications, questions must be clearly labeled, "Written Questions". The Authority is not responsible for failure to respond to a request that has not been labeled as such.
- **c.** Any of the following methods of delivering written questions are acceptable as long as the questions are received no later than the date and time specified above:
  - 1. U.S. Mail: Orange County Transportation Authority, P.O. Box 14184, Orange, California 92863-1584.
  - 2. Courier/Overnight: Orange County Transportation Authority, 600 South Main Street, Lobby Receptionist, Orange, California 92868
  - 3. Facsimile: (888) 404-6282.
  - 4. E-Mail: gvalle@octa.net
- **d.** Any request for an approved equal or clarification of the specifications must be fully supported with technical data, test results, or other pertinent information as evidence that the substitute offered is equal to or better than the specification requirements. The burden of proof as to the equality, substitutability, and the compatibility of proposed alternates or equals shall be upon the bidder, who shall furnish all necessary information at no cost to the Authority. The Authority shall be the sole judge as to the equality, substitutability and compatibility of the proposed alternatives or equals.

#### 4. Authority Responses

Responses from the Authority will be posted on CAMM NET, no later than five (5) calendar days before the scheduled date of bid opening. Bidders may download responses from CAMM NET at *https://cammnet.octa.net*, or request responses may be sent via U.S. Mail by e-mailing or faxing the request to Gustavo Valle, Senior Contract Administrator.

To receive e-mail notification of Authority responses when they are posted on CAMM NET, bidders and their subcontractors must be registered on CAMM NET with at least one of the following commodity codes for this solicitation selected as part of the vendor's on-line registration profile:

<u>Category:</u> Facility; Equipment, Supplies Construction	<u>Commodity:</u> Concrete & Cement Concrete
	Construction (General)
	Earthwork / Paving
	General Contractor
	Masonry
	Road / Highway building materials
	Right of Way Services
Professional Consulting	Construction Consulting
Rail Services	Rail - Right of Way
	Maintenance

Inquiries received after 5:00 p.m. on August 4, 2025, will not be responded to.

#### F. SUBMISSION OF BIDS

#### 1. Date and Time

#### Bids must be submitted at or before 11:00 a.m., August 18, 2025.

Bids received after the time due will be rejected without consideration or evaluation.

Bids will be publicly opened in the Authority's Administration Office, 600 South Main Street, Orange, California 92863 Conference Room 101 at the submission time indicated above. Participation via teleconference will also be available. Bidders may join or call-in using the following credentials:

Join the meeting now OR Call-in Number: +1 916-550-9867 Conference ID: 565 712 149#

#### 2. Address

Bids delivered in person or by a means other than the U.S. Postal Service shall be submitted to the following:

Orange County Transportation Authority Contracts Administration and Materials Management (CAMM) 600 South Main Street, (Lobby Receptionist) Orange, California 92868 Attention: Gustavo Valle, Senior Contract Administrator Or bids delivered using the U.S. Postal Services shall be addressed as follows:

Orange County Transportation Authority Contracts Administration and Materials Management (CAMM) P.O. Box 14184 Orange, California 92863-1584 Attention: Gustavo Valle, Senior Contract Administrator

#### 3. Bid Booklet and Identification of Bids

Bids must be submitted on the forms provided in the Bid Booklet (Book 2 of 2) that accompanies this IFB. Bids shall include properly completed bidding forms. The bid forms must be enclosed in a sealed package clearly marked as follows:

#### IFB 4-2666, "CONSTRUCTION OF THE INLAND SLOPE REHABILITATION - PHASE II"

Bidder shall be entirely responsible for any consequences, including disqualification of the bid, resulting from any inadvertent opening of unsealed or improperly identified packages. It is the bidder's sole responsibility to see that its bid is received as required.

#### G. PRE-CONTRACTUAL EXPENSES

The Authority shall not, in any event, be liable for any pre-contractual expenses incurred by bidder in the preparation of its bid. Bidder shall not include any such expenses as part of its bid.

Pre-contractual expenses are defined as expenses incurred by bidder in:

- 1. Preparing a bid in response to this IFB;
- 2. Submitting that bid to the Authority;
- 3. Negotiating with the Authority any matter related to this bid; and
- 4. Any other expenses incurred by bidder prior to date of award, if any, of the Agreement.

#### H. JOINT BIDS

Where two or more firms desire to submit a single bid in response to this IFB, they should do so on a prime-subcontractor basis rather than as a joint venture. The Authority intends to contract with a single firm and not with multiple firms doing business as a joint venture.

#### I. TAXES

Bids are subject to State and Local sales taxes. However, the Authority is exempt from the payment of Federal Excise and Transportation Taxes. Contractor is responsible for payment of all taxes for any goods, services, processes, and operations incidental to or involved in the contract.

#### J. BID SECURITY FORMS

Bids shall be accompanied by a certified or cashier's check, or an acceptable bid bond for an amount not less than ten percent (10%) of the bid, made payable to the order of the Orange County Transportation Authority. A corporate surety (not an individual surety), registered in the state of California and registered to do business in the county of Orange must issue bid bonds. Said check or bond shall be given as a guarantee that the bidder will enter into a contract if awarded the work and in case of refusal or failure to enter into said contract, the check or bond, as the case may be, shall be forfeited to the Authority.

#### K. WITHDRAWAL OF BIDS

Bidders may withdraw its bid at any time prior to the time set for opening of bids by means of written request signed by the bidder or its proper authorized representative. Such written request shall be delivered to the Contracts Administrator at the address noted in the cover notice of this IFB.

#### L. PREVAILING WAGES

This project is funded under a financial assistance contract by the U.S. Department of Transportation and is subject to all conditions of the Davis-Bacon Act (40 U.S.C. 3141–48), as supplemented by the Department of Labor regulations 29 CFR part 5, and the Labor Code of the State of California commencing in Section 1770 et. seq. It is required that all mechanics and laborers employed or working at the site be paid not less than the current basic hourly rates of pay and fringe benefits. Wage schedules are available at the Authority's Offices or on the internet at:

http://www.dir.ca.gov/OPRL/statistics\_research.html and http://www.access.gpo.gov/davisbacon/.

Bidders shall utilize the relevant prevailing wage determinations in effect on the first advertisement date of the Notice Inviting Sealed Bids. In the event there are any differences between the minimum wage rates as determined by the United States Secretary of Labor and those determined by the State of California, the highest rate must be paid.

This Agreement is subject to compliance monitoring and enforcement by the Department of Industrial Relations. The Department of Industrial Relations shall monitor and enforce compliance with applicable prevailing wage requirements for this Agreement. The reporting requirements may be found at

<u>https://www.dir.ca.gov/Public-Works/Contractors.html</u>. Bidder is responsible for complying with all requirements of the Department of Industrial Relations, including filing electronic payroll reports.

A contractor or subcontractor will not be qualified to bid on, be listed in a bid proposal, or engage in the performance of any contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code Section 1725.5. A contractor or subcontractor will be exempt from this requirement pursuant to Labor Code Section 1771.1(a) if it submits a bid authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

A contractor or subcontractor will not 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.

A bid submitted by a contractor or subcontractor will not be accepted or entered into without proof of the contractor or subcontractor's current registration to perform public work pursuant to Labor Code Section 1725.5.

#### M. SUBCONTRACTORS AND ASSIGNMENTS

The successful bidder shall perform work equivalent to **at least ten percent (10%) of the total amount of the construction work** at the site; and, perform the work on the site with its own staff.

Pursuant to the provisions of the California Public Contract Code Section 4104, every bidder shall in the bid set forth:

- The name, business address, and California contractor license number of each subcontractor who will perform work or labor or render service to the bidder in or about the work in an amount in excess of one-half of one percent (1/2 of 1 %) of the bidder's total bid; and
- 2. The portion of the work that will be done by each subcontractor. The bidder shall list only one subcontractor for each portion of work as defined by the bidder in its bid.
- 3. The dollar amount of the work which will be done by each such subcontractor.

Bidder shall complete Exhibit D "List of Subcontractors" with the above requested information.

If a subcontractor's California contractor license number is submitted incorrectly in the bid, it will not be grounds for filing a bid protest or grounds for considering the

bid nonresponsive if the corrected subcontractor's California contractor license number is submitted to the Authority within 24 hours after the bid opening.

If the bidder fails to specify a subcontractor for any portion of the work to be performed under the contract in excess of one-half of one percent (1/2 of 1 %) of the bidder's total bid, or if the bidder specifies more than one (1) subcontractor for the same portion of the work to be performed under the contract in excess of one-half of one percent (1/2 of 1 %) of the bidder's total bid, the bidder agrees to perform that portion. The successful bidder shall not, without the express written consent of the Authority, either:

- 1. Substitute any person, firm, or corporation as subcontractor in place of the subcontractor designed in the original bid; or
- 2. Permit any subcontract to be assigned or transferred; or
- 3. Allow it to be performed by anyone other than the original subcontractor listed in the bid.

Each Bidder shall set forth in its bid the name and location of the place of business address of each subcontractor who will perform work or labor or render service to the prime contractor in connection with the performance of the contract.

Bidder shall not assign any interest it may have in any Agreement with the Authority, nor shall bidder assign any portion of the work under any such Agreement with a value in excess of one-half of one percent (1/2 of 1%) of Agreement price to be sub-contracted to any one other than these subcontractors listed in Exhibit D in the "List of Subcontractors," except by prior written consent of Authority. Authority's consent to any assignment shall not be deemed to relieve bidder of its obligations to fully comply with its obligations under its Agreement with the Authority. Bidder with its own forces shall perform minimum of ten percent (10%) calculated as a percentage of the total cost of the project under this Agreement. Bidder shall also include in its subcontract agreements the provisions of its Agreement with Authority including the stipulation that each subcontractor shall maintain adequate insurance coverage compatible to the insurance coverage required of the bidder.

#### N. BIDDER'S LICENSING REQUIREMENTS

In conformance with the current statutory requirements of Section 7028.15 of the Business and Professions Code of the State of California, regarding submission of a bid without a license, the bidder shall provide as part of the bid a valid State of California license number, class or type and date of expiration.

Furthermore, the bidder shall ensure that all subcontractors fully comply with the appropriate licensing requirements. The bidder shall also certify that all information provided and representations made in the bid are true and correct, and made under penalty of perjury. Bidders shall provide this information on Exhibit D,

"List of Subcontractors" presented in the IFB. Failure to provide the information on the certification form or elsewhere as part of the bid shall render the bidder nonresponsive to this solicitation and will result in the rejection of the bid.

#### O. PERMITS AND INSPECTION COSTS

Successful bidder shall procure all permits and licenses; pay all charges, assessments and fees, as may be required by the ordinances and regulations of the public agencies having jurisdiction over the areas in which the work is located, and shall comply with all the terms and conditions thereof and with all lawful orders and regulations of each such public agency relating to construction operations under the jurisdiction of such agency.

#### P. LIQUIDATED DAMAGES

In the event bidder, after entering into an Agreement with the Authority, fails to complete the work within the time specified in the Agreement, the bidder will be required to pay the Authority the amount of **\$3,500.00 per calendar day** of delay as agreed to liquidated damages.

#### Q. PROTEST PROCEDURES

The Authority has on file a set of written protest procedures applicable to this solicitation that may be obtained by contacting the Contract Administrator responsible for this procurement. Any protest filed by a bidder in connection with this IFB must be submitted in accordance with the Authority's written procedures.

#### R. CONTRACT AWARD

Any contract awarded as a result of this IFB, will be awarded to the lowest responsive and responsible bidder and shall be on a lump sum basis, in accordance with the requirements of this IFB. The contract to be awarded is the Agreement presented in Section VI of this IFB.

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#### S. EXECUTION OF CONTRACT

The successful bidder shall submit to the Authority the required contract bonds, "Guaranty" and acceptable insurance certificates within ten (10) calendar days after notification of contract award from the Authority. Failure to sign the contract and submit applicable bonds, "Guaranty", and acceptable insurance certificates within the specified time shall be cause to cancel the award and the forfeiture of the Bid Bond. Transfers of contract, or of interest in contracts, are prohibited.

#### T. AUTHORITY'S RIGHTS

1. The Authority reserves the right to accept or reject any and all bids, or any item

or part thereof, or to waive any informalities or irregularities in bids.

- 2. The Authority reserves the right to withdraw or cancel this IFB at any time without prior notice. The Authority makes no representations that any contract will be awarded to any bidder responding to this IFB.
- 3. The Authority reserves the right to issue a new IFB for the project.
- 4. The Authority reserves the right to postpone the bid opening for its own convenience.
- 5. Each bid will be received with the understanding that acceptance by the Authority of the bid to provide the goods and services described herein shall constitute a contract between the bidder and Authority which shall bind the bidder on its part to furnish and deliver at the prices given and in accordance with conditions of said accepted bid and specifications.
- 6. The Authority reserves the right to investigate the qualifications of any bidder, and/or require additional evidence of qualifications to perform the work.
- 7. Submitted IFBs are not to be copyrighted.

#### U. PUBLIC RECORDS AND INFORMATION

Bids received by Authority are considered public information and will be made available to the public if requested to do so.

#### V. CONFLICT OF INTEREST

All bidders responding to this IFB must avoid organizational conflicts of interest, which would restrict full and open competition in this procurement. An organizational conflict of interest means that due to other activities, relationships or contracts, a bidder is unable, or potentially unable to render impartial assistance or advice to the Authority; a bidder's objectivity in performing the work identified in the Project Specifications is or might be otherwise impaired; or a bidder has an unfair competitive advantage. Conflict of Interest issues must be fully disclosed in the bidder's bid.

#### W. CODE OF CONDUCT

Bidders agree to comply with the Authority's Code of Conduct as it relates to Third-Party contracts, which is hereby referenced and by this reference is incorporated herein. Bidders agree to include these requirements in all of its subcontracts.

#### X. SAFETY

The complete safety requirements for this IFB are included in Section IV: Agreement Exhibit H. The Contractor will be required to demonstrate compliance with all requirements of the Safety Specifications after Notice to Proceed but prior to mobilization. These requirements include, but are not limited to, an onsite Health Safety and Environmental (HSE) representative to be present at all times during construction. The representative must have a current Board of Certified Safety Professionals (BCSP) certification and a minimum of five years of experience enforcing HSE compliance. BCSP certification requirements may be found at: <a href="https://www.bcsp.org/Safety-Certifications">https://www.bcsp.org/Safety-Certifications</a>.

## SECTION II: INSTRUCTIONS TO BIDDING FORMS

#### SECTION II. INSTRUCTIONS TO BIDDING FORMS

The Bidder shall complete all the forms identified below, and contained in the Bid Booklet Book 2 of this IFB. The bid may not contain exceptions to or deviations from the requirements of this IFB.

#### A. BID FORM

The bidder must complete the Bid Form which must be submitted in its entirety. Failure to submit the Bid Form in its entirety will result in the bid being nonresponsive. In addition to providing the lump sum bid, the bidder affirms the Bid Form statements.

#### B. BID SECURITY FORM - BID BOND

The bidder shall include the Bid Security Form and include the appropriate bid bond or cashier check with the bid.

#### C. INFORMATION REQUIRED OF BIDDER

Bidder must provide all the information requested in this form.

#### D. NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246) (NO FORM REQUIRED)

The bidder shall include the Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity provides notice to Bidder regarding the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications".

# E. BIDDER'S CERTIFICATE OF COMPLIANCE - WORKERS' COMPENSATION INSURANCE

In conformance with current statutory requirements of Section 1860, et. seq., of the Labor Code of the State of California, bidder shall execute the bidder's Certificate of Compliance Regarding Workers' Compensation Insurance.

#### F. BIDDER'S CERTIFICATE OF COMPLIANCE - BUSINESS AND PROFESSIONS CODE SECTION 7028

Bidder shall execute the Bidder's Certificate of Compliance Regarding State of California Business and Professions Code Section 7028.15.

#### G. LIST OF SUBCONTRACTORS FORM

Bidder shall complete Exhibit D, which lists all subcontractors performing work in excess of one-half of one percent ( $\frac{1}{2}$  of 1%) of the bid amount per the instructions

set forth in Section I "Instructions to Bidders".

#### H. STATUS OF PAST AND PRESENT CONTRACTS FORM

Bidder is required to complete and sign the form entitled "Status of Past and Present Contracts" provided in this IFB and submit as part of the bid. Bidder shall identify the status of past and present contracts where the firm has either provided services as a prime vendor or a subcontractor during the past five (5) years in which the contract has been the subject of or may be involved in litigation with the contracting authority. This includes, but is not limited to, claims, settlement agreements, arbitrations, administrative proceedings, and investigations arising out of the contract. Bidder shall have an ongoing obligation to update the Authority with any changes to the identified contracts and any new litigation, claims, settlement agreements, arbitrations, administrative proceedings, or investigations that arise subsequent to the submission of the bid.

A separate form must be completed for each identified contract. Each form must be signed by the Bidder confirming that the information provided is true and accurate. Bidder is required to submit one copy of the completed form(s) as part of its bid.

#### I. CERTIFICATION OF NON-COLLUSION

This form requires the Bidder to certify that the bid is not collusive or a sham. This form is to be signed, dated and is part of the bid package in Book 2 of 2.

#### J. IRAN CONTRACTING ACT CERTIFICATION

This form requires the Bidder to certify that the Bidder is not engaged in specified investment activities in the energy sector of Iran. (Required if the bid is equal to or greater than \$1,000,000).



## **BID FORM**

The undersigned hereby proposes to perform all work for which a contract may be awarded and to furnish any and all plant, labor, services, material, tools, equipment, supplies, transportation, utilities, and all other items and facilities necessary therefore as required in the **IFB 4-2666**, **"CONSTRUCTION OF THE INLAND SLOPE REHABILITATION - PHASE II"**, and to do everything required therein; and further proposes that, if this bid is accepted, will contract in the form and manner stipulated to perform all the work in strict conformity therewith within the time limits set forth therein, and will accept as full payment therefore, the following price:

Item	Description/Bid Allowance	Lump Sum Price
1	Base Work	\$
2	Allowance – Metrolink Flagging & Training	\$300,000.00
3	Allowance – Contaminated Soils	\$50,000.00
	Total Lump Sum Bid Amount	\$

A cashier's check/certified check/bid bond (circle applicable term) properly made payable to Orange County Transportation Authority, hereinafter designated as the Owner, for the sum of

#### Dollars

(\$

which amount is not less than ten percent (10%) of the total amount of this bid, is attached hereto and is given as a guarantee that the undersigned will execute the Agreement and furnish the required bonds, "Guaranty" and "Certificate of Insurance", if awarded the contract, and in case of failure to do so within the time provided, (a) the proceeds of said check shall be forfeited to the Authority; or (b) surety's liability to the Authority for forfeiture of the face amount of the bond shall be considered as established [circle (a) or (b)].

The undersigned hereby represents that:

#### BID FORM, PAGE 2

- 1. Bidder has thoroughly examined and become familiar with the work required and documents included under this IFB. The bidder understands that the award of the contract, if it is awarded, will be based on the lowest total bid submitted by a responsive and responsible bidder, and further, that the amounts and the total on the Bid Form will be subject to verification by the Authority.
- 2. By investigation at the site of the work and otherwise, it is satisfied as to the nature and location of the work and is fully informed as to all conditions and matters, which can in any way affect the work or the cost thereof.
- 3. Bidder fully understands the scope of the work/specifications and has checked carefully all words and figures inserted in said Invitation For Bids (IFB) and further understands that the Authority will in no way be responsible for any errors or omissions in the preparation of this bid. Bidder further asserts that it is capable of performing quality work to meet Authority's requirements.
- 4. Bidder will execute the Agreement and furnish the required Performance and Payment Bonds, Guaranty and proof of insurance coverage within ten (10) calendar days after notice of acceptance of bid by the Authority; and further, that this bid may not be withdrawn for a period of 120 calendar days after the date set for the opening thereof, unless otherwise required by law. If any bidder shall withdraw its bid within said period, the bidder shall be liable under the provisions of the Bid Security, or the bidder and the surety shall be liable under the Bid Bond, as the case may be.
- 5. Bidder hereby certifies that this bid is genuine and not a sham or collusive or made in the interest or on behalf of any person not herein named, and the undersigned has not directly or indirectly induced or solicited any other bidder to put in a sham bid, or any other person, firm, or corporation to refrain from bidding; the undersigned has not in any manner sought by collusion to secure for himself an advantage over any other bidder.
- In conformance with current statutory requirements of Section 1860, et. seq., of the Labor Code of the State of California, the Bidder shall execute the document included in this IFB entitled "Bidder's Certificate of Compliance Regarding Workers' Compensation Insurance."
- 7. Bidder hereby further certifies that each, and every representation made in this bid are true and correct and made under penalty of perjury.

#### BID FORM, PAGE 3

- 8. Bidder shall permit the authorized representative of the Authority to inspect and audit all data and records of bidder relating to this bid, and if awarded a contract resulting from this bid, shall permit such inspection and audit of all data and records of bidder related to bidder's performance of such contract.
- 9. Bidder does not employ anyone who is now, or for one (1) year immediately prior to the date of this offer was, a director, officer, member, or employee of the Orange County Transportation Authority. The undersigned has not agreed to pay a fee contingent upon the award of a contract resulting from this bid to anyone who is now, or for one (1) year immediately prior to the date of this bid was, a director, officer, member, or employee of the Orange County Transportation Authority. No member of or delegate to the Congress of the United States shall be admitted to any share of the contract or to any benefit arising therefrom.
- 10. If awarded a contract resulting from this bid, bidder shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, age or national origin. The bidder shall take affirmative action to ensure that applicants are employed, and that employees are treated during their employment, without regard to their race, religion, color, sex, age or national origin. Such actions shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
- 11. Bid will be in effect for 120 calendar days after the bid closing date.

#### BID FORM, PAGE 4

Now: In compliance with the **Invitation For Bids 4-2666**, "**CONSTRUCTION OF THE INLAND SLOPE REHABILITATION - PHASE II**", the undersigned, with full cognizance thereof, hereby proposes to perform the entire work in strict compliance with all of the said requirements and provisions for the prices set forth herein upon which award of contract is made. The undersigned affirms that the information provided herein is true and accurate and that any misrepresentations are made under penalty of perjury.

Dated , 202_	Bidder
The above bid includes	Signature
Addenda Nos	Name
	Title
Bidder's Authorized Representative	
Title	
Telephone #	
Fax #	
Email Address	
Bidders post office address	
Corporation organized under the laws of t	he State of
Contractor's License No.	
Expiration Date of License	
Surety or sureties	
	(CORPORATE SEAL)

#### BID SECURITY FORM BID BOND

#### KNOW ALL MEN BY THESE PRESENTS:

That, \_\_\_\_\_\_\_as principal and Bidder and \_\_\_\_\_\_\_as Surety, are held and firmly bound unto the Orange County Transportation Authority, of State of California, hereinafter referred to as "Authority," in the sum of \_\_\_\_\_\_\_\_Dollars (\$\_\_\_\_\_\_), to be paid to the Authority, its successors, and assigns; for which payment, well and truly to be made, bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents, this amount being ten percent (10%) of the total amount of the Bid.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the certain bid of the above named bounden principal

for at the Orange County Transportation Authority's as specifically set forth in documents entitled IFB 4-2666, "CONSTRUCTION OF THE INLAND SLOPE **REHABILITATION - PHASE II**", shall not be withdrawn within a period of 120 calendar days after the date set for the opening of bids, (unless otherwise required by law, and notwithstanding the award of the contract to another Bidder), and that if said bid is accepted by the Authority through action of its legally constituted contracting authorities and if the above bounden its heirs, executors, administrators, successors and assigns, shall execute a contract for such construction and deliver the required Performance and Payment Bonds, "Guaranty," and proof of insurance coverage within ten (10) calendar days after notification of contract award from the Authority, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

IN WITNESS WHEREOF, we hereunto set our hands and seals this \_\_\_\_\_ day of \_\_\_\_\_, 202\_.

NOTE: The standard printed bond form of any bonding company acceptable to the Authority may be used in lieu of the foregoing approved sample bond form provided the security stipulations protecting the Authority are not in any way reduced by use of the security company's printed standard form.

#### BID SECURITY FORM CHECK TO ACCOMPANY BID

(NOTE: The following form shall be used in case check accompanies bid)

Accompanying this bid is a Certified or Cashiers check (circle the appropriate one) payable to the order of Orange County Transportation Authority, hereinafter referred to As "Authority" for

dollars (\$\_\_\_\_\_\_), this amount being ten percent (10%) of the total amount of the Bid submitted in response to IFB 4-2666, "CONSTRUCTION OF THE INLAND SLOPE REHABILITATION - PHASE II". The proceeds of this check shall become the property of Authority provided this bid shall be accepted by Authority through action of its legally constituted contracting authorities and the undersigned shall fail to execute a contract and furnish the required Guaranty Form, Performance and Payment Bonds and proof of insurance coverage within ten (10) calendar days after date of notification of contract award from the Authority. The proceeds of this check shall also become the property of the Authority if the undersigned bidder withdraws the bid within the period of 120 days after the date set for the opening thereof, unless otherwise required by law, and notwithstanding the award of the contract to another bidder. Otherwise, the check shall be returned to the undersigned.

Bidder: \_\_\_\_\_

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

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

NOTE: If the bidder desires to use a bond instead of check, the Bid Bond form shall be executed and the sum of this bond shall be ten percent [10%] of the total amount of the bid.

### **INFORMATION REQUIRED OF BIDDER**

The bidder is required to supply the following information. Additional sheets may be attached if necessary.

1.	Name of Bidder:
2.	Business Address:
3.	Telephone ( ) Fax ( )E-Mail
4.	Type of Firm - Individual, Partnership or Corporation:
5.	Corporation organized under the laws of state of:
6.	Contractor's License No.: ClassYears     of       Experience:
7.	Expiration Date of License:
8.	Is your firm a certified small business in California? Yes No
9.	List the names and addresses of all owners of the firm or names and titles of all officers of the corporation:

#### **INFORMATION REQUIRED OF BIDDER, PAGE 2**

10. Please list the following: a) All prior and current license numbers that the current owner(s) or officers possess or have possessed in the last five years and the current status of those license; b) any prior company names that the owner(s) had in operation during the previous five years.

Current Officers or Owners Name	Prior Company Names (During the last 5 years)	Prior and Current License Numbers	Status of License

*Note*: If additional space is required to detail the information requested, please attach another page. All information requested must be included. Failure to identify all of the information may result in your bid being found non-responsive and your bid being rejected.

11. List all construction projects (public and private) for which Bidder has provided general contractor services for the past three years:

Contract Type (Public or Private)	Project Description	Dates of Service	Total Cost	Name and Address of Owner	Contact Name and Phone Number

*Note*: If additional space is required to detail the information requested, please attach another page. All information requested must be included. Failure to identify all of the information, may result in your bid being found non-responsive and your bid being rejected.

12. List the name, address and phone number of Superintendent for this project:

13. List all construction projects (public and private) for which Superintendent has provided services as a Superintendent for the past three years.

Contract Type (Public or Private)	Project Description	Dates of Service	Total Cost	Name and Address of Owner	Contact Name and Phone Number

Bidder hereby certifies that it:

\_\_\_\_\_ is a certified Disadvantaged Business Enterprise as defined herein.

\_\_\_\_\_ is not a Disadvantaged Business Enterprise as defined herein.

**NOTE:** If requested by the Authority, bidder shall furnish a certified financial statement, financial data, or other information and references sufficiently comprehensive to permit an appraisal of its current financial condition.

I hereby certify the above is true and correct to the best of my belief.

Signature
Name
Title
Company Name

Telephone Number

Fax Number

Email Address

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

- 1. The Bidders' attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
- 2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate <u>work force</u> in each trade on all construction work in the covered area, are as follows:

Timetable Goals for Minority Participation for Each Trade (11.9)

Goals for Female Participation in Each Trade (6.9)

These goals are applicable to all the Contractor's construction work (whether or not it is federal or federally assisted) performed in the covered area.

The Contractor's compliance with the Executive Order and the regulations in 41 C.F.R. Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 C.F.R. 60-4.3 (a), and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 C.F.R. Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated

starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" includes the County of Orange, California.

#### BIDDER'S CERTIFICATE OF COMPLIANCE REGARDING WORKERS' COMPENSATION INSURANCE

In conformance with current statutory requirements of Section 1860, et. seq., of the Labor Code of the State of California, the undersigned confirms the following certification:

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

Name of	of Bidder/Contractor:
Signatu	ıre:
Title:	
Date:	

#### BIDDER'S CERTIFICATE OF COMPLIANCE REGARDING STATE OF CALIFORNIA BUSINESS AND PROFESSIONS CODE SECTION 7028.15

Contractor License Number:

Expiration Date of Contractor's License: \_\_\_\_\_

Each, every and all of the representations made by Bidder in the attached bid are true and correct.

Name of Bidder/Contractor: \_\_\_\_\_

Signed: \_\_\_\_\_

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

Subscribed to and sworn before me, a Notary Public in and for the State of California, on \_\_\_\_\_, 202\_\_\_\_,

Notary Public

My commission expires on:

\_\_\_, 202\_ (NOTARY SEAL)

#### LIST OF SUBCONTRACTORS (EXHIBIT D)

List only the subcontractors, which will perform work or labor or render services to the bidder in <u>excess of one-half of one</u> <u>percent</u> (1/2 of 1%) of the bidder's total bid amount. Do not list alternative subcontractors for the same work. (Use additional sheets if necessary.)

Name & Address Under Which Subcontractor is Licensed	License Number	DIR Registration No.	Specific Description of Work to be Rendered	Small Business Y/N	Туре	Dollar Amount	
						\$	
						\$	
						\$	
						\$	
						\$	
						\$	
TOTAL VALUE OF SUBCONTRACTED WORK							

Bidder's Name

#### STATUS OF PAST AND PRESENT CONTRACTS FORM

On the form provided below, Offeror/Bidder shall list the status of past and present contracts where the firm has either provided services as a prime vendor or a subcontractor during the past five (5) years in which the contract has been the subject of or may be involved in litigation with the contracting authority. This includes, but is not limited to, claims, settlement agreements, arbitrations, administrative proceedings, and investigations arising out of the contract.

A separate form must be completed for each contract. Offeror/Bidder shall provide an accurate contact name and telephone number for each contract and indicate the term of the contract and the original contract value. Offeror/Bidder shall also provide a brief summary and the current status of the litigation, claims, settlement agreements, arbitrations, administrative proceedings, or investigations. If the contract was terminated, list the reason for termination.

Offeror/Bidder shall have an ongoing obligation to update the Authority with any changes to the identified contracts and any new litigation, claims, settlement agreements, arbitrations, administrative proceedings, or investigations that arise subsequent to the submission of the bid. Each form must be signed by an officer of the Offeror/Bidder confirming that the information provided is true and accurate.

Project city/agency/other:					
Contact Name: Phone:					
Contact Name. Filone.					
Project Award Date: Original Contract Value:					
Term of Contract:					
(1) Litigation, claims, settlements, arbitrations, or investigations associated with contract:					
(2) Summary and Status of contract:					
(3) Summary and Status of action identified in (1):					
(4) Reason for termination, if applicable:					

By signing this Form entitled "Status of Past and Present Contracts," I am affirming that all of the information provided is true and accurate.

Name

Signature

Title

Date

Revised. 03/16/2018

## **Non-Collusion Affidavit**

#### To the Orange County Transportation Authority

In accordance with Title 23 United States Code Section 112 and Public Contract Code 7106 the bidder declares that the bid is not made in the interest of, or on the behalf of, any undisclosed person, partnership, company, association, organization or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly, or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

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

Signature:

Date:		
## **IRAN CONTRACTING ACT CERTIFICATION**

(California Public Contract Code Sections 2200, *et seq.*)

The Iran Contracting Act of 2010 (PCC Sections 2200-2208), prohibits bidders who are engaged in investment activities in the energy sector of Iran from bidding on, submitting proposals for, or entering into or renewing contracts with public entities for goods or services of one million dollars (\$1,000,000) or more. At the time of submitting a bid, each bidder must certify that the bidder is not identified on the Department of General Services list of ineligible persons pursuant to PCC Section 2203(b). Each bidder is also required to certify that the bidder is not engaged in investment activities in violation of the Iran Contracting Act of 2010.

A bidder who is engaged in investment activities in the energy sector of Iran is defined as:

- 1. A person providing goods or services of twenty million dollars (\$20,000,000) or more in the energy sector of Iran, including a person that provides 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
- 2. A person that is a financial institution that extends twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that person will use the credit to provide goods or services in the energy sector in Iran and is identified on a list created pursuant to PCC Section 2203(b).

A bidder is not required to certify that it is engaged in investment activities in the energy sector of Iran if the bidder is exempt from the certification under PCC Section 2203(c) or (d). If the bidder is exempt from the certification requirement, the bidder will be required to provide documentation demonstrating the exemption.

To comply with the Iran Contracting Act of 2010, the bidder shall complete <u>one</u> of the options below. Please note: under PCC Section 2205, false certification of this form may result in civil penalties of \$250,000 or twice the amount of the contract for which false certification was made, termination of the contract, and/or ineligibility to bid on contracts for a period of three years.

## **Option No. 1: Certification**

I, the official named below, certify I am duly authorized to execute this certification on behalf of the vendor/financial institution identified below, and the vendor/financial institution identified below, and any subcontractor who will perform work or labor or render services to the vendor identified below, is not on the current Department of General Services list identifying persons engaged in investment activities in the energy sector of Iran, and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person/vendor, for 45 days or more, if that other person/vendor will use the credit to provide goods or services in the energy sector in Iran and is identified on the current Department of General Services list identifying persons engaged in investment activities in the energy sector of Iran.

Vendor/Financial Institution:
Signature:
Name and Title:
Date:

## Option No. 2: Exemption

Pursuant to PCC Section 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 bid on, submit proposals for, or enter into or renew a contract with a public entity for goods or services of one million dollars (\$1,000,000) or more. If the bidder, financial institution, or any subcontractor who will perform work or labor or render services to the bidder has obtained an exemption from the certification requirement, please complete and sign below and attach the documentation demonstrating the exemption approval.

Vendor/Financial Institution:
Signature:
Name and Title:

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

## **Option No. 3: Non-Applicability**

Pursuant to PCC Section 2203(b), a bidder or financial institution engaged in investment activities in Iran may not be eligible for, or to bid on, submit proposals for, or enter into or renew a contract with a public entity for goods or services of one million dollars (\$1,000,000) or more. If the contract is not for goods or services of one million dollars (\$1,000,000) or more, please sign below indicating that the contract is not for goods or services of one million dollars (\$1,000,000) or more and thus bidder is not required to certify and does not meet the exemption.

/endor/Financial Institution:
Signature:
Name and Title:
Date:

# SECTION III: ADDITIONAL CONTRACTUAL EXHIBITS

## SECTION III. ADDITIONAL CONTRACTUAL EXHIBITS

The following Exhibits will be attached to and incorporated into the signed Agreement resulting from this IFB.

## A. PERFORMANCE BOND

The successful bidder shall furnish at its own expense a Performance Bond (Exhibit E) satisfactory to the Authority in the amount of one hundred percent (100%) of the full amount of the contract as a guarantee of good faith on behalf of the Contractor that the terms of the contract, including all warranty provisions, shall be complied with in every particular. The bond shall be in effect during the entire term of the contract and warranty and shall be issued by a corporation surety (not an individual surety) required in the state of California and registered to do business in the county of Orange. The bond shall not be issued from a corporation surety that requires a funds control, funds disbursement, or funds administration company for the issuance of the performance bond.

The bond shall specifically provide that if the Contractor, or its subcontractor, fails to fully perform that the surety or sureties will pay for the same in an amount not exceeding the amount specified in the bond and in case suit is brought against the Authority, that the surety will undertake the defense of same.

## B. PAYMENT BOND

The successful bidder shall furnish a Payment Bond (Exhibit F) satisfactory to the Authority in the amount of one hundred percent (100%) of the full amount of the contract. Such bonds shall be in effect during the entire term of the contract and warranty and shall be issued directly by a corporate surety (not an individual surety) registered in the state of California and registered to do business in the county of Orange. The bond shall not be issued from a corporation surety that requires a funds control, funds disbursement, or funds administration company for the issuance of the performance bond.

The bond shall specifically provide that if the Contractor fails to pay for amounts due under the Employment Insurance Act that the surety or sureties will pay for the same in an amount not exceeding the amount specified in the bond and in case suit is brought against the Authority, that the surety will undertake the defense of same.

Pursuant to California Civil Code sections 9550 through 9554, in conjunction with the Bond and Undertaking Law (Code of Civil Procedure sections 995.010, et. seq.), Bidders must provide the following information as part of their payment bond; a certificate of Authority from the Orange County Clerks Office indicating that the insurer has not been surrendered, revoked, canceled, annulled, or suspended or, in the event that it has, that renewed Authority has been granted.

## C. GUARANTY

The successful bidder shall also submit to the Authority the executed and notarized Guaranty form (Exhibit G) in this IFB.

All forms must be completed and submitted to the Contract Administrator responsible for this procurement within ten (10) calendar days of award notice by the Authority. <u>Failure to submit the completed and signed forms will result in cancellation of the award</u>.

## D. CONTRACT CHANGE ORDER

The Authority's Contract Change Order form (Exhibit I) will be attached to and incorporated into the signed Agreement resulting from this IFB.

## PERFORMANCE BOND

### **KNOW ALL MEN BY THESE PRESENTS:**

That we. hereinafter referred to as "Contractor", as principal, and as surety, are held and firmly bound unto the Orange County Transportation Authority, State of California, in the sum ), lawful money of the United States of America, Dollars, (\$ for the payment of which sum, well and truly to be made, we bind ourselves, jointly and severally, firmly by these presents.

The condition of the foregoing obligation is such that,

WHEREAS, said Contractor has been awarded and is about to enter into the annexed Agreement with the Orange County Transportation Authority for the IFB 4-2666, "CONSTRUCTION OF THE INLAND SLOPE REHABILITATION - PHASE II," as specified in said Agreement, which is incorporated herein to this bond by reference, and is required under the terms of said Agreement to give this bond in connection with the execution thereof;

**NOW THEREFORE**, if the said Contractor shall well and truly do and perform all of the covenants and obligations of said Agreement on his part to be done and performed at the times and in the manner specified herein, then this obligation shall be null and void, otherwise it shall be and remain in full force and effect; and in the event said Contractor fails to fully perform all requirements in accordance with the terms and conditions of said Agreement, including warranty obligations, then surety shall enforce performance by the Contractor or shall pay the Orange County Transportation Authority for the same in an amount not exceeding the amount specified in this bond; and, further, if in the event suit is brought upon this bond then said surety shall pay the Orange County Transportation Authority for reasonable attorneys' fees to be fixed by the court;

**PROVIDED**, that any changes in the work to be done, or the material to be furnished, whether or not made pursuant to the terms of said contract, shall not in any way release either the Contractor or the surety there under, nor shall any extensions of time granted under the provisions of said contract release either the Contractor or the surety, and notice of such changes or extensions of the contract is hereby waived by the surety.

WITNESS our hands this	day of, 202
(SEAL)	(Contractor) By
Approved:	(Title)
(SEAL)	(Surety) By

## PAYMENT BOND

## KNOW ALL MEN BY THESE PRESENTS:

The Condition of the foregoing obligation is such that,

WHEREAS, said Contractor has been awarded and is about to enter into the annexed Agreement with the ORANGE COUNTY TRANSPORTATION AUTHORITY for the IFB 4-2666, "CONSTRUCTION OF THE INLAND SLOPE REHABILITATION - PHASE II," as specified in said Agreement, which is incorporated herein to this bond by reference, and is required under the terms of said Agreement to give this bond in connection with the execution thereof;

**NOW, THEREFORE,** if said Contractor or a subcontractor fails to pay any of the persons named in Section 9100 of the Civil Code of the State of California, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract, or for any amounts required to be deducted, withheld and paid over to the Employment Development Department from the wages of employees of said Contractor and subcontractors pursuant to Section 13020 of the Unemployment Insurance Code with respect to such work and labor, then said surety will pay for the same, in an amount not exceeding the sum specified in this bond, and also, in case suit is brought upon this bond, a reasonable attorney's fee, to be fixed by the court. This bond shall inure to the benefit of all persons named in Section 9100 of the Civil Code of the State of California so as to give a right of action to such persons or their assigns in any suit brought upon this bond. This bond shall be subject to and include all of the provisions of Title 3 of Part 64 of Division 4 of the Civil Code of California relating to Payment Bond for Public Works, including but not confined to, Civil Code Sections 8150 – 8154, inclusive and Sections 9550 - 9566, inclusive.

**PROVIDED,** that any changes in the work to be done or the material to be furnished, whether or not made pursuant to the terms of said contract, shall not in any way release either the Contractor or the surety thereunder, nor shall any extensions of time granted under the provisions of said contract release either the Contractor or the surety, and notice of such alterations or extensions of the contract is hereby waived by the surety.

## PAYMENT BOND, PAGE 2

WITNESS our hands this	day of	, 202
(SEAL)	(Contractor)	
	Ву	
	(Title)	
Approved:	(Surety)	
(SEAL)	Ву	

## <u>GUARANTY</u>

The undersigned, as "Contractor," guarantees to the Orange County Transportation Authority that the materials furnished and the completed installation work, and the related work performed by the Contractor pursuant to Agreement No. **C-4-2666**, **"CONSTRUCTION OF THE INLAND SLOPE REHABILITATION - PHASE II".** 

- A. For a period of one (1) year from the date of completion, as evidenced by the date of final acceptance of the work by the Authority, the Contractor warrants to the Authority that work performed and materials furnished under this Contract conforms to the Contract requirements and shall be free from any defect in design, material or workmanship performed by the Contractor or its subcontractors or suppliers. Notwithstanding the foregoing, Contractor shall not be liable for any defects of design, material or equipment provided by Authority.
- B. Under this guaranty, the Contractor shall remedy at its own expense any such failure to conform or any such defect.
- C. Nothing in the above intends or implies that this warranty shall apply to work, which has been abused or neglected by the Authority.
- D. This guaranty shall be in addition to the other guarantees and warranties specified in the Agreement and shall be enforceable concurrently with, or in lieu of, said other guarantees.

Should any of the materials or equipment prove defective or should the work as a whole prove defective, due to faulty workmanship, material furnished or methods of installation, or should the work or any part thereof fail to operate properly as originally intended and in accordance with the plans and specifications, due to any of the above causes, all within twelve (12) months after the date on which the work is accepted by the Authority, the undersigned agrees to reimburse the Authority, upon demand, for its expenses incurred in restoring any such equipment or materials replaced and the cost of removing and replacing any other work without cost to the Authority so that said work will function correctly as originally contemplated.

The Authority shall have the unqualified option to make any needed replacements or repairs itself or to have such replacements or repairs done by the undersigned. In the event the Authority elects to have said work performed by the undersigned, the undersigned agrees that the repairs shall be made and such materials as are necessary shall be furnished and installed within a reasonable time after the receipt of demand from the Authority. If the undersigned shall fail or refuse to comply with its obligations under this guaranty, the Authority shall be entitled to all costs and expenses, including attorneys' fees, reasonably incurred by reasons of the said failure or refusal.

## **GUARANTY, PAGE 2**

Name
Title
Signature
Date

# **SECTION IV: AGREEMENT**

AGREEMENT NO. C-4-2666
BETWEEN
ORANGE COUNTY TRANSPORTATION AUTHORITY
AND
THIS AGREEMENT is effective this day of, 20("Effective
Date"), by and between the Orange County Transportation Authority, 550 South Main Street, P.O. Box
14184, Orange, CA 92863-1584, a public corporation of the State of California (hereinafter referred to as
"AUTHORITY"), and , , , (hereinafter referred to as "CONTRACTOR").
WITNESSETH:
WHEREAS, AUTHORITY has determined that it requires construction of the inland slope
rehabilitation - phase II to repair erosion damage to various areas within the Orange County
Transportation Authority's owned right of way; and
WHEREAS, said work cannot be performed by the regular employees of AUTHORITY; and
WHEREAS, CONTRACTOR has represented that it has the requisite personnel, experience,
material, and equipment and is otherwise qualified to perform such services; and
WHEREAS, CONTRACTOR wishes to perform these services; and
WHEREAS, the AUTHORITY's Board of Directors authorized this Agreement on
<b>NOW, THEREFORE</b> , it is mutually understood and agreed by AUTHORITY and CONTRACTOR
as follows:
ARTICLE 1. COMPLETE AGREEMENT
A. This Agreement, including all exhibits and other documents incorporated herein and made
applicable by reference, constitutes the complete and exclusive statement of the terms and conditions of
the agreement between AUTHORITY and CONTRACTOR and it supersedes all prior representations,
understandings and communications. The invalidity in whole or in part of any term or condition of this
Agreement shall not affect the validity of other terms or conditions.

B. AUTHORITY's failure to insist in any one or more instances upon the performance of any terms or conditions of this Agreement shall not be construed as a waiver or relinquishment of AUTHORITY's right to such performance by CONTRACTOR or to future performance of such terms or conditions and CONTRACTOR's obligation in respect thereto shall continue in full force and effect. CONTRACTOR shall be responsible for having taken steps reasonably necessary to ascertain the nature and location of the work, and the general and local conditions, which can affect the work or the cost thereof. Any failure by CONTRACTOR to do so will not relieve it from responsibility for successfully performing the work without additional expense to AUTHORITY.

C. AUTHORITY assumes no responsibility for any understanding or representations concerning conditions made by any of its officers, employees or agents prior to the execution of this Agreement, unless such understanding or representations by AUTHORITY are expressly stated in this Agreement.

D. Time shall be of the essence hereunder; but CONTRACTOR shall perform work hereunder only to the minimum extent consistent with requirements herein.

E. Changes to any portion of this Agreement shall not be binding upon AUTHORITY except when specifically confirmed in writing by an authorized representative of AUTHORITY and issued in accordance with the provisions of this Agreement.

## ARTICLE 2. AUTHORITY DESIGNEE

The Chief Executive Officer of AUTHORITY, or designee, shall have the authority to act for and exercise any of the rights of AUTHORITY as set forth in this Agreement.

## ARTICLE 3. SCOPE OF WORK

CONTRACTOR shall provide all labor, equipment, materials and facilities necessary for all work related to Construction of the Inland Slope Rehabilitation - Phase II at the AUTHORITY's in strict compliance with all the requirements specified herein and in:

Exhibit A, entitled "General Provisions";

Addendum No's ;

Exhibit B, entitled "Specifications";

Exhibit C, entitled "List of Drawings";

Exhibit D, entitled "List of Subcontractors";

Exhibit E, entitled "Performance Bond";

Exhibit F, entitled "Payment Bond";

Exhibit G, entitled "Guaranty";

Exhibit H, entitled "Safety Specifications" and

Exhibit I, entitled "Contract Change Order";

all of which documents are attached to and, by this reference, incorporated in and made a part of this Agreement. By this reference, also incorporated in and made a part of this Agreement are all applicable provisions of IFB and all representations made by CONTRACTOR in its original bid to AUTHORITY, including, but not limited to, CONTRACTOR's certifications relative to Workers' Compensation Insurance, and compliance with Section 7028.15 of the State of California Business and Professions Code.

## ARTICLE 4. DELIVERY / RECOVERY SCHEDULE

A. CONTRACTOR shall fully complete the herein above described work within (165) calendar days from the effective date of written Notice to Proceed (NTP) issued by AUTHORITY. CONTRACTOR shall give AUTHORITY not less than seventy-two (72) hours advance notice of the start of any work. Within five (5) calendar days after said notice, CONTRACTOR shall provide any construction schedules as may be requested by AUTHORITY.

B. If at any time, the critical path schedule reflects -30 or a greater negative number of days of total float, then CONTRACTOR, within ten days after CONTRACTOR first becomes aware of such schedule delay, shall prepare and submit to AUTHORITY for review and approval a Recovery Schedule demonstrating CONTRACTOR's proposed plan to regain lost schedule progress and to achieve the original contractual milestones in accordance with the Contract. AUTHORITY shall notify CONTRACTOR within ten days after receipt of each such Recovery Schedule whether the schedule is deemed accepted or rejected. Within five days after AUTHORITY's rejection of the schedule, CONTRACTOR will resubmit a revised Recovery Schedule incorporating AUTHORITY's comments.

When AUTHORITY accepts CONTRACTOR's Recovery Schedule, CONTRACTOR shall, within five days after AUTHORITY's acceptance, incorporate and fully include such schedule into the Project Schedule and deliver it to AUTHORITY.

C. All costs incurred by CONTRACTOR in preparing, implementing and achieving the Recovery Schedule shall be borne by CONTRACTOR and shall not result in a change to the contract price.

D. In the event that CONTRACTOR fails to provide an acceptable Recovery Schedule within 30 days of CONTRACTOR's receipt of a notice to do so, CONTRACTOR shall have no right to receive progress payments until CONTRACTOR has prepared and AUTHORITY has approved such Recovery Schedule.

#### ARTICLE 5. START OF WORK

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CONTRACTOR shall incur no costs, and shall not perform or furnish any work, services, materials or equipment under this Agreement, unless and until a written Notice to Proceed has been given to CONTRACTOR by AUTHORITY. Conditions precedent to AUTHORITY issuing said Notice to Proceed are CONTRACTOR furnishing the Exhibit E "Performance Bond," Exhibit F "Payment Bond," Exhibit G "Guaranty," and certificates of insurance as set forth in Article 10 hereunder. CONTRACTOR shall furnish said documents within ten (10) calendar days after notification of contract award from AUTHORITY. Upon receipt of acceptable bonds, guaranty, and insurance certificates, AUTHORITY will within ten (10) working days thereafter issue the written Notice to Proceed.

#### ARTICLE 6. PAYMENT

A. CONTRACTOR's full and complete performance of its obligations under this Agreement, is subject to the maximum cumulative payment obligation provision set forth in Article 7.

B. Progress payments and the final payment will be made by AUTHORITY to CONTRACTOR in accordance with the terms as set forth in Exhibit A, "General Provisions," under the "Progress Payments" and "Final Payment and Claims" sections therein. The acceptance by CONTRACTOR of AUTHORITY's final payment hereunder shall constitute a waiver of all claims against AUTHORITY under or arising out of this herein Agreement, as such may from time to time be amended. C. Failure by AUTHORITY to pay amount in dispute shall not alleviate, diminish or modify in any respect the CONTRACTOR's obligation to achieve final acceptance of and all work in accordance with the contract documents, and CONTRACTOR shall not cease or slow down its performance under this Agreement on account of any such amount in dispute. CONTRACTOR shall proceed as directed by AUTHORITY pending resolution of dispute. Upon resolution of dispute, each party shall promptly pay any amount owing.

D. Allowances are to be paid for based on Force Account. No work under allowance categories shall commence unless authorized in writing by the Engineer. Any costs which exceed, or are less than the bid allowance amount, shall require an adjustment to the maximum cumulative payment obligation amount by Change Order.

## ARTICLE 7. MAXIMUM OBLIGATION

Notwithstanding any provisions of this Agreement to the contrary, AUTHORITY and CONTRACTOR mutually agree that AUTHORITY's maximum cumulative payment obligation hereunder (including obligation for CONTRACTOR 's profit), shall be \_\_\_\_\_Dollars (\$.00), which shall include all amounts payable to CONTRACTOR for its subcontracts, leases, materials and costs arising from, or due to termination of, this Agreement.

## ARTICLE 8. NOTICES

All notices hereunder and communications regarding the interpretation of the terms of this Agreement, or changes thereto, shall be effected by delivery of said notices in person or by depositing said notices in the U.S. mail, registered or certified mail, returned receipt requested, postage prepaid and addressed as follows:

#### To CONTRACTOR:

## To AUTHORITY:

Orange County Transportation Authority 550 South Main Street P.O. Box 14184 Orange, CA 92863-1584

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ATTENTION: ATTENTION: Gustavo Valle Title: Senior Contract Administrator Phone: Phone: (714) 560 - 5670 Email: gvalle@octa.net

> CC: Jason Lee, Project Manager Phone: (714) 560-5833 Email: jlee1@octa.net

#### ARTICLE 9. INDEPENDENT CONTRACTOR

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Title:

Email:

A. CONTRACTOR's relationship to AUTHORITY in the performance of this Agreement is that of an independent contractor. CONTRACTOR's personnel performing work under this Agreement shall at all times be under CONTRACTOR's exclusive direction and control and shall be employees of CONTRACTOR and not employees of AUTHORITY. CONTRACTOR shall pay all wages, salaries and other amounts due its employees in connection with this Agreement and shall be responsible for all reports and obligations respecting them, such as social security, income tax withholding, unemployment compensation, workers' compensation and similar matters.

B. Should CONTRACTOR's personnel or a state or federal agency allege claims against AUTHORITY involving the status of AUTHORITY as employer, joint or otherwise, of said personnel, or allegations involving any other independent contractor misclassification issues, CONTRACTOR shall defend and indemnify AUTHORITY in relation to any allegations made.

#### ARTICLE 10. INSURANCE

A. CONTRACTOR shall procure and continuously maintain in full force and effect through contract completion, insurance coverages specified herein. Coverages shall not be subject to selfinsurance provisions. CONTRACTOR shall provide the following insurance coverage:

Commercial General Liability, to include Products/Completed 1. Operations, Independent Contractors', Contractual Liability, and Personal Injury, and Property Damage with a

## AGREEMENT NO. C-4-2666

1	minimum limit of \$4,000,000 per occurrence and \$6,000,000 general aggregate.		
2	2. Automobile Liability to include owned, hired and non-owned autos with a combined		
3	single limit of \$1,000,000 each accident;		
4	3. Workers' Compensation with limits as required by the State of California, including		
5	waiver of subrogation, in favor of AUTHORITY, its officers, directors, employees, agents and SCRRA.		
6	4. Employers' Liability with minimum limits of \$1,000,000.		
7	5. Builders All Risk policy or course of construction including earthquake and flood		
8	coverage with minimum limits of \$(project amount).		
9	6. Professional Liability with minimum limits of \$1,000,000 per claim.		
10	7. Pollution and Environmental Liability with minimum limits of \$1,000,000 per claim.		
11	8. Railroad Protective Liability insurance listing the Railroad as the named insured with		
12	coverage of at least \$2,000,000 per occurrence and \$6,000,000 in the aggregate. The policy shall be		
13	issued on a standard ISO form CG 00 35 10 93 and include the following:		
14	a) No other endorsements restricting coverage may be added.		
15	b) The original policy must be provided to the Railroad prior to performing any work or		
16	services under this Agreement.		
17	c) All policies (applying to coverage listed above) must not contain an exclusion for		
18	punitive damages and certificates of insurance must reflect that no exclusion exists.		
19	d) CONTRACTOR agrees to waive its right of recovery against Railroad and		
20	AUTHORITY for all claims and suits against Railroad and AUTHORITY. In addition, its insurers, through		
21	the terms of the policy or policy endorsement, waive their right of subrogation against Railroad and		
22	AUTHORITY for all claims and suits. The certificate of insurance must also have attached the waiver of		
23	subrogation endorsement. CONTRACTOR further waives its right of recovery, and its insurers also waive		
24	their right of subrogation against Railroad and AUTHORITY for loss of its owned or leased property or		
25	property under CONTRACTOR's care, custody or control.		
26	B. The CONTRACTOR and all subcontractors, if applicable, must maintain the insurance		

coverages set forth herein, and list the State of California, SCRRA, BNSF Railway, Amtrak, and Union Pacific Corporation, as additional insureds, and release, defend and indemnify the Railroad to the same extent and under the same terms and conditions as the CONTRACTOR.

C. Prior to commencement of any work hereof, CONTRACTOR shall furnish to AUTHORITY's Contract Administrator broker-issued insurance certificate showing the required insurance coverages and further providing that:

1. AUTHORITY, its officers, directors, employees and agents must be named as additional insured on Commercial General Liability and Automobile Liability policy with respect to performance hereunder. The CONTRACTOR shall provide standard ISO form CG 20 10 and CG 20 37 endorsements, with primary and non-contributory language; and

2. The coverage shall be primary and noncontributory as to any other insurance with respect to performance hereunder; and

3. Thirty (30) days prior written notice of cancellation or material change be given to AUTHORITY.

In addition, CONTRACTOR shall provide insurance policy blanket endorsement.

D. "Occurrence," as used herein, means any event or related exposure to conditions, which result in bodily injury or property damage.

E. Upon AUTHORITY's request, certified, true and exact copies of each of the insurance policies shall be provided to AUTHORITY.

F. AUTHORITY shall notify CONTRACTOR in writing of any changes in the requirements to insurance required to be provided by CONTRACTOR. Except as set forth in this Article, any additional cost from such change shall be paid by AUTHORITY and any reduction in cost shall reduce the contract price pursuant to a change order.

G. CONTRACTOR shall also include in each subcontract the stipulation that subcontractors shall maintain coverage in the amounts required as provided in this Agreement.

H. CONTRACTOR shall be required to immediately notify AUTHORITY of any modifications or

cancellation of any required insurance policies.

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I. CONTRACTOR shall submit required insurance certificates to AUTHORITY's insurance tracking contractor, InsureTrack. CONTRACTOR shall respond directly to InsureTrack's request for updated insurance certificates and other insurance-related matters by email to <u>octa@instracking.com</u>.

J. CONTRACTOR shall include on the face of the certificate of insurance, the following information:

1. The Agreement Number C-4-2666 and, the Contract Administrator's Name, Gustavo Valle

2. For Certificate Holder: The Orange County Transportation Authority, its officers, directors, employers and agents, c/o InsureTrack, P.O. Box 60840 Las Vegas, NV 89160.

#### ARTICLE 11. BONDS

A. By submitting Exhibit E, entitled "Performance Bond," and Exhibit F, entitled "Payment Bond," CONTRACTOR shall satisfy AUTHORITY's requirements that CONTRACTOR deposit with AUTHORITY bonds with values in the sum of 100 percent of this Agreement's price to cover CONTRACTOR's failure to fully perform hereunder and CONTRACTOR's failure to pay its labor, material or failure to comply with Article 32 of this Agreement, in performing hereunder. If the contract price is increased in connection with a Change Order, the AUTHORITY may, in its sole discretion, require a corresponding increase in the amount of the Performance and Payment bonds or new bonds covering the Change Order work.

B. Notwithstanding any other provision set forth in this Agreement, performance by a Surety or Guarantor of any obligations of CONTRACTOR shall not relieve CONTRACTOR of any of its obligations thereunder.

## ARTICLE 12. ORDER OF PRECEDENCE

Conflicting provisions hereof, if any, shall prevail in the following descending order of precedence: (1) the provisions of this Agreement, including its exhibits; (2) the provisions of IFB including all Addendums; (3) the bid submitted to AUTHORITY by CONTRACTOR in response to said IFB; and (4) any other documents, cited herein or incorporated by reference. In the event of conflicting provisions of Exhibit B ("Specifications"), and Exhibit C ("List of Drawings"), Project Specifications shall take precedence.

#### ARTICLE 13. CHANGES

A. By written notice or order, AUTHORITY may, from time to time, order work suspension and/or make any change in the general scope of this Agreement, including, but not limited to, changes in the drawings, specifications, schedules (either deceleratory or acceleratory) or any other particular of the specifications or provisions of this Agreement. If any such work suspension or change causes an increase or decrease in the price or time required for performance, CONTRACTOR shall promptly notify AUTHORITY thereof and assert its claim for adjustment within ten (10) calendar days after the change or work suspension is ordered, and an equitable adjustment shall be negotiated. However, nothing in this clause shall excuse CONTRACTOR from proceeding immediately with the Agreement as changed. Changes will be made in accordance with the terms as set forth in Exhibit A, "General Provisions," paragraph F, Extra Work and Changes, by written Change Order.

B. No claims by CONTRACTOR for equitable adjustment hereunder shall be allowed if asserted after final payment under this Agreement.

C. Any work done beyond the technical provisions specified in this Agreement, or any extra work done without AUTHORITY's written authority, will be considered unauthorized work and will not be paid for. Upon order of AUTHORITY's Engineer or its designee, unauthorized work shall be remedied, removed or replaced at CONTRACTOR's expense.

## ARTICLE 14. MODIFICATION PROPOSALS-PRICE BREAKDOWN

CONTRACTOR, in connection with any proposal it makes for an agreement modification, shall furnish a price breakdown, itemized as required by AUTHORITY. Unless otherwise directed, the breakdown shall be in sufficient detail to permit an analysis of all material, labor, equipment, subcontract and overhead costs, as well as profit, and shall cover all work involved in the modification, whether such work was deleted, added or changed. Any amount claimed for subcontracts shall be supported by a similar price breakdown. In addition, if the proposal includes a time extension, a justification therefore

shall also be furnished. The proposal, together with the price breakdown and time extension justification, shall be furnished by the date specified by AUTHORITY.

#### ARTICLE 15. DISPUTES

A. Except as otherwise provided in this Agreement, when a dispute arises between CONTRACTOR and AUTHORITY, the project managers shall meet to resolve the issue. If project managers do not reach a resolution, the dispute will be decided by AUTHORITY's Director of Contracts Administration and Materials Management (CAMM), who shall reduce the decision to writing and mail or otherwise furnish a copy thereof to CONTRACTOR. The decision of the Director, CAMM, shall be the final and conclusive administrative decision.

B. Pending final decision of a dispute hereunder, CONTRACTOR shall proceed diligently with the performance of this Agreement and in accordance with the decision of AUTHORITY's Director, CAMM. Nothing in this Agreement, however, shall be construed as making final the decision of any AUTHORITY official or representative on a question of law, which questions shall be settled in accordance with the laws of the State of California.

#### ARTICLE 16. TERMINATION FOR CONVENIENCE

A. AUTHORITY may terminate this Agreement for its convenience at any time in whole or in part, by giving CONTRACTOR written notice thereof. AUTHORITY shall terminate by delivering to CONTRACTOR a written Notice of Termination for Convenience specifying the extent of termination and its effective date. Upon termination, AUTHORITY shall pay CONTRACTOR its allowable costs incurred to date of that portion terminated. The rights, duties and obligations of the parties shall be construed in accordance with the applicable provisions of CFR Title 48, Chapter 1, Part 49, of the Federal Acquisition Regulation (FAR) and specific subparts and other provisions thereof applicable to termination for convenience. If AUTHORITY sees fit to terminate this Agreement for convenience, said notice shall be given to CONTRACTOR in accordance with the provisions of the FAR referenced above and Article 8, herein. Upon receipt of said notification, CONTRACTOR shall immediately proceed with all obligations, regardless of any delay in determining or adjusting any amounts due under this Article, and agrees to

comply with all applicable provisions of the FAR pertaining to termination for convenience.

#### ARTICLE 17. TERMINATION FOR DEFAULT-DAMAGES FOR DELAY-TIME EXTENSIONS

A. If CONTRACTOR refuses or fails to prosecute the work, or any separable part thereof, with such diligence as will ensure its completion within the time specified in this Agreement, or any extension thereof, or fails to complete said work within such time, AUTHORITY may, by written notice to CONTRACTOR, terminate CONTRACTOR's right to proceed with the work or such part of the work as to which there has been delay. In such event, AUTHORITY may take over the work and prosecute the same to completion, by Agreement or otherwise, and may take possession of and utilize in completing the work such materials, appliances and plant as may be on the site of the work and necessary therefore. Whether or not CONTRACTOR's right to proceed with the work is terminated, it and its sureties shall be liable for any damage to AUTHORITY resulting from its refusal or failure to complete the work within the specified time.

B. If AUTHORITY so terminates CONTRACTOR's right to proceed, the resulting damage will consist of such liquidated damages as set forth in the Article 31 in this Agreement entitled "Liquidated Damages," until such reasonable time as may be required for final completion of the work together with any increased costs occasioned AUTHORITY in completing the work. If AUTHORITY does not so terminate CONTRACTOR's right to proceed, the resulting damage will consist of such liquidated damages until the work is completed or accepted.

C. CONTRACTOR's right to proceed shall not be so terminated nor the CONTRACTOR charged with resulting damage if:

1. The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of CONTRACTOR, including but not restricted to, acts of God, acts of the public enemy, acts or omissions of AUTHORITY, acts of another CONTRACTOR in the performance of an Agreement with AUTHORITY, fires, floods, epidemics, quarantine restrictions, freight embargoes, unusually severe weather, or delays of subcontractors or suppliers arising from unforeseeable causes beyond the control and without the fault or negligence of both CONTRACTOR and

such subcontractors or suppliers; and

2. CONTRACTOR, within ten (10) calendar days from the beginning of any such delay, notifies AUTHORITY in writing of the causes of delay. AUTHORITY shall ascertain the facts and the extent of the delay and extend the time for completing the work when, in its judgment, the findings of fact justify such an extension, and its findings of fact shall be final and conclusive on the parties, subject only to appeal as provided in the "Disputes" clause of this Agreement. Any such time extensions will not become effective until approved by AUTHORITY's Engineer in writing. AUTHORITY's Engineer will furnish CONTRACTOR a weekly statement showing the number of calendar days charged to the Agreement for the preceding week, the number of calendar days of time extensions being considered or approved, the number of calendar days originally specified for the completion of this Agreement and the number of calendar days remaining to complete this Agreement, and the extended date for completion thereof.

 Should at any time extensions be included by AUTHORITY's Engineer on the Weekly Statement of Contract Calendar Days, a change order covering the sum total of the time extensions will be issued to CONTRACTOR at periodic intervals during the project.

D. If, after notice of termination of CONTRACTOR's right to proceed under the provisions of this clause, it is determined for any reason that CONTRACTOR was not in default under the provisions of this clause, or that the delay was excusable under the provisions of this clause, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to Article 16, entitled "Termination for Convenience."

E. The rights and remedies of AUTHORITY provided in this clause are in addition to any other rights and remedies provided by law or under this Agreement.

F. As used in paragraph C.1 of this Article, the term "subcontractors or suppliers," means subcontractors or suppliers at any tier.

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#### ARTICLE 18. INDEMNIFICATION

CONTRACTOR shall indemnify, defend, and hold harmless AUTHORITY, its officers, directors, employees and agents from and against any and all claims (including attorneys' fees and reasonable expenses for litigation or settlement) for any loss, costs, penalties, fines, damages, bodily injuries, including death, damage to or loss of use of property, arising out of, resulting from, or in connection with the performance of CONTRACTOR, its officers, directors, employees, agents, subcontractors or suppliers under the Agreement. Notwithstanding the foregoing, such obligation to defend, hold harmless, and indemnify AUTHORITY, its officers, directors, employees and agents shall not apply to such claims or liabilities arising from the sole or active negligence or willful misconduct of AUTHORITY.

#### ARTICLE 19. ASSIGNMENTS AND SUBCONTRACTS

A. Neither this Agreement nor any interest herein nor claim hereunder may be assigned by CONTRACTOR either voluntarily or by operation of law. CONTRACTOR shall not have the right to make any substitutions of any subcontractor listed in Exhibit D, entitled "List of Subcontractors," except in accordance with the provisions of the Subletting and Subcontractors Fair Practices Act, Public Contract Code section 4100 et. seq. AUTHORITY's consent shall not be deemed to relieve CONTRACTOR of its obligation to fully comply with the requirements of this Agreement.

B. CONTRACTOR shall be fully responsible to AUTHORITY for all acts and omissions of its own employees, and of subcontractors and their employees. CONTRACTOR shall coordinate the work performed by subcontractor.

C. AUTHORITY shall have the right, but not the obligation, to review the form of subcontract used by CONTRACTOR for the project and to require modifications thereto to conform to the requirements set forth herein.

## ARTICLE 20. AUDIT AND INSPECTION OF RECORDS

CONTRACTOR shall provide AUTHORITY, or other agents of the AUTHORITY, such access to CONTRACTOR's accounting books, records, payroll documents and facilities of the CONTRACTOR which are directly pertinent to this Agreement for the purposes of examining, auditing and inspecting all

#### AGREEMENT NO. C-4-2666

accounting books, records, work data, documents and activities related hereto. CONTRACTOR shall maintain such books, records, data and documents in accordance with generally accepted accounting principles and shall clearly identify and make such items readily accessible to such parties during CONTRACTOR's performance hereunder and for a period of four (4) years from the date of final payment by AUTHORITY, except in the event of litigation or settlement of claims arising from the performance of this Agreement, in which case CONTRACTOR agrees to maintain same until AUTHORITY, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto. AUTHORITY's right to audit books and records directly related to this Agreement shall also extend to all first-tier subcontractors. CONTRACTOR shall permit any of the foregoing parties to reproduce documents by any means whatsoever or to copy excerpts and transcriptions as reasonably necessary.

#### ARTICLE 21. CONFLICT OF INTEREST

CONTRACTOR agrees to avoid organizational conflicts of interest. An organizational conflict of interest means that due to other activities, relationships or contracts, the CONTRACTOR is unable, or potentially unable to render impartial assistance or advice to the AUTHORITY; CONTRACTOR's objectivity in performing the work identified in the Scope of Work is or might be otherwise impaired; or the CONTRACTOR has an unfair competitive advantage. CONTRACTOR is obligated to fully disclose to the AUTHORITY in writing Conflict of Interest issues as soon as they are known to the CONTRACTOR. All disclosures must be submitted in writing to AUTHORITY pursuant to the Notice provision herein. This disclosure requirement is for the entire term of this Agreement.

#### ARTICLE 22. CODE OF CONDUCT

CONTRACTOR agrees to comply with the AUTHORITY's Code of Conduct as it relates to Third-Party contracts which is hereby referenced and by this reference is incorporated herein. CONTRACTOR agrees to include these requirements in all of its subcontracts.

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### ARTICLE 23. PROHIBITION ON PROVIDING ADVOCACY SERVICES

CONTRACTOR and all subcontractors performing work under this Agreement, shall be prohibited from concurrently representing or lobbying for any other party competing for a contract with AUTHORITY, either as a prime contractor or subcontractor. Failure to refrain from such representation may result in termination of this Agreement.

#### ARTICLE 24. FEDERAL, STATE AND LOCAL LAWS

CONTRACTOR warrants that in the performance of this Agreement it shall comply with all applicable federal, state and local laws, statutes and ordinances and all lawful orders, rules and regulations promulgated thereunder.

## ARTICLE 25. EQUAL EMPLOYMENT OPPORTUNITY

In connection with its performance under this Agreement, CONTRACTOR agrees that it shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, age or national origin. CONTRACTOR shall take affirmative action to ensure that applicants are employed, and that employees are treated during their employment, without regard to their race, religion, color, sex, age or national origin. Such actions shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

## ARTICLE 26. FINISHED AND PRELIMINARY DATA

A. All of CONTRACTOR's finished technical data, including but not limited to illustrations, photographs, tapes, software, software design documents, including without limitation source code, binary code, all media, technical documentation and user documentation, photoprints and other graphic information required to be furnished under this Agreement, shall be AUTHORITY's property upon payment and shall be furnished with unlimited rights and, as such, shall be free from proprietary restriction except as elsewhere authorized in this Agreement. CONTRACTOR further agrees that it shall have no interest or claim to such finished, AUTHORITY-owned, technical data; furthermore, said data is subject to the provisions of the Public Records Act.

B. It is expressly understood that any title to preliminary technical data is not passed to AUTHORITY but is retained by CONTRACTOR. Preliminary data includes roughs, visualizations, software design documents, layouts and comprehensives prepared by CONTRACTOR solely for the purpose of demonstrating an idea or message for AUTHORITY's acceptance before approval is given for preparation of finished artwork. Preliminary data title and right thereto shall be made available to AUTHORITY if CONTRACTOR causes AUTHORITY to exercise Article 17, and a price shall be negotiated for all preliminary data.

#### ARTICLE 27. PRIVACY ACT

CONTRACTOR shall comply with, and assures the compliance of its employees with, the information restrictions and other applicable requirements of the Privacy Act of 1974, 5 U.S.C. §552a. Among other things, CONTRACTOR agrees to obtain the express consent of the Federal Government before CONTRACTOR or its employees operate a system of records on behalf of the Federal Government. CONTRACTOR understands the requirements of the Privacy Act, including the civil and criminal penalties for violation of that Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in termination of the underlying Agreement.

#### ARTICLE 28. OWNERSHIP OF REPORTS AND DOCUMENTS

A. The originals of all letters, documents, reports and other products and data produced under this Agreement shall be delivered to, and become the property of AUTHORITY. Copies may be made for CONTRACTOR'S records but shall not be furnished to others without written authorization from AUTHORITY. Such deliverables shall be deemed works made for hire and all rights in copyright therein shall be retained by AUTHORITY.

B. All ideas, memoranda, specifications, plans, manufacturing, procedures, drawings, descriptions, and all other written information submitted to CONTRACTOR in connection with the performance of this Agreement shall not, without prior written approval of AUTHORITY, be used for any purposes other than the performance under this Agreement, nor be disclosed to an entity not connected with the performance of the project. CONTRACTOR shall comply with AUTHORITY's policies regarding

#### AGREEMENT NO. C-4-2666

such material. Nothing furnished to CONTRACTOR, which is otherwise known to CONTRACTOR or is or becomes generally known to the related industry shall be deemed confidential. CONTRACTOR shall not use AUTHORITY's name, photographs of the project, or any other publicity pertaining to the project in any professional publication, magazine, trade paper, newspaper, seminar or other medium without the express written consent of AUTHORITY.

C. No copies, sketches, computer graphics or graphs, including graphic artwork, are to be released by CONTRACTOR to any other person or agency except after prior written approval by AUTHORITY, except as necessary for the performance of services under this Agreement. All press releases, including graphic display information to be published in newspapers, magazines, etc., are to be handled only by AUTHORITY unless otherwise agreed to by CONTRACTOR and AUTHORITY.

#### ARTICLE 29. CONVICT LABOR

In connection with the performance of work under this Agreement, CONTRACTOR agrees not to employ any person undergoing sentence of imprisonment at hard labor. This does not include convicts who are on parole or probation.

#### ARTICLE 30. NOTICE OF LABOR DISPUTE

Whenever CONTRACTOR has knowledge that any actual or potential labor dispute may delay its performance under this Agreement, CONTRACTOR shall immediately notify and submit all relevant information to AUTHORITY. CONTRACTOR shall insert the substance of this entire clause in any subcontract hereunder as to which a labor dispute may delay performance under this Agreement. However, any subcontractor need give notice and information only to its next higher-tier subcontractor.

#### ARTICLE 31. LIQUIDATED DAMAGES

If CONTRACTOR fails to complete the work within the time specified in Article 4 of this Agreement, or any AUTHORITY authorized extension thereof, the actual damage to AUTHORITY for the delay will be difficult or impossible to determine. Therefore, in lieu of actual damages, CONTRACTOR shall pay to AUTHORITY as fixed, agreed-to liquidated damages for each calendar day of delay the sum of Three Thousand Five Hundred Dollars (\$3,500.00). Alternatively, AUTHORITY may terminate this

Agreement in whole or in part as provided in Article 16 of this Agreement, and in that event, CONTRACTOR shall be liable, in addition to the excess costs provided in Article 16 of this Agreement, for such liquidated damages accruing until such time as AUTHORITY may reasonably obtain delivery or performance of similar supplies or services from a different source. CONTRACTOR shall not be charged with liquidated damages when the delay is determined to be excusable in accordance with Article 45 hereunder. AUTHORITY shall ascertain the facts and extent of the delay and shall extend the time for performance of the Agreement when in its judgment, the findings of fact justify an extension.

#### ARTICLE 32. WARRANTY

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A. In addition to any other warranties set forth in this Agreement, whether expressed or implied, CONTRACTOR warrants that (1) all work performed and all equipment and material provided under this Agreement by CONTRACTOR or any of its subcontractors or suppliers at any tier, conforms to the requirements herein and is free of any defects; (2) equipment furnished by CONTRACTOR or any of its subcontractors or suppliers at any tier, shall be of modern design, in good working condition and fit for use of its intended purpose; and (3) all work shall meet all of the requirements of this Agreement. Such warranty shall continue for a period of one (1) year from AUTHORITY's acceptance as shown in Article 34 hereunder. Under this warranty, CONTRACTOR shall remedy at its own expense any such failure to conform or correct any such defect. In addition, CONTRACTOR shall remedy at its own expense any damage to AUTHORITY owned or controlled real or personal property, when that damage is the result of CONTRACTOR's failure to conform to Agreement requirements or any such defect of equipment, material, workmanship or design. CONTRACTOR shall also restore any work damaged in fulfilling the terms of this clause. CONTRACTOR's warranty with respect to work repaired or replaced hereunder will run for one year from the date of such repair or replacement.

B. AUTHORITY shall notify CONTRACTOR in writing within a reasonable time after the discovery of any failure, defect or damage. CONTRACTOR has seven days from receipt of notice from AUTHORITY to respond to AUTHORITY's notification and indicate how CONTRACTOR will remedy the failure, defect, or damage. If AUTHORITY is not satisfied with the remedy proposed by CONTRACTOR,

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CONTRACTOR and AUTHORITY shall meet and mutually agree when and how CONTRACTOR shall remedy such violation. In the case of an emergency requiring immediate corrective action, CONTRACTOR shall implement such action, as it deems necessary and shall notify AUTHORITY in writing of the urgency of a decision and action taken. CONTRACTOR and AUTHORITY shall, then promptly meet in order to agree on a remedy. If CONTRACTOR and AUTHORITY fail to agree on the remedy within a five-day period, AUTHORITY, after notice to CONTRACTOR, shall have the right to perform or have performed by third parties the necessary remedy, and the costs thereof shall be borne by CONTRACTOR.

C. Should CONTRACTOR fail to remedy any failure, defect or damage described in paragraph A above within a reasonable time after receipt of notice thereof, AUTHORITY shall have the right to replace, repair or otherwise remedy such failure, defect or damage at CONTRACTOR's expense and CONTRACTOR shall be liable for all damages, including, but not limited to, actual or consequential damages and cost of any suit to enforce AUTHORITY's rights hereunder, including reasonable attorney's fees.

D. In addition to the other rights and remedies provided by this clause, all subcontractors, manufacturers, and suppliers' warranties, expressed or implied, respecting any work and materials furnished hereunder, shall, at the direction of AUTHORITY, be enforced by CONTRACTOR for the benefit of AUTHORITY. In such case if CONTRACTOR's warranty under paragraph A above has expired, any suit directed by AUTHORITY shall be at the expense of AUTHORITY. CONTRACTOR shall obtain any warranties, which the subcontractors, manufacturers or suppliers would give in normal commercial practice and shall cause all subcontractor or supplier warranties to be extend to AUTHORITY.

E. If directed by AUTHORITY, CONTRACTOR shall require any such warranties to be executed in writing to AUTHORITY.

F. Notwithstanding any other provision of this clause, unless such a defect is caused by the negligence of CONTRACTOR or its subcontractors or suppliers at any tier, CONTRACTOR shall not be liable for the repair of any defects of material or design furnished by AUTHORITY nor for the repair of any

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damage which results from any such defect in AUTHORITY furnished material or design.

G. The warranty specified herein shall not limit AUTHORITY's rights under the Inspection and Acceptance clause of this Agreement with respect to latent defects, gross mistakes or fraud.

H. Defects in design or manufacture of equipment specified by AUTHORITY on a "brand name and model" basis shall not be included in this warranty. CONTRACTOR shall require any subcontractors, manufacturers or suppliers thereof to execute their warranties in writing directly to AUTHORITY.

I. Any disagreement between AUTHORITY and CONTRACTOR relating to this section shall be subject to dispute resolution in accordance with Article 15.

#### ARTICLE 33. GENERAL WAGE RATES

A. All laborers and mechanics employed by CONTRACTOR or subcontractor at any tier working on the construction site, will be paid unconditionally and not less often than once a week and without any subsequent deduction or rebate on any account (except such payroll deductions as are permitted or required by federal, state or local law, regulation or ordinance), the full amounts due at the time of payment computed at wage rates and per diem rate not less than the aggregate of the highest of the two basic hourly rates and rates of payments, contributions or costs for any fringe benefits contained in the current general prevailing wage rate(s) and per diem rate(s), established by the Director of the Department of Industrial Relations of the State of California, (as set forth in the Labor Code of the State of California, commencing at Section 1770 et. seq.), regardless of any contractual relationship which may be alleged to exist between CONTRACTOR or subcontractor and their respective mechanics, laborers, journeypersons, workpersons, craftspersons or apprentices. Copies of the current General Prevailing Wage Determinations and Per Diem Rates are on file at AUTHORITY's offices and will be made available to CONTRACTOR upon request. CONTRACTOR shall post a copy thereof at each job site at which work hereunder is performed.

B. In addition to the foregoing, CONTRACTOR agrees to comply with all other provisions of the Labor Code of the State of California, which are incorporated herein by reference, pertaining to workers performing work hereunder including, but not limited to, those provisions for work hours, payroll records

and apprenticeship employment and regulation program. CONTRACTOR agrees to insert or cause to be inserted the preceding clause in all subcontracts, which provide for workers to perform work hereunder regardless of the subcontractor tier.

#### ARTICLE 34. INSPECTION AND ACCEPTANCE

A. All work (which term includes but is not restricted to materials, equipment, workmanship, and manufacture and fabrication of components) shall be subject to inspection and test by AUTHORITY at all reasonable times and at all places prior to acceptance. Any such inspection and test is for the sole benefit of AUTHORITY and shall not relieve CONTRACTOR of the responsibility of providing quality control measures to assure that the work strictly complies with requirements of this Agreement. No inspection or test by AUTHORITY or its representative shall be construed as constituting or implying acceptance. Inspection or test shall not relieve CONTRACTOR of responsibility for damage to or loss of the material prior to acceptance, nor in any way affect the continuing rights of AUTHORITY after acceptance of the completed work under the terms of paragraph F of this Article, except as herein above provided.

B. CONTRACTOR shall, without charge, replace any material or correct any workmanship found by AUTHORITY not to conform to the requirements of this Agreement, unless in the public interest AUTHORITY consents to accept such material or workmanship with an appropriate adjustment in the price of this Agreement. CONTRACTOR shall promptly segregate and remove rejected material from the premises.

C. CONTRACTOR shall furnish promptly, without additional charge, all facilities, labor, equipment and material reasonably needed for performing such safe and convenient inspection and test as may be required by AUTHORITY. All inspections and tests by AUTHORITY shall be performed in such manner as to not unnecessarily delay the work. AUTHORITY reserves the right to charge to CONTRACTOR any additional cost of inspection or test when material or workmanship is not ready at the time specified by CONTRACTOR for inspection or test or when reinspection or retest is necessitated by prior rejection.

D. If CONTRACTOR does not promptly replace rejected material or correct rejected

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workmanship, AUTHORITY (1) may, by Agreement or otherwise, replace such material or correct such workmanship and charge the cost thereof to CONTRACTOR, or (2) may terminate CONTRACTOR's right to proceed in accordance with the clause of this Agreement entitled "Termination for Default."

E. Should it be considered necessary or advisable by AUTHORITY at any time before acceptance of the entire work to make an examination of work already completed, by removing or tearing out same, CONTRACTOR shall, on request, promptly furnish all necessary facilities, labor and material. If such work is found to be defective or nonconforming in any material respect, due to the fault of CONTRACTOR or its subcontractors, CONTRACTOR shall pay all costs of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of this Agreement, an equitable adjustment shall be made in the Agreement price to compensate CONTRACTOR for the additional services involved in such examination and reconstruction and, if completion of the work has been delayed thereby, it shall in addition, be granted a suitable extension of time.

F. Unless otherwise provided in this Agreement, acceptance by AUTHORITY shall be made as promptly as practicable after completion and inspection of all work required by this Agreement, or that portion of the work that AUTHORITY determines can be accepted separately. Acceptance shall be final and conclusive except as regards latent defects, fraud, or such gross mistakes as may amount to fraud or as regards AUTHORITY's rights under the warranty provisions set forth herein.

#### ARTICLE 35. MATERIAL AND WORKMANSHIP

A. Unless otherwise specifically provided in this Agreement, all equipment, material, and articles incorporated in the work covered by this Agreement are to be new and of the most suitable grade for the purpose intended. Unless otherwise specifically provided in this Agreement, reference to any equipment, material, article or patented process, by trade name, make or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition, and CONTRACTOR may, at its option, use any equipment, material, article or process which, in the judgment of AUTHORITY, is equal to that named. CONTRACTOR shall furnish to AUTHORITY for its approval the name of the manufacturer, the model number and other identifying data and information respecting the performance,

capacity, nature and rating of the machinery and mechanical and other equipment, which CONTRACTOR contemplates incorporating in the work. When required by this Agreement or when called for by AUTHORITY, CONTRACTOR shall furnish AUTHORITY, for approval, full information concerning the material or articles, which it contemplates incorporating in the work. When so directed, samples shall be submitted for approval at CONTRACTOR's expense, with all shipping charges prepaid. Machinery, equipment, material and articles installed or used without required approval shall be at the risk of subsequent rejection.

B. All work under this Agreement shall be performed in a skillful and workmanlike manner. Notwithstanding the provisions of Article 3 hereof, AUTHORITY may, in writing, require CONTRACTOR to remove from the work any employee AUTHORITY deems incompetent, careless or otherwise objectionable.

#### ARTICLE 36. NON-CONFORMING WORK

A. Nonconforming work rejected by AUTHORITY shall be removed and replaced so as to conform to the requirements of this Agreement, at CONTRACTOR's cost and without a time extension; and CONTRACTOR shall promptly take all action necessary to prevent similar deficiencies from occurring in the future. The fact that AUTHORITY may not have discovered the nonconforming Work shall not constitute an acceptance of such nonconforming Work. If CONTRACTOR fails to correct any nonconforming work within ten days of receipt of notice from AUTHORITY requesting correction, or if such nonconforming work cannot be corrected within ten days, and CONTRACTOR fails to (1) provide to AUTHORITY a schedule for correcting any such nonconforming work acceptable to AUTHORITY within such ten-day period, (2) commence such corrective work within such ten-day period and (3) thereafter diligently prosecute such correction in accordance with such approved schedule to completion, then AUTHORITY may cause the nonconforming work to be remedied or removed and replaced and may deduct the cost of doing so from any moneys due or to become due CONTRACTOR and/or obtain reimbursement from CONTRACTOR for such cost.

B. If AUTHORITY agrees to accept any Nonconforming Work without requiring it to be fully
corrected, AUTHORITY shall be entitled to reimbursement of a portion of the Contract Price in an amount equal to the greater of the amount deemed appropriate by AUTHORITY to provide compensation for future maintenance and/or other costs relating to the Nonconforming Work, or 100% of CONTRACTOR's cost savings associated with its failure to perform the Work in accordance with Contract requirements. Such reimbursement shall be payable to AUTHORITY within ten days after CONTRACTOR's receipt of an invoice thereof. CONTRACTOR acknowledges and agrees that AUTHORITY shall have sole discretion regarding acceptance or rejection of Nonconforming Work and that AUTHORITY shall have sole discretion with regard to the amount payable in connection therewith.

#### ARTICLE 37. CONTRACTOR INSPECTION SYSTEM

CONTRACTOR shall maintain an adequate inspection system and perform such inspections as will assure that the work performed under this Agreement conforms to the specified requirements, and shall maintain and make available to AUTHORITY adequate records of such inspections.

#### ARTICLE 38. SUPERINTENDENCE BY CONTRACTOR

CONTRACTOR, at all times during performance and until the work is completed and accepted, shall give its personal superintendence to the work or have on the work a competent superintendent, satisfactory to AUTHORITY and with authority to act for and on behalf of CONTRACTOR.

ARTICLE 39. OTHER CONTRACTS

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AUTHORITY may undertake or award other agreements for additional work, and CONTRACTOR shall fully cooperate with such other CONTRACTOR's and AUTHORITY's employees and carefully fit its own work to such additional work as may be directed by AUTHORITY. CONTRACTOR shall not commit or permit any act, which will interfere with the performance of work by any other CONTRACTOR or by AUTHORITY.

#### ARTICLE 40. INSPECTION OF SITE

CONTRACTOR acknowledges that it has investigated and satisfied itself as to the conditions affecting the work including, but not restricted to, those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power and roads and uncertainties of

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weather, river stages, tides or similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment and facilities needed preliminary to and during prosecution of the work. CONTRACTOR further acknowledges that it has satisfied itself as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by AUTHORITY, as well as from information presented by the drawings and specifications made a part of this Agreement. Any failure by CONTRACTOR to acquaint itself with the available information will not relieve it from responsibility for the difficulty or cost of successfully performing the work. AUTHORITY assumes no responsibility for any conclusions or interpretations made by CONTRACTOR on the basis of the information made available by AUTHORITY.

#### ARTICLE 41. DIFFERING SITE CONDITIONS

A. CONTRACTOR shall immediately, and before such conditions are disturbed, notify AUTHORITY in writing of: (1) subsurface or latent physical conditions at the site which differ materially from those indicated in this Agreement, or (2) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Agreement. AUTHORITY will investigate the conditions within three business days of receipt of notification, and if it finds that such conditions do materially so differ and cause an increase or decrease in CONTRACTOR's cost of, or the time required for, performance of any part of the work under this Agreement, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the Agreement modified in writing accordingly.

B. No claim of CONTRACTOR under this Article shall be allowed unless CONTRACTOR has given the written notice required above; no claim by CONTRACTOR for an equitable adjustment hereunder shall be allowed if asserted after final payment under this Agreement.

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#### ARTICLE 42. OPERATIONS AND STORAGE AREAS

A. All operations of CONTRACTOR (including storage of materials and equipment) on AUTHORITY owned premises shall be confined to areas authorized or approved by AUTHORITY. CONTRACTOR shall hold AUTHORITY and its officers and agents free and harmless from liability of any nature occasioned by CONTRACTOR's operations.

B. Temporary building (storage sheds, shops, offices, etc.) may be erected by CONTRACTOR with the written consent of AUTHORITY, and shall be built with labor and materials furnished by CONTRACTOR without expense to AUTHORITY. Such temporary buildings and utilities shall remain the property of CONTRACTOR and shall be removed by CONTRACTOR at its expense upon the completion of the work. With the written consent of AUTHORITY, such buildings and utilities may be abandoned and need not be removed.

C. CONTRACTOR shall, under regulations prescribed by AUTHORITY, use only established roadways or construct and use such temporary roadways as may be authorized by AUTHORITY. Where materials are transported in the prosecution of work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any federal, state or local law or regulation. When it is necessary to cross curbing or sidewalks, protection against damage shall be provided by CONTRACTOR and any damaged roads, curbing or sidewalks shall be repaired by, or at the expense of, CONTRACTOR.

#### ARTICLE 43. PROTECTION OF VEGETATION, UTILITIES, IMPROVEMENTS

A. CONTRACTOR shall preserve and protect all existing vegetation such as trees, shrubs and grass on or adjacent to the site of work which is not to be removed and which does not unreasonably interfere with the construction work. Care will be taken in removing trees authorized for removal to avoid damage to vegetation to remain in place. Any limbs or branches of trees broken during such operations or by the careless operation of equipment, or by workmen, shall be trimmed with a clean cut and painted with an approved tree pruning compound as directed by AUTHORITY.

B. CONTRACTOR shall protect from damage all existing improvements or utilities at or near the

site of the work, the location of which is made known to it, and will repair or restore any damage to such facilities resulting from failure to comply with the requirements of this Agreement or the failure to exercise reasonable care in the performance of the work. If CONTRACTOR fails or refuses to repair any such damage promptly, AUTHORITY may have the necessary work performed and charge the cost to CONTRACTOR.

#### ARTICLE 44. CLEANING UP

A. CONTRACTOR shall at all times keep the construction area, including storage areas used by it, free from accumulations of waste material or rubbish, and prior to completion of the work remove any rubbish from AUTHORITY owned premises and all tools, scaffolding, equipment and materials not the property of AUTHORITY. Upon completion of the construction, CONTRACTOR shall leave the work and premises in a clean, neat and workmanlike condition satisfactory to AUTHORITY.

B. After completion of all work on the project, and before making application for acceptance of the work, CONTRACTOR shall clean the construction site, including all areas under the control of AUTHORITY, that have been used by CONTRACTOR in connection with the work on the project and remove all debris, surplus material and equipment, and all temporary construction or facilities of whatever nature, unless otherwise approved by AUTHORITY. Final acceptance of the work by AUTHORITY will be withheld until CONTRACTOR has satisfactorily complied with the foregoing requirements for final cleanup of the project site.

C. Full compensation for conforming to the provisions in this Article, not otherwise provided for, shall be considered as included in price of this Agreement and no additional compensation will be allowed therefore.

#### ARTICLE 45. USE AND POSSESSION TO COMPLETION

AUTHORITY shall have the right to take possession of or use any completed or partially completed part of the work. Prior to such possession or use, AUTHORITY shall furnish CONTRACTOR an itemized list of work remaining to be performed or corrected on such portions of the project as are to be possessed or used by AUTHORITY, provided that failure to list any item of work shall not relieve CONTRACTOR of responsibility for compliance with the terms of this Agreement. Such possession or use shall not be deemed an acceptance of any work under this Agreement. While AUTHORITY has such possession or use, CONTRACTOR shall be relieved of the responsibility for the loss or damage to the work resulting from AUTHORITY's possession or use. If such prior possession or use by AUTHORITY delays the progress of the work or causes additional expense to CONTRACTOR, an equitable adjustment in the Agreement price or the time of completion will be made and the Agreement shall be modified in writing accordingly.

#### ARTICLE 46. PROHIBITED INTERESTS

CONTRACTOR covenants that, for the term of this Agreement, no director, officer or employee of AUTHORITY, during his/her tenure in office or for one (1) year thereafter, shall have any interest, direct or indirect, in this Agreement or the proceeds thereof.

#### ARTICLE 47. CONTRACTOR PURCHASED EQUIPMENT

A. If during the course of this Agreement, additional equipment is required, which will be paid for by the AUTHORITY, CONTRACTOR must request prior written authorization from the AUTHORITY's project manager before making any purchase. As part of this purchase request, CONTRACTOR shall provide a justification for the necessity of the equipment or supply and submit copies of three (3) competitive quotations. If competitive quotations are not obtained, CONTRACTOR must provide the justification for the sole source.

B. CONTRACTOR shall maintain an inventory record for each piece of equipment purchased that will be paid for by the AUTHORITY. The inventory record shall include the date acquired, total cost, serial number, model identification, and any other information or description necessary to identify said equipment or supply. A copy of the inventory record shall be submitted to the AUTHORITY upon request.

C. At the expiration or termination of this Agreement, CONTRACTOR may keep the equipment and credit AUTHORITY in an amount equal to its fair market value. Fair market value shall be determined, at CONTRACTOR's expense, on the basis of an independent appraisal. CONTRACTOR may sell the equipment at the best price obtainable and credit AUTHORITY in an amount equal to the sales price. If the equipment is to be sold, then the terms and conditions of the sale must be approved in advance by AUTHORITY's project manager.

D. Any subcontractor agreement entered into as a result of this Agreement shall contain all provisions of this clause.

#### ARTICLE 48. HEALTH AND SAFETY SPECIFICATIONS

CONTRACTOR shall comply with all requirements set forth in Exhibit H, Level 3 Safety Specifications.

#### ARTICLE 49. FORCE MAJEURE

Either party shall be excused from performing its obligations under this Agreement during the time and to the extent that it is prevented from performing by an unforeseeable cause beyond its control, including but not limited to: any incidence of fire, flood; acts of God; commandeering of material, products, plants or facilities by the federal, state or local government; national fuel shortage; or a material act or omission by the other party; when satisfactory evidence of such cause is presented to the other party, and provided further that such nonperformance is unforeseeable, beyond the control and is not due to the fault or negligence of the party not performing.

ecuted as of the date of the las	st signature below.
	ORANGE COUNTY TRANSPORTATION
By: License No:	By: Darrell E. Johnson Chief Executive Officer
	APPROVED AS TO FORM:
	By: James M. Donich General Counsel
	APPROVED:
	By: James G. Beil, P.E. Executive Director, Capital Programs

# SECTION V: GENERAL PROVISIONS - EXHIBIT A

#### SECTION V: GENERAL PROVISIONS

#### A. COST BREAKDOWN

Within 15 calendar days after "Notice to Proceed," the Contractor shall, upon request by the Authority, submit a cost breakdown of the lump sum Bid entered on the Bid Form for all construction work. This cost breakdown will form the basis for progress payments in accordance with these Specifications and shall show all of the major categories and subcategories of work and equipment requested by the Authority. Additionally, all cost shall be segregated between off-site and on-site costs. Mobilization costs shall not exceed 10% of total construction costs. Bonds and insurance costs will be identified as a separate line item. Such cost breakdown shall not be required if the Authority, at its sole discretion, elects to pay the Contractor in lump sum within thirty (30) calendar days of receipt of proper invoice following the Contractor's satisfactory completion and the Authority's acceptance of all work.

#### B. PROGRESS PAYMENTS

- 1. The Authority, no later than the 25th day of each month, shall prepare a progress payment estimate based on the estimated percentage of completion of each Bid Item and on the Contractor's actually incurred allowable expenses on such Bid Items. The Authority will issue the progress payment, in the amount it deems appropriate, by approximately the 15th day of the following month.
- 2. For purposes of calculating the progress payments, Authority will use the cost breakdown submitted by the Contractor for each Bid Item at the start of this Agreement. In no event will the Authority make a progress payment that, when added to the prior progress payments, amounts to a sum more than the Contractor's actual aggregate incurred expenses, adjusted to include Contractor's overhead and profit as allocated to such incurred expenses.
- 3. The Authority will pay only 95% of each progress payment amount as determined above, retaining 5% as part security for the fulfillment of this Agreement by the Contractor.
- 4. No progress payments will be made for materials not installed.
- 5. Progress payments made by Authority in no way shall be deemed or construed as acceptance by the Authority of work or waiver by the Authority of any rights hereunder.
- 6. The Contractor shall pay subcontractors, promptly upon receipt of each Authority progress payment; the respective amounts allowed the Contractor on account of the work performed by subcontractors, to the extent of each such subcontractor's interest therein. Such payments to subcontractors shall be based on estimates made pursuant to this Agreement. Any diversion by the

Contractor of payments received for prosecution of a contract, or failure to reasonably account for the application or use of such payments, constitutes ground for termination of the Contractor's control over the work and for taking over the work, in addition to disciplinary action by the Contractor's State License Board. The subcontractor shall notify, in writing, the Contractor's State License Board and the Authority of any payment less than the amount or percentage approved for the class or item of work as set forth in this Agreement.

7. In addition to other amounts properly withheld under this Agreement, the Authority shall withhold all legally required sums for, but not necessarily limited to, stop notices, labor and tax liens, etc.

### C. FINAL INSPECTION AND ACCEPTANCE

Promptly after Substantial Completion has occurred, Contractor shall perform all Punch List Work, if any, which was deferred for purposes of Project Completion, and shall satisfy all of its other contractual obligations under the contract documents.

When the Contractor determines that the work is fully completed, including satisfactory completion of all inspections, tests, and required documentation, Punch List and clean-up items, Contractor shall give the Authority a written request for Final Acceptance within ten (10) days thereafter, specifying that the work is completed and the date on which it was completed.

Within thirty (30) days after receipt of the request for Final Acceptance from Contractor, Authority will make a final inspection of the work and will either:

- 1. Reject the request for Final Acceptance, specifying the defective or uncompleted work; or
- 2. Issue a written Final Acceptance and record Notice of Completion with County Recorder.

Substantial Completion is defined herein as; In the opinion of the Authority, that Work or portion thereof that is sufficiently complete and in accordance with the Contract, that it can be utilized by the Authority for the purpose for which it was intended. A determination of Substantial Completion does not waive, but may not require the prior completion of minor items, which do not impair the Authority's ability to safely occupy and utilize the Work for its intended purpose.

# D. CLAIMS

Contractor is required to submit a written claim within ten (10) days after the event or occurrence first giving rise to the potential claim, or in the event of a denial of a request for change by the Authority. All claims shall include a detailed factual statement; including names, dates and specific events that took place. In addition, all claims shall include supporting documents in support of the claim, a detailed analysis of a request for a time extension, if applicable, and a detailed breakdown of a request for additional compensation. A revised construction schedule shall also be included identifying the impact of the delays, including proposals to minimize any of the impacts.

Authority shall respond in writing to a claim within forty-five (45) days of receipt of claim. Within thirty (30) days of receipt of claim, Authority, if necessary, may request additional documentation in support of said claim. If additional documentation is requested, Authority shall respond in writing to the claim within fifteen (15) days after receipt of additional documentation.

Claims filed by the Contractor shall be in sufficient detail to enable the Authority to ascertain the basis and amount of said claims. The Authority will consider and determine the Contractor's claims, and it will be the responsibility of the Contractor to furnish within a reasonable time such further information and details as may be required by the Authority to determine the facts or contentions involved in its claims. Failure to submit such information and details will be sufficient cause for denying the claim.

Claims submitted by the Contractor shall be accompanied by a notarized certificate containing the language listed below. Failure to submit the notarized certificate will be cause for denying the claim.

#### Certificate

Under the penalty of law for perjury or falsification with specific reference to the California False Claims Act, Government Code Section 12650 et. Seq., the undersigned,

(Name)

(Title)

(Company)

herby certifies that the claim for the additional compensation and time, if any, made herein for the work on this Contract is a true statement of the actual cost incurred and time sough, and is fully documented and supported under the Contract between the parties

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

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

Subscribed and sworn before this \_\_\_\_\_ day of \_\_\_\_\_, 202\_\_\_

Notary Public

My Commission Expires:

### E. FINAL PAYMENT

- 1. After the filing of the Notice of Completion, the Authority will make a proposed final estimate, in writing, of the total amount payable to the Contractor, including therein an itemization of said amount, segregated as to contract item quantities, extra work and any other basis for payment, and shall also show therein all deductions made or to be made for prior payments and amounts to be kept or retained under the provisions of the contract. All prior estimates and payments shall be subject to correction in the proposed final estimate. Within 15 days after proposed final estimate has been submitted, Contractor shall submit to the Authority written approval of proposed final estimate and/or a written statement of all claims of the contract. No claim will be considered that was not included in written statement of claims, nor will any claim be allowed unless the Contractor has previously complied with the notice and protest requirements.
- 2. On the Contractor's approval, or if he files no claim within stated period,

Authority will issue a final written estimate, in accordance with the proposed final estimate submitted to the Contractor; and 35 days after the date of filing the Notice of Completion Authority will pay the entire sum found to be due. Such final estimate and payment thereon shall be conclusive and binding against the Contractor on all questions relating to the amount of work done and the compensation payable therefore, except as otherwise provided.

- 3. If the Contractor within said period of 15 days files claims, Authority will issue a semi-final estimate in lieu of the final estimate submitted to the Contractor; and 35 days after the date of filing of the Notice of Completion, the Authority will pay the sum found to be due. Such semi-final estimate and payment thereon shall be conclusive and binding against the Contractor on all questions relating to the amount of work done and the compensation payable therefore, except insofar as affected by the claims filed within the time and in the manner required hereunder and except as otherwise provided.
- 4. Upon final determination of any outstanding claims, the Authority shall then make and issue a final estimate in writing and within 30 days thereafter, the Authority will pay the entire sum, if any, found due. Such final estimate shall be conclusive and binding against the Contractor on all questions relating to the amount of work done and the compensation payable therefore, except as otherwise provided.

# F. EXTRA WORK AND CHANGES

1. New and unforeseen work, which in the judgment of the Authority is found necessary or desirable for the satisfactory completion of the work, will be classified as extra work, as well as work specifically designated as such in the plans or specifications. The Contractor shall do such extra work and furnish material and equipment therefore as directed by the Engineer in writing by a change order. No extra work will be paid for or allowed unless the same was done upon written change order of the Engineer and after all legal requirements have been complied with.

The Contractor agrees that he will accept as full compensation for any extra work or changes in the work, so ordered, an amount to be determined by one of the following methods:

- a. A price mutually agreed upon in writing by the Engineer and Contractor (hereafter Agreed Price).
- b. Force Account as hereafter provided.

All compensation for extra work or changes in the work will be provided through a written change order. Nothing herein shall excuse the Contractor from proceeding with the work as otherwise directed by the Agreement.

2. It is mutually agreed that on the agreed price, the Contractor and

subcontractor(s) shall add not more than a total markup of 20% to be divided between the Contractor and subcontractor(s) as full compensation for all other expenses including overhead, profit, bond, superintendence, insurance and small tools.

- 3. When extra work is to be paid for on a force account basis, compensation will be determined as follows:
- a. Materials

A sum equal to the actual cost to the Contractor of the materials furnished by him, as shown by paid receipts, plus not more than fifteen percent (15%). Only installed materials shall be paid for.

- b. Labor
  - 1. The actual wages paid as shown on the certified copies of Contractor's payroll, for all labor directly engaged in the work and including the cost of any compensation insurance paid for by the Contractor, subsistence and travel allowance aid to such workmen as required by collective bargaining agreements plus not more than twenty percent (20%).
  - 2. To the actual wages as described in 1 above will be added a labor surcharge of not more than seventeen percent (17%), and shall constitute full compensation for all other payments, including payments imposed by State and Federal laws.
- c. Equipment
  - Equipment will be paid for as a rental charge whether owned by the Contractor or not, and said rental rates prevailing in the area for comparable equipment will be paid. To the direct costs of "Equipment Rental" will be added a not more than fifteen percent (15%) markup.
  - 2. All extra work at Force Account shall be adjusted daily upon report sheets prepared by the Engineer, furnished to the Contractor and signed by both parties. Said daily reports shall thereafter be considered the true record of all extra work done. The decision of the Engineer as to whether extra work has in fact been performed shall be conclusive and binding upon both parties to the contract.
- 4. A contract change order approved by Authority may be issued to the Contractor at any time. Should the Contractor disagree with any terms or conditions set forth in the contract change order, the Contractor shall submit a written protest to the Authority within 15 days after the receipt of the contract change order. The protest shall state the points of disagreement and, if possible, the contract

specification references, quantities and costs involved. If a written protest is not submitted within the above period, payment will be made as set forth in the approved contract change order and such payment shall constitute full compensation for all work included therein or required thereby. Such unprotested approved contract change orders will be considered as executed contract change orders.

5. Contractor shall promptly notify the Authority in writing when it receives direction, instruction, interpretation or determination from any source other than the Authority or its designated representatives that may lead to or cause change in the work. Such written notification shall be given to the Authority before the Contractor acts on said direction, instruction, interpretation or determination.

# G. EXTENDED FIELD OFFICE OVERHEAD COSTS

- 1. Within thirty (30) days after receipt of the Notice to Proceed, the Contractor shall submit a written statement to the Authority detailing its field office overhead costs which are time related. The Authority will review this cost submittal and reach a written agreement with the Contractor on a daily field office overhead cost rate which shall be issued as an agreed upon Change Order. The daily rate agreed to in this Change Order will be applicable throughout the duration of the Contract. No field office costs will be paid until such agreement is reached between the Authority and the Contractor and the Change Order concerning this daily rate is executed by both parties.
- 2. The individual cost components of the daily field office overhead rate shall represent costs which increase as a direct result of any time extension caused solely and exclusively by an act of the Authority. This listing may include such cost items as on-site project management, supervision, engineering and clerical salaries; on-site office utilities and rent; on-site company vehicles and their operating expenses; and site maintenance and security expenses. Field office overhead costs which are unaffected by increased time shall not be allowable costs in calculating the daily field office overhead rate. These non-time related costs include, but are not limited to, acquisition and installation of stationary equipment; temporary construction facilities; utilities and office furnishings (unless such items are rented or leased); the preparation of the site including grubbing, grading and fencing; mobilization clearing, and demobilization costs; and the costs of permits, bonds and insurance coverage for the project.
- 3. The individual wage cost components used to calculate the daily field office overhead rate shall be supported by actual employee payroll records, not salary ranges or estimates. Hourly rates for

management, supervisory, engineering and clerical employees shall be based upon 2,080 work hours per year and shall not include allowances for holidays, vacation or sick time. However, the daily field office overhead rate shall only reflect the actual on-site time required in the field office. All other field office overhead cost components shall be evidenced by records demonstrating actual field office costs incurred by the Contractor.

4. The daily field office overhead rate shall be multiplied by the number of days the Contract is delayed or extended by Change Order and shall be added to the agreed upon Change Order cost. The days of delay shall be those caused solely by action of the Authority and documented by a time impact analysis prepared and submitted by the Contractor. In the event of a deductive Change Order is issued which reduces time under the Contract, the daily field office overhead rate shall be added to the deductive amount. No allowance for overhead costs and no profit allowance shall be added to the extended field office overhead cost.

# H. ACCELERATION

- Authority reserves the right to accelerate the work of the Contract at any time during its performance. In the event that the Authority directs acceleration, such directive will be given to the Contractor in writing. The Contractor shall keep cost and other Project records related to the acceleration directive separately from normal Project cost records and shall provide a written record of acceleration costs to the Authority on a daily basis.
- 2. In the event that the Contractor believes that some action or inaction on the part of the Authority constitutes an acceleration directive, the Contractor shall immediately notify the Authority in writing that the Contractor considers the actions or inactions an acceleration directive. This written notification shall detail the circumstances of the acceleration directive. The Contractor shall not accelerate their work efforts until the Authority responds to the written notification. If acceleration is then directed or required by the Authority, all cost records referred to in section (1) shall be maintained by the Contractor and provided to the Authority on a daily basis.
- 3. In order to recover additional costs due to acceleration, the Contractor must document that additional expenses were incurred and paid by the Contractor. Labor costs recoverable will only be overtime or shift premium costs or the cost of additional laborers brought to the site to accomplish the accelerated work effort. Equipment costs recoverable will only be the cost of added equipment mobilized to the site to accomplish the accelerated work effort.

### I. VALUE ENGINEERING

Authority encourages the Contractor to submit Value Engineering Proposals

(VEP's) whenever it identifies areas and/or instances in which improvements can be made, in order to avail the Authority of potential cost savings. Contractor and the Authority will share any savings in the manner described below.

A VEP applies to a Contractor developed and documented VEP that:

- 1. Requires a change to the contract.
- 2. Reduces the total contract price without impairing essential functions or characteristics of the work.
- 3. Results in an estimated total net savings to the Authority equal to or greater than \$1,000.

At a minimum, a VEP should include the following information:

- 1. A description of the existing contract requirements that are involved in the proposed change.
- 2. A description of the proposed change, and all specifications and/or plans necessary for the complete evaluation of the proposed change. Include a discussion of the differences between existing requirements and the proposed change, together with advantages and disadvantages of each changed item. All relevant back up documentation needs to be included to support proposed changes.
- 3. Cost estimate for existing contract requirements correlated to the Contractors lump sum breakdown and the proposed changes in those requirements, including costs of development and implementation by the Contractor.

Contractor shall submit the VEP to the Authority. At its sole discretion, Authority may accept, in whole or in part and by change order, any VEP submitted pursuant to this section. Until a change order is issued on a VEP, Contractor shall remain obligated to perform in accordance with the contract. The decision of the Authority as to the rejection or acceptance of a VEP shall be at the sole discretion of the Authority.

If a VEP, submitted by the Contractor pursuant to this section is accepted by the Authority, the total contract price shall be adjusted based upon a sharing of the net savings by the Contractor and the Authority (50% Authority, 50% Contactor). Contractor's profit shall not be reduced by application of the VEP.

Net savings are defined as gross savings less the Contractor's costs and less the Authority's costs.

1. Contractors cost means reasonable costs incurred by the Contractor in preparing the VEP and making the change.

- 2. Authority's costs means reasonable costs incurred by the Authority for evaluating and implementing the VEP.
- 3. Contractor is not entitled to share in either concurrent, collateral or future contract savings. Collateral savings are those measurable net reductions in the Authority's costs of operation that result from the VEP. Concurrent savings cover the reductions in the cost of performance of other contracts.

Contractor shall include appropriate VEP provisions in all subcontracts greater than \$25,000.

### J. STOP NOTICES

The Authority, at its sole discretion, may, at any time, retain out of any amounts due the Contractor, sums sufficient to cover claims filed pursuant to Section 9358 et. seq. of the California Civil Code.

### K. ORDER OF WORK

Contractor shall perform work hereunder at such places, and in such order or precedence, as may be determined necessary by the Engineer to expedite completion of the required work.

# L. LABOR PROVISIONS

1. Prevailing Wages

Contractor shall comply with all applicable requirements of Division 2, Part 7, Chapter 1 of the Labor Code and all applicable federal requirements respecting prevailing wages. If there is a difference between the minimum wage rates predetermined by the Secretary of Labor and the wage rates determined by the Director of the Department of Industrial Relations (DIR) for similar classifications of labor, the Contractor and subcontractors shall not pay less than the higher wage rate. The DIR will not accept lower state wage rates not specifically included in the Federal minimum wage determination.

- 2. Minimum Wages
  - a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally, and not less often than once a week and without subsequent deduction or rebate on any account, the full amounts due at time of payment computed at wage rates not less than those specified in the General Wage Determinations referenced in this section regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics; and the wage determination decision shall be posted by the Contractor at the site of the work in a prominent place where it can be easily seen by the workers. For the purpose of this clause, contributions made or cost reasonably anticipated under the Labor Code of the State of California on behalf of laborers or

mechanics are considered wages paid by such Laborers or mechanics. Also for the purpose of this clause, regular contributions made or costs incurred for more than a weekly period under plans, funds or programs, but covering the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

- b. Authority shall require that any class of laborers or mechanics, including apprentices and trainees, which is not listed in the General Wage Determinations and which is to be employed under this Contract, shall be classified conformably to such wage determinations. In the event the Authority does not concur in the Contractor's proposed classification or reclassification of a particular class of laborers and mechanics (including apprentices and trainees) to be used, the question, accompanied by the recommendation of the Authority, shall be referred to the State Director of Industrial Relations for determination.
- c. Authority shall require, whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly wage and the Contractor is obligated to pay a cash equivalent of such a fringe benefit, an hourly cash equivalent thereof to be established. In the event the interested parties cannot agree upon cash equivalent of the fringe benefit, the questions, accompanied by the recommendation of the Authority, shall be referred to the State Director of Industrial Relations for determination.
- d. All disputes concerning the payment of wages or the classification of workers under this Agreement shall be promptly reported to the Authority.
- 3. Deductions

Authority may deduct from each progress payment and the Final Payment the following:

- a. Any Authority or third party claims or losses for which Contractor is responsible hereunder or any Liquidated Damages which have accrued as of the date of the application for payment;
- b. If a notice to stop payment is filed with Authority, due to the Contractor's failure to pay for labor or materials used in the work, money due for such labor or materials, plus the 25% prescribed by law, will be withheld from payment to the Contractor. In accordance with Section 9358 of the Civil Code, Authority may accept a bond by a corporate surety in lieu of withholding payment;
- c. Any sums expended by or owing to Authority as a result of Contractor's failure to maintain the as-built drawings;

- d. Any sums expended by Authority in performing any of the Contractor's obligations under the Contract which Contractor has failed to perform; and
- e. Any other sums which Authority is entitled to recover from Contractor under the terms of the Contract.

The failure by Authority to deduct any of these sums from a progress payment shall not constitute a waiver of Authority's right to such sums.

All amounts owing by Contractor to Authority under the Contract shall earn interest from the date on which such amount is owing at the lesser of (i) 10% per annum or (ii) the maximum rate allowable under applicable Governmental Rules.

- 4. Payrolls and Basic Records
  - a. Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of three (3) years thereafter for all laborers and mechanics working at the site of the work. Such records will contain the name, address and social security number of each such worker, the correct classification, rates of pay, daily and weekly number of hours worked, deductions made and actual wages paid.
  - Contractor will submit weekly a copy of all payrolls to the Authority as b. required in these "Labor Provisions." The copy shall be accompanied by a statement signed by the employer or its agent indicating that the payrolls are correct and complete, that the wage rates contained therein are not less than those determined by the State Director of Industrial Relations and that the classifications as set forth for each laborer or mechanic conform to A submission of the "Weekly Statement of the work performed. Compliance," which is required under this Contract, shall satisfy this requirement. The prime Contractor shall be responsible for the submission of copies of payrolls of all subcontractors. The Contractor will make the records required under the labor standard clauses of the contract available for the inspection by authorized representatives of the Authority, and will permit such representatives to interview employees during working hours on the job.
- 5. Apprentices and Trainees
  - a. Apprentices: Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed and individually registered in a bona fide apprenticeship program as defined in section 1777.5 of the Labor Code of the State of California. The allowable

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ratio of apprentices to journeymen in any craft classification shall not be greater than the ratio permitted to the Contractor as to his entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate who is not registered or otherwise employed as stated above, shall be paid the wage rate determined by the State Director of Industrial Relations for the classification of work he actually performed. The Contractor or subcontractor will be required to furnish to the Authority or the State Director of Industrial Relations written evidence of the registration of his program and apprentices as well as the appropriate ratios and wage rates (expressed in percentages of the journeyman's rate contained in the applicable wage determination).

- Trainees: Except as provided in 29 CFR 5.15, trainees will not be permitted b. to work at less than the predetermined rate for the work performed unless they are employed pursuant to or individually registered in a program which has received prior approval, evidenced by formal certification, by the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training. The ratio of trainees to journeymen shall not be greater than that permitted under the plan approved by the Bureau of Apprenticeship and Training. Every trainee must be paid at not less than the rate specified in the approved program for his level of progress. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Bureau of Apprenticeship and Training shall be paid not less than the wage rate determined by the Secretary of Labor for the classification of work he actually performed. The Contractor or subcontractor will be required to furnish the contracting officer or a representative of the Wage-Hour Division of the U.S. Department of Labor written evidence of the certification of his program, the registration of the trainees, and the ratios and wage rates prescribed in that program. In the event the Bureau of Apprenticeship and Training withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- c. Equal Employment Opportunity: The utilization of apprentices and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, 29 CFR Part 30, and 41 CFR Part 60.
- 6. Compliance With Copeland Regulations (29 CFR Part 3)

The Contractor shall comply with the Copeland "Anti-Kickback" Act (18 U.S.C. 874 and 40 U.S.C. 276c). The Contractor shall also comply with the Copeland Regulations (29 CFR Part 3) of the Secretary or Labor which are herein incorporated by reference.

7. Contract Termination; Debarment

A breach of item 1 through 6 may be grounds for termination of the contract, and for debarment as provided in 29 CFR Section 5.6.

8. Overtime Requirements

No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any work week in which he is employed on such work to work in excess of 8 hours a day or 40 hours in such work week unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 8 hours a day or 40 hours in such work week.

9. Violation; Liability for Unpaid Wages

Pursuant to section 1775 of the Labor Code of the State of California, in the event that any workman employed on this public works project is paid less than the amount specified in the General Prevailing Wage Determinations or less than is required, relative to overtime, the Contractor and any subcontractor responsible therefore shall be liable to the affected workman for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the State of California or the Authority for liquidated damages. Such liquidated damages shall be computed with respect to each individual workman found to be underpaid and shall be in the amount of \$50 per calendar day that a workman was underpaid.

10. Withholding for Liquidated Damages

The Authority may withhold or cause to be withheld, from any monies payable on account of work performed by the Contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for liquidated damages as provided in this section.

11. Final Labor Summary

The Contractor and each subcontractor shall furnish to the Authority, upon the completion of the contract, a summary of all employment, indicating for the completed project, the total hours worked and the total amount earned. 12. Final Certificate

Upon completion of the contract, the Contractor shall submit to the Authority, with the voucher for a final payment for any work performed under the contract, a concerning wages and classifications for laborers and mechanics, including apprentices and trainees employed on the project, in the following form:

The undersigned, Contractor on

# (Contract No.)

hereby certifies that all laborers, mechanics, apprentices and trainees employed by the Contractor or by a subcontractor performing work under the contract on the project have been paid wages at rates not less than those required by the contract provisions, and that the work performed by each such laborer, mechanic, apprentice or trainee conformed to the classifications set forth in the contract or training program provisions applicable to the wage rate paid.

#### Signature and Title

13. Notice to the Authority of Labor Dispute

Whenever the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice thereof, including all relevant information with respect thereto, to the Authority.

- 14. Disputes Clause
  - a. All disputes concerning the payment of prevailing wage rates or classifications shall be promptly reported to the Authority for its referral to DOT for decision or, at the option of the Authority, DOT referral to the Secretary of Labor. The decision of DOT or the Secretary of Labor, as the case may be, shall be final.
  - b. All questions relating to the application or interpretation of the Copeland Act, the Contract Work Hours Standards Act, the Davis-Bacon Act, or Section 13 of the Act shall be sent to the Federal Transit Administration (FTA) for referral to the Secretary of Labor for ruling or interpretation, and such ruling or interpretation shall be final.
- 15. Convict Labor

In connection with the performance of work under this Contract, the Contractor agrees not to employ any person-undergoing sentence of

imprisonment at hard labor. This does not include convicts who are on parole or probation.

16. Insertion in Subcontracts

The Contractor shall set forth in item 1 through 15 of this Section so that all of the provisions of this section will be inserted in all construction subcontracts of any tier, and such other clauses as the Government may by appropriate instructions require.

- 17. Certified Payrolls
  - a. The Authority shall obtain from the Contractor and each subcontractor a certified copy of each weekly payroll within seven (7) days after the regular payroll date. Following a review by the Authority for compliance with State and Federal labor laws, the payroll copy shall be retained at the project site for later review by FTA.
  - b. Contractor may use the Department of Labor Form WH-347, "Optional Payroll Form," which provides for all the necessary payroll information and certifications.
  - c. If, on or before the 20th of the month, the Contractor has not submitted satisfactory payrolls covering its work and the work of all subcontractors for all payroll periods ending on or before the 6th of that month, such payrolls will be considered to be delinquent. Regardless of the number of delinquent payrolls, an amount equal to 10% (but not less than \$1,000 or more than \$10,000) shall be deducted from the estimate. Deductions will be made separately for each estimate period in which a new delinquency appears and will be continued until payrolls have been submitted.
  - d. Contractors employing apprentices or trainees under approved programs shall include a notation on the first weekly certified payrolls submitted to the Authority that their employment is pursuant to an approved program and shall identify the program.

#### M. TIME EXTENSION/DELAYS

a. Contractor may be granted an extension of time for any portion of a delay in completion of the work due to acts of God, the public enemy, wars, civil unrest, fires, quarantine restrictions, or weather more severe than normal, providing that (1) the aforesaid causes were not foreseeable and did not result from an act or omission by the Contractor, (2) Contractor has taken reasonable precautions to prevent further delays owing to such causes, and (3) Contractor notifies Authority in writing of the cause(s) for the delay within ten (10) days from the beginning of any such delay. No claims for additional compensation or damages for the foregoing delays shall be allowed to the Contractor, and the extension of time provided for herein shall be the sole remedy of the Contractor on account of any such delays.

- b. An extension of time will not be granted for a delay described in the above paragraph(s) caused by a shortage of materials, except if materials are furnished by Authority, unless the Contractor supplies the Authority with documented proof that every effort to obtain the materials from all known sources that (a) such materials could have been obtained only at exorbitant prices or (b) the prices were entirely inconsistent with current rates, taking into account the quantities; and (c) such facts could not have been known or anticipated at the time the Notice To Proceed was issued. Contractor shall also submit proof, that the inability to obtain such materials when originally planned, did in fact, cause a delay in completion of the work that could not be compensated for by revising the sequence of its operations. Only the physical shortage of material will be considered as a basis for an extension of time.
- c. An extension of time for weather more severe than normal shall be granted only to the extent the work is actually delayed as determined by the Authority. Normal is defined as the monthly average of the temperature and rainfall wherein the work was performed for the prior 20 years before the execution of the contract.
- d. In the event Contractor is actually and necessarily delayed by an act or omission on the part of the Authority, as determined by the Authority, the Contractor shall notify the Authority in writing within five (5) days from the beginning of any such delay. The time for completion of the work may be extended at the sole discretion of the Authority.
- e. Within 30 days after the last day of delay, Contractor shall provide Authority with detailed information concerning the circumstances of the delay, the number of days actually delayed, and the measures taken to minimize or prevent the delay. Failure to submit information shall be sufficient reason to deny the claim. Authority shall ascertain the facts and the extent of the delay; and provide the Contractor its written findings, which will be final and conclusive. Except for the additional compensation for herein and except as provided in Public Contract Code Section 7102, Contractor shall have no claim for damages or compensation for any delay or hindrance.
- f. No extension of time will be granted for any Authority caused delay or delay as defined in which (a) the performance of work would have been concurrently delayed by Contractor induced causes, including but not limited to an act or omission of the Contractor, or (b) remedies are included or excluded by any other contract provision. Only the actual delay necessarily resulting from the causes specified in this Article shall be

grounds for extension of time. Should the Contractor be delayed at any time for any period by two or more of the causes specified in this article, Contractor shall only be entitled to one time extension for the entire delay.

g. Any time extension granted to Contractor shall not release the Contractor or surety from its obligations. Work shall continue and be carried on in accordance with the contract provisions, unless formally suspended or terminated by the Authority.

### N. NONDISCRIMINATION

During the performance of this Contract, the Contractor agrees as follows:

- 1. The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, religion, color, sex or national origin. Such action shall include, but not be limited to employment; upgrading; demotion; transfer; recruitment or recruitment advertising; layoff; termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post, in conspicuous places available to the employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. 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 race, religion, color, sex or national origin.
- 3. The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this Section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
- 5. In the event of the Contractor's noncompliance with the nondiscrimination

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clauses of this Contract or with any of the said rules, regulations or orders, this Contract may be canceled, terminated or suspended in whole or in part, and the Contractor may be declared ineligible for further Government contracts or Federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation or order, of the Secretary of Labor, or as otherwise provided by law.

- 6. The Contractor will include the provisions of this Paragraph ("Nondiscrimination") in every subcontract or purchase order entered into under this Agreement unless exempted by rules, regulations or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.
- 7. No person employed on the work covered by this Agreement shall be discharged or in any way discriminated against because he has filed any complaints or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable hereunder to his employer.

# O. TITLE VI OF THE CIVIL RIGHTS ACT OF 1964

Contractor agrees to comply with and ensure compliance by all subcontractors with all requirements of Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. §2000d; 49 U.S.C. §5332 and Department of Transportation Regulations, "Nondiscrimination in Federally-Assisted Programs of the Department of Transportation-Effectuation of Title VI of the Civil Rights Act," 49 CFR Part 21.

### P. AFFIRMATIVE ACTION

Contractors and subcontractors holding a value of work of \$10,000 or more must submit a Monthly Employment Utilization Report (Form 257) to the Authority Engineer by the 5th of each month or sanctions shall be applied for late submittal, non-submittal and incomplete forms returned to the Contractor and resubmitted after the due date.

The reporting period shall be for each calendar month.

The report shall include the information requested for each Contractor's aggregate work force (for all workers on all projects within Orange County) and not just for workers on this project.

If the form is not received by the 5th of the month, a deduction of 10% (with a minimum of \$1,000 and a maximum of \$10,000) will be withheld from the monthly estimate at the option of the Authority.

The Contractor shall designate an Equal Employment Officer for the project and notify the Authority in writing whom that person is prior to beginning of work. All workers shall also be informed who the EEO Officer is.

#### Q. STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

- 1. As used in these specifications:
  - a. "Covered area" means the geographical area described in the solicitation from which this Contract resulted;
  - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates Authority;
  - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
  - d. "Minority" includes persons who are citizens or lawful permanent residents of the United States and are one of the following:
    - 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, Portuguese American or other Spanish culture or origin, regardless of race);
    - Asian and Pacific Islanders (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent or the Pacific Islands);
    - 4) American Indians and 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);
    - 5) Women regardless of ethnicity.

- 2. In order for the nonworking training hours of apprentices to be counted in meeting the goals, such apprentices must be employed by the Contractor during the apprenticeship period, and the Contractor must have made a commitment to employ the apprentices at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
- 3. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
  - a. Ensure and maintain a working environment free of harassment, intimidation and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
  - b. Establish and maintain a current list of disadvantaged and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organization's responses.
  - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and disadvantaged or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
  - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a disadvantaged person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

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- e. Develop on-the-site-training opportunities and/or participate in training programs for the area which expressly include minority and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 3.b. above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foreman, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractors' recruitment area and employment needs. Not later than one month prior to the date of the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the opening, screening, procedures and tests to be used in the selection process.

- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of Contractor's work force.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 C.F.R., Part 60-3.
- I. Conduct, at least annually, an inventory and evaluation of all minority and female personnel for promotional opportunities, and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, working assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- Document and maintain a record of all solicitations or offers for subcontracts from disadvantaged and female construction Contractors and suppliers, including circulation of solicitations, to disadvantaged and female Contractor associations and other business associations.
- p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
- 4. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (3. (a) through (p)). The efforts of a Contractor association, joint Contractor-union, Contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 3. (a) through (p) of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participation, make a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the

Contractor's failure if such a group to fulfill an obligation, shall not be a defense for the Contractor's noncompliance.

- 5. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, male and female, and all women, both minority and nonminority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order 11246 if a specific minority group of women is underutilized.)
- 6. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex or national origin.
- 7. The Contractor shall not enter into any subcontract with a person or firm debarred from Government contracts pursuant to Executive Order 11246.
- 8. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
- 9. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in item 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 C.F.R. 60-4.8.
- 10. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation, if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to

the degree of existing records satisfy this requirement; Contractor shall not be required to maintain separate records.

11. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

# R. CONFLICT OF INTEREST

All Contractors responding to this Invitation For Bids must avoid organizational conflicts of interest which would restrict full and open competition in this procurement. An organizational conflict of interest means that due to other activities, relationships or contracts, a Contractor is unable, or potentially unable to render impartial assistance or advice to the Authority; a Contractor's objectivity in performing the work identified in the specifications is or might be otherwise impaired; or a Contractor has an unfair competitive advantage. Contractor is obligated to fully disclose to the Authority in writing any conflict of interest issues as soon as they are known. All disclosures must be disclosed at the time of bid submittal.

# S. CODE OF CONDUCT

Contractor agrees to comply with the Authority's Code of Conduct as it related to Third-Party contracts, which is hereby referenced and by this reference is incorporated herein. Contractor agrees to include these requirements in all of it's subcontracts.

### T. GOVERNMENT INSPECTIONS

The Authority or Federal Government representatives shall have access to the construction site and shall have the right to inspect all project works.

### U. LICENSING, PERMITS AND INSPECTION COSTS

1. The Contractor warrants that it has all necessary licenses and permits required by the laws of the United States, State of California, the County of Orange, the Local Jurisdictions, and all other appropriate governmental agencies, and agrees to maintains these licenses and permits in effect for the duration of the Agreement. Further, Contractor warrants that its employees, agents, and Contractors and subcontractors shall conduct themselves in compliance with such laws and licensure requirements including, without limitation, compliance with laws applicable to nondiscrimination, sexual harassment and ethical behavior throughout the duration of this Agreement. Contractor further warrants that it shall not retain or employ an unlicensed subcontractor to perform work on this Project. Contractor shall notify the Authority immediately and in writing of its employees', agents', Contractors' or subcontractors' inability to obtain or maintain, irrespective of the pendency of any appeal, any such licenses, permits, approvals, certificates, waivers, and exemptions. Such inability shall be cause for termination of this Agreement.

2. Contractor shall procure all permits and licenses; pay all charges, assessments and fees, as may be required by the ordinances and regulations of the public agencies having jurisdiction over the areas in which the work is located, and shall comply with all the terms and conditions thereof and with all lawful orders and regulations of each such public agency relating to construction operations under the jurisdiction of such agency.

#### V. HAZARDOUS SUBSTANCES

1. CAL-OSHA Requirements

All flammable, corrosive, toxic, or reactive materials being bid must have a complete CAL-OSHA Safety Data Sheet (SDS) accompanying the submitted bid.

2. South Coast Air Quality Management District (SCAQMD)

All materials (paints, coatings, inks, solvents, and adhesives) shall comply with the volatile organic compounds (VOC) content requirements of the applicable SCAQMD rules.

3. Notice of Hazardous Substances

Title 8, California Code of Regulations, Section 5194 (e) (c), states that the employer must inform any Contractor employers with employees working in the employer's workplace of the hazardous substances to which their employees may be exposed while performing their work. In compliance with this requirement, the Authority hereby gives notice to all bidders that the following general categories of hazardous substances are present on the Authority's premises:

- Adhesives, sealant, patching, and coating products
- Antifreezes, coolants
- Cleaners, detergents
- Paints, thinners, solvents
- Pesticides, Petroleum products (diesel and unleaded fuel, oil products)
- Printing, photocopying materials
- Propane Welding materials/compressed gases (e.g., acetylene, oxygen, nitrogen)

More specific information may be obtained from the Authority's Safety and Benefits office at (714) 560-5854, and from Safety Data Sheets (SDS) for individual products.

4. Hazardous Waste Labels

Containers containing hazardous substances must be labeled with the following information:

- Identity of hazardous substance-chemical name, not manufacturer or trade name;
- Appropriate health warning relative to health and physical hazard; and
- Name and address of manufacturer or other responsible party.

All containers containing hazardous substances may be rejected unless containers are properly labeled. Containers of 55 gallons or larger must have either weather resistant labels or the information should be painted directly on the containers.

# W. CHANGES IN LAWS AND REGULATIONS

CONTRACTOR shall at all times comply with all applicable state and local regulations, policies, procedures and directives, including without limitation those listed directly or by reference in this Agreement. CONTRACTOR's failure to so comply shall constitute a material breach of contract.

### X. MEDIA AND THE PUBLIC

Contractor shall immediately refer all inquires from the news media or other public sources to the Authority's Project Manager, or designated representative, relating to this project.

### Y. COORDINATION AND ACCESS

Authority may undertake or award other contracts for additional work at the project site. Contractor is responsible for coordinating its work with the work of other Contractors as appropriate. The Contractor acknowledges that they do not have any exclusive access to the site or other work areas Authority may require that certain facilities and areas be used concurrently by the Contractors and others. Contractor shall cooperate fully with Authority Contractors/consultants that may be performing work in the construction area.

# Z. UTILITIES RELATED DELAYS

If, due to interruptions caused by the undocumented utilities, Contractor sustains loss which could not have been avoided by the judicious handling of forces, equipment and plant, there shall be paid to the Contractor that amount that the Authority may find to be a fair and reasonable compensation for the part of the Contractor's actual loss, that, in the opinion of Authority was unavoidable, determined as follow: Compensation for idle time of equipment will be determined in the same manner as determinations are made for equipment used in the performance of extra work paid for on a force account basis, as provided in Section F. Extra Work and Changes, Item 3,c. Equipment with the following exceptions:

1. The utility related delay factor for each classification of equipment shown

in the Department of Transportation publication entitled Labor Surcharge And Equipment Rental Rates will be applied to that equipment rental rate.

- 2. The time for which the compensation will be paid will be the actual normal working time during which the delay condition exists, but in no case will exceed 8 hours in any one day.
- 3. The days for which compensation will be paid will be the calendar days, excluding Saturdays, Sundays and legal holidays, during the existence of the delay, except that when the rented equipment can be returned or used elsewhere on the project, then no payment will be made for utilities related delays.

Actual loss shall be understood to include no items of expense other than idle time of equipment and necessary payments for idle time of workers, and cost of extra moving of equipment. Compensation for idle time of equipment will be determined as provided in this Section and compensation for idle time of workers will be determined as provided in Section F. Extra Work and Changes, Item 3, b. "Labor," and no markup will be added in either case for overhead and profit. The cost of extra moving of equipment will be paid for as extra work and changes as provided in Section F of General Provisions.

If performance of the Contractor's work is delayed as the result of the Utilities Related Delays, an extension of time determined pursuant to the provisions in Article 18. Termination for Default – Damages for Delay – Time Extensions will be granted.

### AA. UTILITIES AND SUBSURFACE STRUCTURES

Contractor shall protect from damage utility and other subsurface structures that are to remain in place, be installed, relocated or otherwise rearranged (as used herein, rearranged includes installation, relocation, alteration or removal).

The right is reserved to the Authority, or their authorized agents, to enter upon the site for the purpose of making those changes that are necessary for the rearrangement of their facilities or for making necessary connections or repairs to their properties. Contractor shall cooperate with forces engaged in this work and shall conduct operations in such a manner as to avoid any unnecessary delay or hindrance to the work being performed by the other forces. Wherever necessary, the work of Contractor shall be coordinated with the rearrangement of utility or other non-highway facilities, and Contractor shall make arrangements with the owner of those facilities for the coordination of the work.

Attention is directed to the possible existence of underground main or trunk line facilities not indicated on the plans or in the special provisions and to the possibility that underground main or trunk lines may be in a location different from that which is indicated on the plans or in the special provisions. Contractor shall ascertain the exact location of underground main or trunk lines whose presence is indicated
on the plans or in the special provisions, the location of their service laterals or other appurtenances, and of existing service lateral or appurtenances of any other underground facilities which can be inferred from the presence of visible facilities such as buildings, meters and junction boxes prior to doing work that may damage any of the facilities or interfere with their service.

If Contractor cannot locate an underground facility whose presence is indicated on the plans or in the special provisions, the Contractor shall so notify the Authority in writing. If the facility for which the notice is given is in a substantially different location from that indicated on the plans or in the special provisions, the additional cost of locating the facility will be paid for as extra work as provided in Section F.

If Contractor discovers underground main, trunk lines or other structures and utilities not indicated on the plans or in the special provisions, Contractor shall immediately give the Authority and the Utility Company written notification of the existence of those facilities. Such facilities shall be located and protected from damage as directed by the Authority, and the cost of that work will be paid for as extra work as provided in Section F. Contractor shall, if directed by the Authority repair any damage which may occur to the main or trunk lines. The cost of that repair work, not due to the failure of the Contractor to exercise reasonable care, will be paid for as extra work as provided in Section F. Damage due to Contractor's failure to exercise reasonable care shall be repaired at the Contractor's cost and expense.

Where it is determined by the Authority that the rearrangement of an underground facility is essential in order to accommodate the project work and the plans and specifications do not provide that the facility is to be rearranged, AuthorityY will provide for the rearrangement of the facility by other forces or the rearrangement shall be performed by Contractor and will be paid for as extra work as provided in Section F.

When ordered by the Authority in writing, Contractor shall rearrange any utility or other subsurface structures necessary to be rearranged as a part of the project work and that work will be paid for as extra work as provided in Section F.

Should Contractor desire to have any rearrangement made in any utility facility, or other improvement, for the Contractor's convenience in order to facilitate the Contractor's construction operations, which rearrangement is in addition to, or different from, the rearrangements indicated on the plans or in the special provisions, the Contractor shall make whatever arrangements are necessary with the owners of the utility or other subsurface structure for the rearrangement and bear all expenses in connection therewith.

Contractor shall immediately notify the Authority of any delays to the Contractor's operations as a direct result of underground utilities or other structures which were not indicated on the plans or in the special provisions or were located in a position substantially different from that indicated on the plans or in the special provisions, (other than delays in connection with rearrangements made to facilitate the

Contractor's construction operations or delays due to a strike or labor dispute). These delays will be considered utilities related delays within the meaning of Section X., Utilities Related Delays and compensation for the delay will be determined in conformance with the provisions in Section M. Contractor shall be entitled to no other compensation for that delay.

## BB. LOCATION OF UNDERGROUND FACILITIES (OFFSITE WORK ONLY)

Contractor is required to obtain digging permits prior to start of excavation by contacting the appropriate permitting agencies 15 calendar days in advance. For the Offsite work scan the construction site with electromagnetic or sonic equipment, and mark the surface of the ground where existing underground utilities are discovered. Verify the elevations of existing piping, utilities, and any type of underground obstruction not indicated or specified to be removed but indicated or discovered during scanning in locations to be traversed by piping, ducts, and other work to be installed. Verify elevations before installing new work closer than nearest manhole or other structure at which an adjustment in grade can be made. Perform potholing to confirm location of all the utilities along the construction alignment prior to start of the construction. The Contractor is responsible for all costs associated with these investigations including the cost of equipment, labor and materials required for any confined space entry.

# CC. UNFORESEEN HAZARDOUS OR REGULATED MATERIALS

All known hazardous or regulated materials are indicated in the contract documents. If material that is not indicated in the contract documents is encountered that may be dangerous to human health upon disturbance during construction operations, stop that portion of work and notify Authority immediately. Intent is to identify materials such as PCB, lead paint, mercury, petroleum products, and friable and non-friable asbestos. Within 14 calendar days, the Authority will determine if the material is hazardous. If the material is not hazardous or poses no danger, the Authority will direct Contractor to proceed without change. If the material is hazardous and handling of the material is necessary to accomplish the work, Authority will contract with a qualified environmental remediation/hazardous materials removal Contractor for such remediation or removal as may be necessary. The remediation or removal will be performed in compliance with applicable State, Federal, and local environmental laws and regulations.

Contractor shall immediately notify the Authority of any delays to the Contractor's operations as a direct result of Unforeseen Hazardous and Regulated Materials These delays will be considered utilities related delays within the meaning of Section X., Utilities Related Delays and compensation for the delay will be determined in conformance with the provisions in Section M. Contractor shall be entitled to no other compensation for that delay.

# SECTION VI: PROJECT SPECIFICATIONS - EXHIBIT B

# ORANGE COUNTY TRANSPORTATION AUTHORITY CONSTRUCTION OF THE INLAND SLOPE REHABILITATION - PHASE II PROJECT

**Project Specific Specifications** 

IFB 4-2666

April 10, 2025

PREPARED BY

Kimley **»Horn** 

Kimley-Horn 1100 W Town & Country Road Suite 700 Orange, CA 92868

#### **SECTION 01 01 05**

#### **CERTIFICATIONS PAGE**

We hereby certify that these Contract Documents have been prepared by us or under our direct supervision in accordance with the rules and regulations governing the Architects and Engineers practicing in the State of California.



**Civil Engineer - Division 01, Division 10, Division 31, Division 32, Division 33, Specifications 34 11 27, 34 80 11** Kimley-Horn and Associates, Inc. 1100 W Town & Country Road, Suite 700 Orange, CA 92868



Structural - Division 03, Division 05, Specification 34 80 23 Kimley-Horn and Associates, Inc. 1100 W Town & Country Road, Suite 700 Orange, CA 92868

#### END OF SECTION 01 01 05

#### SECTION 01 01 10

## TABLE OF CONTENTS

#### ORANGE COUNTY TRANSPORTATION AUTHORITY INLAND SLOPE REHABILITATION PHASE II PROJECT

Note: The TYPE column indicates whether the section is a Modification (M) of an existing SCRRA Standard Specification section, or a Supplemental (S) Specification section.

All SCRRA standard specifications are hereby included in this contract that are currently posted on SCRRA's Engineering and Construction website

https://metrolinktrains.com/about/agency/engineering--construction/.

The following are modifications or supplemental sections to the 2022 SCRRA Standard Specifications:

SECTION	TITLE	TYPE	PAGES
Division 01	General Requirements		
01 11 13	Work Covered by Contract Documents	М	22
01 11 16	Work by SCRRA	М	1
01 14 00	Work Restriction	М	1
01 14 19	Coordination with Utilities	M	15
01 23 00	Options	М	1
01 35 23	Site Safety Requirements	М	1
01 43 23	Contractor Qualifications and Requirements	M	10
01 71 23	Field Engineering	М	1
Division 03	Concrete		
03 31 00	Structural Concrete	М	1
03 37 19	Pneumatically Placed Concrete	S	8
Division 31	Earthwork		
31 20 00	Earthwork	М	3
Division 33	Utilities		
33 42 01	Temporary Channel Diversion System	S	4
Division 34	Transportation		
34 11 27	Sub-Ballast and Aggregate Base	М	1

#### END OF SECTION 01 01 10

## SECTION 01 11 13

## WORK COVERED BY CONTRACT DOCUMENTS

The following are modifications to the 2022 SCRRA Standard Specifications:

## PART 1 – GENERAL

ADD paragraph 1.05 – Summary of Work and the following Tables 1, 2, and 3

#### 1.05 SUMMARY OF WORK

All proposed demolition and construction shall comply with SCRRA Standard Specifications and Engineering Standard Drawings, and shall be performed per the contract plans and specifications, and will generally consist of the following:

- A. Clearing and grubbing.
- B. Earthwork and site preparation.
- C. Confirmation of existing utility locations throughout project limits.
- D. Construction of shotcrete and slope paving.
- E. Construction of maintenance roadways and curbs.
- F. Construction of new underdrains, new drainage features, riprap, and concrete uchannel with temporary channel diversion.
- G. Installation of hand railing.
- H. Protection of existing utilities.

The tables identified below continue on the following pages:

 Table 1: SCRRA Standard Specifications

 Table 2: SCRRA Standard Plans

 Table 3: Other Governing Documents

Table 1: SCR	RA Standard Specifications		
SECTION NO.	DESCRIPTION	SECTION REQUIRED	PROJECT SPECIFIC REVISION
Division 01	<ul> <li>General Requirements</li> </ul>		
01 11 13	Work Covered by Contract Documents	Yes	Yes
01 11 15	Definition of Terms and Reference Standards	Yes	No changes
01 11 16	Work by SCRRA	Yes	Yes
01 14 00	Work Restrictions	Yes	Yes
01 14 16	Coordination with SCRRA	Yes	No changes
01 14 19	Coordination with Utilities	Yes	Yes
01 21 00	Allowances	Yes	No changes
01 22 00	Unit Prices	Yes	No changes
01 22 05	Lump-Sum Prices	Yes	No changes
01 23 00	Options	Yes	No changes
01 23 50	Time-Related Overhead	Yes	No changes
01 24 13	Value Engineering Change Proposals (VECP)	Yes	No changes
01 25 00	Substitution Procedures	Yes	No changes
01 26 14	Request for Information	Yes	No changes
01 29 73	Schedule of Values	Yes	No changes
01 31 00	Project Management and Coordination	Yes	No changes
01 31 19	Partnering	Yes	No changes
01 31 99	Period of Performance	Yes	No changes
01 32 17	Construction Project Schedule	Yes	No changes
01 32 33	Photographic Documentation	Yes	No changes
01 33 00	Submittal Procedures	Yes	No changes
01 35 15	Maintenance and Protection of Railroad Traffic	Yes	No changes
01 35 23	Site Safety Requirements	Yes	Yes
01 35 44	Environmental Safety and Health Program	Yes	No changes
01 35 91	Historic Treatment Procedures	No	No changes
01 40 00	Quality Requirements	Yes	No changes
01 43 23	Contractor Qualifications and Requirements	Yes	Yes
01 55 26	Maintenance and Protection of Roadway Traffic	Yes	No changes
01 56 37	Worksite Security Requirements	Yes	No changes
01 56 38	Bird Protection	Yes	No changes
01 56 39	Temporary Tree and Plant Protection	Yes	No changes
01 57 19	Temporary Environmental Controls	Yes	No changes
01 60 00	Product Requirements	Yes	No changes
01 64 00	Authority Furnished Materials and Equipment	Yes	No changes
01 71 13	Mobilization, Demobilization, and Controls	Yes	No changes
01 71 23	Field Engineering	Yes	Yes

SECTION PROJECT				
NO.	DESCRIPTION	REQUIRED	SPECIFIC REVISION	
01 74 19	Construction Waste Management and Disposal	Yes	No changes	
01 77 00	Substantial Completion	Yes	No changes	
01 77 19	Project Closeout	Yes	No changes	
01 78 23	Operation and Maintenance Data	Yes	No changes	
01 78 36	Warranties and Guarantees	Yes	No changes	
01 78 39	Project Record Documents	Yes	No changes	
01 79 00	Demonstration and Training	Yes	No changes	
01 91 13	General Commissioning Requirements	Yes	No changes	
Division 03 -	- Concrete			
03 21 00	Reinforcing Steel	Yes	No changes	
03 31 00	Structural Concrete	Yes	Yes	
Division 04 -	- Masonry			
04 22 00	Concrete Unit Masonry	No	No changes	
04 22 10	Environmental Paving	No	No changes	
Division 05 -	- Metals			
05 12 23	Structural Steel	No	No changes	
05 52 00	Hand Rails and Railing	Yes	No changes	
05 52 10	Pedestrian Swing Gates	No	No changes	
05 53 00	Metal Grating	No	No changes	
05 55 00	Miscellaneous Metals	No	No changes	
Division 09 -	Finishes			
09 61 50	Detectable Warning Tactile	No	No changes	
09 90 00	Painting and Coatings	No	No changes	
09 96 23	Graffiti-Resistant Coating	No	No changes	
Division 10 -	- Specialties			
10 14 53	Roadway (Traffic) Signs	No	No changes	
10 14 55	Railroad Signage	Yes	No changes	
Division 12 -	- Furnishings			
12 67 23	Benches and Trash Containers	No	No changes	
Division 26 ·	- Electrical			
26 05 00	Basic Electrical Materials and Methods	No	No changes	
26 05 43	Electric: Exterior Underground	No	No changes	
26 05 50	Overcurrent Protection Devices	No	No changes	
26 06 00	Grounding and Bonding	No	No changes	
26 07 10	Seismic Controls for Electric Works	No	No changes	

SECTION NO.	DESCRIPTION	SECTION REQUIRED	PROJECT SPECIFIC REVISION
26 07 50	Electrical Identifications	No	No changes
26 08 00	Electrical Testing	No	No changes
26 12 00	Conductors and Cables – Low Voltage	No	No changes
26 13 00	Conduits, Raceways, and Boxes	No	No changes
26 14 00	Wiring Devices	No	No changes
26 28 00	Overcurrent and Short Circuit Protection Devices	No	No changes
26 28 16	Safety Switches	No	No changes
26 28 90	Transient Voltage Suppression	No	No changes
26 41 00	Enclosed Switches and Circuit Breakers	No	No changes
26 42 00	Enclosed Controllers	No	No changes
26 44 10	Switchboards	No	No changes
26 44 20	Service Pedestals and Panelboards	No	No changes
26 46 00	Dry Type Transformers (600 V and Less)	No	No changes
26 50 00	Interior and Exterior Lighting	No	No changes
Division 28 –	Electronic Safety and Security		
28 13 00	Access Control System (ACS)	No	No changes
28 23 00	Video Surveillance System (VSS)	No	No changes
Division 29 -	Customer Information System (CIS)		
29 00 00	Summary of Work (CIS)	No	No changes
29 00 20	Standards, Abbreviations, and Definitions (CIS)	No	No changes
29 10 60	Power Distribution Testing and Commissioning	No	No changes
29 20 20	Communications Services	No	No changes
29 20 60	System Testing and Commissioning	No	No changes
Division 31 -	Earthwork		
31 11 00	Site Clearing	Yes	No changes
31 11 50	Demolition, Cutting and Patching	Yes	No changes
31 20 00	Earthwork	Yes	Yes
31 20 50	Removal and Disposal of Contaminated Soils	Yes	No changes
31 50 00	Excavation Support	Yes	No changes
Division 32 -	- Exterior Improvements		•
32 12 00	Hot Mix Asphalt (HMA) Pavement	No	No changes
32 16 00	Curbs, Gutters, and Sidewalks	Yes	No changes
32 17 23	Pavement Markings	No	No changes
32 31 13	Chain Link Fencing and Gates	Yes	No changes
32 31 14	Security Fencing and Gates	Yes	No changes
32 31 16	Welded Wire Fencing and Gates	Yes	No changes
32 31 19	Tubular Steel Fencing and Gates	Yes	No changes
	Exterior Improvements		
32 31 32	Vehicular Gate Operator System	No	No Changes

SECTION NO.	DESCRIPTION	SECTION REQUIRED	PROJECT SPECIFIC REVISION
32 32 16	Gravity Block Retaining Walls	No	No changes
32 32 20	MSE Retaining Walls	No	No changes
32 80 00	Irrigation System	No	No changes
32 90 00	Landscaping	No	No changes
32 91 00	Soil Erosion, Sediment Control, Top Soiling and Seeding	Yes	No changes
Division 33 -	- Utilities		
33 05 23	Steel Casing	No	No changes
33 42 00	Culvert and Drainage Pipe	No	No changes
33 46 00	Underdrains	Yes	No changes
Division 34 -	Transportation		
Track Materi	als		
34 11 10	Continuous Welded Rail (CWR)	No	No changes
34 11 15	Other Track Materials (OTM)	No	No changes
34 11 23	Special Trackwork	No	No changes
34 11 26	Ballast	No	No changes
34 11 27	Sub-Ballast and Aggregate Base	Yes	Yes
34 11 33	Concrete Railroad Ties	No	No changes
34 11 34	Wood Railroad Ties	No	No changes
34 11 36	Elastic Rail Fasteners	No	No changes
34 11 40	Precast Concrete Grade Crossing Panels	No	No changes
Traffic Signa	ls		
34 41 16	Traffic Signal Systems	No	No changes
Railroad Sig	nals		
34 42 00	General Signal Requirements	No	No changes
34 42 10	Coordination with SCRRA Procurement Contractor	No	No changes
34 42 16	Signal Wires and Cables	No	No changes
34 42 18	Conduits and Pull Boxes	No	No changes
34 42 38	Interlocking Controls	No	No changes
34 42 40	Solid-State Coded Track Circuits	No	No changes
34 42 42	Signal Layout, Structures and Foundations	No	No changes
34 42 43	Electric Switch Lock Layouts	No	No changes
34 42 44	Relays	No	No changes
34 42 46	Signal Equipment Houses	No	No changes
34 42 48	Power Switch and Lock Movement	No	No changes
34 42 50	Switch Circuit Controller	No	No changes

SECTION		SECTION	PROJECT
SECTION NO.	DESCRIPTION	REQUIRED	SPECIFIC REVISION
34 42 52	Rectifiers, Batteries, and Battery Charging Equipment	No	No changes
34 42 54	Rail Bonding	No	No changes
34 42 56	Signal Grounding	No	No changes
34 42 58	Signal System Testing	No	No changes
34 42 60	Signal Systems Miscellaneous Products	No	No changes
34 42 62	Service Meters	No	No changes
34 42 64	Highway-Rail Grade Crossing Warning Systems	No	No changes
34 42 66	Dragging Equipment Detectors	No	No changes
34 42 70	Wayside Signal Assemblies	No	No changes
Railroad Co	mmunications		
34 44 00	Railroad Communication Requirements	No	No changes
34 44 05	Communications Basic Equipment, Materials, and Methods	No	No changes
34 44 10	Prefabricated Communications Shelter	No	No changes
34 44 20	Communications Wire and Cable	No	No changes
34 44 50	Customer Information Systems	No	No changes
34 44 70	Wide Area Network	No	No changes
34 44 95	Data Radio Network	No	No changes
Highway-Ra	il Grade Crossings		
34 71 50	Highway-Rail Grade Crossings	No	No changes
Track Const			
34 72 00	Trackwork	No	No changes
34 72 20	Track Shifting, Relocation and Resurfacing	No	No changes
34 72 30	Field Welding Rail	No	No changes
34 72 40	Track Collector Pan System	No	No changes
Railroad Bri	dges		
34 80 11	Stone Revetment (Riprap)	Yes	No changes
34 80 21	Piling	No	No changes
34 80 22	Cast-In-Drilled Hole (CIDH) Piles	No	No changes
34 80 23	Subdrainage System for Railroad Bridges and Retaining Walls	Yes	No changes
34 80 31	Bridge Deck Drainage System	No	No changes
34 80 32	Adhered Elastomeric Waterproofing for Railroad Bridges	No	No changes
34 80 33	Hot Mix Asphalt (HMA) for Bridges	No	No changes
34 80 43	Precast and Prestressed Concrete for Bridges	No	No changes
34 80 51	Structural Steel for Railroad Bridges	No	No changes
34 80 52	Metal Fabrications for Railroad Bridges	No	No changes
34 80 53	Steel Handrails for Railroad Bridges	No	No changes
34 80 61	Painting and Protective Coating for Bridges	No	No changes

Dwg No.	SCRRA Description of Title or Standard	Required
1000	ABBREVIATIONS	rtoquiroc
1101	General Abbreviations Civil & Track	Yes
1102	General Abbreviations Signal, Communications and Station Communications	Yes
1103	General Abbreviations Architectural and Engineering	Yes
200	SYMBOLS	
1201-01	Standard Abbreviations	Yes
1201-02	Standard Abbreviations	Yes
201-03	Standard Symbols and Patterns	Yes
1201-04	Standard Linestyles	Yes
211	Standard Title Blocks	Yes
212	Lettering for Signs	Yes
2000	ROADBED SECTIONS	
2001	Roadbed Sections for Track Constructed Using Wood Ties	Yes
2002	Roadbed Sections for Track Constructed Using Concrete Ties	Yes
2003	Roadbed Sections for Exposure to Ocean Surf	No
2004	HMAC Underlayment for Select Critical Locations	No
2005	Turnout Construction Pads	No
007-01	Grain Size Distribution for Subgrade Soils	Yes
2007-02	Ballast and Subballast Gradation Table	Yes
100	CLEARANCES	
101	Standard Clearance of Structures	Yes
102	Minimum Clearance of Structures	Yes
103	Car (Equipment) Clearance Envelope	Yes
104	Minimum Vertical Clearances for Wires	Yes
105	Turnout Walkways and HMAC Underlayment	No
106	Track Clearance Points at Grade Crossings	No
107	Track No Ride Zone at Turnouts	No
108	Switch Stand Placement	No
109	CPUC Minimum Walkway Standards	Yes
200	TRACK GEOMETRY DATA TABLE	
201	Vertical Curve Geometry	No
202-01	Horizontal Curve Geometry	No
202-02	Track Geometry Data Table	No
203	Curve Speed, Superelevation and Spiral Length Notes	No
2204-01	Table P3.5 - 3.5 Inch Superelevation Underbalance Standard Spiral Length         Table for Passenger	No
204-02	Table F2.0 - 2.0 Inch Superelevation Underbalance Standard Spiral Length         Table for Freight	No
204-03	Table P3.5M - 3.5 Inch Superelevation Underbalance Minimum Spiral Length Table for Passenger	No
204-04	Table F2.0M - 2.0 Inch Superelevation Underbalance Minimum Spiral Length         Table for Freight	No
204-05	Table PML - 4.0 Inch Superelevation Underbalance Maintenance Limit for         Passenger Operations	No
204-06	Table FML - 3.0 Inch Superelevation Underbalance Maintenance Limit for           Freight Operations	No
206	Superelevation Tags	No
207	Track Center Spacing	No
208	Speed Through Turnouts	No

Dwg No.	SCRRA Description of Title or Standard	Require
2209	Facing Point Turnout Arrangement and Spacing	No
2300	RAIL SECTIONS	
2301	Data for Standard Rail Sections	No
2302	Inside Guard Rail for Concrete Ties Details	No
304	Inside Guard Rail for Wood Ties Details	No
350	RAIL FASTENERS	
2351-01	Rail Anchor Applications to Jointed Rail	No
351-02	Rail Anchor Applications for Continuous Welded Rail with Wood Crossties	No
2351-03	Rail Anchor Applications for Continuous Welded Rail - Transition Wood to Concrete Ties	No
2351-04	Rail Anchor Patterns for CWR on Bridges	No
352	Track Bolts, Nuts and Washer	No
353	Switch Rod Clips and Bolts	No
354	Switch Point Clamp	No
355	6" Track Spikes, 15/16" Screw Fastener, Tie Plugs and Tight Spike Filler	No
356	PIM 532 Screw, Insert and Helical Washer for Concrete Ties	No
357	Square Head Frog Bolts, Square and Hex Nuts and Hardened Flat Washers	No
358	Tapered Frog Bolt Assembly	No
359	Spherical (Self Centering) Washer Set	No
2360-01	"Pandrol Fastclip" Concrete Tie Assemblies for Various Rail Combinations	No
360-02	"Pandrol Fastclip" Concrete Tie Assemblies for Various Rail Combinations	No
360-03	"Pandrol Fastclip" Concrete Tie Assemblies for Various Rail Combinations	No
361	"Pandrol" Joint E-Clip Type E2063	No
2362	"Pandrol" Brand Rail Clip "e" Clip	No
2364	"Pandrol" Concrete Tie Pads for use with 5 $\frac{1}{2}$ " & 6" Base Rail	No
2365-01	"Pandrol Fastclip" Type Side Post Insulators	No
2365-02	Insulator Side Post for FC1600 Series "Pandrol Fastclip"	No
2366	"Pandrol" Type Fastclip 136LB FC1601 and 115LB - 119LB FC1603	No
2367	"Pandrol" Type Toe Insulator to Suit Fastclip 1600 Series Rail Clips	No
2368	"Pandrol" Type Toe Insulator to Suit "Pandrol" Fastclip 1600 Series Rail Clips For Standard Rail & Joint Applications	No
2369	Weld-On Shoulder for "Pandrol" E-Clips	No
2370	Poly-Insulated Joint 141-136-132 RE Rail	No
2371	Inside Guard Rail Plates for Concrete Ties	No
2372	Forged Transition Rails for New 141/136 LB to 115 LB New and ¼" Head Loss Rail	No
373	Transition Rails (Planed) for New 141 LB and 136 LB to 132 LB 1/4" Head Loss	No
375	Evergrip Double Head Spike	No
380	Typical Track Panels 115 LB and 136 LB Timber Ties	No
400	TIES	
402	Concrete Tie and Fastclip Fastening Standard	No
403	8'-3" Bottom Pad Tie Fastclip for Use on Bridge Decks	No
406	Concrete Tie - Guard Rail	No
407	Concrete Tie - Guard Rail With Neoprene Pad	No
450	TIE PLATES	
451	Standard 13" Tie Plate for 5 1/2" Base Rail	No
2452	14" Tie Plate for 6" Base Rail	No
2453	Rolled Steel Tie Plate to Suit 5 ½" Base AREMA Rail and Pandrol Rail Clips E2055	No

Dwg No.	SCRRA Description of Title or Standard	Require
2455	Cast Shoulder to Suit Series FC1600 Fastclip	No
2460-01	Tie Plate Spiking Patterns	No
2460-02	Tie Plate Spiking Patterns For "SP" Plates	No
2463	Double Shoulder Tie Plates 5 $\frac{1}{2}$ and 6 Base Rail	No
2500	JOINT BARS AND BOLTS	
2501-01	Rail and Joint Assembly for 115 LB. "RE" Rail	No
2501-02	Rail and Joint Assembly for 115 LB. "RE" Rail for Maint. Use W/ Former SP Punch 2 1⁄2" x 6 1⁄2"x 6 1⁄2"	No
2502	Rail and Joint Assembly 136 LB. "RE" Rail	No
2503	Compromise Joints for Various Weights of Rail	No
2504	Prefabricated Bonded Insulated Joint	No
2600	DERAILS	
2601	Derail Use Requirements	No
2602	Connecting Rod Details for Derails	No
2604-01	16'-6" Double Point Derail (LH Shown)	No
2604-02	16'-6" Double Point Derail Bill of Material LH and RH	No
2610	Derailing Switch Target	No
2611	Type "B" Derail Sign	No
2612	Derail Switch Notice	No
2613	Bi-Directional Derail With Crowder	No
2614	Bi-Directional Derail With Crowder with 36E Switch Stand	No
2615	Rail Lubricator	No
2616	Steel Bumping Post Details	No
2700	SWITCH STANDS, ROLLERS AND RODS	
2701	High Star Switch Stand Double Crank - Double Headblock	No
2702	Insulated Joint Placement and Derail Location	No
2703-01	Color Indicators of Targets on Switch Stands	No
2703-02	Color Indicators of Targets on Switch Stands	No
2704	Low Star Switch Stand Double Crank - Double Headblock	No
2706	Insulated Gauge Rod	No
2707	22E Switch Stand	No
2708-01	36E & 36EH Switch Stands	No
2708-02	36E & 36EH Switch Stands	No
2709	112E High Switch Stand	No
2710	Switch Stands Hand Throw Adjustments and Installation Instructions	No
2712	Connecting Rod Assembly	No
2715	Identification Tags for Track Components	No
2800	TURNOUTS	
2801	No. 8, RBM Frog, Tangential	No
2802	No. 10, RBM Frog, Tangential	No
2803	No. 10, WSM Frog, Schwihag Rollers, Pseudo Tangential	No
2805	No. 14, WSM Frog, Schwinag Rollers, Pseudo Tangential	No
2806	No. 20, WSM Frog, Schwihag Rollers, Pseudo Tangential	No
2807	No. 24, WSM Frog, Schwihag Rollers, Pseudo Tangential	No
2808	No. 10 Crossover (Tie Pattern & Panel Between Frogs)	No
2809	No. 14 Crossover (Tie Pattern & Panel Between Frogs)	No
2810	No. 20 Crossover (Tie Pattern & Panel Between Frogs)	No
2811	No. 24 Crossover (Tie Pattern & Panel Between Frogs)	No
	TURNOUTS (MAINTENANCE)	

Table 2: SC	RRA Standard Plans	
Dwg No.	SCRRA Description of Title or Standard	Required
2901 (1-14)	No. 8, 136 LB. Double Slip Crossing with Solid Manganese Frog	No
2902 (1-20)	No. 10, 136 LB. Double Slip Crossing with Moveable Point Frog	No
2911 (1-15)	No. 8, 136 LB. R.H. RBM Frog Turnout and Crossover	No
2921 (1-16)	No. 10, 136 LB. R.H. RBM Frog Turnout and Crossover	No
	No. 10, 136 LB. R.H. SR Frog Turnout and Crossover	No
2931 (1-16)	No. 14, 136 LB. R.H. RBM Frog Turnout and Crossover	No
	No. 20, 136 LB. R.H. RBM Frog Turnout and Crossover	No
	No. 24, 136 LB. R.H. RBM Frog Turnout and Crossover	No
3000	STATION	
	STATION CONFIGURATION	
3001	Abbreviations, Legend and General Notes	No
3002	Side Platforms	No
3003	Metrolink Station Standards Center Platforms	No
3004	Locomotive and Car Elevations	No
3100	MINI HIGH PLATFORMS	
3101-01	Mini - High Platform Details	No
3101-02	Mini - High Platform Details	No
3101-03	Precast Mini-High Platform	No
3101-04	Precast Mini-High Platform Details	No
3201	Side Platforms Typical Sections	No
3202	Center Platforms Typical Sections	No
3203-01	Detectable Warning Tile and Marking Details	No
3203-02	Detectable Warning Tile and Marking Details	No
3300	STATION SIGNAGE	
3301-01	Sheet Index and General Notes	No
3301-02	Graphic Standards	No
3302-01	Station Sign Menu	No
3302-02	Station Sign Menu	No
3303-01	Station Site Typical Sign Location Plan	No
3303-02	Side Platform Typical Sign Location Plan	No
3303-03	Side Platform Typical Sign Location Plan	No
3305	Primary Identification Monument Sign - Sign Type I	No
3306	Vehicular Directional Freestanding Sign - Sign type 2	No
3307-01	Information / Restrictive Sign Copy Layouts - Sign Type 3	No
3307-02	Information / Restrictive Sign Details - Sign Type 3	No
3307-03	Information / Restrictive Sign Attachment Details - Sign Type 3	No
3307-04	Information / Restrictive Sign Exit Sign Installation Details - Sign Type 3	No
3308	Trailblazer Directional Sign - Sign Type 4	No
3309	Parking Restrictive Sign Pole Mounted - Sign Type 5	No
3310	Accessible Parking Identification Sign - Sign Type 6	No
3311	Accessible Parking Information Sign - Sign Type 7	No
3314	Track Directional Sign - Sign Type 11	No
3315	Elevator Directional Sign - Sign Type 12	No
3316	Elevator Identification Flag Mounted - Sign Type 13	No
3317	Pedestrian Warning Signs at Station Platforms - (Sign Type 14)	No
3318	Pedestrian Directional Sign Gate Mounted - Sign Type 15	No
3319	Pedestrian Directional Look Sign Post Mounted - Sign Type 16	No
3320	Station Identification Sign (Small) - Sign Type 20	No

Dwg No.	SCRRA Description of Title or Standard	Required
3321	Station Identification Sign (Large) - Sign Type 21	No
3322	CPUC Railroad Crossing Sign Post Mounted - Sign Type 22	No
3323	Accessibility Sign - Sign Type 23	No
3324	Pedestrian Restrictive / Information Sign - Sign Type 24	No
3325	ADA Station Identification Sign (Braille) - Sign Type 25	No
3326	Map / Info Kiosk Freestanding - Sign Type 26	No
3327	ADA Station Identification at Track - Sign Type 27	No
3328-01	Display Case Wall or Post Mounted - Sign Type 28	No
3328-02	Display Case Post Mounted Single Sided - Sign Type 28	No
3330-01	Train Position Marker - Sign Type 30	No
3330-02	New Train Position Marker - Sign Type 30	No
3330-02	Side Platform Typical Sign Location Plan	No
3330-04	Side Platforms Locomotive Position Marker Plan	No
3330-05	Side Platforms Locomotive Position Marker Plan	No
3330-05	Center Platform Locomotive Position Marker Plan	No
3332	Passenger Information Telephone - Sign Type 41	No
3400	STATION COMMUNICATION EQUIPMENT	INU
3400 3401-01	Metrolink Station Conduit Layout - Side Platform	No
3401-01 3401-02	Metrolink Station Conduit Layout - Side Platform	No
3402-01	Metrolink Station Conduit Layout Details - Side Platform	No
3402-01	-	
	Metrolink Station Conduit Layout Details - Center Platform	No
3403	Single Tennant Communications Equipment Room Conduit Layout	No
3404	Shared Tennant Communications Equipment Room Conduit Layout	No
3405-01	Metrolink Station TVM Pad (COMPLETE CONFIGURATION)	No
3405-02 3501-01	Metrolink Station TVM Pad (MINIMUM CONFIGURATION)	No No
3501-01 3501-02	Customer Information System (CIS) For Existing Stations	
3501-02 3501-03	Customer Information System (CIS) For Existing Stations Speaker Diagram Customer Information System (CIS) For Existing Stations LED Message Sign Diagram	No No
3501-04	Customer Information System (CIS) For Existing Stations LED Video Monitor Diagram	No
3502-01	Customer Information System (CIS) For New Stations	No
3502-02	Customer Information System (CIS) For New Stations Speaker Diagram	No
3502-03	Customer Information System (CIS) For New Stations LED Message Sign Diagram	No
3502-04	Customer Information System (CIS) For New Stations LED Video Monitor Diagram	No
3503	LED Message Sign Mounting Details	No
3504-01	LED Video Monitor Assembly Mounting Details	No
3504-02	LED Video Monitor Assembly Mounting Post Foundation Detail	No
3505	CIS Materials List	No
3601	Video Surveillance System (VSS) Mounting & Spacing Details (Typical)	No
3602	Video Surveillance System (VSS) Typical Network Line Diagram	No
3603	Video Surveillance System (VSS) Camera Field of View Details	No
3604-01	Video Surveillance System (VSS) Equipment Mounting Configurations (Typical)	No
3604-02	Video Surveillance System (VSS) Equipment Mounting Configurations (Typical)	No
3604-03	Video Surveillance System (VSS) Equipment Mounting Configurations (Typical)	No
4000	GRADE CROSSINGS	<u> </u>
1000	PEDESTRIAN FACILITIES	No
1001	Highway Rail Grade Crossing - Typical Sections	No
1002-01	Pedestrian Swing Gate Details	No
4002-02	Pedestrian Swing Gate Details	No

Dwg No.	SCRRA Description of Title or Standard	Required
4004	Pedestrian Crossing Design Consideration Table	No
1005	Pedestrian Barricade and Metal Hand Railing Details	No
4006-01	Grade Crossing Marking and Signage	No
1006-02	Grade Crossing Marking and Signage	No
4011	Pedestrian Facilities At Vehicle Crossing Entrance Gates Only	No
4012	Pedestrian Facilities At Vehicle Crossing Entrance / Exit Gates	No
4013	Pedestrian Facilities At Acute Angle Vehicle Crossing - Entrance Gates Only	No
4014	Pedestrian Facilities At Acute Angle Vehicle Crossing - Entrance / Exit Gates	No
4015	Pedestrian Facilities At Obtuse Angle Vehicle Crossing - Entrance / Exit Gates	No
4016	Pedestrian Facilities At Obtuse Angle Vehicle Crossing - Entrance Gates Only	No
4017	Typical Pedestrian Treatment Details	No
4018	Pedestrian Crossing Only	No
4020	Pedestrian / Vehicle Crossing Adjacent to Station	No
4021	Pedestrian Crossing Adjacent to Station	No
1200	PRECAST CONCRETE PANELS	
4201-01	Precast Concrete Panels for Highway - Rail Grade Crossing	No
1201-02	Precast Concrete Panels for Highway - Rail Grade Crossing	No
4201-03	Precast Concrete Panels for Highway - Rail Grade Crossing	No
4300	TEMPORARY TRAFFIC CONTROLS	
4301-01	Temporary Traffic Control At or Near Grade Crossings	No
4301-02	Temporary Traffic Control At or Near Grade Crossings	No
4302	Temporary Construction Crossing	Yes
4310	Highway - Railroad Crossing Crossbuck Sign	No
4311	Private, Pedestrian And Bicycle Railroad Grade Crossing Sign	No
4312	Private Crossing Closure Notification Sign	No
5000	RIGHT OF WAY	
5000	PIPELINE STANDARDS	
5001	Pipelines for Non-Flammable Substances Across or Along R.O.W.	Yes
5002	Pipelines for Flammable and Hazardous Substances Across or Along R.O.W.	Yes
5100	FENCE STANDARDS	
5102	Station Fencing Platform Edge Fence and Inter-track Fence	No
5103	R.O.W. Fencing High Security Ornamental Fencing	No
5104	R.O.W. Fencing (Tube Steel)	No
5105	R.O.W. Fencing (Welded Wire Mesh)	No
5106	R.O.W. Fencing (Chain Link)	Yes
5107-01	Security Access Gate Details	Yes
5107-02	Security Access Gate Details	Yes
5200	CONSTRUCTION PROJECT SIGNS	
5201	Construction Project Funding Identification Sign (Federal)	Yes
	WAYSIDE SIGNS	
5210	Details for Installing Signs at Grade	No
5211	Milepost	Yes
5212	Quarter Mile Increment Marker	Yes
5213	Permanent Speed Restriction Signs	No
5214	Warning Signs	Yes
5215	Stop, Slow and Resume Speed Flags and Signs	Yes
5216	Whistling Point / Quiet Zone Sign	No
5217	Yard Limit Sign for Terminal Tracks	No
5218-01	CP Limit Sign	No

Dwg No.	SCRRA Description of Title or Standard	Required
5218-02	CP Limit Sign Rail Markings	No
5219	Flag Stanchion	No
5222	Station Signs for Other Than CTC Territory	No
5223	Mechanical Limit and No Ride Zone Signs	No
5225	Warning Paddle	No
5229	Underground Cable Sign	Yes
5230	Marking For Track Identification	No
5000	STRUCTURES	
5000	BRIDGES	
6001 1-26	Precast / Prestressed Concrete Double Box Beam Bridges	No
5002 1-22	Precast / Prestressed Concrete Slab Beam Bridges	No
6003 1-4	General Details Precast Concrete Culverts (Single and Double Box)	No
5100	SIGNS FOR STRUCTURES	
5101	Bridge Trestle & Culvert Numbers	No
5102	Tunnel Numbers	No
5103	Radio Channel Sign	No
5104	Tunnel Exit Sign	No
300	CULVERTS	
301	End Treatments for Pipe Culverts General Notes	Yes
302-01	General Arrangement for Type A Headwalls	No
302-02	Culvert Pipe Lengths for Type A Headwalls	No
304-01	Type A-1 Headwall Framing Details	No
304-01	Type A-1 Headwall Reinforcing Details	No
304-02 304-03	Type A-1 Headwall Reinforcing Details	No
304-03 306-01	Type A-2 Headwall Framing Details	NO
306-01	Type A-2 Headwall Reinforcing Details	No
306-02 3306-03	Type A-2 Headwall Reinforcing Details	No
308-03 308-01	Type A-3 Headwall Framing Details	No
308-01 308-02	Type A-3 Headwall Reinforcing Details	No
308-02 308-03	Type A-3 Headwall Construction Sequence	No
308-03 308-04	Type A-3 Headwall Construction Sequence	No
308-04 310-01	Type A-M Headwall Framing Details	No
310-01 310-02	Type A-M Headwall Reinforcing Details	No
310-02 310-03	Type A-M Headwall Reinforcing Schedule	No
330 330	Handrail Layout and Details	Yes
6330 6340	Construction Notes & Table for Smooth & Corrugated Steel Pipe Culverts	No
<b>′000</b>	MAINTENANCE AND LAYOVER FACILITIES	110
7000	WALKWAY CLEARANCES	
7001-01	Walkway Clearance for Facilities With Under Track Pits	No
001-01	Walkway Clearance for Facilities With Onder Track Pits	No
100	FACILITIES	110
100	Dump Station Layout	No
101-01	Dump Station Vault Details	No
101-02	Dump Station Vault Aluminum Lid Details	No
101-03		
102	Flushing Manhole Details Potable Water Station	No No
/104-01	Typical Inspection Pit Plan Inspection Pit Section and Details	No
'104-02 '104-03	Inspection Pit Section and Details	No No

Dwg No.	SCRRA Description of Title or Standard	Required
7104-04	Inspection Pit Stair Plan and Section	No
104-05	Inspection Pit Stair Plan, Sections and Details	No
7105	Jacking Pad Plan, Sections and Details	No
7109	Oil Drip Collector Pans Plan, Elevation and Section	No
7110	Track Spacing at Maintenance Facilities	No
7111	Roadway Details at Maintenance Facilities	No
7112	Lighting at Maintenance Facilities Foundation and Fixture	No
7200	COMPRESSED AIR FACILITY	110
7201-01	Compressed Air Plumbing Schedule & Details	No
7201-02	Miscellaneous Equipment Foundations	No
7300	POWER SYSTEM	
7301-01	Ground Power System - Typical 600A Panel Schematic	No
301-02	Ground Power System - Panel Layouts	No
302	480V Wayside Power - Cordset Details	No
3000	SIGNAL STANDARDS	110
ES8000-01	Minimum Braking Distance Table for Freight Trains Ascending	No
ES8000-02	Minimum Braking Distance Table for Freight Trains Descending	No
ES8005-01	Freight Train Reducing Distances	No
ES8005-01	Freight Train Reducing Distances	No
ES8005-02	Freight Train Reducing Distances	No
ES8010	Passenger Train Braking and Reducing Distances	No
ES8020-01	Speed - Time - Distance Chart	No
ES8020-01	Speed - Time - Distance Chart	No
ES8030	Standard Bit Assignment	No
 ES8100-1	Check B4 U Change	No
ES8100-1	Miscellaneous Signal Circuit Plan Symbols	No
ES8105	Miscellaneous Signal Component Symbols	No
ES8106-01	Miscellaneous Signal Equipment Details	No
ES8106-02	Miscellaneous Signal Equipment Details	No
ES8106-02	Miscellaneous Signal Equipment Details	No
ES8107-01	Miscellaneous Component and Equipment Applications	No
ES8107-01	Miscellaneous Component and Equipment Applications	No
ES8110	Shelf and Vital Relay Symbols	No
ES8115	Relay Contact Symbols	No
ES8120	Plug-In Relay Base Coil & Jumper Wiring with Contact Arrangement	No
ES8125	Grade Crossing Symbols	No
ES8130	Wayside Signal Symbols and Track Configurations	No
ES8135	Switch and Derail Symbols and Configurations	No
ES8140	Circuit Controller and Electric Lock Contact Symbols	No
ES8145	Ohms Law	No
S8150	Wago and Board Wiring Details	No
S8155	Terminal Board Details	No
S8205	Typical Signal Terminal Box	No
ES8205	Cable Termination	No
ES8210 ES8215-01	Placement of Instrument Enclosure	NO
ES8215-01	Placement of Signal Foundation	NO
ES8215-02	Placement of Signal Foundation Placement of Insulated Joints	
		No
ES8223 ES8225-02	Underground Signal Conduit Installation 4'X4'X4' Concrete Pull Box Installation	No No

Dwg No.	SCRRA Description of Title or Standard	Required
ES8230	Multiple Track Wire Installation	No
S8235	Termination NBS Shunt Installation	No
S8237	Wide Band Shunt (WBS) Installation	No
S8238	Alstom (TJC-1A) Tuned Joint Coupler Track Wire Installation	No
S8240	Rail and Frog Bonding Details	No
S8245	Placement of Fouling Bridles	No
S8250	Foundation For Ped Gate Assembly	No
S8253	Foundation For Dwarf Signal	No
S8255	Foundation for Ground Wayside Signal and Warning Device Assembly	No
S8257	Wayside Cantilever Foundation 4 Mast – 16 Bolt	No
S8270	Emergency Notification Sign for Highway-Rail Grade Crossing	No
S8271	Typical Legend For Control Point Instrument Enclosure	No
S8275	Typical Power Off Indication Light	No
S8280	Grounding Details	No
S8290	Standard Signs Begin Circuit, End Circuit	No
S8291	Standard Signs Begin CTC, End CTC	No
S8292	Standard Wayside Stop Sign	No
S8300	Flashing Light Signals Assembly With or Without Gate	No
S8305	Flashing Light Signals Configuration (CPUC No. 8)	No
S8306	Flashing Light Signals with Gate Configurations (CPUC No. 9, 9-A and 9-E)	No
S8308	Typical Gate Assemblies for Pedestrian Treatments at Vehicle Crossings	No
S8309	Typical Gate Assembly for Pedestrian and Bicycle Only Crossings	No
S8320	Single Mast Crossing Cantilever Assembly 10' Thru 30' Arm Length	No
S8325	Double Mast Crossing Cantilever Assembly 30' Thru 40' Arm Length	No
S8330-01	Single Mast Cantilever Foundation 4-Bolts 12' to 26' Maximum	No
S8330-02	Double Mast Cantilever Foundation, 6 Bolts Siemens Systems	No
S8330-03	Double Mast Cantilever Foundation, 8 Bolts 27' to 40' Maximum	No
ES8335	Foundations for Cantilever Assemblies (Alternative Design for Use At Constrained Locations)	No
ES8350-01	Location Plan Flashing Light Signals with Entrance Gates	No
ES8350-02	Location Plan Flashing Light Signals with Entrance Gates, Gates, Exit Gates, Ped Gates Instrument Enclosure, Pull Box & Conduit Layout	No
S8355	Typical Location Plan Flashing Light Signals with Entrance and Exit Gates	No
S8360	Typical Location Plan Cantilever Flashers With Entrance Gates	No
S8365	Typical Location Plan Cantilever Flashers With Entrance and Exit Gates	No
S8370	Typical Location Plan Flashing Light Signals With Entrance Gates and Median	No
S8375	Typical Location Plan Flashing Light Signals With Entrance and Exit Gates And Median	No
S8380	Typical Location Plan Cantilever Flashers with Entrance Gates and Median	No
S8385	Typical Location Plan Cantilever Flashers with Entrance and Exit Gates and Median	No
ES8390	Typical Location Plan Pedestrian Flashing Light Signals With Pathways Crossing Configuration	No
ES8395	Typical Location Plan Pedestrian Flashing Light Signals with Vehicle Crossing Configuration	No
S8400	Typical Light Unit Alignment For Flashing Light Signals at Grade Crossings	No
S8405-01	Installation and Placement of Vital Inductive Loops Used With Exit Gates	No
S8405-2	Typical Vehicle Detection Radar Configurations	No
410-1	Typical Wireless Crossing Nearside Station Stop System	No
S8450-01	Typical LED Gate Arm Lamp Complete With Hardware	No
S8450-02	Typical LED Gate Arm Lamp Specifications	No
ES8460	Typical Fiber Reinforced Polyglass Gate Arm Tip Section with Vertical Striping	No

Dwg No.	SCRRA Description of Title or Standard	Required
ES8461	Typical Fiber Reinforced Polyglass Gate Arm Mid Section with Vertical Striping	No
ES8462	Typical Gate Arm Aluminum Base Section with Vertical Striping	No
ES8465	Typical 26' High Wind Gate Arm Kit with Vertical Striping	No
ES8466	Typical 32' High Wind Gate Arm Kit with Vertical Striping	No
ES8470	Typical Wind Support	No
ES8500	Typical Ground Signals with One Platform Ladder Assembly	No
ES8505	Typical Ground Signal with Two Platform Ladder Assembly	No
ES8506-01	Typical 21' Ground Signal Mast with Pole Mounted Junction Box and Predrilled for Two Signal Heads	No
ES8506-02	Typical 21' Ground Signal Mast with Pole Mounted Junction Box and Predrilled for Four Signal Heads	No
S8510	Wayside Signal Cantilever Structure	No
S8515	Wayside Signal Bridge Structure	No
S8520	Typical Dwarf Signal Assembly	No
S8525	Typical LED Color Light Signal Unit Details	No
S8530	Typical Ground Signal Junction Box	No
S8540	Typical Signal Number Plate For Use At Intermediate Signal Locations	No
S8545	Typical "P" Sign for Use At Protective Signal Locations	No
S8550	Grade Marker Typical	No
S8605	M23A Dual Control Switch Layout for No. 8, No. 10, & No. 14 Right Hand Turnouts	No
S8610	M23-A Dual Control Switch Layout for No. 8, No. 10, & No. 14 Left Hand Turnouts	No
S8615	M23-A Dual Control Switch Layout for No. 20 & No. 24 Right Hand Turnouts	No
S8620	M23-A Dual Control Switch Layout for No. 20 & No. 24 Left Hand Turnouts	No
S8621-01	M23-A Dual Control Switch Layout For Hollow Tie No. 20 Left Hand Machine and Turnout	No
S8621-02	M23A-E Dual Control Switch Layout For Hollow Tie No. 20 Left Hand Machine and Turnout	No
ES8621-03	M23-A Dual Control Switch Layout For Hollow Tie No. 20 Right Hand Machine and Turnout	No
ES8621-04	M23A-E Dual Control Switch Layout For Hollow Tie No. 20 Right Hand Machine and Turnout	No
ES8622-01	M23-A Dual Control Switch Layout For Hollow Tie No. 10 Left Hand Machine and Turnout	No
ES8622-02	M23A-E Dual Control Switch Layout For Hollow Tie No. 10 Left Hand Machine and Turnout	No
ES8622-03	M23-A Dual Control Switch Layout For Hollow Tie No. 10 Right Hand Machine and Turnout	No
ES8622-04	M23A-E Dual Control Switch Layout For Hollow Tie No. 10 Right Hand Machine and Turnout	No
ES8623-01	WCH No. 8 HBSX Bi-Directional Derail with No. 8 WCX Wheel Crowder on Wood Ties For M23-A Power Switch on Left Hand Side	No
S8623-02	WCH No. 8 HBSX Bi-Directional Derail with No. 8 WCX Wheel Crowder on Wood Ties For M23A-E Power Switch on Left Hand Side	No
S8623-03	WCH No. 8 HBSX Bi-Directional Derail with No. 8 WCX Wheel Crowder on Wood Ties For M23-A Power Switch on Right Hand Side	No
S8623-04	WCH No. 8 HBSX Bi-Directional Derail with No. 8 WCX Wheel Crowder on Wood Ties For M23A-E Power Switch on Right Hand Side	No
S8623-05	WCH No. 8 HBSX Bi-Directional Derail with No. 8 WCX Wheel Crowder on Wood Ties For Hand Throw Switch on Left Hand Side	No
	Alternative Layout For WCH No. 8 HBSX Bi-Directional Derail with No. 8 WCX Wheel	No
ES8624-01	Crowder on Wood Ties For M23-A Power Switch on Right Hand Side	
S8624-01 S8624-02	Alternative Layout For WCH No. 8 HBSX Bi-Directional Derail with No. 8 WCX Wheel Crowder on Wood Ties For M23A-E Power Switch on Right Hand Side Push – Pull Helper Rod Assembly for No. 20 Right or Left Hand Turnouts	No

Dwg No.	SCRRA Description of Title or Standard	Required
ES8635-01	Push-Pull Helper Rod Assembly Details "T" Crank & Pipe Guide Aux Connection	No
ES8635-02	Push-Pull Helper Rod Assembly Details Screw Jaw, Solid Jaw & Adjustable Link	No
ES8650	Typical Left or Right Hand Racor Type "MF" Insulated "Front" Rod for No. 8, No. 10, &	
	No. 14 Turnouts	No
ES8655	Typical Left or Right Hand Racor Type "MF" Insulated "Front" Rod for No.20 & no. 24	Nia
	Turnouts	No
ES8660	Typical Racor Type "SMJ" No. 1 Insulated "Basket" Rod for No. 8, No. 10, & No. 14	No
	Turnouts	NO
ES8665	Typical Racor Type "SMJ" No. 1 Insulated "Basket" Rod for No.20 & No. 24 Turnouts	No
ES8700	Internal Point Detector Bar For M23-A Power Switch Machine	No
ES8705	Point Detector Connecting Rod for Dual Control Switch Applications	No
ES8710	Internal Lock Rod Assembly	No
ES8715	Lock Rod Drop Lug	No
ES8720	Lock Rod Connecting Rod	No
ES8725	Switch Operating Lug (Bear Claw)	No
ES8730	Switch Operating Rod for Dual Control Switch Applications	No
ES8735	Universal Extension Plate for 14'-0" Dapped Headblock Tie	No
ES8740	14'-0" or 16'-0" Dapped Headblock Tie	No
ES8750	Various Tie Straps For Dual Control Switch Layout Applications	No
ES8755-01	Typical Pedestal Junction Box	No
ES8755-02	Typical Pedestal Junction Box	No
ES8760	Circuit Controller Placement At Hand Throw Switches	No
ES8765-01	Model 10A On 50/51 Hand Throw	No
ES8765-02	Model 10A on Meridian Hand Throw	No
ES8800	Hot Bearing Detector Layout	No
ES8803	Typical Retaining Wall for Signal Facility Instrument Enclosure with Post and Cable Fall	
	Protection	No
ES8804	Typical Retaining Wall for Signal Facility Instrument Enclosure with Chain Link Fence Fall	
	Protection	No
ES8805	Retaining Wall Block Details	No
ES8810	Dragging Equipment Detector Layout	No
ES8820-01	Typical Bridge Deck Mounted HWD	No
ES8820-02	High Water Detector Layout Line Connection	No
ES8830	High -Wide Load Detector Layout Valley Subdivision	No
ES8831	High -Wide Load Detector Layout Ventura Subdivision	No
ES8901	Signal Fiber 2" Conduit Duct Bank Trench Detail	No
ES8902	Signal Fiber Pull Box Layout & Grounding Requirements	No
ES8903	Signal Fiber Cable Tagging & Labeling	No
ES8904	Signal Fiber Logical Network & Route Diagram	No
ES8905	Signal & Crossing Fiber Network Connection Details	No
ES8906	Signal & Crossing Network Physical Fiber Layout 1 of 2	No
ES8907	Signal & Crossing Network Physical Fiber Layout 2 of 2	No
S8908	Signal Fiber Pull Box Butterfly Diagrams Configuration 1	No
ES8909	Signal Fiber Pull Box Butterfly Diagrams Configuration 2	No
ES8910	Signal Fiber Pull Box Butterfly Diagrams Configuration 3	No
ES8911	Signal Fiber Pull Box Butterfly Diagrams Configuration 4	No
ES8912	Signal Fiber Pull Box Butterfly Diagrams Configuration 5	No
ES9000	COMMUNICATIONS GENERAL	No
ES9000-01	Communications Engineering Standards Index Sheet	No

Dwg No.	SCRRA Description of Title or Standard	Required
ES9000-02	Communications Engineering Standards Index Sheet	No
S9000-03	Communications Engineering Standards Index Sheet	No
S9002	List of Acronyms	No
S9003	Index of Symbols	No
S9004	Abbreviations and Notes	No
S9005	Point to Multipoint Communications System Overview	No
100	DATA RADIO SYSTEM	
S9100	900MHz Data Radio System Overview	No
S9105	900Mhz Antenna Typical Self Support Tower Installation	No
S9110	900Mhz Antenna Typical Shelter Rooftop Installation	No
S9115	900Mhz Antenna Typical Tilt Down Tower Installation	No
S9120	900Mhz Antenna Cable Configurations	No
S9125	Typical 900Mhz ATCS Base Radio Circuits	No
S9130	Typical 900Mhz Equipment Rack	No
S9150	Ethernet Radio System Overview	No
S9155	Ethernet Radio Antenna Typical Self Support Tower Installation	No
S9160	Ethernet Radio Antenna Typical Tilt Down Tower Installation	No
S9170	Ethernet Radio Access Point Circuits	No
S9175	Ethernet Radio Subscriber Circuits	No
S9180	Typical Access Point Ethernet Radio Rack Layout	No
S9185	Typical Ethernet Radio Subscriber Wall Detail	No
200	VOICE RADIO SYSTEM	
S9200	Metrolink Voice Radio System Subscribers	No
S9205	VHF Antenna Typical Self Support Tower Installation	No
S9210	VHF Antenna Typical Shelter Rooftop Installation	No
S9215	VHF Antenna Cable Configurations	No
S9220-01	Typical VHF Base Radio Circuits	No
S9220-02	Typical PBX Base Radio Circuits	No
ES9230-01	Typical VHF Equipment Rack	No
ES9230-02	Typical PBX Equipment Rack	No
9250	SECURITY DATA NETWORK	
S9250	Security Data Network System Overview	No
S9255-01	Typical SDN System Circuits Location 1 Example	No
ES9255-02	Typical SDN System Circuits Location 2 Example	No
S9255-03	Typical SDN System Circuits Location 6 Example	No
S9260	Typical SDN Equipment Rack	No
9300	PTC RADIO SYSTEM	
ES9300	Base Station Sites Mountain - Top Site Details Positive Train Control System Overview	No
S9305	PTC Antenna Typical Self Support Tower Installation	No
S9310	PTC Antenna Typical Tilt Down Tower Installation	No
S9315	PTC System Antenna Configurations	No
S9320-01	Typical PTC Circuits – Base Station	No
S9320-02	Typical PTC Circuits – Control Point	No
S9320-03	Typical PTC Circuits – Intermediate Signal	No
S9320-04	Typical PTC Circuits – Nearside Signal	No
S9325-01	Typical PTC Equipment Rack – Base Station	No
S9325-02	Typical PTC Equipment Rack and Wall Layout - Control Point	No
S9325-03	Typical PTC Equipment Rack and Wall Layout – Intermediate Signal	No
S9325-04	Typical PTC Equipment Rack and Wall Layout – Nearside Signal	No

Dwg No.	SCRRA Description of Title or Standard	Required
ES9330	PTC Initialization Typical Tilt Down Tower Installation	No
ES9335	PTC Initialization Access Point Circuits	No
ES9340	PTC Initialization Enclosure Components	No
9400	COMMUNICATIONS SHELTER	NO
ES9400-01	Typical Communications Single Tenant Floor Plan	No
ES9400-01	Single Tenant AC Panel Circuit Schedule	No
ES9405-02	Typical Communications Dual Tenant Floor Plan	No
ES9405-01	Dual Tenant AC Panel Circuit Schedule	No
ES9410	Pre Fab Shelter Ceiling Plan and Panel Connection Details	No
ES9415	Typical Pre Fab Shelter Exterior Elevation Views	No
ES9420	Pre Fab Shelter Foundation and Entrance Conduit Details	No
S9425	Pre Fab Shelter Grounding Scheme	No
S9430	Typical Wall B Utilization	No
ES9435	Equipment Rack for Wayside and Secure Mountain Top Sites	No
	Typical Ladder Equipment Rack Attachment and Cable Management	No
	Typical Power Distribution Circuits	No
ES9445-01	Typical Power Monitoring Circuits	No
ES9445-02	Typical Communication Shelter Alarm Circuits	No
ES9450	Remote Monitor Camera Systems	No
LS9455	Typical DC Battery Plants	No
S9460	Typical Communications Power Rack	No
159400 1500	FIBER OPTIC - SYSTEM	
ES9500	Fiber Optic System Overview	No
ES9505	Train Control and CIS Network Configuration and Cabling Requirements	No
S9510-01	Fiber Cable and Termination Requirements	No
S9510-01	Fiber Distribution Panel Termination Detail	No
ES9510-03	Fiber Distribution Panel Splicing Standards and Trace Wire Cable Detection	No
S9515	Train Control Fiber Optic Network Links and Typical Port Assignments	No
S9520-01	Fiber Optic Systems Circuits Location 1 Example	No
S9520-02	Fiber Optic Systems Circuits Location 2 Example	No
ES9520-02	Fiber Optic Systems Circuits Location 6 Example	No
S9525	Typical Fiber Optic System Equipment Rack	No
S9530-01	Typical Cable Run List	No
S9530-02	Typical Cable Label Scheme	No
600	FIBER OPTIC – OUTSIDE PLANT	No
ES9600-01	Backhaul Fiber Logical Network and Route Diagram	No
S9600-02	Backhaul Fiber Logical Network and Route Diagram	No
S9605-02	Communications Fiber Network Connection Details	No
ES9605-01	Communications Fiber Network Connection Details	No
S9605-02	Communications Fiber Network Connection Details	No
S9610-01	Backhaul Working Cable Physical Fiber Layout (Buffers 1-6)	No
S9610-02	Backhaul Working Cable Physical Fiber Layout (Buffers 1-6)	No
S9610-03	Backhaul Working Cable Physical Fiber Layout (Buffers 1-6)	No
S9610-04	Backhaul Working Cable Physical Fiber Layout (Buffers 1-6)	No
S9611-01	Backhaul Protect Cable Physical Fiber Layout (Buffers 1-6)	No
ES9611-02	Backhaul Protect Cable Physical Fiber Layout (Buffers 1-6)	No
S9611-02	Backhaul Protect Cable Physical Fiber Layout (Buffers 1-6)	No
S9611-04	Backhaul Protect Cable Physical Fiber Layout (Buffers 1-6)	No
S9615	Fiber Route Typical Placement Future Double Track Alignment	No

Dwg No.	SCRRA Description of Title or Standard	Required
ES9620	Communications Fiber Conduit Depth and Construction	No
S9625	Pull Box and Conduit Placement	No
S9630	Cable Depths Around Culverts and Ditches	No
S9635	Pull Box Placement and Service Loop Details	No
S9640	Communications Fiber Pull Box Layout	No
S9645	Communications Fiber Cable Tagging and Labeling	No
S9650-01	Communications Fiber Pull Box Butterfly Diagrams Configuration 1	No
S9650-02	Communications Fiber Pull Box Butterfly Diagrams Configuration 2	No
S9655-01	Engineering Specifications Fiber Cable Marker Installation	No
S9655-02	Engineering Specifications Fiber Cable Marker Installation	No
700	MICROWAVE RADIO SYSTEM AND COMPOUND	
S9700	Microwave Radio System Overview	No
S9705	Microwave Compound Layout	No
S9710	Microwave Antenna Typical Self Support Tower Installation	No
S9715	Microwave Antenna Typical Monopole Installation	No
S9720	Microwave Compound Typical Grounding Plans	No
S9725	Microwave Antenna Cable Configuration	No
S9730	Standby Generator Electric System Overview	No
S9735	Typical Dehydrator Alarm Circuits	No
S9740	Microwave Radio Circuits	No
S9745	Typical Microwave Radio Equipment Wall Detail	No
S9750	Typical Microwave Radio Equipment Rack	No
800	CUSTOMER INFORMATION SYSTEMS - STATIONS	
S9800	Customer Information Systems Overview	No
S9805-01	Station Single Platform Typical CIS	No
S9805-02	Station Single Platform Typical CIS	No
S9810-01	Station Double Platform Typical CIS	No
S9810-02	Station Double Platform Typical CIS	No
S9815-01	Typical CIS Controller Circuits	No
S9815-02	Typical CIS Controller Circuits	No
S9820	Typical CIS Public Address Circuits	No
S9825-01	Typical CIS LED Sign Circuits	No
S9825-02	Typical CIS LED Sign Circuits	No
S9830	Typical LED Monitor Enclosure Circuits	No
S9835	Typical CIS Equipment Rack	No
S9840-01	CIS LED Monitor Enclosure with AC and Post Assembly	No
S9840-02	CIS LED Monitor Enclosure Assembly Drawing	No
850	VIDEO SURVEILLANCE SYSTEM	
S9850	Video Surveillance System Overview	No
S9855	Typical VSS Circuits	No
S9860	Typical VSS Equipment Rack	No
S9865	Typical VSS Pole Mounted Enclosure	No
900	PRODUCTS	
S9900	Products Data Radio Systems	No
S9905	Products Voice Radio System	No
S9910	Products Security Data Network	No
S9915	Products PTC Radio System	No
S9920	Products Communications Shelter	No
S9925	Products Fiber Optic System	No

Table 2: SC	Table 2: SCRRA Standard Plans		
Dwg No.	SCRRA Description of Title or Standard	Required	
ES9930	Products Fiber Optic Outside Plant	No	
ES9935	Products Microwave Systems	No	
ES9940	Products Customer Information Systems	No	
ES9945	Products Video Surveillance Systems	No	

Table 3: Other Governing Documents*
Description or Title
Project Documents
Design Plans Issued for Construction
Project Specifications
Hydrology and Hydraulics Report
Geotechnical Memorandum
Stormwater Pollution Prevention Plan Permit (SWPPP) / National Pollutant Discharge Elimination System (NPDES) Permit
Project Environmental Reports
Other Documents
AASHTO Manuals and Publications
AREMA Manuals and Publications
Cal/OSHA Manuals and Publications
Caltrans Standard Plans and Specifications
California Building Code
FRA 49 Code of Federal Regulations
Standard Specifications and Plans for Public Works Construction ("Greenbook")
SCRRA Track Maintenance Manual

\*List is not comprehensive and other documents and permits may be required as part of the project

## END OF SECTION 01 11 13

## SECTION 01 11 16

#### WORK BY SCRRA

The following are modifications to the 2022 SCRRA Standard Specifications:

#### PART 1 – GENERAL

DELETE the following sections:

#### 1.04 AUTHORITY FURNISHED LABOR

#### 3.01 ARRANGEMENT FOR AUTHORITY FURNISHED LABOR

MODIFY Part 4 as follows:

#### PART 4 – MEASUREMENT AND PAYMENT

- A. SCRRA fees associated with Signal and Communications line location mark outs shall be paid by the contractor.
- B. SCRRA fees associated with SCRRA standard plan review, SCRRA administration, SCRRA staff time contingency, and SCRRA inspection shall be paid by the Project Sponsor.
- C. Related costs for compliance with all other SCRRA requirements, including but not limited to additional insurance, labor hours related to preparing/obtaining permits, attending training, re-submitting documents if required, delays in obtaining the right-of-entry, shall be considered as included in the prices in the Bid for the various items of work and no additional compensation will be allowed.

## END OF SECTION 01 11 16

## SECTION 01 14 00

#### WORK RESTRICTIONS

The following are modifications to the 2022 SCRRA Standard Specifications:

#### PART 1 – GENERAL

ADD paragraph 1.10F as follows:

#### 1.10 WORK WINDOWS

F. Project Specific Work Windows

SCRRA has established an Exclusive Work Window calendar for each subdivision. Contractors are required to adhere to these specified Exclusive Work Windows and no additional Exclusive Work Windows will be granted. The Exclusive Work Windows that apply to this Contract are as follows:

- 1. Work within SCRRA right-of-way within 25 feet from centerline of active tracks shall be performed under Form B protection. Form B Work Windows will be available between the hours of 8:00 PM to 5:00 AM Monday through Friday. Metrolink cannot guarantee the hours between 8:00 PM and 5:00 AM Monday through Friday will be absent of rail traffic, interruption, and delay. Work may be interrupted for up to 2 hours in any one work shift within right-of-way, during the Contractor's nightly work shift. All indirect and direct costs for these anticipated nightly delays shall be included in the Contract price and no additional cost due to the impact of these delays will be accepted by SCRRA.
- 2. Exclusive Track Windows will occur between the hours of 10:00 PM Friday to 5:00 AM the following Monday based on the Exclusive Work Window calendar developed by SCRRA.

## END OF SECTION 01 14 00

#### SECTION 01 14 19

#### COORDINATION WITH UTILITIES

The following are modifications to the 2022 SCRRA Standard Specifications:

## PART 3 – EXECUTION

REPLACE paragraph 3.03A.2 and ADD paragraph 3.03A.8 & 9 as follows:

#### 3.03 CONTRACTOR FIELD WORK REQUIREMENTS

- 2. The Contractor shall notify Southern California Gas Company Distribution (SCG) whenever there are any excavation activities within ten (10) feet of high-pressure gas facilities and within a minimum of five (5) working days prior to proposed work to coordinate for SCG representative(s) to be onsite. The contractor shall hand-dig within 5 feet of any natural gas pipeline.
- 8. The Contractor shall notify Verizon's One Call System a minimum of fortyeight (48) hours prior to construction. In order to avoid a potential conflict, construction shall maintain a minimum of twenty-four (24) inches of vertical clearance when crossing Verizon Business facilities and sixty (60) inches of horizontal clearance when running lines are parallel to Verizon facilities.
- 9. The Contractor shall coordinate potholing activities with Moulton Niguel Water District to confirm facility elevations and no conflict prior to beginning work for the Concrete U-Channel near MP 193. Mouton Niguel Water District shall be included in the preconstruction meeting for this area of the project.

ADD the following exhibits "Project Utility Responsibilities":

#### PROJECT UTILITY RESPONSIBILITIES

PROTECT IN PLACE EXISTING UTILITIES THROUGHOUT PROJECT LIMITS

REFERENCE SPECIFICATION SECTIONS: 01 14 00, 01 14 16, 01 33 00, 01 35 23, 01 78 39, 33 05 23

CONTACTS AND RESPONSIBILITIES

Name of Utility: AT&T

Contact Person: Bob Fleisher

Address: 1452 Edinger Ave, 3<sup>rd</sup> Floor, Tustin, CA 92780

**Phone:** 949-229-9640

Email: rf3259@att.com

PERFORMANCE RESPONSIBILITY

PAYMENT RESPONSIBILITY

N/A

N/A

N/A

Design done by: <u>N/A</u>

Construction by: <u>N/A</u>

Inspection by: <u>N/A</u>

NOTES:

## PROJECT UTILITY RESPONSIBILITIES

PROTECT IN PLACE EXISTING UTILITIES THROUGHOUT PROJECT LIMITS

REFERENCE SPECIFICATION SECTIONS: 01 14 00, 01 14 16, 01 33 00, 01 35 23, 01 78 39, 33 05 23

CONTACTS AND RESPONSIBILITIES

Name of Utility: City of Mission Viejo

Contact Person: Mark Chagnon

Address: 200 Civic Center, Mission Viejo, CA 92691

**Phone:** 949-470-3091

Email: mchagnon@cityofmissionviejo.org

PERFORMANCE RESPONSIBILITY

Design done by: <u>N/A</u>

Construction by: <u>N/A</u>

Inspection by: <u>N/A</u>

NOTES:

N/A

PAYMENT RESPONSIBILITY

<u>N/A</u>

N/A

#### **PROJECT UTILITY RESPONSIBILITIES**

PROTECT IN PLACE EXISTING UTILITIES THROUGHOUT PROJECT LIMITS

REFERENCE SPECIFICATION SECTIONS: 01 14 00, 01 14 16, 01 33 00, 01 35 23, 01 78 39, 33 05 23

CONTACTS AND RESPONSIBILITIES

Name of Utility: County of Orange

**Contact Person:** Alex Gonzalez

Address: 601 North Ross Street, 4th Floor, Santa Ana, CA 92701

Phone: 714-955-0313 / 714-722-0611

**Email:** alejandro.gonzalez@ocpw.ocgov.com

PERFORMANCE RESPONSIBILITY

Design done by: <u>N/A</u>

Construction by: <u>N/A</u>

Inspection by: <u>N/A</u>

NOTES:

N/A

PAYMENT RESPONSIBILITY

N/A

N/A

## **PROJECT UTILITY RESPONSIBILITIES**

PROTECT IN PLACE EXISTING UTILITIES THROUGHOUT PROJECT LIMITS

REFERENCE SPECIFICATION SECTIONS: 01 14 00, 01 14 16, 01 33 00, 01 35 23, 01 78 39, 33 05 23

CONTACTS AND RESPONSIBILITIES

Name of Utility: COX Communications

Contact Person: Sara Dufour

Address: 5159 Federal Blvd, San Diego, CA 92610

Phone: 619-266-5480 / 519-322-1091

Email: sara.dufour@cox.com

PERFORMANCE RESPONSIBILITY

Design done by: N/A

Construction by: <u>N/A</u>

Inspection by: <u>N/A</u>

NOTES:

N/A

N/A

N/A

PAYMENT RESPONSIBILITY

#### **PROJECT UTILITY RESPONSIBILITIES**

PROTECT IN PLACE EXISTING UTILITIES THROUGHOUT PROJECT LIMITS

REFERENCE SPECIFICATION SECTIONS: 01 14 00, 01 14 16, 01 33 00, 01 35 23, 01 78 39, 33 05 23

CONTACTS AND RESPONSIBILITIES

Name of Utility: El Toro Water District

Contact Person: Rory Harnisch

Address: 24251 Los Alisos Blvd, Lake Forest, CA 92630

Phone: 949-837-7050 x251 / 949-415-4032

Email: Engineering@etwd.com

PERFORMANCE RESPONSIBILITY

Design done by: <u>N/A</u>

Construction by: <u>N/A</u>

Inspection by: <u>N/A</u>

NOTES:

N/A

N/A

N/A

PAYMENT RESPONSIBILITY
# PROJECT UTILITY RESPONSIBILITIES

PROTECT IN PLACE EXISTING UTILITIES THROUGHOUT PROJECT LIMITS

REFERENCE SPECIFICATION SECTIONS: 01 14 00, 01 14 16, 01 33 00, 01 35 23, 01 78 39, 33 05 23

CONTACTS AND RESPONSIBILITIES

Name of Utility: Irvine Ranch Water District

Contact Person: Belisario Rios

Address: 15600 Sand Canyon Avenue, Irvine, CA 92618

**Phone:** 949-453-5300

Email: plancheck@irwd.com

PERFORMANCE RESPONSIBILITY

PAYMENT RESPONSIBILITY

N/A

N/A

N/A

Design done by: <u>N/A</u>

Construction by: <u>N/A</u>

Inspection by: <u>N/A</u>

# **PROJECT UTILITY RESPONSIBILITIES**

PROTECT IN PLACE EXISTING UTILITIES THROUGHOUT PROJECT LIMITS

REFERENCE SPECIFICATION SECTIONS: 01 14 00, 01 14 16, 01 33 00, 01 35 23, 01 78 39, 33 05 23

CONTACTS AND RESPONSIBILITIES

Name of Utility: Kinder-Morgan

Contact Person: Rafel Mogollon

Address: 1001 Louisiana Street, Houston, Texas 77002

**Phone:** 713-420-2393

**Email:** KMEncroachmentsPacific@kindermorgan.com

PERFORMANCE RESPONSIBILITY

Design done by: N/A

Construction by: <u>N/A</u>

Inspection by: <u>N/A</u>

NOTES:

N/A

N/A

N/A

PAYMENT RESPONSIBILITY

# PROJECT UTILITY RESPONSIBILITIES

PROTECT IN PLACE EXISTING UTILITIES THROUGHOUT PROJECT LIMITS

REFERENCE SPECIFICATION SECTIONS: 01 14 00, 01 14 16, 01 33 00, 01 35 23, 01 78 39, 33 05 23

CONTACTS AND RESPONSIBILITIES

Name of Utility: Lumen/Qwest/Level 3

Contact Person: Bryan D. Church

Address: 1550 Marlborough Ave, Suite 100, Riverside, CA 92507

**Phone:** 951-203-4415

Email: bryan.church@lumen.com

PERFORMANCE RESPONSIBILITY

PAYMENT RESPONSIBILITY

N/A

N/A

N/A

Design done by: <u>N/A</u>

Construction by: <u>N/A</u>

Inspection by: <u>N/A</u>

## PROJECT UTILITY RESPONSIBILITIES

PROTECT IN PLACE EXISTING UTILITIES THROUGHOUT PROJECT LIMITS

REFERENCE SPECIFICATION SECTIONS: 01 14 00, 01 14 16, 01 33 00, 01 35 23, 01 78 39, 33 05 23

CONTACTS AND RESPONSIBILITIES

Name of Utility: Moulton Niguel Water District

Contact Person: Mark Mountford

Address: 26161 Gordon Road, Laguna Hills, CA 92653

**Phone:** 949-831-2500 / 949-425-3555 / 949-795-2251

Email: MMountford@mnwd.com

PERFORMANCE RESPONSIBILITY

Design done by: <u>N/A</u>

Construction by: <u>N/A</u>

Inspection by: <u>N/A</u>

NOTES:

N/A

PAYMENT RESPONSIBILITY

<u>N/A</u>

N/A

# PROJECT UTILITY RESPONSIBILITIES

PROTECT IN PLACE EXISTING UTILITIES THROUGHOUT PROJECT LIMITS

REFERENCE SPECIFICATION SECTIONS: 01 14 00, 01 14 16, 01 33 00, 01 35 23, 01 78 39, 33 05 23

CONTACTS AND RESPONSIBILITIES

Name of Utility: MCI Verizon

Contact Person: Pete Bologna

Address: 5771 Copley Drive, San Diego, CA 92111

**Phone:** 951-667-9469

Email: Peter.III.Bologna@verizon.com

PERFORMANCE RESPONSIBILITY

Design done by: <u>N/A</u>

Construction by: N/A

Inspection by: <u>N/A</u>

NOTES:

N/A

PAYMENT RESPONSIBILITY

<u>N/A</u>\_\_\_\_\_

N/A

# **PROJECT UTILITY RESPONSIBILITIES**

PROTECT IN PLACE EXISTING UTILITIES THROUGHOUT PROJECT LIMITS

REFERENCE SPECIFICATION SECTIONS: 01 14 00, 01 14 16, 01 33 00, 01 35 23, 01 78 39, 33 05 23

CONTACTS AND RESPONSIBILITIES

Name of Utility: Southern California Edison

**Contact Person:** Gilbert Aceves

Address: 14155 Bake Pkwy, Irvine, CA 92618

**Phone:** 909-548-7249

Email: gilbert.aceves@sce.com

PERFORMANCE RESPONSIBILITY

Design done by: N/A

Construction by: <u>N/A</u>

Inspection by: <u>N/A</u>

NOTES:

N/A

N/A

PAYMENT RESPONSIBILITY

N/A

# PROJECT UTILITY RESPONSIBILITIES

PROTECT IN PLACE EXISTING UTILITIES THROUGHOUT PROJECT LIMITS

REFERENCE SPECIFICATION SECTIONS: 01 14 00, 01 14 16, 01 33 00, 01 35 23, 01 78 39, 33 05 23

CONTACTS AND RESPONSIBILITIES

Name of Utility: San Diego Gas and Electric

Contact Person: Dolphus Davis

Address: 662 Camino De Los Mares, San Clemente, CA 92673

**Phone:** 949-246-8511

Email: DDDavis@sdge.com

PERFORMANCE RESPONSIBILITY

PAYMENT RESPONSIBILITY

Design done by: <u>N/A</u>

Construction by: <u>N/A</u>

Inspection by: <u>N/A</u>

PAYMENT RESPOnsibility

<u>N/A</u>

<u>N/A</u>

<u>N/A</u>

# PROJECT UTILITY RESPONSIBILITIES

PROTECT IN PLACE EXISTING UTILITIES THROUGHOUT PROJECT LIMITS

REFERENCE SPECIFICATION SECTIONS: 01 14 00, 01 14 16, 01 33 00, 01 35 23, 01 78 39, 33 05 23

CONTACTS AND RESPONSIBILITIES

Name of Utility: Santa Margarita Water District

Contact Person: Betsy Parkinson

Address: 26111 Antonio Pkwy, Las Flores, CA 92688

**Phone:** 949-459-6612 / 949-433-6933

Email: engcounter@smwd.com

PERFORMANCE RESPONSIBILITY

PAYMENT RESPONSIBILITY

N/A

N/A

N/A

Design done by: <u>N/A</u>

Construction by: N/A

Inspection by: <u>N/A</u>

## PROJECT UTILITY RESPONSIBILITIES

PROTECT IN PLACE EXISTING UTILITIES THROUGHOUT PROJECT LIMITS

REFERENCE SPECIFICATION SECTIONS: 01 14 00, 01 14 16, 01 33 00, 01 35 23, 01 78 39, 33 05 23

CONTACTS AND RESPONSIBILITIES

Name of Utility: Southern California Gas

Contact Person: Christopher Keevern

Address: 1919 S State College Blvd, Anaheim, CA 92806

**Phone:** 1-877-238-0092

Email: CKeevern@socalgas.com

PERFORMANCE RESPONSIBILITY

PAYMENT RESPONSIBILITY

N/A

N/A

N/A

Design done by: <u>N/A</u>

Construction by: N/A

Inspection by: <u>N/A</u>

# SECTION 01 23 00

# **OPTIONS**

The following are modifications to the 2022 SCRRA Standard Specifications:

# PART 1 – GENERAL

ADD paragraphs to 1.01 as follows:

### 1.01 SUMMARY

The Authority will evaluate an Option for the Contractor to propose a precast u-channel in place of the cast-in-place channel as shown in the Contract Plans. The precast u-channel shall maintain a similar size and shape as shown on the Contract Plans along with the adjacent project features.

The Contractor shall follow the submittal procedures as outlined in Section 01 33 00.

The precast u-channel shall be designed by a licensed professional engineer in the State of California and submitted to the Engineer for approval.

Both cast-in-place and precast u-channel options will require cast-in-place features and the beginning and end of the u-channel, as listed in Schedule 1 of the Schedule of Quantities and Prices.

The Contractor shall develop Schedule 2 and Schedule 3 of the Schedule of Quantities and Prices for evaluation by the Authority of the section of u-channel that has the option to be cast-in-place or precast.

# END OF SECTION 01 23 00

# SECTION 01 35 23

# SITE SAFETY REQUIREMENTS

The following are modifications to the 2022 SCRRA Standard Specifications:

# PART 1 – GENERAL

ADD section 1.11 as follows:

### 1.11 CONTRACTOR PROVIDED ROADWAY WORKER IN CHARGE

- A. The Contractor shall provide an SCRRA approved Roadway Worker in Charge (RWIC), and 49 CFR Part 213.7 qualified personnel to monitor the interface between the Contractor's work and train movements and facilitate temporary rearrangements or tracks out of service.
- B. The Contractor shall supply up to 150 days of RWIC for the project.
- C. Schedule of Fees are subject to change at any time and may be found on the Metrolink website at:

https://metrolinktrains.com/globalassets/about/engineering/scrra\_schedule\_of\_fees\_f or third party construction.pdf

MODIFY Part 4 as follows:

#### 4.01 MEASUREMENT

- A. ALLOWANCE Roadway Worker in Charge will be measured by the unit or fraction thereof defined in the Schedule of Fees mentioned above and completed with the Contract Documents and as measured by the Contractor and verified by the Authority or their designee.
- B. Remaining work of this Section is considered incidental to Work under other payment items and no separate measurement will be made to the Contractor for Work of this Section.

#### 4.02 PAYMENT

- A. ALLOWANCE The Roadway Worker in Charge will be paid from an allowance included on the approved Schedule of Quantities and shall include all labor, training, and equipment. Work of this section shall include all training, permitting, mark outs and incidentals to comply with the Site Safety Requirements.
- B. Remaining work of this Section is considered incidental to Work under other payment items and no separate payment will be made to the Contractor for Work of this Section.

# END OF SECTION 01 35 23

# SECTION 01 43 23

# CONTRACTOR QUALIFICATIONS AND REQUIREMENTS

The following shall replace Section 01 43 23 of the 2022 SCRRA Standard Specifications:

# PART 1 - GENERAL

#### 1.01 SUMMARY

This Section outlines requirements and provisions to which the Contractor shall provide professional construction staff and equipment capable of safely executing the Work required by these Contract Documents part of which are on an operating railroad system, with little or no disruption to the passenger/commuter and freight operations, as well as other public facilities.

### 1.02 RELATED REQUIREMENTS

- A. Section 01 14 16, Coordination with SCRRA
- B. Section 01 31 00, Project Management and Coordination
- C. Section 01 35 23, Site Safety Requirements

## 1.03 GOVERNING REGULATIONS

- A. SCRRA: Maintenance of Way Operating Rules
- B. SCRRA: Track Maintenance Manual, FRA: Title 49 CFR Part 213 and Part 214
- C. Cal/OSHA: California Occupational Safety and Health Administration Regulations
- D. CPUC: California Public Utility Commission General Orders

#### 1.04 SUBMITTALS

A. The Contractor shall submit the resumes for all personnel listed herein to the Authority within 15 days after the Award. Each resume shall provide sufficient detail to demonstrate compliance with the appropriate specifications. Submit the number of each classification of employee to be assigned to the Work and the duration of their assignments.

- B. The Authority will review the submitted personnel resumes to determine compliance with all specified requirements. The Contractor shall not substitute or remove Authority approved personnel from the Contract without prior approval from Authority and shall not resubmit personnel that are deemed unacceptable by the Authority. The Authority must be notified and approve thirty (30) Days in advance, Contractor's planned substitution or removal of key personnel. Any removal or substitution of personnel without SCRRA consent shall be identified as contractual noncompliance. The Contractor shall submit a list of the equipment proposed to be used to the Authority for approval. This list shall have sufficient detail to demonstrate compliance with the appropriate Specification Sections.
- C. The Contractor shall submit a list of the equipment proposed to be used to the Authority for approval, within 15 days after the Award. This list shall have sufficient detail to demonstrate compliance with the appropriate Specification sections, regulatory authorities, and Railroad Operators.
- D. All equipment other than railroad track and ballast equipment shall be equipped with multi tonal directional "white noise" backup alarm that complies with OSHA Regulation 1926.601(b)(4). The Contractor shall submit a list of the equipment proposed to be used to the Authority for approval prior to NTP.
- E. Contractor Qualifications: The Contractor shall submit a company resume of all projects the Contractor has performed within a live railroad operating environment. Project experience shall include Class 1 railroads or Commuter and Passenger Rail. The Contractor shall submit a resume of performing Contract Work as a prime contractor on live active railroads for a minimum of 3 projects.
- F. The Contractor or their designated on-site personnel shall have attended a South Coast Air Basin Fugitive Dust Control Class within the last two years (SCAQMD Rule 403).

# 1.05 RAILROAD CONSTRUCTION PROJECT MANAGER

- A. The Contractor shall have a Railroad Construction Project Manager who will manage and coordinate the overall aspects of the track, site civil, systems, and structure construction. The Railroad Construction Project Manager's qualifications and experience must include the following:
  - 1. At least five years of progressively more responsible engineering, construction, and maintenance experience on a wide variety of Railroad projects for a Class 1 or Commuter Railroad. The Project Manager shall have experience on at least three (3) Class 1 or Commuter Railroad projects, managing construction related activities in an active railroad operating environment with moderate to heavy traffic and limited work windows.
  - 2. Knowledge of FRA standards and qualified under FRA Track Safety Standards, Part 213.7, applicable CPUC General Orders, the General Code of Operating Rules, SCRRA Track Maintenance, Right-of-Way, and Structures Engineering Instructions, SCRRA Standard Plans, and Railroad Roadway Worker Protection rules and regulations.

- 3. A demonstrated ability to work safely and supervise individuals in safe work.
- 4. Previous positions and experience supervising and planning work activities of construction superintendents, project engineers, and support personnel foreman and crews.
- 5. The ability to read and understand track, bridge, station, construction plans and specifications, and SSWPs, and to develop and work from construction schedules.
- B. The Railroad Construction Project Manager must be located at the Contractor's construction field office; and be able to respond immediately to emergency or problem calls, seven days a week, 24 hours a day.
- C. This Railroad Construction Project Manager shall have the necessary authority to receive and promptly execute instructions and orders from the Authority or its authorized representatives. The Project Manager shall not be replaced without advance approval by the Authority. Any replacement Project Manager shall be subject to the approval of the Authority.

### 1.06 MACHINE OPERATORS

The Contractor shall provide qualified Machine Operators and the Contractor will not be allowed to operate any equipment within the Authority Right-of-Way until the following requirements are met:

- A. Machine Operators qualifications and experience must include knowledge of railroad methods of track construction and maintenance under traffic.
- B. Machine Operators shall be qualified under SCRRA's General Code of Operation Rules (GCOR) and Roadway Worker Protection rules.
- C. Must have a valid California Class "CA" driver's license with no more than three moving violations and no DUI's in any state within the last three years.
- D. Must pass a pre-employment physical examination including a drug and alcohol test.
- E. Ability to work outdoors in all weather conditions, to lift objects weighing a minimum of 50 lbs. and must have ability to distinguish colors and to hear warning signals and radio and telephone devices.

# 1.07 RAILROAD TRACK EQUIPMENT REPAIRER

- The Contractor shall have a Railroad Track Equipment Repairer to perform Α. inspection, analysis, repair and maintenance of several types of heavy equipment including rail-mounted tamping and surfacing machines, ballast regulators, compactors, and brooms, rail mounted all-terrain cranes, rail mounted heavy duty trucks equipped with hydraulic cranes and log loaders, and all-terrain construction equipment including end loaders, backhoe tractors, bulldozers, and road graders. The Railroad Track Equipment Repairer shall lubricate working parts, change engine and hydraulic oil and filters, clean and change air filters, tighten bolts, inspect and adjust fluid levels, belt tension, and dimensioned measurements (e.g. cross level of track), and perform safety inspections of equipment per FRWS using wrenches, screwdrivers, and other small hand and power tools. The Railroad Track Equipment Repairer shall performs heavy repair, analysis, and component exchanges in accordance with manufacturer's recommendations using power and hand tools, hydraulic booms and jacks, and electronic measuring and testing devices and shall establish and implement a schedule of preventive maintenance for equipment, order repair components and parts, and maintain an inventory of consumable parts and supplies that minimizes the time equipment is out of service for repairs and maintenance.
- B. Railroad Track Equipment Repairer qualifications and experience must include the following:
  - 1. Five years experience in maintenance of heavy equipment and three years experience in the maintenance of railroad track construction and/or maintenance equipment including diesel engine, hydraulic system, electronic control, surfacing tamping machine, and rail guide wheel equipment.
  - 2. Knowledge of safe and proper procedures for operating this equipment in accordance with both the FRWS and the manufacturer's recommendations.
  - 3. Knowledge of FRWS and the ability to be Qualified on Authority's examinations for the GCOR related to these regulations within two weeks of Limited NTP.
  - 4. Ability to complete work under time pressures and to maintain composure under the stress of emergency situations.
  - 5. Must have a valid California Class "A" driver's license with no more than 3 moving violations and no DUI's in any state within the last 3 years.
  - 6. Must pass a pre-employment physical examination including a drug and alcohol test.
  - 7. Ability to work outdoors in all weather conditions, to lift objects weighing a minimum of 50 lbs and must have the ability to distinguish colors and to hear warning signals and radio and telephone devices.

8. Ability to communicate in the written and verbal English language.

### 1.08 RAILROAD TRACK EQUIPMENT REPAIRER HELPER

- A. The Contractor shall have a Railroad Track Equipment Repairer Helper (Helper) to work under the supervision of the Railroad Track Equipment Repairer. The Helper may work independently or as a member of a crew as directed only for the purpose of servicing and maintaining equipment.
- B. Railroad Track Equipment Repairer Helper qualifications and experience must include the following:
  - 1. One to three years experience in the maintenance and repair of construction equipment or small work equipment.
  - 2. Knowledge of safe and proper procedures for operating this equipment in accordance with both FRWS and the manufacturer's recommendations.
  - 3. Knowledge of safe and efficient manipulation of equipment and tools to assist in track, structures or right-of-way related maintenance tasks.
  - 4. Knowledge of FTSS and FRWS and the ability to be Qualified on Authority's examinations for the GCOR related to these regulations within two weeks of Start Date.
  - 5. Ability to complete work under time pressures and to maintain composure under the stress of emergency situations.
  - 6. Must have, or obtain within two weeks of Start Date, a valid California Class "A" driver's license with no more than 3 moving violations and no DUIs within the last 3 years.
  - 7. Must pass a pre-employment physical examination including a drug and alcohol test.
  - 8. Ability to work outdoors in all weather conditions, to lift objects weighing a minimum of 50 lbs and must have the ability to distinguish colors and to hear warning signals and radio and telephone devices.
  - 9. Ability to communicate in the written and verbal English language.

### 1.09 STRUCTURES LABORER/WELDER HELPER

The Contractor shall provide Structures Laborer/Welder Helper as needed for the project with the following qualifications and experience:

- A. Knowledge of railroad methods of track construction and maintenance under traffic.
- B. The ability to work safely at heights.
- C. The ability to work safely on operating railroad right of way.

D. All Welder Helpers and 50 percent of the Track and Structures Laborers must have a minimum of one year of general track construction or maintenance experience.

## 1.10 SAFETY REPRESENTATIVE

- A. The Contractor shall provide a Safety Representative with minimum qualifications as set forth in the Special Conditions, as well as knowledge of FRA standards and qualified under FRA Track Safety Standards, Part 213, Railroad Workplace Safety, Part 214, applicable CPUC General Orders, the General Code of Operating Rules, SCRRA and railroad physical characteristics, SCRRA Track Maintenance, Right-of-Way, and Structures Engineering Instructions, and Roadway Worker Protection rules and regulations.
- B. The Safety Representative must be located at the Contractor's construction field office and must be on the Work Site when construction activity is occurring. The safety representative may be one of the other Authority approved positions identified in Section 01 43 23.
- C. Must have a valid California Class "CA" driver's license with no more than three moving violations and no DUI's in any state within the last three years.
- D. Must pass a pre-employment physical examination including a drug and alcohol test.
- E. Ability to work outdoors in all weather conditions, to lift objects weighing a minimum of 50 lbs. and must have ability to distinguish colors and to hear warning signals and radio and telephone devices.
- F. Ability to communicate in the written and verbal and Spanish language.

#### PART 2 - PRODUCTS (NOT USED)

#### PART 3 - EXECUTION

### 3.01 PERSONNEL QUALIFICATIONS

- A. Once personnel are deemed acceptable by the Authority, the Authority will make arrangements to provide the training and testing required for personnel to be qualified under subject areas described in Part 1 of this Specification Section.
  - 1. The Authority will provide approximately 48-hours of various training. The training course may cover parts of the Authority's General Code of Operating Rules, Maintenance of Way Operating Rules, Maintenance of Way Safety Rules, Fire Prevention Plan, and Track Maintenance Manual. Additional training will be determined by the Authority. The Contractor's managers and key personnel listed above shall attend and successfully complete this course within 45 days after the NTP. Successful completion shall be defined as becoming Qualified under these subject areas.

- 2. The Contractor will be notified of test results in writing. The Authority will make arrangements for retesting if personnel fail the initial test. Retesting of the course material will be allowed one time within 55 days after the full NTP.
- 3. SCRRA to provide one initial training and one refresher training every 12 months for the following:
  - a) Maintenance of Way Operating Rules (MOWOR)
  - b) Maintenance of Way Safety Rules (MOWSR)
  - c) On-Track Safety Manual (OTSM) one day class
  - d) Continuously Welded Rail (CWR)
  - e) Track Maintenance Manual (TMM)
  - f) Roadway Maintenance Machines Training (RMMS)
  - g) Roadway Worker Protection (RWP)

The following Contractor Staff shall be certified throughout the construction period of performance as follows:

Construction Project Manager: MOWOR, MOWSR, OTSM, RMMS, RWP

Safety Manager/Safety Representative: MOWOR, MOWSR, OTSM, RMMS, and RWP

Construction Track Foreman: MOWOR, MOWSR, OTSM, RMMS, RWP

Off Track Equipment Operators: MOWOR, MOWSR, OTSM, RWP

- B. The Authority will provide an approximately 4-hour Roadway Worker Protection (RWP) training course. The RWP training course will cover the Authority's Roadway Worker Protection rules and regulations. The Contractor's managers, key personnel listed above in Subparts 1.4 through 1.7, 1.10 through 1.19, and subcontractors shall attend and successfully complete this course. All workers entering the Railroad right-of-way are required to complete the RWP training course.
- C. Substitutions: If the Contractor needs to replace any of the personnel described in Part 1, the above procedure shall be used. This process, including proficiency testing, shall be completed prior to the vacancy. The allowance of substitutions does not relieve the Contractor of his responsibility to provide the personnel in accordance with Part 1.

- D. The Contractor shall provide the required personnel in accordance with Part 1. If the Contractor fails to provide the appropriate personnel due to a substitution or if the personnel described in Part 1 are not available within 30 days as specified in these Contract Documents, and the Contractor has not acted in good faith to secure replacement personnel, the Authority is entitled to implement one of the following options, at his sole discretion:
  - 1. Option 1: Suspend the portion of the Contractor's operation, which was under the direct supervision of the subject personnel, until the appropriate personnel are provided. All costs relating to this suspension of the Work will be the responsibility of the Contractor.
  - 2. Option 2: Allow the Contractor's operation to proceed and deduct \$500 per day for each operation that was under the direct supervision of the subject personnel. If this option is used, this deduction shall be taken until the construction operation is completed or until the appropriate personnel are provided.
- E. Immediately remove from the Work, when so ordered by the Authority, and not reemploy on any of the Work, without written permission from the Authority, any Contractor or SubContractor employee doing unsafe, improper, and defective Work; who, in the Authority's judgment, refuses or neglects the direction of the Authority given to the Contractor; who is deemed incompetent or disorderly; or who commits any trespassing on any public or private property in the vicinity of the Work.

# 3.02 CONSTRUCTION EQUIPMENT QUALIFICATIONS

- A. The Contractor shall make the construction equipment available for inspection a minimum of 30 days prior to its first use on the project, or as otherwise agreed upon with the Authority.
- B. The Contractor shall make arrangements for initial inspection of the equipment by the Authority. The construction equipment shall not be operated on the Authority's Operating System until the initial inspection and approval is completed.
- C. The Contractor shall inspect all construction equipment daily to ensure compliance with manufacturer instructions, FRA regulations, CPUC regulations, and the Authority's Operating and Safety Rules. The equipment not in compliance shall not be used on the Authority's Operating System.

- D. The Contractor shall provide the required equipment described in Part 1 to perform the work specified in these Contract Documents. Permission given by the Authority to use any particular methods, equipment, or appliances shall not be so construed to relieve the Contractor from furnishing other equipment or other appliances or adopting other methods when those in use prove unsatisfactory or as to bind the Authority to accept Work which does not comply with the Contract. Compliance with determinations by the Authority shall not relieve the Contractor from other obligations imposed by law or regulation nor serve as the basis of a Request for Change Order to the Work. Once mobilization is paid, if the Contractor fails to provide the appropriate equipment in accordance with Part 1, and if the Contractor has not acted in good faith in providing and maintaining the equipment, the Authority shall be entitled, at its own discretion, to implement one of the following options:
  - 1. Option 1: Suspend the Contractor's operation until the appropriate equipment is provided. All costs relating to this suspension of the Work will be the responsibility of the Contractor.
  - 2. Option 2: Allow the Contractor's operation to proceed and deduct \$500 per day for each piece of equipment not on the job site. If this option is used, this deduction shall be taken until the construction operation is completed or until the appropriate equipment is provided.

# 3.03 CONSTRUCTION EQUIPMENT

- A. The Contractor shall have proper equipment to perform the work as described in the Contract Documents. The inspection and testing of the equipment, and the approval of the Contractor's operators, will be done by the Authority's Manager, Rules, and Training as scheduled by the Authority.
- B. Unless amended by the Specifications, the Contractor shall have on hand and use the minimum equipment or approved equal listed below in performing the Work of the Contract Documents.
  - 1. A minimum of one dust control tanker capable of spraying water with dust control additive in advance and during surfacing and brooming and regulating activities. The water tank shall have a capacity of at least 3,000 gallons.
- C. The Contractor shall furnish all other on-track and off-track equipment necessary to complete the work.
- D. The Contractor shall maintain the equipment such that is operational and in proper working order. Measures that may be necessary, include, but are not limited to, the following:
  - 1. Efficient scheduling and performance of required inspections, preventative maintenance, and service
  - 2. Promptly making any necessary repairs

- 3. Containing hydraulic and other spills
- 4. Keeping equipment owner's manual on board at all times
- E. Use of backup equipment not meeting the requirements listed above will be permitted subject to the following conditions:
  - 1. The Authority approves the use of the proposed backup equipment, in advance.
  - 2. The backup equipment is not used to perform contract work except as needed to return the tracks to service following an unforeseen breakdown of the required equipment. Use of backup equipment is considered a temporary measure until such reasonable time that the main equipment is repaired. This shall not exceed two consecutive workweeks.

### PART 4 - MEASUREMENT AND PAYMENT

Work of this Section is considered incidental to work under other payment items and no separate measurement or payment will be made to the Contractor for Work of this Section.

### END OF SECTION 01 43 23

# SECTION 01 71 23

## FIELD ENGINEERING

The following are modifications to the 2022 SCRRA Standard Specifications:

# PART 3 – EXECUTION

ADD item 3.04B.6 as follows:

### 3.04 CONSTRUCTION LAYOUT

- B. General: Engage a California registered Land Surveyor to lay out the Work using accepted surveying practices in accordance with the following:
  - 6. Design Engineer will provide CAD files if requested, however, the Contractor shall assume complete responsibility for the construction layout of the project based on the Plans and Specifications. The Contractor assumes all liability for verifying that any electronic information provided and used for construction matches the plans. The Contractor shall indemnify SCRRA and the Engineer against any issues for use of the electronic information provided. Additional information not included in the bid package, such as construction layout notes, reports, and/or grid grades, are not available and are the responsibility of the contractor for the construction layout based on the Plans and Specifications.

# END OF SECTION 01 71 23

# SECTION 03 31 00

# STRUCTURAL CONCRETE

The following are modifications to the 2022 SCRRA Standard Specifications:

# PART 1 – GENERAL

#### 1.01 SUMMARY

ADD item 1.01C as follows:

C. Slope Paving identified on the plans as being per Caltrans Bridge Standard Detail xs4-210 shall be in accordance with Caltrans Standard Specifications, latest editions and revisions, Section 72-11.

#### 1.02 REFERENCES

ADD item 1.02F as follows:

F. Caltrans Standard Specifications, latest editions and revisions, Section 72-11.

### PART 2 – PRODUCTS

### 2.03 CONCRETE MIXES

ADD Subsection H.1 as follows:

- H. Concrete in Corrosive Environments:
  - 1. Concrete at U-Channel is in a corrosive environment and shall be in accordance with Caltrans Standard Specifications latest editions and revisions, Section 90-1.02H.

# PART 4 – MEASUREMENT AND PAYMENT

#### 4.01 MEASUREMENT

ADD item 4.01H as follows:

H. Slope Paving will be measured by the unit or fraction thereof furnished and completed in accordance with the Contract Documents and as measured by the Engineer. The quantities as contained on the Schedule of Quantities and Prices or approved schedule of values, as applicable, as derived from the Plans will be used as the basis for this measurement.

#### 4.02 PAYMENT

ADD item 4.02L as follows:

L. Slope Paving furnished and completed in accordance with the Contract Documents will be paid for at the Contract Unit Price, as listed on the Schedule of Quantities and Prices.

This price shall include full compensation for furnishing all labor, Materials, tools, equipment, supplies, supervision, and incidentals, and doing all work, as shown on the Plans, and as specified in these Specifications, and as directed by the Engineer.

# END OF SECTION 03 31 00

### SECTION 03 37 19

### PNEUMATICALLY PLACED CONCRETE

#### PART 1 – GENERAL

#### 1.01 DESCRIPTION

- A. The Work specified in the Section consists of pneumatically placing gunite or shotcrete.
- B. Related Specification Sections include but are not necessarily limited to:
  - 1. Section 03 21 00 Reinforcing Steel
  - 2. Section 03 31 00 Structural Concrete
  - 3. Section 31 11 00 Site Clearing
  - 4. Section 31 20 00 Earthwork
  - 5. State of California Department of Transportation, Standard Specifications Current or Latest Edition, Section 53 - Shotcrete

### 1.02 DEFINITIONS

- A. **Dry-mix process (Gunite):** Deliver mixed aggregate and cementitious material pneumatically or mechanically to the nozzle body and add water and mix the materials in the nozzle body.
- B. **Wet-mix process (Shotcrete):** Deliver mixed aggregate, cementitious material, and water pneumatically to the nozzle and add any admixture at the nozzle.
- C. **Rebound:** Shotcrete material that ricochets off the receiving surface, is recovered, and is clean and free of foreign material.
- D. For this specification's purpose, all pneumatically placed concrete, either dry-mix (gunite) or wet-mix (shotcrete), will be referred to as shotcrete.

#### 1.03 SUBMITTALS

- A. Contractor shall submit the following in accordance with Section 01 33 00 Submittal Procedures of the Standard Specifications:
  - 1. Manufacturer's mix design for proposed products.
  - 2. QC plan that includes:
    - a. Number and qualification of nozzlemen available to place shotcrete, number of nozzlemen on the job site at any time during shotcrete

placement, description of their work schedule, and procedures for avoiding fatigue of any nozzleman.

- b. Proposed method of placing shotcrete, including application rates, details of proposed construction joints and their locations, and methods for achieving the required thickness and surface finish.
- c. Procedures for curing shotcrete surfaces.
- d. Description of a debris containment system.
- 3. Preconstruction test panels and test results.
- 4. Production test cores and test results.

### 1.04 QUALITY ASSURANCE

- A. Qualifications
  - 1. Each nozzleman must have at least 3,000 hours of experience as a nozzleman on projects with a similar application.
- B. Preconstruction Test Panels
  - 1. Contractor shall obtain approval and authorization from the Authority of the QC plan before construction test panels.
  - 2. Contractor shall construct 1 unreinforced test panel and 1 reinforced test panel for each proposed mix design. Test panels shall be constructed with the same nozzleman, application crew, equipment, materials, mix designs, and procedures proposed for the work in the Contract Documents.
  - 3. Cure the test panels under conditions similar to those expected during final placement and deemed acceptable to the Engineer.
  - 4. For the unreinforced test panel:
    - a. Size of test panel shall be 3' x 3' minimum, unless approved by the Authority.
    - b. Four cores, 3 inches diameter, shall be obtained from each test panel. Cores that show evidence of improper coring shall not be used for testing and shall be discarded.
    - c. Test cores for compressive strength.
    - d. Label and submit the test panel and a copy of the test results within 5 days of testing.
    - e. Include the mix design and ambient temperature in the submittal.

- 5. For the reinforced test panel:
  - a. Contractor shall construct a square test panel that has the same thickness, bar size and quantity of bar reinforcement or other obstructions, and positioning of bar reinforcement or obstructions as the most heavily reinforced section of shotcrete to be placed.
  - b. Minimum length of each side shall be equal to a minimum of 3 times the thickness of the most heavily reinforced section of shotcrete to be placed but not less than 30 inches.
  - c. Contractor shall break the test panel in the presence of the Authority after a minimum 7-day cure into pieces no larger than 10 inches in the greatest dimension.
  - d. Surfaces of the broken pieces must be dense and free of laminations and sand pockets and must show that the bar reinforcement or other obstructions are completely encased.
- 6. Obtain and test cores for compressive strength in accordance with these Specifications.
- 7. Instead of constructing a separate unreinforced test panel, the Contractor may obtain cores from the reinforced test panel to determine the compressive strength. If this option is chosen, the Contractor shall not break the test panel until it has cured for at least 14 days.
- 8. Dispose of test panels.
- C. Quality Control
  - 1. General
    - a. Contractor shall obtain cores for compressive strength testing under ASTM C1604/C1604M. Discard cores that contain bar reinforcement or other obstructions or show evidence of improper coring. Test cores for compressive strength at 28 days under ASTM C1605/C1604M at an authorized laboratory. The compressive strength is the average strength of at least 3 cores that are free from bar reinforcement or other obstructions.
    - b. Notify the Authority at least 24 hours before performing any coring or testing.
  - 2. Field Quality Control
    - a. Contractor shall obtain at least four 3-inch diameter test cores from each 50 cu yd, or portion thereof, of shotcrete placed each day. Three cores must be free from reinforcement or obstructions. One core must include reinforcement. The location of each core shall be determined by the Authority.

- b. Cores shall be both visually inspected by the Authority and tested for compressive strength by the Contractor.
- c. Each core shall be easily identifiable and include a description of the core location and mix design, and submit the cores immediately after coring.
- d. The Authority will perform the visual inspection and return the cores to the Contractor for compressive strength testing within 48 hours.
- 3. Authority Acceptance
  - a. General
    - I. The Authority accepts shotcrete based on test cores for visual inspection and compressive strength.
  - b. Visual Inspection
    - I. Each test core shall be dense and be free of laminations and sand pockets. Any core with reinforcement must show reinforcement or other obstructions are completely encased.
    - II. Shotcrete represented by an unacceptable core will be rejected unless the Contractor submits evidence that the quality of the shotcrete placed in the work is acceptable.
  - c. Compressive Strength
    - I. If the compressive strength of the shotcrete is below the specified compressive strength:
      - b) The Contractor shall make corrections to the mix design or fabrication procedures and obtain authorization from the Engineer before placing additional shotcrete.
      - c) Shotcrete represented by the cores is subject to one of the following:
        - i. If the compressive strength is at least 95 percent of the specified strength, \$10/cu yd is deducted from the payment for shotcrete.
        - ii. If the compressive strength is below 95 percent of the specified strength but is at least 85 percent of the specified strength, \$15/cu yd is deducted from the payment for shotcrete.
        - iii. If the compressive strength is below 85 percent of the specified strength, the shotcrete shall be removed.
    - II. If the compressive strength is below the specified strength but is at least 85 percent of the specified strength, the deductions specified above apply unless the Contractor obtains and submits evidence that the

strength of the concrete placed in the work is greater than or qual to the specified strength and this evidence is accepted by the Engineer.

- III. If the compressive strength is below 85 percent of the specified, the non-compliant concrete represented by the test shall be removed unless the Contractor obtains and submits evidence that the strength of the concrete placed in the work is at least 85 percent of the specified compressive strength and this evidence is accepted by the Engineer.
- IV. If the evidence consists of tests made on cores taken from the work, the Contractor shall obtain and test the cores under ASTM C1604/1604M.

# PART 2 – PRODUCTS

### 2.01 MATERIALS

- A. Shotcrete shall consist of cementitious material, fine aggregate, and water. Cementitious material, fine aggregate, and water shall comply with Section 03 31 00 Structural Concrete of the Standard Specifications.
- B. Shotcrete shall have a minimum compressive strength of 3,600 psi, unless otherwise described. The shotcrete shall attain the minimum compressive strength at 28 days, except 42 days are allowed for shotcrete with a described minimum compressive strength greater than 3,600 psi.
- C. For the dry-mix process:
  - Contractor shall thoroughly mix 1 part cementitious material to not more than 4.5 parts fine aggregate in a dry state before charging into the machine. Measurement must be either by volume or weight.
  - 2. Fine aggregate shall contain not more than 6 percent moisture by weight.
- D. For the wet-mix process:
  - 1. Shotcrete shall contain at least 632 pounds of cementitious material per cubic yard.
  - 2. Contractor may substitute a maximum of 30 percent pea gravel for the fine aggregate. The maximum size of pea gravel shall be such that 100 percent passes the 1/2-inch screen and at least 90 percent passes the 3/8-inch screen.
  - 3. Contractor may add admixtures complying with Section 03 31 00 Structural Concrete of the Standard Specifications.
- E. Where colored shotcrete is described, color shotcrete by mixing a fine ground, synthetic mineral oxide into the shotcrete. The synthetic mineral oxide shall be specifically manufactured for coloring shotcrete. The coloring agent shall be uniformly and homogeneously mixed with the shotcrete. Coloring of shotcrete shall be such that matches the coloring of the existing ground and accepted by the Engineer.

F. Reinforcement shall be as shown on the project plans and conform to Section 03 21 00 Reinforcing Steel of the Standard Specifications.

### PART 3 – EXECUTION

#### 3.01 PREPARING RECEIVING SURFACES

- A. Contractor shall clear receiving surface of existing tress, stumps, undergrowth, brush, trash, grass, weeds, roots, rubbish, refuse, or other debris in conformance with Section 31 11 00 Site Clearing.
- B. Contractor shall evenly grade receiving surface before applying shotcrete. No point on the graded slope may be above the slope plane shown on the Plans.
- C. Contractor shall thoroughly compact receiving surfaces in conformance to Section 31 20 00 Earthwork. Receiving surfaces shall contain enough moisture to provide a firm surface and to prevent absorption of water from the shotcrete. Receiving surfaces must be free of surface water.
- D. Ground or gauging wires shall be used to establish thickness, surface planes, and finish lines.
- E. Contractor shall install the schedule 40 PVC weep holes with rock wrapped in filter fabric as shown on the plans and details. Contractor shall install a temporary cap to prevent shotcrete from filling weep hole during placement. Temporary cap shall be removed upon placement.

# 3.02 PLACING SHOTCRETE

- A. Shotcrete shall be applied by either the dry-mix or wet-mix process.
- B. Nozzle shall be directed in a way that minimizes rebound of the shotcrete.
- C. A uniform velocity of the material shall be maintained as it leaves the nozzle and at a rate determined for the job site conditions.
- D. For dry-mix shotcrete:
  - 1. A constant pressure as deemed acceptable by the Authority shall be maintained in the placing machine.
  - 2. Contractor shall not use aggregate and cementitious materials that have been mixed for more than 45 minutes.
- E. For wet-mix shotcrete:
  - Transportation of shotcrete shall follow requirements as specified in Section 03 31 00 Structural Concrete of the Standard Specifications.
  - 2. Limit placing to 8-foot lifts measured along the slope or as directed by the Authority.

- 3. Place gauging wires at approximately 7-foot centers or as directed by the Authority.
- 4. Contractor shall not use aggregate and cementitious materials that have been mixed for more than 90 minutes.
- F. Contractor shall not reuse shotcrete material rebound on this project.

#### 3.03 FINISHING SHOTCRETE

- A. Before final set, use air blowpipes to remove rebound, overspray, and other debris from the areas to receive shotcrete.
- B. Place shotcrete to the depth shown and check the surface with a straightedge. Bring to grade any low spots or depressions by placing additional shotcrete. The finished surface must be smooth and uniform for the type of work involved.
- C. Remove and replace loose areas of shotcrete.
- D. Cure shotcrete for at least 72 hours by spraying with water, by a moist earth blanket, or by any of the methods specified in Section 03 31 00 Structural Concrete of the Standard Specifications.
- E. Contractor shall maintain the temperature of the shotcrete to at least 45 degrees Fahrenheit for a minimum of 72 hours after placing and at least 40 degrees Fahrenheit for an additional 4 days.
- F. Shotcrete shall be protected as specified per Section 03 31 00 Structural Concrete of the Standard Specifications.

### PART 4 – MEASUREMENT AND PAYMENT

#### 4.01 MEASUREMENT

- A. Shotcrete, Colored Shotcrete, or Gunite will be measured by the unit or fraction thereof furnished and completed per the item in which the shotcrete, Gunite, or slope paving is used in accordance with the Contract Documents and as measured by the Engineer. The quantities as contained on the Schedule of Quantities and Prices, or approved schedule of values, as applicable, as derived from the Plans will be used as the basis for this measurement.
- B. All reinforcement, weep holes with rock wrapped in filter fabric, grading and removals, disposals, earthwork, and additional site preparation for Shotcrete, Colored Shotcrete, or Gunite included in this Section are considered incidental to work under this Section and no separate measurement and will be made to the Contractor of this Section.

# 4.02 PAYMENT

A. Shotcrete, Colored Shotcrete, or Gunite furnished and completed in accordance with the Contract Documents will be paid for at the Contract Unit Price per the item in which the shotcrete, colored shotcrete, or Gunite is used, as listed on the Schedule of

Quantities and Prices. This price shall include full compensation for furnishing all labor, reinforcement, materials, tools, equipment, supplies, supervision, and incidentals, and doing all work, as shown on the Plans, and as specified in these Specifications, and as directed by the Engineer.

# END OF SECTION 03 37 19

# **SECTION 31 20 00**

# EARTHWORK

The following are modifications to the 2022 SCRRA Standard Specifications:

## PART 1 – GENERAL

#### 1.01 SUMMARY

REPLACE the following from item 1.01A.2 as follows:

- A. Section Includes:
  - 2. Structural excavation shall consist of excavation for the construction of foundations for structures, excavation for trenches for the construction of culverts and concrete channels, and overexcavation. Structural backfill shall consist of furnishing, installing, and compacting backfill material around structures.

### PART 2 – PRODUCTS

#### 2.01 MATERIALS

REPLACE the following item 2.01A.1 as follows:

- A. Structure Excavation:
  - 1. Excavation for the construction of foundations for structures; excavation of trenches for the construction of culverts, and overexcavation; other excavation designated on the plans or in these specifications or in the technical provisions as structure excavation.

#### PART 4 – MEASUREMENT AND PAYMENT

REPLACE items 4.01 and 4.02 as follows:

#### 4.01 MEASUREMENT

- A. Earthwork will be measured by the unit of fraction thereof furnished and completed in accordance with the Contract Documents and as measured by the Engineer for Earthwork. The quantities as contained on the Schedule of Quantities and Prices, or approved schedule of values, as applicable as derived from the Plans will be used as the basis for this measurement.
- B. Earthwork will include the excavation and backfill that will be acceptably excavated or filled within the limits of lines and slope described in typical sections and cross sections in the plans and contract documents. Measurement of Earthwork will include the following types of excavation or backfill:

- 1. Excavation.
- 2. Overexcavation.
- 3. Structural Excavation.
- 4. Embankment fill and borrow used as embankment fill.
- 5. Removal of unsuitable material and backfill with approved suitable material.
- C. Materials excavated outside of the designated sections or from borrow pits will not be measured. When the project is constructed essentially to the dimensions shown on the plans no further measurement will be required, and payment will be made for the quantities shown in the contract for the various bid items involved. If disagreement exists between the Contractor and the Engineer as to the accuracy of the plan quantities, either party shall, before any work is started which would affect the measurement, have the right to request in writing and thereby cause the quantities involved to be measured. If measured quantities do not reveal a discrepancy when compared to plan quantities, the Contractor must pay for the cost of the Engineer to perform measurements and calculations of quantities.
- D. Embankment of the various types, as specified, will be measured by the unit or fraction thereof furnished and completed in accordance with the Contract Documents and as measured by the Engineer. The quantities as contained on the Schedule of Quantities and Prices, or approved schedule of values, as applicable, as derived from the Plans will be used as the basis for this measurement. Embankment will be measured in the space occupied within the limits of lines and slopes described in the typical sections and cross sections as defined in the plans and contract documents. No payment will be made for the volume of material bladed off the top of roadway embankments outside of the roadbed limits. No allowance for shrinkage or compaction will be made. If disagreement exists between the Contractor and the Engineer as to the accuracy of the plan quantities, either party shall, before any work is started which would affect the measurement have the right to request in writing and thereby cause the quantities to be measured. If measured quantities requested by the Contractor do not differ from plan quantities, then the Contractor must pay the Engineer's costs to verify measurements of quantities.
- E. When, in the judgment of the Engineer, it is impracticable, because of mixture of materials, to measure the actual unit content of each kind of material the Contractor and the Engineer shall agree upon payment provisions prior to proceeding with work. The Engineer will, from time to time, make such measurements as will best aid him in arriving at a just and equitable conclusion as to the proper percentage of the materials of the different classifications in the entire excavation, and he will so separate and classify the different materials.
- F. Structural Backfill and Pervious Backfill will be measured by the unit of fraction thereof furnished and completed in accordance with the Contract Documents and as measured by the Engineer for Earthwork. The quantities as contained on the Schedule of Quantities and Prices, or approved schedule of values, as applicable as derived from the Plans will be used as the basis for this measurement.

## 4.02 PAYMENT

- A. Earthwork, as defined in the Measurement Section, will be paid for at the contract unit price, as listed on the Schedule of Quantities and Prices, of earthwork of proper classification within the limits of lines and slopes described in the typical sections and cross sections as defined in the plans and Contract Documents. This price shall be full compensation for furnishing all labor, materials, tools, equipment, supplies, supervision, and incidentals necessary for excavating, loading, transporting, and depositing materials in embankment, spoil bank, stockpile, or other designated location by whatever method is adopted, including all permission/permitting for haul operations.
- B. Structural backfill and pervious backfill material will be paid for at the contract unit price, as listed on the Schedule of Quantities and Prices, of material within the limits of lines and slopes described in the typical section and cross sections as defined in the Plans and Contract Documents. This priced shall be full compensation for furnishing all labor, material, tools, equipment, supplies water for compaction, supervision and tools necessary for backfilling structures in accordance with these Specifications and the designated lines and grades in the Plans.

# END OF SECTION 31 20 00

## SECTION 33 42 01

# TEMPORARY CHANNEL DIVERSION SYSTEM

#### PART 1 – GENERAL

#### 1.01 SUMMARY

- A. The Contractor shall provide all work and materials necessary to manage the temporary storm water channel diversion system while the permanent U-Channel is being constructed during the dry weather season as shown on the Plans. This system shall address the dry weather flows and off-season storm events.
  - Per the Orange County Planning Erosion and Sediment Control Plans Instruction Manual, the dry weather season occurs between May 1<sup>st</sup> and September 30<sup>th</sup>.
  - 2. Complete installation of diversion system including excavation, sheet piling, berms, rock slope protection, and pumps if necessary.
  - 3. Provide other necessary features and incidentals to protect the adjacent active track, private property, and construction site.
  - 4. Contractor to submit to the Engineer for approval of the means to maintain dry weather flow and safe access to the construction site.
  - 5. Monitor and maintain the system through the duration of use.
  - 6. Once the permanent U-Channel system is complete, divert flows to the new system and remove the Temporary Channel Diversion System to represent the final condition as shown on the Plans. Phasing for final non-grouted or grouted riprap installation per Contract Plans shall be up to the contractor and approved by the Engineer.
- B. Related Specification Sections include but are not necessarily limited to:
  - 1. Division 01 General Requirements
  - 2. Section 01 33 00 Submittal Procedures
  - 3. Section 03 21 00 Reinforcing Steel
  - 4. Section 03 31 00 Structural Concrete
  - 5. Section 05 12 23 Structural Steel
  - 6. Section 31 20 00 Earthwork
  - 7. Section 31 50 00 Excavation Support
  - 8. Section 34 80 11 Stone Revetment (Riprap)
9. Section 34 80 21 – Piling

### 1.02 SUBMITTALS

- A. General
  - 1. Submittals shall be made in accordance with Section 01 33 00 requirements.
  - 2. Submit complete materials list of all manufactured products to be installed on the site. Provide manufacture's name, model number, quantity, and size. Note clearly all products which are not as specified and are submitted for approval as equal products.
- B. Plans and Procedures:
  - 1. Contractor shall submit a plan for temporary channel diversion indicating diversion method, shoring protection calculations, and list of equipment to assure adequate clearance from the adjacent active track. Plan shall include the following at a minimum: contractor equipment operations and accommodations, access paths, protection measures around active track, and substages necessary to construct the permanent channel.
  - 2. Provide Temporary Channel Diversion System Monitoring Plan and Report to be part of the Project's Storm Water Pollution Prevention Plan (SWPPP). This shall contain monitoring procedures, frequencies, and mitigations in the event of a significant rain event. Report shall include written description of method in which 24-hour monitoring of the site when a rain event is forecasted. Contractor shall implement this plan and provide a QSP per Section 01 57 19 of these specifications.
  - 3. Contractor shall account for potential water seepage into the construction area. Any water seepage is the responsibility of the Contractor and shall be at no additional cost to SCRRA.

### 1.03 CONDUCT OF WORK

A. The Contractor shall maintain continuously, a competent superintendent or foreman, satisfactory to the Authority, on the work during progress, with authority to act for him in all matters pertaining to the work.

## 1.04 GENERAL REQUIREMENTS

- A. The Contractor shall provide the Temporary Channel Diversion System during the published dry season and shall not conduct any construction activities which may require the Temporary Channel Diversion System to be active during the rainy season.
- B. The Contractor shall complete all permanent drainage features as shown on the Plans and these Contract Documents or as specified by the Engineer and remove the Temporary Channel Diversion System by the end of the published dry season.

# PART 2 – PRODUCTS

### 2.01 MATERIALS

- A. Soil and rock materials for fill, backfill or subgrade preparation shall be in accordance with Section 31 20 00 or as specified by the Engineer.
- B. Stone and other materials shall be in accordance with Section 34 80 11 or as specified by the Engineer.
- C. Materials used in the Temporary Channel Diversion System shall be new unless otherwise approved by the Engineer. Structural materials that compose the Temporary Channel Diversion System shall meet the requirements for the applicable material type as listed, unless specified otherwise by the Engineer in Responsible Charge in the Contract Documents or approved Working Plans:
  - 1. Structural steel: Section 05 12 23 for steel sheet piling and Section 34 80 21 for all other piling.
  - 2. Structural concrete: Section 03 31 00
  - 3. Reinforcing Steel: Section 03 21 00.
- D. Pump Type (If Necessary)
  - 1. Contract shall supply a pump(s), hoses, connectors, and sediment control as necessary per requirements from the Plans or as specified by the Engineer.
  - 2. Contractor supplied pump shall be non-clogging and following all requirements as listed in the Contract Documents.
  - 3. Contractor pump(s) shall accommodate water flows in channel or as specified by the Engineer.

### PART 3 – EXECUTION

### 3.01 INSTALLATION

- A. Contractor shall provide equipment and methods that protect the adjacent properties and active track in accordance with 01 71 13 Mobilization, Demobilization, and Controls.
- B. Contractor shall provide work, including the stream diversion operation, in a manner that prevents erosion, damage, flooding and contamination of runoff downstream.
- C. Contractor shall restore any temporarily disturbed areas within existing channel to existing elevations and protect riprap to match existing conditions at no addition cost to the Authority per the Contract Plans.

# PART 4 – MEASUREMENT AND PAYMENT

Work of this Section is considered incidental to work under other payment items and no separate measurement and payment will be made to the Contractor for Work of this Section. Work of this section shall include furnishing all labor, materials, tools, equipment, supplies, supervision, and incidentals, and doing all work, as necessary to implement the temporary channel diversion described in these Specifications, and as directed by the Authority.

## END OF SECTION 33 42 01

# SECTION 34 11 27

# SUB-BALLAST AND AGGREGATE BASE

The following are modifications to the 2022 SCRRA Standard Specifications:

## PART 4 – MEASUREMENT AND PAYMENT

REPLACE items 4.01A as follows:

### 4.01 MEASUREMENT

A. Subballast will be measured by the unit or fraction thereof furnished and installed in accordance with the Contract Documents and as measured by the Engineer. The quantities as contained on the Schedule of Quantities and Prices, or approved Schedule of Values, as applicable, as derived from the plans will be used as the basis for this measurement.

REPLACE items 4.02A as follows:

### 4.02 PAYMENT

A. Subballast furnished and installed in accordance with the Contract Documents will be paid for at the contract unit price, as listed on the Schedule of Quantities and Prices. This price shall be full compensation for furnishing all labor, materials, tools, equipment, supplies, supervision, and incidentals necessary for subballast described by the Contract Documents.

# END OF SECTION 34 11 27

# SECTION VII: LIST OF DRAWINGS - EXHIBIT C

# **SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY ORANGE COUNTY TRANSPORTATION AUTHORITY INLAND SLOPE REHABILITATION PHASE II SCRRA CONTRACT NO. E745D-20 IFB NO. C-4-2666**

# Kimley»Horn



# **CONTRACT** No.









PURSUANT TO ASSEMBLY BILL 4216 NO EXCAVATION PERMIT IS VALID UNLESS THE CONTRACTOR CONTACTS AND OBTAINS A DIG ALERT TICKET NUMBER. CALL 811 AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING EXCAVATION.



		INDEX OF	DRAWINGS
SHT NO.	DWG. NO.	REV. NO.	TITLE
GENE	RAL		
1	0C-G-100	0	TITLE SHEET
2	OC-G-101	0	INDEX OF DRAWINGS
3	0C-G-102	0	CONTACTS, ABBREVIATIONS, LINESTYLES, & SYMBOLS
4	0C-G-200	0	GENERAL NOTES
SURV	EY CONTROL		
5	OC-VR-101	0	RIGHT OF WAY ACCESS MAP
6	0C-VR-201	0	SURVEY CONTROL PLAN SHEET 1 OF 3
7	0C-VR-202	0	SURVEY CONTROL PLAN SHEET 2 OF 3
8	0C-VR-203	0	SURVEY CONTROL PLAN SHEET 3 OF 3
CIVIL			
9	OC-C-101	0	TYPICAL SECTIONS
10	0C-XS-201	0	CROSS SECTIONS STA. 4641+00 TO STA. 4643+50
11	0C-XS-202	0	CROSS SECTIONS STA. 4644+00 TO STA. 4646+50
12	0C-XS-203	0	CROSS SECTIONS STA. 4647+00 TO STA. 4650+00
13	0C-XS-204	0	CROSS SECTIONS STA. 4650+50 TO STA. 4651+50
14	0C-XS-205	0	CROSS SECTIONS STA. 4912+50 TO STA. 4915+50
15	0C-XS-206	0	CROSS SECTIONS STA. 4915+65 TO STA. 4915+97
16	OC-GD-101	0	GRADING AND DRAINAGE PLAN AREA 1
17	OC-GD-102	0	GRADING AND DRAINAGE PLAN AREA 2
18	OC-GD-103	0	GRADING AND DRAINAGE PLAN AREA 3
19	OC-GD-104	0	GRADING AND DRAINAGE PLAN AREA 3
20	OC-GD-105	0	GRADING AND DRAINAGE PLAN AREA 4
21	OC-GD-106	0	GRADING AND DRAINAGE PLAN AREA 5
22	OC-GD-107	0	GRADING AND DRAINAGE PLAN AREA 6
23	OC-GD-201	0	GRADING AND DRAINAGE DETAILS SHEET 1 OF 3
24	OC-GD-202	0	GRADING AND DRAINAGE DETAILS SHEET 2 OF 3
25	OC-GD-203	0	GRADING AND DRAINAGE DETAILS SHEET 3 OF 3
26	0C-GD-301	0	REFERENCE STANDARDS
STRU	CTURES		
27	OC-SW-201	0	CONCRETE U-CHANNEL DETAILS
28	0C-SW-202	0	CONCRETE U-CHANNEL MISCELLANEOUS DETAILS
			All plans, drawings, spec- ifications, and or information furnished herewith shall remain
			All plans, drawings, spec- ifications, and or information furnished herewith shall remain the property of the Southern California Regional Rail Authority and shall be held confidential; and shall not be
			used for any purpose not provided for in agreements with the Southern California Regional Rail Authority.
DAT	E		BY SUB. APP. Regional Rail Authority.

IDENTIAL: spec-formation shall remain Southern Rail be held all not be e not ements alifornia ty DATE 04-10-2025

0122610-6-101 0122510-6-101 0122510-6-101 USER = Gabe.Keehn Slope Stabilization DesignN17 CADN02\_Sheets Slope Stabilization DesignN17 CADN08\_Cadd\_Su Slope Stabilization DesignN17 CADN08\_Cadd\_Su ans Sub Sub e e e 6/17/2025 K:\ORA\_RAIL\099804107\_0ran K:\ORA\_RAIL\099804107\_0ran K:\ORA\_RAIL\099804107\_0ran





APPROVED:\_

PROJECT MANAGER

ORANGE COUNT

IFB 4-2666
EXHIBIT C

<b>FY TRANSPORTATION AUTHORITY</b> CONTRACT NO. E745D-20	!
OPE REHABILITATION PHASE II	
REVISION SHEET NO.	_
NDEX OF DRAWINGS 0 2 OF 28	
SCALE	_

UTILITY AND AGENCY CONTACTS				
AT&T	(949) 229-9640 BOB FLEISHER			
CITY OF MISSION VIEJO	(949) 470-3091 MARK CHAGNON			
COUNTY OF ORANGE	(714) 955-0313 ALEX GONZALEZ			
COX COMMUNICATIONS	(619) 266-5480 SARA DUFOUR			
EL TORO WATER DISTRICT	(949) 415-4032 RORY HARNISCH			

IRVINE RANCH WATER DISTRICT KINDER-MORGAN LEVEL 3/QWEST/LUMEN MOULTON NIGUEL WATER DISTRICT MCI VERIZON SAN DIEGO GAS AND ELECTRIC SANTA MARGARITA WATER DISTRICT SOUTHERN CALIFORNIA EDISON SOUTHERN CALIFORNIA GAS

(949) 453-5300 BELISARIO RIOS (713) 420-2393 RAFAEL MOGOLLON (951) 203-4415 BRYAN CHURCH (949) 831-2500 MARK MOUNTFORD (951) 667-9469 PETE BALOGNA (949) 246-8511 DOLPHUS DAVIS (949) 459-6612 BETSY PARKINSON (909) 548-7249 GILBERT ACEVES (877) 238-0092 CHRISTOPHER KEEVERN

# ABBREVIATIONS

		LA	LUJ ANGLLLJ
AB	AGGREGATE BASE	Lc	LENGTH OF CIRCULAR CURVE
чС	HOT MIX ASPHALT	LED	LIGHT EMITTING DIODE DISPLAY
ЛСР	ASBESTOS CEMENT PIPE	LF	LINEAR FEET
ADA	AMERICANS WITH DISABILITIES ACT	LH	LEFT HAND
APN	ASSESSOR PARCEL NUMBER	LLT	LAST LONG TIE
AT&T	AMERICAN TELEPHONE AND TELEGRAPH COMPANY	LG	LIP OF GUTTER
AWW	ABSOLUTE WORK WINDOW	LN	LANE
BC	BEGIN CURVE	LOL	LAYOUT LINE
BCR	BEGIN CURB RETURN	LP	LOW POINT
BM	BENCH MARK	Ls	LENGTH OF SPIRAL
BR	BRIDGE	LS	LEFT OR LONG TANGENT
BSL	BICYCLE SINGLE LOCKER	MAX	
BW	BOTTOM OF WALL	MCI	MICROWAVE COMMUNICATIONS INC
C	CHORD	MH	MANHOLE
C&G	CURB AND GUTTER	MIN	MINIMUM OR MINUTE
СВ	CHORD BEARING	MNH	MINI-HIGH PLATFORM
CBC	CALIFORNIA BUILDING CODE	MOC	MIDDLE OF CURVE
CI	CAST IRON	МΤ	MAIN TRACK
СН	CURB HEIGHT	NAD 83	NORTH AMERICAN DATUM OF 198
CL,Q	CENTERLINE	NFPA	NATIONAL FIRE PROTECTION ASSO
CLR	CLEAR	NGS	NATIONAL GEODETIC SURVEY
CMP,CSP	CORRUGATED METAL PIPE	NO	NUMBER
СМРА	CORRUGATED METAL PIPE-ARCH	NSRS	NATIONAL SPATIAL REFERENCE S
COMMS	COMMUNICATIONS	ОВ	OUT BOARD
CONC	CONCRETE	0.C.	ON CENTER
CONT	CONTINUED, CONTINUOUS	OCTA	ORANGE COUNTY TRANSPORTATIO
CPUC	CALIFORNIA PUBLIC UTILITIES COMMISSION	O.C.E.W.	ON CENTER EACH WAY
CS	POINT OF CIRCULAR CURVE TO SPIRAL	0.D.	OUTSIDE DIAMETER
CT	CONCRETE TIES OR COURT OR POINT OF CURVE TO T		ORIGINAL GROUND
DBH	DIAMETER AT BREAST HEIGHT	OHL	OVERHEAD LINE
	DEGREE OF CURVE	PAS	PASSENGER
DL	DRAINAGE INLET	PB	PULL BOX
DIA, <b>Ø</b> Dot	DIAMETER DEPARTMENT OF TRANSPORTATION (U.S.)	PCC	PORTLAND CEMENT CONCRETE O
DOT	DEPARTMENT OF TRANSPORTATION (U.S.)	PD	PIPE DRAIN
DR	DRIVE	PH	POT HOLE
Ds	DEFLECTION ANGLE - SPIRAL	PI	POINT OF INTERSECTION
DT	DEFLECTION ANGLE - TOTAL CURVE	PIP	PROTECT IN PLACE
DWG	DRAWING	PITO	POINT OF INTERSECTION OF TUR
E	EAST/EQUILIBRIUM SUPERELEVATION	PLAT	PLATFORM
EA	EACH	POB	POINT OF BEGINNING
Ea	ACTUAL SUPERELEVATION	POC	POINT OF CONNECTION/POINT ON
EC	END CURVE	POE	POINT OF ENDING
ECR	END OF CURB RETURN	POS	POINT OF SAFETY
EG	EXISTING GROUND	POT	PATH OF TRAVEL/POINT ON TAN
ELEV, EL	ELEVATION	РОТО	POWER OPERATED TURNOUT
E'LY	EASTERLY	PPB	PEDESTRIAN PUSH BUTTON
EQ	EQUAL	PRE-EMPT	PREEMPTION
ES	ENGINEERING STANDARDS (SCRRA STANDARD DRAWINGS)	PROP	PROPOSED
EST	EASEMENT	PS	POINT OF SWITCH
Eu	UNBALANCED SUPERELEVATION	PSI	POUNDS PER SQUARE INCH
	EXISTING	PT	POINT OF TANGENCY
EXIST, EX, (E)			
FG	FINISHED GRADE	PTC	POSITIVE TRAIN CONTROL
		INFORMATION CONFIDENTIAL: DESIGNE All plans, drawings, spec-	
		All plans, drawings, spec- ifications, and or information furnished herewith shall remain the property of the Southern California Regional Rail Authority and shall be held	BY J. AN
		the property of the Southern P. KEO	UGH / 5/2 ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
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FINISHED SURFACE

HOT MIX ASPHALT

IRRIGATION CONTROL

INVERT ELEVATION

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GLOBAL POSITIONING SYSTEM

HIGH PRESSURE, HIGH POINT

IRRIGATION CONTROL VALVE

IRVINE RANCH WATER DISTRICT

HIGH DENSITY POLY ETHYLENE

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Regional Rail Authority.

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ADRIAN

04-10-2025

PROVED BY

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METROLINK Kimley »Horn SUBMITTED: PROJECT MANAGER

APPROVED:

ORANGE COUN **INLAND SI** CONTACTS, ABBR

ENGTH OF SPIRAL EFT OR LONG TANGENT AXIMUM CROWAVE COMMUNICATIONS INC. ANHOLE NIMUM OR MINUTE INI-HIGH PLATFORM IDDLE OF CURVE AIN TRACK ORTH AMERICAN DATUM OF 1983 ATIONAL FIRE PROTECTION ASSOCIATION ATIONAL GEODETIC SURVEY JMBER ATIONAL SPATIAL REFERENCE SYSTEM JT BOARD CENTER RANGE COUNTY TRANSPORTATION AUTHORITY CENTER EACH WAY JTSIDE DIAMETER RIGINAL GROUND VERHEAD LINE ASSENGER JLL BOX ORTLAND CEMENT CONCRETE OR POINT OF COMPUND CURVATURE PE DRAIN OT HOLE DINT OF INTERSECTION ROTECT IN PLACE DINT OF INTERSECTION OF TURNOUT ATFORM DINT OF BEGINNING DINT OF CONNECTION/POINT ON CURVE DINT OF ENDING DINT OF SAFETY ATH OF TRAVEL/POINT ON TANGENT WER OPERATED TURNOUT EDESTRIAN PUSH BUTTON REEMPTION ROPOSED DINT OF SWITCH OUNDS PER SQUARE INCH DINT OF TANGENCY OSITIVE TRAIN CONTROL

PVT POINT OF VERTICAL TANGENT PVC POINT OF VERTICAL CURVE PVRC POINT OF VERTICAL REVERSE CURVE R RADIUS, VERTICAL CURVE PROPERTY, OR RIGHT RCB REINFORCED CONCRETE BOX RCP REINFORCED CONCRETE PIPE RD road Ret RETAINING RH RIGHT HAND ROE RIGHT-OF-ENTRY ROW, R/W RIGHT-OF-WAY RAISED PAVEMENT MARKERS RPMS RR RAILROAD RSP RIPRAP RΤ RIGHT RTN REAL TIME NETWORK RW RETAINING WALL RWIC ROADWAY WORKER-IN-CHARGE RWP ROADWAY WORKER PROTECTION SC POINT OF SPIRAL TO CIRCULAR CURVE SCVWA SANTA CLARITA VALLEY WATER AUTHORITY SPI POINT OF INTERSECTION OF SPIRAL ST STREET OR SHORT TANGENT OR POINT OF SPIRAL TO TANGENT S/W OR SDWK SIDEWALK SCH SCHEDULE SCRRA SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY SCE SOUTHERN CALIFORNIA EDISON SDGE SAN DIEGO GAS AND ELECTRIC SPPWC STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION STA STATION ST STREET OR SHORT TANGENT SCP STEEL CASED PIPE SD STORM DRAIN SS STORM SEWER SSPWC STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION SSWP SAFE SYSTEM OF WORK PLAN STD STANDARD TBD TO BE DETERMINED ТC POINT OF TANGENT TO CURVE/TOP OF CURVE OR TOP OF CURB OR TRACK CENTER(S) TCE TEMPORARY CONSTRUCTION EASEMENT ТD TRAVEL DISTANCE/TRENCH DRAIN TDI TRENCH DRAIN INVERT TEMP TEMPORARY ΤG TOP OF GRATING ΤO TURNOUT TOP OF BALLAST ТОВ TOR, T/R TOP OF RAIL TS POINT OF TANGENT TO SPIRAL ΤT TIMBER/WOOD TIES ΤVΜ TICKET VENDING MACHINE ΤW TOP OF WALL ТWС TIME WARNER CABLE ТҮР TYPICAL UD UNDERDRAIN UP, UPRR UNION PACIFIC RAILROAD VELOCITY V VAR VARIOUS, VARIES VC VERTICAL CURVE WATER W WITH W/ WD WALL DRAIN WGS WORLD GEODETIC SYSTEM W'LY WESTERLY WSE WATER SURFACE ELEVATION WSP WELDED STEEL PIPE WWF WELDED WIRE FABRIC WWM WELDED WIRE MESH XING CROSSING

**ABBREVIATIONS (CONT.)** 

POINT OF VERTICAL INTERSECTION

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ABBREVIATIONS (CONT.) FIBER OPTIC CABLE

	EXISTIN	NG LINES	STYLES
			ASPHALT SURFACE
			BUILDING
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	BRUSH LINE/TREE LINE
			CONCRETE SURFACE
			CURB
			DIRT SURFACE
			EXISTING CENTERLINE OF TRAC
XXXX	XX	XX	FENCE AND HANDRAILS
			GUARD RAIL
			GUTTER
AA		A A	RETAINING WALL
			EXISTING RIGHT-OF-WAY LINE
———— Е ———— Е —	———— Е ————	—— Е ———	EXISTING ELECTRICAL UNDERGROUND
———— Е (ОН) —————	— Е (ОН) ———— Е	E (OH)	EXISTING ELECTRICAL OVERHEAD
— — FO — FO — FO	— — FO — — FC	— — FO — —	EXISTING FIBER UNDERGROUND
- FOC(он) ————————————————————————————————————	———— FOC(он) ——	———— FOC(он) –	EXISTING FIBER OVERHEAD
FUEL	FUEL	FUEL	EXISTING OIL LINE
G G	G	G	EXISTING GAS LINE
S S	S S	SS —	EXISTING SEWER LINE
			EXISTING WATER LINE
S D S D	S D	S D	EXISTING STORM DRAIN

# PROPOSED LINESTYLES



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<b>REVIATIONS, LINESTYLES &amp; SYMBOLS</b> 0 3 OF 28	REVIATIONS, LINESTYLES & SYMBOLS	0	3 (	)F <b>28</b>	
SCALE		SCALE			

NONE

# GENERAL NOTES

- 1. UTILITIES ARE SHOWN ACCORDING TO KNOWN UTILITY OWNER INFORMATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES AND THEIR SERVICE CONNECTIONS PRIOR TO CONSTRUCTION.
- 2. CONTRACTOR MUST MAINTAIN ALL TRAFFIC SIGNS IN ERECT POSITION AND SET SAME FRAME IN PROPER POSITION AT CLOSE OF THE JOB.
- 3. SANITARY SEWER AND STORM DRAIN MANHOLE FRAME AND COVER SETS SHALL BE ADJUSTED TO THE NEW FINISHED SURFACE GRADE BY THE CONTRACTOR. THE USE OF CAST IRON RAISING RINGS WILL NOT BE ACCEPTED.
- 4. PLANTED AREAS ADJACENT TO THE PROPOSED WORK WHICH ARE DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO MATCH EXISTING.
- 5. EXISTING UTILITIES SHALL BE PROTECTED AND MAINTAINED IN PLACE BY THE CONTRACTOR, UNLESS OTHERWISE NOTED IN PLANS. CONTRACTOR TO NOTIFY THE UTILITY OWNER(S) 72 HOURS PRIOR TO PAVING OR CONCRETE POUR IF UTILITY FACILITIES NEED TO BE RELOCATED OR ADJUSTED TO FINISHED GRADE.
- 6. THE CONTRACTOR SHALL REMOVE PORTION OF EXISTING SPRINKLER SYSTEMS IN CONFLICT WITH THE NEW CONSTRUCTION AND PROVIDE FOR THE IMMEDIATE RESTORATION OF A TEMPORARY SYSTEM, BEFORE FINAL ACCEPTANCE OF THE WORK, THE CONTRACTOR SHALL RESTORE THE SPRINKLER SYSTEM TO THEIR ORIGINAL COVERAGE LESS THE NEW PAVED AREAS.
- 7. PRIOR TO POURING CONCRETE ADJACENT TO EXISTING CURB & GUTTER THE CURB FACE SHALL BE PREPARED BY REMOVING CONCRETE REMNANTS AT FLOW LINE, DIRT, AND ASPHALT, TO ENSURE GOOD CONTACT WITH EXISTING CONCRETE.
- 8. CONTRACTOR SHALL NOTIFY RESIDENTIAL PROPERTY OWNERS 72 HOURS AND BUSINESS ESTABLISHMENTS 96 HOURS PRIOR TO CLOSURE OF THEIR EXISTING DRIVEWAY AND ACCESS POINTS.
- 9. ALL CONCRETE REMOVALS SHALL BE MADE TO A SAW CUT LINE PER SCRRA STANDARD SPECIFICATIONS.
- 10. ALL GAS VALVE COVERS & APPURTENANCES WILL BE ADJUSTED TO NEW FINISHED GRADE BY THE GAS COMPANY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE REQUIRED WORK.
- 11. ELECTRICAL VAULTS, MANHOLES, AND PULL BOXES WILL BE ADJUSTED TO FINISHED GRADE OR RELOCATED BY THE UTILITY OWNER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE REQUIRED WORK. RELOCATION OF TRAFFIC SIGNAL PULL BOXES, TRAFFIC SIGNAL POLES, TRAFFIC SIGNAL UTILITY CONTROL BOXES, AND OTHER MISCELLANEOUS TRAFFIC FACILITIES SHALL BE COMPLETED BY THE CONTRACTOR.
- 12. CONTRACTOR TO INSTALL AND MAINTAIN SCRRA APPROVED TEMPORARY FENCING BETWEEN WORK AREA AND MAIN LINE TRACKS DURING CONSTRUCTION WITHIN METROLINK RIGHT-OF-WAY TO THE SATISFACTION OF THE ENGINEER.
- 13. ALL WORK IN THE RAILROAD RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH SCRRA STANDARDS AND PROCEDURES.
- 14. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT AT 811 AT LEAST TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION TO ALLOW UTILITY OWNERS TO MARK THE LOCATION OF THEIR RESPECTIVE UNDERGROUND FACILITIES/UTILITIES, PUBLIC, OR PRIVATE, SHOWN OR NOT SHOWN ON THESE PLANS.
- 15. ALL CONSTRUCTION, GRADING, STORAGE AND TRANSPORTATION ACTIVITIES WILL BE CONDUCTED IN A MANNER CONSISTENT WITH THE STORM WATER POLLUTION CONTROL PLAN/STORM WATER POLLUTION PREVENTION PLAN SUBMITTED FOR THIS PROJECT AND THE ORANGE COUNTY STORM WATER QUALITY MANAGEMENT PROGRAM. A COPY OF THE STORM WATER POLLUTION PLAN AND/OR THE STORM WATER POLLUTION PREVENTION PLAN WILL BE ON SITE AND AVAILABLE FOR REVIEW AT ALL TIMES DURING CONSTRUCTION.
- 16. GRADING SHALL BE IN ACCORDANCE WITH SPECIFIC JURISDICTIONAL REQUIREMENTS AS INDICATED IN SPECIFICATION 31 20 00.
- 17. ALL CONCRETE SHALL CONFORM TO THE SCRRA SPECIFICATIONS AND STANDARDS.
- 18. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT. INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT LIMITED TO NORMAL WORKING HOURS, AND THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD SCRA AND THE DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED. IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT. EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONALS.
- 19. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS AND PAY PERMIT FEES AS REQUIRED FOR CONSTRUCTION OF THIS PROJECT.

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			INFORMATION CONFIDENTIAL:
			ifications, and or information
			All plans, drawings, spec- ifications, and or information furnished herewith shall remain the property of the Southern California Regional Rail Authority and shall be held confidential; and shall not be used for any purpose not provided for in agreements with the Southern California Regional Rail Authority.
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			used for any purpose not provided for in agreements
			with the Southern California Regional Rail Authority.
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# **SPECIFICATIONS**

ALL WORK SHALL CONFORM TO THE SCRRA STANDARD SPECIFICATIONS; PROJECT SPECIFIC SPECIFICATIONS; STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, INCLUDING AMERICAN RAILWAY ENGINEERING AND MAINTENANCE-OF-WAY (AREMA), 2024 EDITION STANDARD SPECIFICATIONS; AND CALTRANS STANDARD SPECIFICATIONS.

# INSPECTION

CONTRACTOR TO OBTAIN NECESSARY PERMITS TO WORK WITHIN SCRRA AND CITY RIGHT-OF-WAY, ALL WORK AND MATERIALS ARE SUBJECT TO INSPECTION PURSUANT TO LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC). CALL AT LEAST 48 HOURS (OR AS REQUIRED BY THE SPECIFIC PERMIT) IN ADVANCE OF THE WORKING DAY BEFORE THE INSPECTION IS REQUIRED.

REMOVALS

A. REMOVE ALL EXISTING IMPROVEMENTS THAT INTERFERE WITH THE CONSTRUCTION OF THIS PROJECT. AND AS INDICATED ON THE PLANS. B. UTILITIES THAT NEED TO BE REMOVED OR RELOCATED SHALL BE DONE SO BY OTHERS, EXCEPT WHERE NOTED ON THE PLANS.

NOTICE TO ADJACENT PROPERTY OWNER THE CONTRACTOR SHALL GIVE REASONABLE NOTICE TO ADJACENT PROPERTY OWNERS OR OCCUPANTS OF THE CONSTRUCTION OF THIS PROJECT PRIOR TO STARTING WORK PER SCRRA SPECIFICATION 01 14 00.

ADVANCE CONSTRUCTION NOTICE SIGNS ADVANCED CONSTRUCTION NOTICE SIGNS ARE REQUIRED BY THE PROVISIONS OF THE "WORK AREA TRAFFIC CONTROL HANDBOOK (WATCHBOOK)", LATEST EDITION.

UNDERGROUND SERVICE ALERT SCRRA IS NOT A MEMBER OF DIGALERT. THE APPLICANT SHALL CALL SCRRA'S SIGNAL DEPARTMENT AT (909) 592–1346 OR BY EMAILING THE ROE COORDINATOR A MINIMUM OF FIFTEEN DAYS PRIOR TO BEGINNING CONSTRUCTION TO MARK SIGNAL AND COMMUNICATION CABLES AND CONDUITS. NO WORK MAY PROCEED UNTIL AN SCRRA C&S AUTHORIZATION NUMBER IS PROVIDED. SCRRA C&S AUTHORIZATION NUMBERS ARE VALID FOR 28 DAYS.

BEFORE COMMENCING ANY EXCAVATION, THE CONTRACTOR SHALL OBTAIN AN UNDERGROUND SERVICE ALERT INQUIRY I.D. NUMBER BY CALLING 811. THIS I.D. NUMBER SHALL BE REPORTED TO SCRRA UPON RECEIPT.

# SURVEY

SURVEY MONUMENT PRESERVATION IS REQUIRED AND SHALL FOLLOW SECTION 01 71 23 OF THE SCRRA STANDARD SPECIFICATIONS. ADDITIONAL SURVEY NOTES AND FIELD ENGINEERING SHALL FOLLOW THE SCRRA STANDARD SPECIFICATIONS.



SIGNED BY

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HECKED BY

ADRIAN

04-10-2025

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**ORANGE COUNT INLAND SL** 

APPROVED:

UBMITTED

PROJECT MANAGER

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# BASIS OF SURVEY

HORIZONTAL CONTROL: THE BASIS OF THE HORIZONTAL CONTROL IS THE NORTH AMERICAN DATUM OF 1983 (NAD83), CALIFORNIA COORDINATE SYSTEM ZONE VI (CCSZVI), EPOCH 2010.00. DETERMINED LOCALLY BY THE SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY (SCRRA) GEODETIC SURVEY CONTROL NETWORK POINTS L027, L028, AND S023 (SEE TABLE BELOW FOR COORDINATES).

VERTICAL CONTROL: THE BASIS OF THE VERTICAL CONTROL IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), SPECIFICALLY THE SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY (SCRRA) SURVEY CONTROL NETWORK POINTS L027, L028, AND S023 (SEE TABLE BELOW FOR ELEVATIONS).

	HORIZONTAL AND VERTICAL CONTROL REFERENCES						
POINT ID	NORTHING	EASTING	ELEVATION	DESCRIPTION			
L027	2175405.44	6115930.90	314.76	SCRRA CONTROL PT			
L028	2138252.07	6128932.20	204.10	2" SILVER DISK			
S023	2162018.33	6128020.91	349.18	2" SILVER DISK W/ PUNCH "SIC BM-11"			

				All plans, drawings, spec-	SURVEYED BY J. HARRINGTON
				ifications, and or information furnished herewith shall remain the property of the Southern	DRAWN BY C. GUTIERREZ
					CHECKED BY M. GARCIA
					APPROVED BY S. WAGNER
REV.	DATE	BY SUB. AI	PP.	Regional Rail Authority.	DATE 03-28-2025





WES WAGNER ENGINEERING & SURVEY, INC.

17134 DEVONSHIRE STREET • SUITE 200 • NORTHRIDGE • CA • 91325-1619

818 892 6565 • FAX 818 488 9480 • mail@wesinc.org • www.wesinc.or



SUBMITTED:

APPROVED:

PROJECT MANAGER

# **ORANGE COUNTY TRANSPORTATION AUTHORITY INLAND SLOPE REHABILITATION PHASE II**

CONTRACT	NO. E745D-20			
DRAWING NO.				
OC-VR-201				
REVISION	SHEET NO.			
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SCALE	NONE			

SURVEY CONTROL PLAN

IFB 4-2666 EXHIBIT C

	CONTROL POINTS					
Point #	Northing	Easting	Elevation	Raw Description		
1	2177582.23	6118903.83	370.06	AT		
2	2178447.28	6119963.20	393.17	AT		
3	2176206.89	6120003.60	385.81	AT		
4	2177115.31	6121180.84	410.93	AT		
5	2174302.32	6121628.30	413.80	AT		
6	2175033.92	6122668.14	446.38	PID		
7	2175669.65	6121570.89	423.04	AT		
8	2172008.66	6123779.84	438.31	АТ		
9	2172934.50	6124846.94	444.77	PID		
10	2171221.53	6125797.04	466.23	AT		
11	2170823.75	6125034.75	438.65	АТ		
12	2168867.36	6125713.04	464.43	АТ		
13	2169653.68	6126796.23	464.96	АТ		
200	2175427.16	6121534.22	421.64	RR-SPK		
201	2175063.73	6121859.39	438.01	RR-SPK		

				INFORMATION CONFIDENTIAL: All plans, drawings, spec-	SURVEYED BY J. HARRINGTON
				ifications, and or information furnished herewith shall remain the property of the Southern	DRAWN BY C. GUTIERREZ
					CHECKED BY M. GARCIA
				used for any purpose not provided for in agreements with the Southern California	APPROVED BY S. WAGNER
REV.	DATE	BY SUB.	APP.	Regional Rail Authority.	DATE 03-28-2025





APPROVED:

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SUBMITTED:

PROJECT MANAGER

# SURVEY CONTROL PLAN

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	CONTROL POINTS						
Point #	Northing	Easting	Elevation	Raw Description			
14	2150523.87	6127593.19	266.70	AT			
15	2150536.92	6127806.13	269.05	AT			
16	2150255.57	6127752.10	267.24	AT			
17	2149951.18	6127883.16	298.15	AT			
18	2149778.93	6127395.89	281.93	AT			
208	2150368.61	6127663.91	264.02	RR-SPK			
209	2150126.39	6127649.25	262.92	RR-SPK			

				All plans, drawings, spec- ifications, and or information furnished herewith shall remain the property of the Southern California Regional Rail Authority and shall be held confidential; and shall not be used for any purpose not provided for in agreements with the Southern California	SURVEYED BY J. HARRINGTON
					DRAWN BY C. GUTIERREZ
					CHECKED BY M. GARCIA
					APPROVED BY S. WAGNER
REV.	DATE	BY SUB.	APP.	Regional Rail Authority.	DATE 03-28-2025





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SUBMITTED: PROJECT MANAGER

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# CONTRACT NO. **ORANGE COUNTY TRANSPORTATION AUTHORITY INLAND SLOPE REHABILITATION PHASE II**

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# SURVEY CONTROL PLAN













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1. UTILITIES ARE SHOWN ACCORDING TO KNOWN UTILITY OWNER INFORMATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF

ALL UTILITIES AND THEIR SERVICE CONNECTIONS PRIOR TO CONSTRUCTION.

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1. UTILITIES ARE SHOWN ACCORDING TO KNOWN UTILITY OWNER

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# NOTES:

REV. DATE

1. UTILITIES ARE SHOWN ACCORDING TO KNOWN UTILITY OWNER INFORMATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES AND THEIR SERVICE CONNECTIONS PRIOR TO CONSTRUCTION. 2. STATIONING IS BASED OFF € MT−1. 3. SLOPE STABILIZATION LIMITS TO BE VERIFIED IN THE FIELD WITH THE ENGINEER PRIOR TO CONSTRUCTION. 4. FOR GROUTED RIP-RAP, OUTER ROCKS SHALL PROJECT ABOVE THE CONCRETE SURFACE BY A HEIGHT OF 0.25-0.32 TIMES THE ROCK DIAMETER. NFORMATION CONFIDENTIAL All plans, drawings, spec-fications, and or information urnished herewith shall remai ne property of the Southern California Regional Rail Authority and shall be held confidential; and shall not be used for any purpose not provided for in agreements with the Southern California

esigned by . **STAKE** RAWN BY . KEOŪGH HECKED BY CHEN PROVED BY ADRIAN 04-10-2025

Regional Rail Authority.

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# CONSTRUCTION NOTES

(1) PROTECT IN PLACE. 2 REMOVE. (5) CONSTRUCT SHOTCRETE PER DETAIL E ON (8) CONSTRUCT GROUTED RIP-RAP PER DETAIL (17) CONSTRUCT HANDRAIL PER ES 6330. (19) CONSTRUCT RETAINING CURB AND HANDRAI PER DETAIL B ON DWG NO. OC-GD-201.



SHOTCRETE

RIP-RAP

# METROLINK **Kimley»Horn** SUBMITTED:

ORANGE COUNT **INLAND SL** GRADI

APPROVED:

PROJECT MANAGER

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TY TRANSPORTATION AUTHO	DRITY CONTRACT NO. E745D-20
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# IFB 4-2666 EXHIBIT C



IFB 4-2666 EXHIBIT C

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ЧИО (::) REV.	DATE	Confidential; and shall not used for any purpose not provided for in agreements with the Southern Californic Regional Rail Authority.	APPROVED BY

RIP RAP CLASS	T (THICKNESS)
	1' – 6"
	2' - 0"
	3' - 0"
IV	4' - 0"

RIP-RAP	A
NOT TO SCALE	

3. RIP RAP CLASS PER PLAN

1. LENGTH IS ALONG DITCH FLOWLINE 2. LENGTH AND WIDTH (OR STATION LIMITS) INDICATED ON PLAN

NOTES





















# METROLINK SUBMITTED:









provided for in agreements with the Southern California

Regional Rail Authority.

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OF CAL

**Kimley»Horn** 

SUBMITTED:

APPROVED:

PROJECT MANAGER

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# DESIGN CRITERIA:

STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE SCRRA DESIGN CRITERIA MANUAL, 2024.

DESIGN STANDARDS: AREMA MANUAL FOR RAILWAY ENGINEERING, 2024 f'c = 4000 PSICAST-IN-PLACE CONCRETE: ACTIVE EARTH PRESSURE = 46 PSF/FT MAXIMUM OF E 80 COOPER OR 2 FT EQUIVALENT HEIGHT OF SOIL SURCHARGE LEVEL II RETURN PERIOD = 500 YEARS PGA = 0.344 gSEISMIC INCREMENT (ACTIVE) = 20 PSF/FT

STRUCTURE GENERAL NOTES

MATERIALS AND CONSTRUCTION SHALL CONFORM TO SCRRA STANDARD SPECIFICATIONS, CURRENT EDITION, THE PROJECT SPECIAL PROVISIONS, THE PLANS, AND AREMA, 2024 EDITION. IN CASE OF A CONFLICT, THE MORE STRINGENT REQUIREMENT SHALL APPLY.

THE CONTRACTOR SHALL REVIEW EXISTING CONDITIONS ON THE SITE DURING THE BIDDING. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING WORK. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES PRIOR TO PROCEEDING.

ALL DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE SHOWN ON THE PLANS, SECTIONS, AND DETAILS. DRAWINGS SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES.

WHERE SHOWN IN THE PLANS, WATERSTOPS IN CONSTRUCTION JOINTS SHALL BE 9" X 3/8" FLAT-RIBBED WATERSTOPS. WATERSTOPS SHALL BE CENTERED IN CONSTRUCTION JOINT. CAST-IN-PLACE CONCRETE

ALL CONCRETE MATERIALS, PLACEMENT, AND WORKMANSHIP SHALL CONFORM TO SCRRA STANDARD SPECIFICATIONS SECTION 03 31 00: STRUCTURAL CONCRETE AND THE PROJECT SPECIFIC SPECIFICATIONS.

REINFORCING STEEL MATERIALS AND PLACEMENT SHALL CONFORM TO SCRRA STANDARD SPECIFICATIONS SECTION 03 21 00: REINFORCING STEEL.

CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 90-1 OF THE 2024 CALTRANS STANDARD SPECIFICATIONS AND SHALL CONTAIN AT LEAST 505 POUNDS OF CEMENTITIOUS MATERIAL PER CUBIC YARD.

LEAN CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 19-03.21 OF THE 2024 CALTRANS STANDARD SPECIFICATIONS.

REPORT PREPARED BY EARTH MECHANICS, INC.: FOUNDATION REPORT FOR U-CHANNEL

NOTES:

- 1. PLACE WEAKENED PLANES AT 24'-0" MAX SPACING IN THE U-CHANNEL WALLS AND BOTTOM SLAB.
- 2. PLACE EXPANSION JOINTS AT 96'-0" MAX SPACING IN THE CHANNEL WALLS.
- CONTRACTOR TO VERIFY THAT THE WEEPHOLES WITHIN THE EXISTING RETAINING WALL ARE CLEAN AND CLEAR OF OBSTRUCTIONS PRIOR TO CONSTRUCTION.

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WALL, THE OVEREXCAVATION SHALL BE FLUSH WITH THE WAL VERTICALLY DOWNWARD TO THE RECOMMENDED MINIMUM EXCA	L FACE WITH	EXTENDING	
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# SECTION VIII: LEVEL 3 HEALTH, SAFETY AND ENVIRONMENTAL SPECIFICATIONS – EXHIBIT H

# LEVEL 3 HEALTH, SAFETY AND ENVIRONMENTAL (HSE) SPECIFICATIONS

## **REQUIRED HSE SUBMITTAL SUMMARY**

The contractor shall submit copies of the items listed below for contract scope work on OCTA projects and property. Copies shall be provided prior to contractor's mobilization onto OCTA projects and property. Contractor shall provide compliant written Health, Safety & Environmental (HSE) submittals within 30 days of the contract notice to proceed.

HSE submittals shall comply with the 1988 Drug Free Workplace Act, or the Department of Transportation (DOT), or the Federal Transportation Administration (FTA) requirements (according to OCTA procurement funding guidelines) and comply with the California Code of Regulations (CCR) Title 8 regulatory standards.

Contractor's established written programs/plans shall comply with CCR Title 8 regulatory standards. All HSE related programs/plans submitted to OCTA for acceptance shall be prepared and submitted by a qualified HSE professional who is recognized by an organization of industry standard (i.e., CSP, CIH, CHST, CHMM, etc.) and is experienced in developing compliant written HSE programs. The site safety HSE representative shall participate in the HSE submittal process.

- 1. Contractor shall provide a copy of Company's Injury Illness Prevention Program in accordance with CCR Title 8, Section 3203.
- 2. Contractor shall provide a copy of their Company HSE Policy/Procedure Manual, in compliance with CCR Title 8 Standards for awarded scope.
- 3. Contractor shall provide a copy of their Policy or Substance Abuse Prevention Program.
- 4. Contractor shall provide a copy of their Hazard Communication Program and MSDS Management Program in compliance with CCR Title 8, Section 5194, Hazard Communication Standard.
- 5. On-Site HSE Representative:

<u>On Facility Modification Projects</u>, The Contractor shall submit a resume of the designated on-site qualified HSE Representative. The HSE Representative shall possess a current certification from the Board of Certified Safety Professionals (BCSP), plus five (5) years construction or scope agreement HSE experience enforcing HSE compliance on heavy or industrial construction project sites, the last two years of which have been administering HSE in the construction or scope discipline for which the Contractor is contracting with the Authority. The designated HSE Representative shall participate in all HSE related submittals through completion of scope.

On Capital Programs, The Contractor's on-site qualified HSE Representative shall be a Certified Safety Professional (CSP) with current standing from the Board of Certified Safety Professionals (BCSP) or a Construction Health and Safety Technician (CHST) with current standing from the (BCSP) or a Certified Industrial Hygienist (CIH) with current standing from the American Board of Industrial Hygiene (ABIH), or an equal professional HSE Certificate of standing from The National Examination Board in Occupational Safety and Health (NEBOSH), that is Level 3 HSE Specifications PAGE 1 OF 19 Revision 9, 8/28/2015 acceptable to the Authority. The Contractor's on-site HSE Representative(s) shall provide a resume and have a minimum of seven (7) years heavy construction experience in administering HSE programs on heavy construction project sites, the last two years of which have been administering HSE in the construction/scope discipline for which Contractor is contracting with the Authority.

6. A Detailed Site Specific HSE Work Implementation Plan:

This plan shall be prepared and submitted by a recognized HSE professional experienced in developing compliant written HSE programs. Indicate the methods and procedures, and include the sequence of tasks as listed on the project schedule, include the hazards, tools and equipment, and the safe work practices to mitigate the hazards in a format acceptable OCTA. Specify safety measures in accordance with applicable Cal/OSHA standards, South Coast Air Quality Management District (SCAQMD) rules, National Fire Protection Association (NFPA), National Electric Code (NEC), American National Standards Institute (ANSI) codes and regulations, job hazard analysis, policies, procedures, HSE training requirements and known and potential hazards of Contractor's scope. Plans shall be prepared as specified above, and may require if necessary a professional engineer licensed to practice in the state of California, when so required by the provisions of the California Board for Professional Engineer and Surveyors.

# PART I – GENERAL

### 1.0 GENERAL HEALTH, SAFETY AND ENVIRONMENTAL REQUIREMENTS

- A. The Contractor, its subcontractors, suppliers, and employees have the obligation to comply with all Authority health, safety and environmental compliance department (HSEC) requirements of this safety specification, project site requirements, and bus yard safety rules, as well as all federal, state, and local regulations pertaining to scope of work or agreements with the Authority including California Department of Transportation safety requirements and special provisions. Additionally, manufacturer requirements are considered incorporated by reference, as applicable, to this scope of work.
- B. Observance of unsafe acts or conditions, serious violation of health and safety standards, non-conformance of Authority HSEC requirements, or disregard for the intent of these safety specifications to protect people and property, by Contractor may be reason for termination of scope or agreements with the Authority, at the sole discretion of the Authority.
- C. The Authority HSEC requirements, and references contained within this scope of work shall not be considered all-inclusive as to the hazards that might be encountered. Safe work practices shall be pre-planned and performed, and safe conditions shall be maintained during the course of this work scope.
- D. The Contractor shall specifically acknowledge that it has primary responsibility to prevent and correct all health, safety and environmental hazards for which it and its employees, or its subcontractors (and their employees) are responsible. The Contractor shall further acknowledge their expertise in recognition and prevention of hazards in the operations for which they are responsible, that the Authority may not have such expertise, and is relying upon the Contractor for
such expertise. The Authority retains the right to notify the Contractor of potential hazards and request the Contractor to evaluate and, as necessary, to eliminate those hazards.

- E. The Contractor shall provide all necessary tools, equipment, and related safety protective devices to execute the scope of work in compliance with the Authority's HSEC requirements, CCR Title 8 Standards, and recognized safe work practices.
- F. The Contractor shall instruct all its employees, and all associated subcontractors under contract with the Contractor who works on Authority projects in the following; recognition, identification, and avoidance of unsafe acts and/or conditions applicable to its work.

#### PART II – SPECIFIC REQUIREMENTS

2.0 While these safety specifications are intended to promote safe work practices, Contractors are reminded of their obligation to comply with all federal (Code of Federal Regulations (CFR) Sections 1926 & 1910 Standards), state (CCR Title 8 Standards), local and municipal safety regulations, and Authority health, safety and environmental requirements applicable to their project scope. Failure to comply with these standards may be cause for termination of scope or agreements with the Authority, at the sole discretion of the Authority.

#### 2.1 REQUIRED DOCUMENTATION / REPORTING REQUIREMENTS

The Contractor at a minimum shall provide the following documents to the Authority's Project Manager. Items A through E below shall be submitted and accepted by the Authority's Project Manager prior to Contractor mobilization. Item F upon each occurrence, and for items G through K, contractor shall verify the following documentation is in place, prior to and during contract scope and make the same available to the Authority upon request within 72 hours.

Contractor's established written programs/plans shall comply with CCR Title 8 regulatory standards. All new programs/plans shall be prepared and submitted by a qualified HSE professional who is recognized by an organization of industry standard (i.e., CSP, CIH, CHST, STS, CHMM, etc.) and is experienced in developing compliant written HSE programs. The site safety HSE representative shall participate in the scope submittal process.

- A. A Comprehensive Project Specific Health, Safety, and Environmental (HSE) Work Plan.
  - a. The Contractor shall develop a site project plan that may include, but is not limited to: Permits, Evacuation, Emergency Plan, Roles and Responsibilities, Scope and Construction Activity Details, Constructability Review, Contractor Coordination Process, Safe Work Methods, Hazard Identification & Risk Control, First Aid and Injury Management, Emergency Procedures, Public Protection, Authority and Contractor Site Rules, Incident Reporting and Investigation, Specialized Work or Licensing, Training and Orientation Requirements, Chemical Management, and Subcontractor Management.

- b. A Detailed Site Specific HSE Implementation Plan: This plan shall be prepared and submitted by a recognized HSE professional (current BCSP Certification in good standing, i.e., CSP, CHST, OHST) experienced in developing compliant written HSE programs, acceptable to OCTA. Indicate the methods and procedures, and include the sequence of tasks as listed on the project schedule, include the hazards, tools and equipment, and the safe work practices to mitigate the hazards in a format acceptable OCTA. Specify safety measures in accordance with applicable Cal/OSHA standards, SCAQMD rules, NFPA, NEC, ANSI codes and regulations, job hazard analysis, policies, procedures, HSE training requirements and known and potential hazards of Contractor's scope. Plans shall be prepared as specified above, and may require if necessary a professional engineer licensed to practice in the state of California, when so required by the provisions of the California Board for Professional Engineer and Surveyors.
- B. Contractor shall provide a copy of their Company HSE Policy/Procedure Manual, in compliance with CCR Title 8 Standards for awarded scope.
- C. Contractor shall provide a copy of Company's Injury Illness Prevention Program in accordance with CCR Title 8, Section 3203.
- D. Contractor shall provide a copy of their Policy or Substance Abuse Prevention Program that complies with the 1988 Drug Free Workplace Act.
- E. Contractor shall provide the resume and qualifications/certifications of assigned project designated Onsite HSE Representative for this scope as identified in section 2.3 of this specification.
- F. Accident/Incident investigation report within 24 hours of event (immediate verbal notification to Authority Project Manager, followed by Written Report).

The following required documentation shall be provided to the Authority's Project Manager, upon Authority request, within 72 hours.

- G. A copy of Contractor weekly site safety inspection report with status of corrections, upon request, within 72 hours.
- H. Contractor shall provide a copy of the Contractors and subcontractors competent person list (submit to Authority Project Manager, upon Authority request, within 72 hours).
- I. Contractors and subcontractors training records for qualified equipment operators, electrical worker certification (NFPA 70E), confined space training, HAZWOPER training, and similar personnel safety training certificates as applicable to the agreement scope and as requested by the OCTA Project Manager and/or HSEC department, upon Authority request, within 72 hours and prior to starting or during the scope activity (submit to Project Manager).
- J. A monthly report that includes number of workers on project, a list of subcontractors, work hours (month, year to date, & project cumulative) of each contractor, labor designation, OSHA Recordable injuries and illnesses

segregated by medical treatment cases, restricted workday cases, number of restricted days, lost workday cases, and number of lost work days, and recordable incident rate. Contractor shall provide to the Authority, upon request, within 72 hours.

#### K. TRAINING DOCUMENTATION

To ensure that each employee is qualified to perform their assigned work, when applicable to scope work, Contractor shall verify training documentation is in place, prior to and during contract scope, and make available to the Authority, upon request, within 72 hours. Training may be required by the Authority or CCR Title 8 Standards and required for activity on Authority's property and/or Authority projects. Contractor shall provide to Authority, upon request, within 72 hours.

- 2.2 HAZARD COMMUNICATION (CCR Title 8, Section 5194)
  - A. Contractor shall comply with CCR Title 8, Section 5194 Hazard Communication Standard. Prior to chemical use on Authority property and/or project work areas the Contractor shall provide to the Authority Project Manager copies of Material Safety Data Sheet (MSDS) for all applicable products used, if any.
  - B. All chemicals including paint, solvents, detergents and similar substances shall comply with SCAQMD Rules 103, 1113, and 1171.

#### 2.3 DESIGNATED HEALTH, SAFETY, ENVIRONMENTAL (HSE) REPRESENTATIVE

- A. Before beginning on-site activities, the Contractor shall designate an On-site HSE Representative. This person shall be a Competent or Qualified Individual as defined by the Occupational, Safety, and Health Administration (OSHA), familiar with applicable CCR Title 8 Standards, and has the authority to affect changes in work procedures that may have associated cost, schedule and budget impacts.
- B. The Contractor's on-site qualified HSE Representative for all Authority projects is subject to acceptance by the Authority Project Manager and the HSEC Department Manager. All contact information of the On-site HSE Representative (name, phone, and fax and pager/cell phone number) shall be provided to the Authority Project Manager.

QUALIFICATIONS – <u>On Capital Programs</u>, the Contractor shall submit a resume of the full time, on-site qualified HSE Representative(s) who reports directly to the Contractor's Project Manager or Superintendent, and who is responsible for HSE oversight for field operations on the project no later than ten (10) days after receipt of Notice to Proceed, and prior to mobilization. The Contractor's On-site HSE Representative(s) shall have a minimum of seven (7) years heavy construction experience in administering HSE programs on heavy construction project sites, the last two years of which have been administering HSE in the construction discipline for which Contractor is contracting with the Authority. The Contractor's On-site HSE Representative shall be a Certified Safety Professional (CSP) with current standing from the Board of Certified Safety Professionals (BCSP), or a Construction Health and Safety Technician (CHST) with current

standing from the BCSP or a Certified Industrial Hygienist (CIH) with current standing from the American Board of Industrial Hygiene (ABIH), or an equal professional HSE Certificate of standing from The National Examination Board in Occupational Safety and Health (NEBOSH), that is acceptable to the Authority. The Contractor's On-site HSE Representatives(s) shall be on site during all operational hours. The On-site HSE Representative(s) shall set up, carry forward and aggressively and effectively maintain the project specific safety program and IIPP covering all phases of the work. If at any time the Contractor wishes to replace their On-site HSE Representative(s), the Contractor must provide written notice thirty (30) days prior to change of personnel to the Authority. The Contractor shall take all precautions and follow all procedures for the safety of, and shall provide all protection to prevent injury to, all persons involved in any way in the scope work and all other persons, including, without limitation, the employees, agents, guests, visitors, invitees and licensees of the Authority who may be involved. This requirement applies continuously and is not limited to normal working hours. The designated HSE Representative shall participate in all HSE related submittals. The Authority reserves the right to allow for an exception to modify these minimum qualification requirements for unforeseen circumstances, at the sole discretion of the Authority Project Manager and HSEC Department Manager.

On Facility Modification Projects, the Contractor shall submit a resume of the full time qualified on-site HSE Representative who reports directly to the Contractor's Project Manager or Superintendent, and who is responsible for safety oversight for field operations on the project no later than ten (10) days after receipt of Notice to Proceed, and prior to mobilization. The Contractor's On-Site HSE Representative shall hold a current certification from the BCSP, plus five (5) years construction or scope HSE experience enforcing HSE compliance on heavy construction or industrial construction project sites, the last two years of which have been administering HSE in the construction or scope discipline for which Contractor is contracting with the Authority. The Contractor's On-site HSE Representative(s) shall be on site during all operational hours. The designated HSE Representative shall participate in all HSE related submittals. The Authority reserves the right to allow for an exception and to modify these minimum qualification requirements for unforeseen circumstances, at the sole discretion of the Authority Project Manager and HSEC Department Manager.

- 1. Capital Programs may include, but are not limited to, projects involving demolition and construction of; heavy construction, rail projects, highway projects, parking lots and structures, fuel stations, building construction, facility modifications, bus base construction, EPA/DTSC remediation, AQMD air or soil monitoring, fuel tank removal or modification, major bus base modifications, handling potential hazardous waste projects, and similar projects as deemed a Capital Program at the sole discretion by the Authority.
- 2. Facility Modification Projects may include, but are not limited to, projects involving minor demolition and construction or improvement projects for transportation centers, bus base sites and/or building modifications, equipment and/or building upgrades, and similar projects as deemed a Facility Modification Project at the sole discretion by the Authority.
- 3. Competent Individual means an individual who is capable of identifying existing and predictable hazards in the surroundings or working conditions Revision 9, 8/28/2015 Level 3 HSE Specifications PAGE 6 OF 19

which are unsanitary, hazardous, or dangerous to employees and/or property, and who has authorization to take prompt corrective measures to eliminate them.

- 4. Qualified Individual means an individual who by possession of a recognized degree, certificate, certification or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his/her ability to solve or resolve problems relating to the subject matter, the work, or the project.
- C. The Contractor shall designate a Competent Individual for each task, as required by Cal-OSHA standards or laws. The task Competent Individual shall be responsible for the prevention of accidents. If the Authority or any public agency with jurisdiction notifies the Contractor of any claimed dangerous condition at the site that is within the Contractor's care, custody or control, the Contractor shall take immediate action to rectify the condition at no additional cost to the Authority. The Contractor shall be responsible for the payment of all fines levied against the Authority for deficiencies relating to the Contractor's supervision or conduct and/or control of the scope agreement.
- D. On Facility Modification Projects, the Authority Project Manager reserves the right to require the Contractor to provide one additional full-time safety representative with qualifications as identified in section 2.3 (C), above whenever the number of individuals from the Contractor, its subcontractors, suppliers, and vendors meets or exceeds 15 workers, there are multiple scope work sites, or as warranted by the scope of work at the sole discretion by the Authority.
- E. On Capital Programs, the Authority's Project Manager reserves the right to require the Contractor to provide one additional full-time safety representative with qualifications as identified in item 2.3 (C) above whenever the number of individuals from the Contractor, its subcontractors, suppliers, and vendors meets or exceeds 50 workers, or is warranted by the scope of work.

#### 2.4 SITE HSE ORIENTATION

The Contractor shall conduct and document a project site safety orientation for all Contractor personnel, subcontractors, suppliers, vendors, and new employees assigned to the project prior to performing any work on Authority projects, a copy of the HSE orientation attendance list shall be provided to the Authority Project Manager. The safety orientation, at a minimum, shall include, as applicable, Personal Protection Equipment (PPE) requirements, eye protection, ANSI class 2 reflective vests, designated smoking, eating, and parking areas, traffic speed limit and routing, cell phone policy, and barricade requirements. When required by scope, additional orientation shall include fall protection, energy isolation lock-out/tag-out (LOTO), confined space, hot work permit, security requirements, and similar project safety requirements.

# 2.5 INCIDENT NOTIFICATION AND INVESTIGATION

A. The Authority shall be promptly notified of any of the following types of incidents:

- 1. Damage to Authority property (or incidents involving third party property damage);
- 2. Reportable and/or recordable injuries (as defined by the U. S. Occupational Safety and Health Administration);
- 3. Incidents impacting the environment, i.e. spills or releases on Authority property.
- B. Notifications shall be made to Authority representatives, employees and/or agents. This includes incidents occurring to contractors, vendors, visitors, or members of the general public that arise from the performance of Authority contract work. An initial immediate verbal notification, followed by a written incident investigation report shall be submitted to Authority's Project Manager within 24 hours of the incident.

A final written incident investigative report shall be submitted within seven (7) calendar days, and include the following information. The current status of anyone injured, photos of the incident area, detailed description of what happened, the contributing factors that led to the incident occurrence, a copy of the company policy or procedure associated with the incident and evaluation of effectiveness, copy of the task planning documentation, copy of the Physician's first report of injury, updated OSHA 300 Log, and the corrective action initiated to prevent recurrence. This information shall be considered the minimum elements required for a comprehensive incident report acceptable to OCTA.

- C. A Serious Injury, Serious Incident, OSHA Recordable Injury / Illness, or Significant Near Miss shall require a formal incident review at the discretion of the Authority's Project Manager. The incident review shall be conducted within seven (7) calendar days of the incident. This review shall require a senior executive from the Contractors' organization to participate in the presentation. The serious incident presentation shall include action taken for the welfare of the injured, a status report of the injured, causation factors leading to the incident, a root cause analysis, and a detailed recovery plan that identifies corrective actions to prevent a similar incident, and actions to enhance safety awareness.
  - 1. <u>Serious Injury:</u> includes an injury or illness to one or more employees, occurring in a place of employment or in connection with any employment, which requires inpatient hospitalization for a period in excess of twenty-four hours for other than medical observation, or in which an employee suffers the loss of any member of the body, or suffers any serious degree of physical disfigurement.
  - 2. <u>Serious Incident:</u> includes property damage of \$500.00 or more, an incident requiring emergency services (local fire, paramedics and ambulance response), news media or OCTA media relations response, and/or incidents involving other agencies (Cal/OSHA, EPA, AQMD, DTSC, etc.) notification or representation.
  - 3. <u>OSHA Recordable Injury / Illness:</u> includes and injury / illness resulting in medical treatment beyond First Aid, an injury / illness which requires restricted duty, or an injury / illness resulting in days away from work.

4. <u>Significant Near Miss Incident</u>; includes incidents where no property was damaged and no personal injury sustained, but where, given a slight shift in time or position, damage and/or injury easily could have occurred.

#### 2.6 REGULAR INSPECTIONS & THIRD PARTY INSPECTIONS

- A. Frequent and regular inspections of the project jobsite shall be made by the Contractor's On-site HSE Representative, or another Competent Individual designated by the Contractor. Unsafe acts and/or conditions noted during inspections shall be corrected immediately.
- B. The Contractor is advised that representatives of regulatory agencies (i.e., CAL-OSHA, EPA, SCAQMD, etc.), upon proper identification, are entitled to access onto Authority property and projects. The Authority Project Manager shall be notified of their arrival as soon as possible.

#### 2.7 ENVIRONMENTAL REQUIREMENTS

- A. The Contractor shall comply with Federal, State, county, municipal, and other local laws and regulations pertaining to the environment, including noise, aesthetics, air quality, water quality, contaminated soils, hazardous waste, storm water, and resources of archaeological significance. Expense of compliance with these laws and regulations is considered included in the agreement. Contractor shall provide water used for dust control, or for pre-wetting areas to be paved, as required; no payment will be made by OCTA for this water.
- B. The Contractor shall prevent pollution of storm drains, rivers, streams, irrigation ditches, and reservoirs with sediment or other harmful materials. Fuels, oils, bitumen, calcium chloride, cement, or other contaminants that would contribute to water pollution shall not be dumped into or placed where they will leach into storm drains, rivers, streams, irrigation ditches, or reservoirs. If operating equipment in streambeds or in and around open waters, protect the quality of ground water, wetlands, and surface waters.
- C. The Contractor shall protect adjacent properties and water resources from erosion and sediment damage throughout the duration of the contract. Contractor shall comply with applicable NPDES permits and Storm Water Pollution Prevention Plan (SWPPP) requirements.
- D. Contractor shall comply with all applicable EPA, Cal EPA, Cal Recycle, DTSC, SCAQMD, local, state, county and city standards, rules and regulations for hazardous and special waste handling, recycling and/ disposal. At a minimum, Contractor shall ensure compliance where applicable with SCAQMD Rule 1166, CCR Title 8, Section 5192, 29 CFR Subpart 1910.120, 49 CFR Part 172, Subpart H, 40 CFR Subpart 265.16 and CCR Title 22 Section 6625.16. Contractor shall provide OCTA a schedule of all hazardous waste and special or industrial waste disposal dates in advance of transport date. Only authorized OCTA personnel shall sign manifests for OCTA generated wastes. Contractor shall ensure that only current registered transporters are used for disposal of hazardous waste and industrial wastes. The Contractor shall obtain approval from OCTA for the disposal site locations in advance of scheduled transport date.

- E. If the Contractor encounters on the site material reasonably believed to be asbestos, polychlorinated biphenyl (PCB) or other Hazardous Substance (as defined in California Health and Safety Code, and all regulations pursuant thereto) which has not been rendered harmless, the Contractor shall immediately stop work in that area affected and report the condition to the Authority in writing. The work in the affected area shall not thereafter be resumed except by written agreement of the Authority and Contractor if in fact the material is asbestos or polychlorinated biphenyl (PCB) or other hazardous substance and has not been rendered harmless. The work in the affected area shall be resumed in the absence of asbestos or polychlorinated biphenyl (PCB) or other hazardous substance, or when it has been rendered harmless, by written agreement of the Authority and the Contractor, or in accordance with a final determination by an Environmental Consultant employed by the Authority.
- F. The Contractor shall not permit any hazardous substances to be brought onto or stored at the Project Site or used in the construction of the work, except for specified materials and commonly used construction materials for which there are no reasonable substitutes. All such materials shall be handled in accordance with all manufacturers' guidelines, warnings and recommendations and in full compliance with all applicable laws. All notices required to be given with respect to such materials shall be given by the Contractor. The Contractor shall not intentionally release or dispose of hazardous substances at the Project Site or into the soil, drains, surface or ground water, or air, nor shall the Contractor allow any Sub-Contractor, subcontractor or supplier or any other person for whose acts the Contractor or any subcontractor, vendor or supplier may be liable, to do so. For purposes of Contract Documents, "hazardous substance" means any substance or material which has been determined or during the time of performance of the work is determined to be capable of posing a risk of injury to health, safety, property or the environment by any federal, state or local governmental authority.

#### 2.8 VEHICLE AND ROADWAY SAFETY REQUIREMENTS

- A. The Contractor shall ensure that all Contractor vehicles, including those of its subcontractors, suppliers, vendors and employees are parked in designated parking areas, are identified by company name and/or logo, and comply with traffic routes, and posted traffic signs in areas other than the employee parking lots.
- B. Personal vehicles belonging to Contractor employees shall not be parked on the traveled way or shoulders including any section closed to public traffic, or areas of the community that may cause interference or complaints
- C. The Contractor shall comply with California Department of Transportation safety requirements and special provisions when working on highway projects.
- D. The Contractor shall conform to American Traffic Safety Services Association (Quality Standard for Work Zone Control Devices 1992).

#### 2.9 LANGUAGE REQUIREMENTS

For safety reasons, the Contractor shall ensure employees that do not read, or understand English, shall be within visual and hearing range of a bilingual Level 3 HSE Specifications PAGE 10 OF 19 Revision 9, 8/28/2015 1008403.1 supervisor or responsible designee at all times when on the Authority property or projects.

2.10 PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING

Contractors, and all associated subcontractors, vendors and suppliers are required to provide their own personal protective equipment (PPE), including eye, head, foot, and hand protection, respirators, reflective safety vests, and all other PPE required to perform their work safely on Authority projects.

- A. RESPIRATORS (CCR Title 8, Section 5144) The required documentation for training and respirator use shall be provided to the Authority's Project Manager upon request within 72 hours. All compliance documentation as required by CCR Title 8, Section 5144, Respiratory Protective Equipment.
- B. EYE PROTECTION The Authority requires eye protection on construction projects and work areas that meet ANSI Z-87.1 Standards.
- C. BUS BASE Minimum PPE required includes but is not limited to; Eye protection, class 2 reflective vest, steel toe or construction type footwear that meets ANSI Z41 1991 are recommended.
- D. CONSTRUCTION PROJECTS Minimum PPE required includes but is not limited to; hard hat, eye protection, hand protection, class 2 reflective vest, safety toe footwear that meets ANSI Z41 1991 are recommended.
- E. HARD HATS: Approved hard hat that meet ANSI Z89. 1 (latest revision). Hard hats should be affixed with the company/agency logo and/or name. The bill shall be worn forward. Metal hard hats and cowboy style are forbidden on Authority projects.
- F. FOOTWEAR: Enclosed leather that covers the ankles, such as a construction type boot. Employees shall not wear casual dress shoes, open toe, sneakers, sandals, canvas-type shoes, or other shoes that have thin soles or heels that are higher than normal in construction work areas. Safety toe footwear that meets ANSI Z41 1991 are recommended on construction sites and in operating facilities.
- G. CLOTHING/SHIRTS: minimum or waist length shirts with sleeves (4" minimum).
- H. CLOTHING/TROUSERS: Cover the entire leg. If flare-legged trousers are worn, the trouser bottoms must be tied to prevent catching. No sweat pants, or trousers with holes.
- 2.11 AERIAL DEVICES (CCR Title 8, Section 3648)

Aerial devices are defined in CCR Title 8 as any vehicle-mounted or self-propelled device, telescoping extensible or articulating, or both, which is primarily designed to position personnel. If aerial devices are to be used, the required documentation in

CCR Title 8, Section 3648 shall be provided to the Authority's Project Manager, upon request, within 72 hours.

2.12 CONFINED SPACE ENTRY (CCR Title 8, Section 5157)

Before any employee will be allowed to enter a confined space, the required documentation as required by CCR Title 8, Section 5157 shall be provided to the Authority's Project Manager, upon request, within 72 hours.

A. RECOMMENDED: a copy of the most recent calibration record for each air monitoring unit, 3-gas monitor or "sniffer" to be used by the Entry Supervisor prior to entering permit-required confined spaces.

#### 2.13 CRANES

- A. Crane activity shall comply with 29 CFR 1926.550, CCR Title 8 Standards, manufacture's recommendations and requirements, applicable American Society of Mechanical Engineers (ASME), and ANSI Standards. In addition, Contractor shall comply with the following requirements: Prior to using mobile cranes, the Contractor shall provide to the Authority Project Manager, items I, 2 & 3 of the following documentation a minimum of seven (7) days prior to activity, and item 4 on each day of crane activity.
- 1. Cranes require a submittal of the annual certification, and copy of the cranes most recent quarterly inspection.
- 2. A copy of each crane operator's qualification (NCCCO or equivalent) of company-authorized crane operators that have been properly trained in the equipment's use and limitations. Operator certification as required by CCR Title 8, Section 5006.1.
- 3. A rigging plan is required for all lifts. Critical lifts require an engineered plan designed by a registered professional engineer licensed in the State of California.
- 4. Contractor shall provide the name and qualifications of each "Qualified Rigger" as defined by OSHA.
- 5. Rigging scope activity shall comply with 29 CFR Subparts1926.250, 1929.753 and CCR Title 8 Standards.
- 6. All rigging equipment shall be free from defects, in good operating condition and maintained in a safe condition.
- 7. Rigging equipment shall be inspected by a designated, competent employee prior to initial use on the project, prior to each use, and documented inspections performed regularly. Records shall be kept on jobsite of each of these inspections by contractor and be made available to the Authority upon request within 72 hours.

- 8. Only one (1) sling eye should be in a hook, for multiple slings a shackle shall be used to prevent separation of slings, and prevent stress on weak points of the hook.
- 9. Contractor shall prepare a documented daily crane inspection report.
- B. Pick and carry with rubber tired cranes is forbidden on Authority projects.
- C. Engineered Critical Lifts

A critical lifts is established where any one of the following conditions are created:

- 1. Where in the crane's current configuration at any point during the lift, a gross load weight exceeds 75% of the capacity of the crane.
- 2. A gross weight equal to, or greater than 10 tons.
- 3. Lifts over buildings, equipment, public roadways, structures, or power lines.
- 4. A single lift where two or more cranes are used, including tandem lifts and tailing cranes.
- 5. Lifts made in close proximity of power lines, as defined by CCR Title 8 voltage clearance specifications.
- 6. Lifts involving helicopters, and specialized or unique and complex rigging equipment.
- 7. Hoisting of suspended work platforms.
- 8. Static tower crane erection and dismantlement.
- 9. Making lifts below the ground level where the crane is positioned. Note: Where the below the ground lift is minimal (evaluated by California registered professional engineer), a critical lift plan may not be required.
- D. Critical Lift Plan

Where a critical lift will be performed, a written critical lift plan shall be submitted to the Authority Project Manager prior to commencing with the lift. The written plan shall include the following:

1. Crane manufacturer, capacity, and all specifications for the configuration to be used for the lift.

- 2. Load chart data for the crane to be used to make the lift. Total calculated weight of the load to be lifted including all rigging and other deductions consistent with the manufacturer's load chart.
- 3. Engineering data shall be provided on the hook assembly (manufacture's certification or independent laboratory testing and load testing within the past 60 days), below-the hook rigging, and all specialized below-the-hook lifting devices.
- 4. Diagrams of the lift that provides geometrical conditions of the load, rigging, and all crane positions during the lift. The drawing shall provide the following:
  - A. Locations of all components to be lifted prior, during and after the lift is completed.
  - B. Radius points.
  - C. Swing patterns.
  - D. In the event that the lift must be aborted, positions where the load may be safely landed.
  - E. Areas where any personnel, public, and vehicles must be evacuated during the lift.
- 5. Potential ground loading for each point of contact by the crane in selected locations in which the crane will perform the critical lift.
- 6. Soil and subsurface data and information pertaining to the location on which the crane used for the critical lift will be positioned. This information shall be procured from an authoritative source such as a geotechnical engineer or a professional civil engineer registered in the state of California.

Note: This information may be available from the Authority for selected locations on some projects.

- 7. An engineer shall use the data provided in #5 and #6 above to verify and confirm the following:
  - A. That the soil and subsurface conditions are capable of supporting all loads imposed during the critical lift.
  - B. That the designs of cribbing and other supports used under the crane load points are appropriate to safely transfer such loads.
- 8. Signature and stamp on the plan by a California registered professional engineer, evidencing review of the plan as meeting the requirements that all Level 3 HSE Specifications PAGE 14 OF 19 Revision 9. 8/28/2015

loads and load information and calculations contained in the plan are approved, acceptable and safe to perform.

- 9. Operator qualifications.
- 10. Method by which communication will be provided to the crane operator. (Designated signal person, two-way radio, hard wire phone system, etc.).
- 11. A critical lift hazard analysis which identifies the particular hazards (including weather, wind, obstructions, etc.) associated with the lift and the means and methods to reduce, mitigate, or eliminate the hazards.
- 12. Emergency action plan.
- 13. Documentation of lift and pre-job meeting shall be conducted by Contractor's Project Manager.

The written plan shall be submitted 7 days prior to any critical lift for review by the Authority Project Manager and the Authority HSEC department. No critical lifts shall be conducted prior to such review.

#### E. OVERHEAD CRANES

Before using the Authority overhead cranes, each Contractor shall designate a limited number of employees to attend a training session on the use and limitations of overhead cranes with designated Authority personnel.

2.14 DEMOLITION OPERATIONS (CCR Title 8, Section 1734)

Before starting demolition activities the required documentation shall be provided to the Authority's Project Manager, upon request, within 72 hours. Contractor shall provide all compliance documentation as required by CCR Title 8 Article 31.

- A. The Contractor shall be responsible for visiting and examining the project site to assess and personally determine the extent of demolition, associated work, debris removal, disposal and general work to be done under this section.
- B. The Contractor shall take possession of all demolished materials, except as noted otherwise in the Contract Documents, and be responsible for disposing of them in accordance with applicable laws and regulations. On-site burning or burial of demolition materials will not be permitted.
- C. Provide continuous noise and dust abatement as required, preventing disturbances and nuisances to the public, workers, and the occupants of adjacent premises and the surrounding areas. Dampen areas affected by demolition operation as necessary to prevent dust nuisance.
- D. Site demolition plan: Indicate methods, procedures, equipment, and structures to be employed. Specify safety measures in accordance with applicable codes including signs, barriers, and temporary walkways. Plans shall be prepared by a

qualified person (CSP, CIH, CHST, CHMM, etc.), or as necessary by a professional engineer licensed to practice in the State of California, when so required by the provisions of the California Board for Professional Engineer and Surveyors.

- E. Equipment, haul routes, and disposal sites to be used in the demolition and disposal work. Copy of manifests showing delivery of disposed materials in accordance with the plan and permit conditions. Certification that all demolished materials removed from the site have been disposed of in accordance with applicable laws and regulations.
- 2.15 EXCAVATION OPERATIONS (CCR Title 8, Section 1541)

Before starting excavation activities more than 5 feet deep into which people shall enter, the required documentation shall be provided to the Authority's Project Manager, upon request, within 72 hours. All compliance documentation shall comply with the following CCR Title 8, Section 1541 requirements:

- A. A copy of the Contractor's Excavation Permit.
- B. Attention is directed to the applicable sections of the Labor Code concerning trench excavation safety plans, "Trench Safety." Excavation for any trench 5 feet or more in depth shall not begin until the Contractor has received approval from the Engineer of the Contractor's detailed plan for worker protection from the hazards of caving ground during the excavation of that trench and any design calculations used in the preparation of the detailed plan. Excavations 20 feet or greater shall be engineered and plan stamped by a California registered professional engineer.
- C. The detailed plan shall show the details of the design of shoring, bracing, sloping or other provisions to be made for worker protection during the excavation. No plan shall allow the use of shoring, sloping or a protective system less effective than that required by the Construction Safety Orders of the Division of Occupational Safety and Health. If the plan complies with the shoring system standards established by the Construction Safety Orders, the plan shall be submitted at least five (5) days before the Contractor intends to begin excavation for the trench.
- D. Excavations and trenches shall be inspected by a "Competent Person" daily and after every rainfall to determine if they are safe. Daily inspections shall be recorded. Documentation is to be kept on site and available for review upon request.
- E. Excavations are considered class 'C' soil unless documented testing in accordance with 29 CFR Subpart P, Section 1926.650 and CCR Title 8 Standards supports a class 'B' soil classification and is confirmed and stamped by a California registered professional engineer. In no case will excavations be classified as class 'A' soil.
- 2.16 FALL PROTECTION (CCR Title 8, Sections 1669-1671)

The following standards are required when performing work on Authority property. The required documentation shall be provided to the Authority's Project Manager, upon request, within 72 hours.

- A. Fall protection is required for workers exposed to falls in excess of six (6) feet.
- B. When conventional fall protections methods are impractical or create a greater hazard, a written plan in conformance with CCR Title 8, Article 24, shall be submitted to the Authority a minimum of seven (7) days in advance of the scheduled activity.

2.17 FORKLIFTS, BACKHOES AND OTHER INDUSTRIAL TRACTORS (CCR Title 8, Section 3664)

CCR Title 8 defines backhoes as "industrial tractors". All compliance documentation shall be provided as required by CCR Title 8, Section 3664. The following required documentation shall be provided to the Authority's Project Manager, upon request, within 72 hours:

A. A copy of each operator's certificate or a list of company-authorized industrial tractor operators that have been properly trained in the equipment's use and limitations. Please state which equipment, and model each operator has been authorized to operate (i.e. forklifts, backhoe, bulldozer, front-end loader, etc.).

#### 2.18 ELECTRICAL OPERATIONS

#### HIGH VOLTAGE (CCR Title 8, Sections 2700-2974)

Any work on electrical equipment defined by OSHA as high-voltage, at or above 600 volts, requires specialized training certifications and personal protective equipment. Before any high-voltage work commences, the Authority Project Manger must be notified and must provide approval. The following required NFPA 70E certification and a certificate of training from a recognized organization of a two day high voltage safety training course shall be provided to the Authority's Project Manager, upon request, within 72 hours:

A. A list of the name(s) of the company-designated high voltage Qualified Electrical Worker(s)

#### LOW VOLTAGE (CCR Title 8, Sections 2299-2599)

Only qualified persons shall work on electrical equipment or systems.

- A. <u>Electrical Certification of Training</u>; Contractor employees working on or around electrical panels, wiring, motors, electrical energy sources or similar electrical devices shall have attended a NFPA 70E, Electrical Safety Course and provide to the OCTA Project Manager a copy of employees' NFPA 70E qualification certificate of training for each employee assigned to electrical tasks on OCTA property or projects.
- 2.19 POWDER-ACTUATED TOOLS (CCR Title 8, Section 1685)

Before using tools such as "Hilti guns" or other powder-actuated tools, the following required documentation shall be provided to the Authority's Project Manager, upon request, within 72 hours.

A. A copy of each qualified person's valid operator card.

2.20 SCAFFOLDS (CCR Title 8, Sections 1635.1-1677)

Scaffold erection shall be in compliance with CCR Title 8 Standards. All compliance documentation shall be provided as required by CCR Title 8, Sections 1635.1-1677. In addition, the Contractor shall comply with the following additional requirements.

- A. All scaffolds on Authority project shall be inspected by a competent person qualified for scaffolds in accordance with CCR Title 8 Standards.
- B. Contractor shall arrange for a third party inspection, at least quarterly, by a credentialed professional (insurance carrier, scaffold manufacturer representative, or similar) in addition to the contractors daily self inspections.
- C. A proper scaffold inspection and tagging system shall be maintained identifying compliance status (Example: Green/safe, Yellow/modified-fall protection required, Red/unsafe-do not use).
- D. Contractor shall have a fall protection plan that meets CCR Title 8 Standards for scaffold erectors, an erection/dismantling plan shall be submitted to Authority Project Manager for review prior to start of activity.
- E. Scaffold erection/dismantling shall install handrails beginning on the first level above ground erected, and erectors shall plan erection and dismantling in a manner to maximize handrail protection and minimize employees at unprotected areas.

#### 2.21 WARNING SIGNS AND DEVICES

Signs, signals, and/or barricades shall be visible at all times when and where a hazard exists. Overhead tasks, roofing tasks, excavations, roadwork activity, demolition work, and other recognized hazards shall have guardrail protection, warning barricades, or similar protective measures acceptable to the Authority's Project Manager. Signs, signals, and/or barricades shall be removed when the hazard no longer exists.

#### 2.22 STEEL ERECTION

Steel Erection scope activity shall comply with 29 CFR Subpart R, Section 1926.750, and CCR Title 8 Standards. In addition to OSHA Standards, Contractor shall comply with the following requirements.

A. Erection planning should incorporate installation methods using aerial devices (man-lifts) and elevated work platforms (scissor lift) to minimize fall hazards of climbing steel where possible. A detailed written job safety analysis (JSA) shall

identify installation methods, equipment, and control methods to minimize potential fall hazards.

- B. The Contractor shall not allow any employee to walk the steel unprotected from falls. Contractor employees must be tied-off and "coon" the beam until safety cables are provided to which employees shall use 100% tie-off protection. Two lanyards are required to ensure 100% tie-off protection.
- C. A safe means of access to the level being worked shall be planned. Climbing and sliding down columns are not considered safe access and are forbidden on Authority projects.
- D. A qualified rigger shall inspect the rigging prior to each shift and each lift.
- E. Multiple lift rigging (Christmas Treeing) lifts are forbidden on Authority property and controlled projects.

# 2.23 AUDITS

- A. The Authority may make periodic patrols of the project site as a part of its normal security and safety program. The Contractor shall not be relieved of its aforesaid responsibilities and the Authority shall not assume same, nor shall it be deemed to have assumed, any responsibility otherwise imposed upon the Contractor, as a result of safety patrols by the Authority.
- B. The Authority may audit the Contractor's safety program for HSE compliance at various intervals of the project, at the sole discretion of the Authority. Elements may include, but are not limited to: OSHA injury & illness records and logs, Job Safety Analysis and safety plans, equipment operator licenses and training records, incident reports, meeting minutes, engineered plans, safety meeting records, crane and rigging plans, equipment inspection records, qualifications of and interviews with key Contractor management personnel, and other similar information. The Contractor shall support and cooperate with these audits at no additional compensation or schedule impacts with this contract.

# 2.24 RAILWAY SAFETY PRECAUTIONS

- A. Work on operating railways shall be in compliance with 49 CFR, Part 214, CCR Title 8 Standards, and the Southern California Regional Rail Authority (SCRRA).
- B. New construction rail projects require that all employers and contractors are responsible to assure employees are trained and understand on-track safety procedures, and follow roadway worker rules identified in 49 CFR, Part 214, CCR Title 8, SCRRA, the California Department of Transportation (CalTrans), and OCTA HSE Construction Management Requirements (i.e., item E references).
- C. Minimum PPE for workers include hard hat, safety glasses, orange (i.e., rail company approved color) class 2 reflective vest, safety toe footwear that meets Level 3 HSE Specifications PAGE 19 OF 19 Revision 9, 8/28/2015 1008403.1

ANSI Z41 1991 (lace-up type over the ankle) and hearing protection (on person and worn as necessary).

2.25 FINES

The Contractor shall be responsible for the payment of all fines levied against the Authority for HSE violations arising from or related to activities over which Contractor has responsibility per the contract.

#### 2.26 COMPLIANCE COSTS

Compliance with Health, Safety and Environmental Compliance identified in these aforementioned Authority Safety Specifications shall be at the expense of the Contractor, and included in Bid Documents to the Authority for the Contractor's scope. The Authority shall incur no additional cost or schedule impacts by Contractor, for compliance with California Construction Safety Orders, CCR Title 8 Standards, Federal OSHA Standards, and the Authority Safety Specifications for the protection of persons and property.

#### 2.27 REFERENCES

- A. CCR Title 8 Standards (Cal/OSHA)
- B. CFR Including 1910 and 1926 Standards
- C. NFPA, NEC, ANSI, NIOSH Standards
- D. USACE Construction Quality Management Manuel (EM-385-1-1)
- E. Construction Industry Institute (CII)
- F. OCTA Construction Management Procedures Manual
- G. OCTA Yard Safety Rules

# END OF DOCUMENT

BID BOOKLET INVITATION FOR BID (IFB) 4-2666 BOOK 2 OF 2

# CONSTRUCTION OF THE INLAND SLOPE REHABILITATION - PHASE II



# ORANGE COUNTY TRANSPORTATION AUTHORITY

550 South Main Street P.O. Box 14184 Orange, CA 92863-1584 (714) 560-6282

Key IFB Dates

Issue Date:	July 14, 2025
Pre-Bid Conference/Site Visit:	July 31, 2025
Questions/Approved Equal Submittal:	August 4, 2025
Bids Submittal Date:	August 18, 2025

IFB NO.\_\_\_\_\_

#### PROJECT TITLE: \_\_\_\_\_

The Orange County Transportation Authority has prepared this checklist as a reminder of the documents required to be submitted with the bid. These documents must be complete, fully executed, notarized where appropriate as required in the bid documents in order to render the bid responsive.

#### THE FOLLOWING CHECKED DOCUMENTS MUST BE SUBMITTED WITH THE BID:

#### General IFB Forms:

_	
	Bid Form – include all pages 1 through 4.
	All addenda must be acknowledged, signed, dated, corporate seal
	Bid Security Form: <u>Bid Bond</u> or <u>Check</u> (circle one)
	Correct bid number, signed, dated, notarized (bid bond)
	Information Required of Bidder
	Provide all information, signed
	Bidders Certificate of Compliance Regarding Workers Compensation
	Insurance
	Signed and dated
	Bidders Certificate of Compliance Regarding State of California Business
	and Professions Code Section 7028.15
	Signed, dated, notarized
	List of Subcontractors (Exhibit D)
	License Number- address/ name should match that associated with License #
	on CSLB website, DIR Registration Number, Description of work (one
	subcontractor for each portion), Dollar amount and Bidders name at bottom of
	form
	Status of Past and Present Contracts Form
	Signed, dated
	Non-Collusion Declaration Form
	Signed, dated
	Iran Contracting Act Certification Applicable (Bids over \$1,000,000 only)
	Signed, dated, ( <u>select one option only)</u>

Signature on this Bid Document Submission Checklist is affirmation that items marked above are hereby submitted with the bid. I understand that failure to complete and/or submit any of the required documents may deem my bid non-responsive.

Authorized Signature

Print Name and Title

Firm Name

Date



# **BID FORM**

The undersigned hereby proposes to perform all work for which a contract may be awarded and to furnish any and all plant, labor, services, material, tools, equipment, supplies, transportation, utilities, and all other items and facilities necessary therefore as required in the **IFB 4-2666**, **"CONSTRUCTION OF THE INLAND SLOPE REHABILITATION - PHASE II"**, and to do everything required therein; and further proposes that, if this bid is accepted, will contract in the form and manner stipulated to perform all the work in strict conformity therewith within the time limits set forth therein, and will accept as full payment therefore, the following price:

Item	Description/Bid Allowance	Lump Sum Price
1	Base Work	\$
2	Allowance – Metrolink Flagging & Training	\$300,000.00
3	Allowance – Contaminated Soils	\$50,000.00
	Total Lump Sum Bid Amount	\$

A cashier's check/certified check/bid bond (circle applicable term) properly made payable to Orange County Transportation Authority, hereinafter designated as the Owner, for the sum of

#### Dollars

which amount is not less than ten percent (10%) of the total amount of this bid, is attached hereto and is given as a guarantee that the undersigned will execute the Agreement and furnish the required bonds, "Guaranty" and "Certificate of Insurance", if awarded the contract, and in case of failure to do so within the time provided, (a) the proceeds of said check shall be forfeited to the Authority; or (b) surety's liability to the Authority for forfeiture of the face amount of the bond shall be considered as established [circle (a) or (b)].

The undersigned hereby represents that:

<sup>(\$</sup> 

#### BID FORM, PAGE 2

- Bidder has thoroughly examined and become familiar with the work required and documents included under this IFB. The bidder understands that the award of the contract, if it is awarded, will be based on the lowest total bid submitted by a responsive and responsible bidder, and further, that the amounts and the total on the Bid Form will be subject to verification by the Authority.
- 2. By investigation at the site of the work and otherwise, it is satisfied as to the nature and location of the work and is fully informed as to all conditions and matters, which can in any way affect the work or the cost thereof.
- 3. Bidder fully understands the scope of the work/specifications and has checked carefully all words and figures inserted in said Invitation For Bids (IFB) and further understands that the Authority will in no way be responsible for any errors or omissions in the preparation of this bid. Bidder further asserts that it is capable of performing quality work to meet Authority's requirements.
- 4. Bidder will execute the Agreement and furnish the required Performance and Payment Bonds, Guaranty and proof of insurance coverage within ten (10) calendar days after notice of acceptance of bid by the Authority; and further, that this bid may not be withdrawn for a period of 120 calendar days after the date set for the opening thereof, unless otherwise required by law. If any bidder shall withdraw its bid within said period, the bidder shall be liable under the provisions of the Bid Security, or the bidder and the surety shall be liable under the Bid Bond, as the case may be.
- 5. Bidder hereby certifies that this bid is genuine and not a sham or collusive or made in the interest or on behalf of any person not herein named, and the undersigned has not directly or indirectly induced or solicited any other bidder to put in a sham bid, or any other person, firm, or corporation to refrain from bidding; the undersigned has not in any manner sought by collusion to secure for himself an advantage over any other bidder.
- In conformance with current statutory requirements of Section 1860, et. seq., of the Labor Code of the State of California, the Bidder shall execute the document included in this IFB entitled "Bidder's Certificate of Compliance Regarding Workers' Compensation Insurance."
- 7. Bidder hereby further certifies that each, and every representations made in this bid are true and correct and made under penalty of perjury.

#### BID FORM, PAGE 3

- 8. Bidder shall permit the authorized representative of the Authority to inspect and audit all data and records of bidder relating to this bid, and if awarded a contract resulting from this bid, shall permit such inspection and audit of all data and records of bidder related to bidder's performance of such contract.
- 9. Bidder does not employ anyone who is now, or for one (1) year immediately prior to the date of this offer was, a director, officer, member, or employee of the Orange County Transportation Authority. The undersigned has not agreed to pay a fee contingent upon the award of a contract resulting from this bid to anyone who is now, or for one (1) year immediately prior to the date of this bid was, a director, officer, member, or employee of the Orange County Transportation Authority. No member of or delegate to the Congress of the United States shall be admitted to any share of the contract or to any benefit arising therefrom.
- 10. If awarded a contract resulting from this bid, bidder shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, age or national origin. The bidder shall take affirmative action to ensure that applicants are employed, and that employees are treated during their employment, without regard to their race, religion, color, sex, age or national origin. Such actions shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
- 11. Bid will be in effect for 120 calendar days after the bid closing date.

#### BID FORM, PAGE 4

Now: In compliance with the **Invitation For Bids (IFB) 4-2666**, **"CONSTRUCTION OF THE INLAND SLOPE REHABILITATION - PHASE II"**, the undersigned, with full cognizance thereof, hereby proposes to perform the entire work in strict compliance with all of the said requirements and provisions for the prices set forth herein upon which award of contract is made. The undersigned affirms that the information provided herein is true and accurate and that any misrepresentations are made under penalty of perjury.

Dated, 202_	Bidder
The above bid includes	Signature
Addenda Nos	Name
	Title
Bidder's Authorized Representative	
Title	
Telephone #	
Fax #	
Email Address	
Bidders post office address	
Corporation organized under the laws of t	he State of
Contractor's License No.	
Expiration Date of License	
Surety or sureties	

(CORPORATE SEAL)

#### BID SECURITY FORM BID BOND

#### KNOW ALL MEN BY THESE PRESENTS:

That, \_\_\_\_\_\_\_as principal and Bidder and \_\_\_\_\_\_as Surety, are held and firmly bound unto the Orange County Transportation Authority, of State of California, hereinafter referred to as "Authority," in the sum of \_\_\_\_\_\_\_ Dollars (\$\_\_\_\_\_\_), to be paid to the Authority, its successors, and assigns; for which payment, well and truly to be made, bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents, this amount being ten percent (10%) of the total amount of the Bid.

**THE CONDITION OF THIS OBLIGATION IS SUCH**, that if the certain bid of the above named bounden principal

for at the Orange County Transportation Authority's as specifically set forth in documents entitled IFB 4-2666, "CONSTRUCTION OF THE **INLAND SLOPE REHABILITATION - PHASE II**", shall not be withdrawn within a period of 120 calendar days after the date set for the opening of bids, (unless otherwise required by law, and notwithstanding the award of the contract to another Bidder), and that if said bid is accepted by the Authority through action of its legally constituted contracting authorities and if the above bounden its heirs. executors, administrators, successors and assigns, shall execute a contract for such construction and deliver the required Performance and Payment Bonds, "Guaranty," and proof of insurance coverage within ten (10) calendar days after notification of contract award from the Authority, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

**IN WITNESS WHEREOF,** we hereunto set our hands and seals this \_\_\_\_\_ day of , 202 .

NOTE: The standard printed bond form of any bonding company acceptable to the Authority may be used in lieu of the foregoing approved sample bond form provided the security stipulations protecting the Authority are not in any way reduced by use of the security company's printed standard form.

#### BID SECURITY FORM CHECK TO ACCOMPANY BID

(NOTE: The following form shall be used in case check accompanies bid)

Accompanying this bid is a Certified or Cashiers check (circle the appropriate one) payable to the order of Orange County Transportation Authority, hereinafter referred to as "Authority" for

dollars (\$\_\_\_\_\_\_), this amount being ten percent (10%) of the total amount of the Bid submitted in response to IFB 4-2666, "CONSTRUCTION OF THE INLAND SLOPE REHABILITATION - PHASE II". The proceeds of this check shall become the property of Authority provided this bid shall be accepted by Authority through action of its legally constituted contracting authorities and the undersigned shall fail to execute a contract and furnish the required Guaranty Form, Performance and Payment Bonds and proof of insurance coverage within ten (10) calendar days after date of notification of contract award from the Authority. The proceeds of this check shall also become the property of the Authority if the undersigned bidder withdraws the bid within the period of 120 days after the date set for the opening thereof, unless otherwise required by law, and notwithstanding the award of the contract to another bidder. Otherwise, the check shall be returned to the undersigned.

Bidder:\_\_\_\_\_

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

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

NOTE: If the bidder desires to use a bond instead of check, the Bid Bond form shall be executed and the sum of this bond shall be ten percent [10%] of the total amount of the bid.

# **INFORMATION REQUIRED OF BIDDER**

The bidder is required to supply the following information. Additional sheets may be attached if necessary.

1.	Name of Bidder:
2.	Business Address:
3.	Telephone ( ) E-Mail:
4.	Type of Firm - Individual, Partnership or Corporation:
5.	Corporation organized under the laws of state of:
6.	Contractor's License No.: ClassYears of Experience:
7.	Expiration Date of License:
8.	Is your firm a certified small business in California? Yes No
9.	List the names and addresses of all owners of the firm or names and titles of all officers
	of the corporation:

# **INFORMATION REQUIRED OF BIDDER, PAGE 2**

10. Please list the following: a) All prior and current license numbers that the current owner(s) or officers possess or have possessed in the last five years and the current status of those license; b) any prior company names that the owner(s) had in operation during the previous five years.

Current Officers or Owners Name	Prior Company Names (During the last 5 years)	Prior and Current License Numbers	Status of License

*Note*: If additional space is required to detail the information requested, please attach another page. All information requested must be included. Failure to identify all of the information may result in your bid being found non-responsive and your bid being rejected.

11. List all construction projects (public and private) for which Bidder has provided general contractor services for the past three years:

Contract Type (Public or Private)	Project Description	Dates of Service	Total Cost	Name and Address of Owner	Contact Name and Phone Number

*Note*: If additional space is required to detail the information requested, please attach another page. All information requested must be included. Failure to identify all of the information, may result in your bid being found non-responsive and your bid being rejected.

- 12. List the name, address and phone number of Superintendent for this project:
- 13.List all construction projects (public and private) for which Superintendent has provided services as a Superintendent for the past three years.

Contract Type (Public or Private)	Project Description	Dates of Service	Total Cost	Name and Address of Owner	Contact Name and Phone Number

Bidder hereby certifies that it:

\_\_\_\_\_ is a certified Disadvantaged Business Enterprise as defined herein.

is not a Disadvantaged Business Enterprise as defined herein.

**NOTE:** If requested by the Authority, bidder shall furnish a certified financial statement, financial data, or other information and references sufficiently comprehensive to permit an appraisal of its current financial condition.

I hereby certify the above is true and correct to the best of my belief.

Signature
Name
Title
Company Name
Telephone Number
Fax Number
Email Address

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

- 1. The Bidders' attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
- 2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate <u>work force</u> in each trade on all construction work in the covered area, are as follows:

Timetable Goals for Minority Participation for Each Trade	(11.9)
Goals for Female Participation in Each Trade	(6.9)

These goals are applicable to all the Contractor's construction work (whether or not it is federal or federally assisted) performed in the covered area.

The Contractor's compliance with the Executive Order and the regulations in 41 C.F.R. Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 C.F.R. 60-4.3 (a), and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 C.F.R. Part 60-4. Compliance with the goals will be measured against the total work hours performed.

- 3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.
- 4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" includes the County of Orange, California.

#### BIDDER'S CERTIFICATE OF COMPLIANCE REGARDING WORKERS' COMPENSATION INSURANCE

In conformance with current statutory requirements of Section 1860, et. seq., of the Labor Code of the State of California, the undersigned confirms the following certification:

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

Bidder/Contractor	:
Signature:	
Name and Title:	
Date:	

#### BIDDER'S CERTIFICATE OF COMPLIANCE REGARDING STATE OF CALIFORNIA BUSINESS AND PROFESSIONS CODE SECTION 7028.15

Contractor License Number:

Expiration Date of Contractor's License:

Each, every and all of the representations made by Bidder in the attached bid are true and correct.

Name of Bidder/C	Contractor:
Signed:	
Title:	
Subscribed to and sworr California, on	h before me, a Notary Public in and for the State of, 202

Notary Public

My commission expires on:

\_\_\_, 202\_\_\_ (NOTARY SEAL)

# LIST OF SUBCONTRACTORS (EXHIBIT D)

List only the subcontractors, which will perform work or labor or render services to the bidder in <u>excess of one-half of one</u> <u>percent</u> (1/2 of 1%) of the bidder's total bid amount. Do not list alternative subcontractors for the same work. (Use additional sheets if necessary.)

Name & Address Under Which Subcontractor is Licensed	License Number	DIR Registration No.	Specific Description of Work to be Rendered	Small Business Y/N	Туре	Dollar Amount
						\$
						\$
						\$
						\$
						\$
						\$
	TOTAL V	ALUE OF SUBCONTRAC		1	<u> </u>	\$

Bidder's Name

#### STATUS OF PAST AND PRESENT CONTRACTS FORM

On the form provided below, Offeror/Bidder shall list the status of past and present contracts where the firm has either provided services as a prime vendor or a subcontractor during the past five (5) years in which the contract has been the subject of or may be involved in litigation with the contracting authority. This includes, but is not limited to, claims, settlement agreements, arbitrations, administrative proceedings, and investigations arising out of the contract.

A separate form must be completed for each contract. Offeror/Bidder shall provide an accurate contact name and telephone number for each contract and indicate the term of the contract and the original contract value. Offeror/Bidder shall also provide a brief summary and the current status of the litigation, claims, settlement agreements, arbitrations, administrative proceedings, or investigations. If the contract was terminated, list the reason for termination.

Offeror/Bidder shall have an ongoing obligation to update the Authority with any changes to the identified contracts and any new litigation, claims, settlement agreements, arbitrations, administrative proceedings, or investigations that arise subsequent to the submission of the bid. Each form must be signed by an officer of the Offeror/Bidder confirming that the information provided is true and accurate.

Project city/agency/other:
Contact Name: Phone:
Project Award Date: Original Contract Value:
Term of Contract:
(4) Listration claims actilements exhituations or investigations accessisted with contract.
(1) Litigation, claims, settlements, arbitrations, or investigations associated with contract:
(2) Summary and Status of contract:
(3) Summary and Status of action identified in (1):
(4) Reason for termination, if applicable:
By signing this Form entitled "Status of Past and Present Contracts," I am affirming that all of the

information provided is true and accurate.

Name

Signature

Title

Date

Revised. 03/16/2018

# **Non-Collusion Affidavit**

# To the Orange County Transportation Authority

In accordance with Title 23 United States Code Section 112 and Public Contract Code 7106 the bidder declares that the bid is not made in the interest of, or on the behalf of, any undisclosed person, partnership, company, association, organization or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly, or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Name of Bidder:	
-----------------	--

Signature:						
eignatare.						

# **IRAN CONTRACTING ACT CERTIFICATION**

(California Public Contract Code Sections 2200, *et seq.*)

The Iran Contracting Act of 2010 (PCC Sections 2200-2208), prohibits bidders who are engaged in investment activities in the energy sector of Iran from bidding on, submitting proposals for, or entering into or renewing contracts with public entities for goods or services of one million dollars (\$1,000,000) or more. At the time of submitting a bid, each bidder must certify that the bidder is not identified on the Department of General Services list of ineligible persons pursuant to PCC Section 2203(b). Each bidder is also required to certify that the bidder is not engaged in investment activities in violation of the Iran Contracting Act of 2010.

A bidder who is engaged in investment activities in the energy sector of Iran is defined as:

- 1. A person providing goods or services of twenty million dollars (\$20,000,000) or more in the energy sector of Iran, including a person that provides 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
- 2. A person that is a financial institution that extends twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that person will use the credit to provide goods or services in the energy sector in Iran and is identified on a list created pursuant to PCC Section 2203(b).

A bidder is not required to certify that it is engaged in investment activities in the energy sector of Iran if the bidder is exempt from the certification under PCC Section 2203(c) or (d). If the bidder is exempt from the certification requirement, the bidder will be required to provide documentation demonstrating the exemption.

To comply with the Iran Contracting Act of 2010, the bidder shall complete <u>one</u> of the options below. Please note: under PCC Section 2205, false certification of this form may result in civil penalties of \$250,000 or twice the amount of the contract for which false certification was made, termination of the contract, and/or ineligibility to bid on contracts for a period of three years.

# **Option No. 1: Certification**

I, the official named below, certify I am duly authorized to execute this certification on behalf of the vendor/financial institution identified below, and the vendor/financial institution identified below, and any subcontractor who will perform work or labor or render services to the vendor identified below, is not on the current Department of General Services list identifying persons engaged in investment activities in the energy sector of Iran, and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person/vendor, for 45 days or more, if that other person/vendor will use the credit to provide goods or services in the energy sector in Iran and is identified on the current Department of General Services list identifying persons engaged in investment activities in the energy sector of Iran.

Vendor/Financial Institution:
Signature:
Name and Title:
Date:

#### Option No. 2: Exemption

Pursuant to PCC Section 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 bid on, submit proposals for, or enter into or renew a contract with a public entity for goods or services of one million dollars (\$1,000,000) or more. If the bidder, financial institution, or any subcontractor who will perform work or labor or render services to the bidder has obtained an exemption from the certification requirement, please complete and sign below and attach the documentation demonstrating the exemption approval.

Vendor/Financial Institution:
Signature:
Name and Title:

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

# **Option No. 3: Non-Applicability**

Pursuant to PCC Section 2203(b), a bidder or financial institution engaged in investment activities in Iran may not be eligible for, or to bid on, submit proposals for, or enter into or renew a contract with a public entity for goods or services of one million dollars (\$1,000,000) or more. If the contract is not for goods or services of one million dollars (\$1,000,000) or more, please sign below indicating that the contract is not for goods or services of one million dollars (\$1,000,000) or more and thus bidder is not required to certify and does not meet the exemption.

/endor/Financial Institution:
Signature:
Name and Title:
Date: