



**CITY OF LAKE FOREST
PORTOLA PARKWAY RESURFACING PROJECT
CITY PROJECT #: PW 2016.05B
FEDERAL PROJECT #: STPL-5469 (017), ADVANTAGE ID: 121600041**

PROJECT SPECIFICATIONS

AUGUST 2016

PREPARED BY:
TAIT & ASSOCIATES
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705

UNDER THE SUPERVISION OF:
CITY OF LAKE FOREST
PUBLIC WORKS DEPARTMENT
25550 COMMERCENTRE DRIVE
LAKE FOREST, CA 92630

**Federally Funded Project
Subject to Davis Bacon Requirements
With
Seven Percent (7%) Contract Specific
Disadvantaged Business Enterprises (DBE) Goal**



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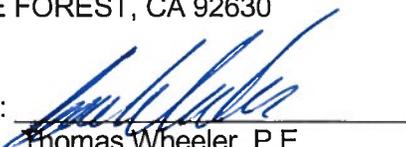
AUGUST 2016

PREPARED BY:
TAIT & ASSOCIATES
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705


David Sloan, P.E.



UNDER THE SUPERVISION OF:
CITY OF LAKE FOREST
PUBLIC WORKS DEPARTMENT
25550 COMMERCENTRE DRIVE
LAKE FOREST, CA 92630

APPROVED BY: 
Thomas Wheeler, P.E.
Director of Public Works/City Engineer

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**SECTION 00100
NOTICE INVITING BIDS**

**PORTOLA PARKWAY RESURFACING PROJECT
CITY PROJECT #: PW 2016.05B
FEDERAL PROJECT #: STPL-5469 (017)
ADVANTAGE ID: 121600041**

**Federally Funded Project
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Seven Percent (7%) Contract Specific
Disadvantaged Business Enterprises (DBE) Goal**

The City of Lake Forest ("City") will receive sealed bids for the Portola Parkway Resurfacing Project, PW 2016.05B, STPL-5469 (017) at the office of the Public Works Department, 25550 Commercentre Drive, Suite 100, Lake Forest, CA 92630, no later than 2:00 p.m. on September 20, 2016, at which time or thereafter said bids will be opened and read aloud. Bids received after this time will be returned unopened. Bids shall be valid for 90 calendar days after the bid opening date.

Bids must be submitted on City's Bid Forms. Bids must be submitted on City's Bid Forms. Bidders may view and/or obtain a copy of the Plans and Specifications directly from SABP Reprographics by calling 949-756-1001 or by accessing their website at www.sabp.com and clicking on PlanWell. Upon payment of the purchase price, the Contract Documents become the property of the purchaser and may not be returned for a refund. Contract documents for the project will not be available for sale at City Hall. To the extent required by Section 20103.7 of the Public Contract Code, upon request from a contractor plan room service, the City shall provide an electronic copy of the Contract Documents to the contractor plan room at no charge.

Bids must be accompanied by cash, a certified or cashier's check, or a Bid Bond in favor of the City in an amount not less than ten percent (10%) of the submitted Total Bid Price. Each bid shall also be accompanied by the Noncollusion Declaration, the List of Subcontractors Form, the Iran Contracting Act Certification and all additional documentation required by the Instructions to Bidders.

The successful bidder will be required to furnish City with a Performance Bond equal to 100% of the successful bid, and a Payment Bond equal to 100% of the successful bid, prior to execution of the Contract. All bonds are to be secured from a surety that meets all of the State of California bonding requirements, as defined in Code of Civil Procedure Section 995.120, and is admitted by the State of California.

Pursuant to Public Contract Code Section 22300, the successful bidder may substitute certain securities for funds withheld by City to ensure his performance under the Contract.

The Director of Industrial Relations has determined the general prevailing rate of per diem wages in the locality in which this work is to be performed for each craft or type of worker needed to execute the Contract which will be awarded to the successful bidder, copies of which

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NOTICE INVITING BIDS

are on file and will be made available to any interested party upon request at Lake Forest Public Works Department or online at <http://www.dir.ca.gov/dlsr>. A copy of these rates shall be posted by the successful bidder at the job site. The successful bidder and all subcontractor(s) under him, shall comply with all applicable Labor Code provisions, which include, but are not limited to the payment of not less than the required prevailing rates to all workers employed by them in the execution of the Contract, the employment of apprentices, the hours of labor and the debarment of contractors and subcontractors.

If the bids subject to this Notice are due on or after March 1, 2015, then pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. If awarded a Contract, the Bidder and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the Project.

This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. In bidding on this project, it shall be the Bidder's sole responsibility to evaluate and include the cost of complying with all labor compliance requirements under this contract and applicable law in its bid.

Each bidder shall be a licensed contractor pursuant to the Business and Professions Code and shall be licensed in the following appropriate classification(s) of contractor's license(s), for the work bid upon, and must maintain the license(s) throughout the duration of the Contract: **CLASS A LICENSE**. In addition, the successful bidder will be required to self-perform at least **50%** of the work.

Award of Contract: City shall award the Contract for the Project to the lowest responsible bidder as determined from the: base bid alone. City reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding process.

For further information, contact Doug Erdman, Principal Civil Engineer, at (949) 282-5233.

END OF NOTICE INVITING BIDS

**SECTION 00200
INSTRUCTIONS TO BIDDERS**

1. AVAILABILITY OF CONTRACT DOCUMENTS

Bids must be submitted to City on the Bid Forms which are a part of the Bid Package for the Project. Contract Documents may be obtained at the location(s) and at the time(s) indicated in the Notice Inviting Bids. Any applicable charges for the Contract Documents are outlined in the Notice Inviting Bids.

City may also make the Contract Documents available for review at one or more plan rooms, as indicated in the Notice Inviting Bids. Please Note: Prospective bidders who choose to review the Contract Documents at a plan room must contact City to obtain the required Contract Documents if they decide to submit a bid for the Project.

2. EXAMINATION OF CONTRACT DOCUMENTS

City has made copies of the Contract Documents available, as indicated above. Bidders shall be solely responsible for examining the Project Site and the Contract Documents, including any Addenda issued during the bidding period, and for informing itself with respect to local labor availability, means of transportation, necessity for security, laws and codes, local permit requirements, wage scales, local tax structure, contractors' licensing requirements, availability of required insurance, and other factors that could affect the Work. Bidders are responsible for consulting the standards referenced in the Contract. Failure of Bidder to so examine and inform itself shall be at its sole risk, and no relief for error or omission will be given except as required under State law.

3. INTERPRETATION OF CONTRACT DOCUMENTS

Discrepancies in, and/or omissions from the Plans, Specifications or other Contract Documents or questions as to their meaning shall be immediately brought to the attention of City by submission of a written request for an interpretation or correction to City. Such submission, if any, must be sent to Doug Erdman by faxing (949) 461-3511 or emailing derdman@lakeforestca.gov.

Any interpretation of the Contract Documents will be made only by written addenda duly issued and mailed or delivered to each person or firm who has purchased a set of Contract Documents. City will not be responsible for any explanations or interpretations provided in any other manner. No person is authorized to make any oral interpretation of any provision in the Contract Documents to any bidder, and no bidder should rely on any such oral interpretation.

Bids shall include complete compensation for all items that are noted in the Contract Documents as the responsibility of the Contractor.

4. INSPECTION OF SITE; PRE-BID CONFERENCE AND SITE WALK

Each prospective bidder is responsible for fully acquainting itself with the conditions of the Project Site (which may include more than one site), as well as those relating to the construction and labor of the Project, to fully understand the facilities, difficulties and restrictions which may impact the cost or effort required to complete the Project. To this end, a Pre-Bid Conference and Site Walk will be held on the date(s) and time(s) indicated in the Notice Inviting Bids. Storm,

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INSTRUCTIONS TO BIDDERS

surface, nuisance, or other waters may be encountered at various times during construction of the Project. Federal and State laws require the City and its contractors to appropriately manage such waters pursuant to the requirements of California State Water Resources Control Board Order Number 2009-0009-DWQ and any amendment or renewal thereof, the Federal Clean Water Act, and the California Porter Cologne Water Quality Control Act. By submitting a Bid, each bidder acknowledges that it has investigated the risk arising from such waters, has prepared its Bid accordingly, and assumes any and all risks and liabilities arising therefrom.

5. ADDENDA

City reserves the right to revise the Contract Documents prior to the bid opening date. Revisions, if any, shall be made by written Addenda. All Addenda issued by City shall be included in the bid and made part of the Contract Documents. Pursuant to Public Contract Code Section 4104.5, if City issues an Addendum which includes material changes to the Project less than 72 hours prior to the deadline for submission of bids, City will extend the deadline for submission of bids. City may determine, in its sole discretion, whether an Addendum warrants postponement of the bid submission date. Each prospective bidder shall provide City a name, address and facsimile number to which Addenda may be sent, as well as a telephone number by which City can contact the bidder. Copies of Addenda will be furnished by facsimile, first class mail, express mail or other proper means of delivery without charge to all parties who have obtained a copy of the Contract Documents and provided such current information. Please Note: Bidders are responsible for ensuring that they have received any and all Addenda. To this end, each bidder should contact the Public Works Department to verify that he has received all Addenda issued, if any, prior to the bid opening.

6. ALTERNATE BIDS

If alternate bid items are called for in the Contract Documents, the lowest bid will be determined on the basis of the base bid only. However, City may choose to award the contract on the basis of the base bid alone or the base bid and any alternate or combination of alternates. The time required for completion of the alternate bid items has been factored into the Contract duration and no additional Contract time will be awarded for any of the alternate bid items. City may elect to include one or more of the alternate bid items, or to otherwise remove certain work from the Project scope of work, accordingly each Bidder must ensure that each bid item contains a proportionate share of profit, overhead and other costs or expenses which will be incurred by the Bidder.

7. COMPLETION OF BID FORMS

Bids shall only be prepared using copies of the Bid Forms which are included in the Contract Documents. The use of substitute bid forms other than clear and correct photocopies of those provided by City will not be permitted. Bids shall be executed by an authorized signatory as described in these Instructions to Bidders. In addition, Bidders shall fill in all blank spaces (including inserting "N/A" where applicable) and initial all interlineations, alterations, or erasures to the Bid Forms. Bidders shall neither delete, modify, nor supplement the printed matter on the Bid Forms nor make substitutions thereon. **USE OF BLACK OR BLUE INK, INDELIBLE PENCIL OR A TYPEWRITER IS REQUIRED.** Deviations in the bid form may result in the bid being deemed non-responsive.

8. MODIFICATIONS OF BIDS

Each Bidder shall submit its Bid in strict conformity with the requirements of the Contract Documents. Unauthorized additions, modifications, revisions, conditions, limitations, exclusions or provisions attached to a Bid may render it non-responsive and may cause its rejection. Bidders shall neither delete, modify, nor supplement the printed matter on the Bid Forms, nor make substitutions thereon. Oral, telephonic and electronic modifications will not be considered, unless the Notice Inviting Bids authorizes the submission of electronic bids and modifications thereto and such modifications are made in accordance with the Notice Inviting Bids.

9. DESIGNATION OF SUBCONTRACTORS

Pursuant to State law, the Bidders must designate the name, license number, and location of each subcontractor who will perform work or render services for the Bidder in an amount that exceeds one half of one percent (1/2%) of the Bidder's Total Bid Price, as well as the portion of work each such subcontractor will perform on the form provided herein by City. No additional time will be provided to bidders to submit any of the requested information in the Designation of Subcontractor form. The successful bidder will be required to self-perform at least 50% of the work.

In addition to submitting the List of Subcontractors form with its bid submission, each bidder shall, within 24 hours of the bid submission deadline, provide the City with a list of bid items that correspond to the portion of work listed for each designated subcontractor. Failure to provide this information in satisfactory form within the time prescribed may be cause for the City to deem the Bid non-responsive and the City may reject the Bid.

10. LICENSING REQUIREMENTS

Pursuant to Section 7028.15 of the Business and Professions Code and Section 3300 of the Public Contract Code, all bidders must possess proper licenses for performance of this Contract. Subcontractors must possess the appropriate licenses for each specialty subcontracted. Pursuant to Section 7028.5 of the Business and Professions Code, City shall consider any bid submitted by a contractor not currently licensed in accordance with state law and pursuant to the requirements found in the Contract Documents to be non-responsive, and City shall reject the Bid. City shall have the right to request, and Bidders shall provide within five (5) calendar days, evidence satisfactory to City of all valid license(s) currently held by that Bidder and each of the Bidder's subcontractors, before awarding the Contract.

11. SIGNING OF BIDS

All Bids submitted shall be executed by the Bidder or its authorized representative. Bidders may be asked to provide evidence in the form of an authenticated resolution of its Board of Directors or a Power of Attorney evidencing the capacity of the person signing the Bid to bind the Bidder to each Bid and to any Contract arising therefrom.

If a Bidder is a joint venture or partnership, it may be asked to submit an authenticated Power of Attorney executed by each joint venturer or partner appointing and designating one of the joint venturers or partners as a management sponsor to execute the Bid on behalf of Bidder. Only that joint venturer or partner shall execute the Bid. The Power of Attorney shall also: (1)

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INSTRUCTIONS TO BIDDERS

authorize that particular joint venturer or partner to act for and bind Bidder in all matters relating to the Bid; and (2) provide that each venturer or partner shall be jointly and severally liable for any and all of the duties and obligations of Bidder assumed under the Bid and under any Contract arising therefrom. The Bid shall be executed by the designated joint venturer or partner on behalf of the joint venture or partnership in its legal name.

12. BID GUARANTEE (BOND)

Each bid shall be accompanied by: (a) cash; (b) a certified check made payable to City; (c) a cashier's check made payable to City; or (d) a bid bond payable to City executed by the bidder as principal and surety as obligor in an amount not less than 10% of the maximum amount of the bid. Personal sureties and unregistered surety companies are unacceptable. The surety insurer shall be California admitted surety insurer, as defined in Code of Civil Procedure Section 995.120. The cash, check or bid bond shall be given as a guarantee that the bidder shall execute the Contract if it be awarded to the bidder, shall provide the payment and performance bonds and insurance certificates and endorsements as required herein within ten (10) calendar days after notification of the award of the Contract to the bidder. Failure to provide the required documents may result in forfeiture of the bidder's bid deposit or bond to City and City may award the Contract to the next lowest responsive, responsible bidder, or may call for new bids.

13. SUBMISSION OF SEALED BIDS

Once the Bid and supporting documents have been completed and signed as set forth herein, they shall be placed, along with the Bid Guarantee and other required materials in an envelope, sealed, addressed and delivered or mailed, postage prepaid to City at the place and to the attention of the person indicated in the Notice Inviting Bids. No oral or telephonic bids will be considered. No forms transmitted via the Internet, e-mail, facsimile, or any other electronic means will be considered unless specifically authorized by City as provided herein. The envelope shall also contain the following in the lower left-hand corner thereof:

Bid of (Bidder's Name)

for the Portola Parkway Resurfacing Project, PW 2016.05B, STPL-5469 (017)

Only where expressly permitted in the Notice Inviting Bids, may Bidders submit their bids via electronic transmission pursuant to Public Contract Code Sections 1600 and 1601. City reserves the right to not accept electronically transmitted bids where not specifically authorized in the Notice Inviting Bids, and may reject any bid not strictly complying with City's designated methods for delivery.

14. DELIVERY AND OPENING OF BIDS

Bids will be received by City at the address shown in the Notice Inviting Bids up to the date and time shown therein. City will leave unopened any Bid received after the specified date and time, and any such unopened Bid will be returned to the Bidder. It is the Bidder's sole responsibility to ensure that its Bid is received as specified. Bids may be submitted earlier than the dates(s) and time(s) indicated.

Bids will be opened at the date and time stated in the Notice Inviting Bids, and the amount of each Bid will be read aloud and recorded. All Bidders may, if they desire, attend the opening of

SECTION 00200
INSTRUCTIONS TO BIDDERS

Bids. City may in its sole discretion, elect to postpone the opening of the submitted Bids. City reserves the right to reject any or all Bids and to waive any informality or irregularity in any Bid. In the event of a discrepancy between the written amount of the Bid Price and the numerical amount of the Bid Price, the written amount shall govern.

15. WITHDRAWAL OF BID

Prior to bid opening, a Bid may be withdrawn by the Bidder only by means of a written request signed by the Bidder or its properly authorized representative. Any request to withdraw a bid after bid opening shall meet all requirements of Public Contract Code section 5100 et seq. and must be submitted in writing within five (5) working days, excluding Saturdays, Sundays and State holidays, specifying in detail the mistake.

16. BASIS OF AWARD; BALANCED BIDS

City shall award the Contract to the lowest responsive, responsible Bidder submitting a responsive Bid. City may reject any Bid which, in its opinion when compared to other bids received or to City's internal estimates, does not accurately reflect the cost to perform the Work. City may reject as non-responsive any bid which unevenly weights or allocates costs, including but not limited to overhead and profit to one or more particular bid items.

17. DISQUALIFICATION OF BIDDERS; INTEREST IN MORE THAN ONE BID

No bidder shall be allowed to make, submit or be interested in more than one bid. However, a person, firm, corporation or other entity that has submitted a subproposal to a bidder, or that has quoted prices of materials to a bidder, is not thereby disqualified from submitting a subproposal or quoting prices to other bidders submitting a bid to City. No person, firm, corporation, or other entity may submit subproposal to a bidder, or quote prices of materials to a bidder, when also submitting a prime bid on the same Project.

18. INSURANCE REQUIREMENTS

The successful bidder shall procure the insurance in the form and in the amount specified in the Contract Documents.

19. AWARD PROCESS

Once all Bids are opened and reviewed to determine the lowest responsive and responsible Bidder, City Council may award the contract. The apparent successful Bidder should begin to prepare the following documents: (1) the Performance Bond; (2) the Payment Bond; and (3) the required insurance certificates and endorsements. Once City notifies the Bidder of the award, the Bidder will have ten (10) consecutive calendar days from the date of this notification to execute the Contract and supply City with all of the required documents and certifications. Regardless whether the Bidder supplies the required documents and certifications in a timely manner, the Contract time will begin to run ten (10) calendar days from the date of the notification. Once City receives all of the properly drafted and executed documents and certifications from the Bidder, City shall issue a Notice to Proceed to that Bidder.

SECTION 00200
INSTRUCTIONS TO BIDDERS

20. FILING OF BID PROTESTS

Bidders may file a “protest” of a Bid with City’s Public Works Director/City Engineer. In order for a Bidder’s protest to be considered valid, the protest must:

- A. Be filed in writing within five (5) calendar days after the bid opening date;
- B. Clearly identify the specific irregularity or accusation;
- C. Specify, in detail, the grounds of the protest and the facts supporting the protest; and
- D. Include all relevant, supporting documentation with the protest at time of filing.

If the protest does not comply with each of these requirements, it may be rejected without further review.

If the protest is valid, City’s Public Works Director/City Engineer, or other designated City staff member, shall review the basis of the protest and all relevant information. The Public Works Director/City Engineer will provide a written decision to the protestor. The protestor may then appeal the decision of the Public Works Director/City Engineer to the City Manager.

The procedure and time limits set forth in this section are mandatory and are the sole and exclusive remedy in the event of a bid protest. Failure to comply with these procedures shall constitute a failure to exhaust administrative remedies and a waiver of any right to further pursue the bid protest,

21. WORKERS COMPENSATION

Each bidder shall submit the Contractor’s Certificate Regarding Workers’ Compensation form.

22. SUBSTITUTION OF SECURITY

The Contract Documents call for monthly progress payments based upon the percentage of the work completed. The City will retain five percent (5%) of each progress payment as provided by the Contract Documents. At the request and expense of the successful Bidder, the City will substitute securities for the amount so retained in accordance with Public Contract Code Section 22300.

23. PREVAILING WAGES

City has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages in the locality in which this work is to be performed for each craft or type of worker needed to execute the Contract. These rates are on file and available at the Department of Public Works or may be obtained online at <http://www.dir.ca.gov/dlsr>. Bidders are advised that a copy of these rates must be posted by the successful Bidder at the job site(s).

This is a federally funded project subject to the attached Davis-Bacon and Related Acts requirements. In the event of a conflict between Federal and State Wages, the higher of

the two will prevail. Copies of said Federal and State Wages shall be posted at the job site during the course of construction.

24. DEBARMENT OF CONTRACTORS AND SUBCONTRACTORS

In accordance with the provisions of the Labor Code, contractors or subcontractors may not perform work on a public works project with a subcontractor who is ineligible to perform work on a public project pursuant to Section 1777.1 or Section 1777.7 of the Labor Code. Any contract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract. Any public money that is paid to a debarred subcontractor by the Contractor for the Project shall be returned to City. The Contractor shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the Project.

25. IRAN CONTRACTING ACT CERTIFICATION

Each bidder shall submit the certification required by the Iran Contracting Act of 2010, Public Contract Code section 2200 et seq. as provided with the Bid Documents.

26. PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION

If the bids subject to this Notice are due on or after March 1, 2015, then pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. If awarded a Contract, the Bidder and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the Project. To this end, Bidder shall sign and submit with its Bid the Public Works Contractor Registration Certification on the form provided, attesting to the facts contained therein. Failure to submit this form may render the Bid non-responsive. In addition, each Bidder shall provide the registration number for each listed subcontractor in the space provided in the Designation of Subcontractors Form.

27. PERFORMANCE BOND AND PAYMENT BOND REQUIREMENTS

Within the time specified in the Contract Documents, the Bidder to whom a Contract is awarded shall deliver to City four identical counterparts of the Performance Bond and Payment Bond in the form supplied by City and included in the Contract Documents. Failure to do so may, in the sole discretion of City, result in the forfeiture of the Bid Guarantee. The surety supplying the bond must be an admitted surety insurer, as defined in Code of Civil Procedure Section 995.120, authorized to do business as such in the State of California and satisfactory to City. The Performance Bond and the Payment Bond shall be for one hundred percent (100%) of the Total Bid Price.

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INSTRUCTIONS TO BIDDERS

28. REQUEST FOR SUBSTITUTIONS

The successful bidder shall comply with the substitution request procedures set forth in the Bid and Contract Documents. Any deadlines for substitution requests that occur prior to the bid opening date are set forth in the Special Conditions.

29. SALES AND OTHER APPLICABLE TAXES, PERMITS, LICENSES AND FEES

Contractor and its subcontractors performing work under this Contract will be required to pay California sales tax and other applicable taxes, and to pay for permits, licenses and fees required by the agencies with authority in the jurisdiction in which the work will be located, unless otherwise expressly provided by the Contract Documents.

30. EXECUTION OF CONTRACT

As required herein the Bidder to whom an award is made shall execute the Contract in the amount determined by the Contract Documents. City may require appropriate evidence that the persons executing the Contract are duly empowered to do so.

END OF INSTRUCTIONS TO BIDDERS

**SECTION 00400
BID FORM**

NAME OF BIDDER: _____

The undersigned, hereby declare that we have carefully examined the location of the proposed Work, and have read and examined the Contract Documents, including all plans, specifications, and all addenda, if any, for the following Project:

Portola Parkway Resurfacing Project, PW 2016.05B, STPL-5469 (017)

We hereby propose to furnish all labor, materials, equipment, tools, transportation, and services, and to discharge all duties and obligations necessary and required to perform and complete the Project for the following TOTAL BID PRICE:

BID SCHEDULE

Bid Item No.	Bid Item Description	Est. Qty	Unit of Measure	Unit Price	Total Item Cost
A-1	Project Mobilization and Demobilization	1	LS		
A-2	Monument Preservation	1	LS		
A-3	Public Notification	1	LS		
A-4	Remove Existing and Construct New ADA Compliant PCC Access Ramp, Complete in Place, per SPPWC Std Plan No. 111-5	26	EA		
A-5	Remove Existing and Construct New ADA Compliant Colored PCC Access Ramp, Complete in Place, per SPPWC Std Plan No. 111-5. Color and Finish to Match Existing.	4	EA		
A-6	Remove Existing and Construct New ADA Compliant Access Path at Channelizing Island per Plan Detail (SE Corner Alton & Portola)	1	EA		
A-7	Retrofit Surface Mounted Truncated Domes on Existing PCC Access Ramp	7	EA		

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Bid Item No.	Bid Item Description	Est. Qty	Unit of Measure	Unit Price	Total Item Cost
A-8	Remove Existing PCC Median Curb	750	LF		
A-9	Construct 8" PCC Median Curb	750	LF		
A-10	Remove Existing PCC Median Infill	1,600	SF		
A-11	Construct 4" PCC Median Infill	1,500	SF		
A-12	Remove & Replace Existing Grated Inlet, Furnish & Install New 8" Storm Drain to Connect to Existing Storm Drain,	1	LS		
A-13	Remove and Replace 4" PCC Sidewalk	2,000	SF		
A-14	Remove and Replace Curb & Gutter	150	LF		
A-15	0" - 2" Variable Depth Cold Mill	100,000	SF		
A-16	Cold Mill 2" Existing Pavement	390,000	SF		
A-17	Cold mill 4" Existing Pavement	19,000	SF		
A-18	Excavate Roadway to required depth for Pavement Section (6"AC/11.5"CMB)	5,800	SF		
A-19	Construct 4" AC / 11.5" CMB Pavement	5,800	SF		
A-20	Construct 2" AC Leveling Course	250	TON		
A-21	Construct 2" Asphalt Rubber Hot Mix (ARHM) Finish Course	11,850	TON		
A-22	Adjust Storm Drain Manhole to Grade	11	EA		
A-23	Adjust Sanitary Sewer Manhole to Grade (IWRD Facility)	18	EA		

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Bid Item No.	Bid Item Description	Est. Qty	Unit of Measure	Unit Price	Total Item Cost
A-24	Remove Existing and Install New Water Valve Frame and Cover to Grade (IRWD Facility)	40	EA		
A-25	Adjust Monument Well Frame and Cover to Grade	3	EA		
A-26	Relocate Existing Pedestrian Push Button and Install New Push Button Post (Including Conduit and Wiring)	2	EA		
A-27	Adjust Pull Box To Grade	13	EA		
A-28	Install & Connect Type D Traffic Loop	69	EA		
A-29	Install & Connect Type E Traffic Loop	168	EA		
A-30	Bake Parkway Median Landscaping & Irrigation Repairs/Replacement	1	LS		
A-31	Traffic Striping, markings, Legends, & Signs	1	LS		
A-32	Traffic Control	1	LS		

In case of discrepancy between the unit price and the item cost set forth for a unit basis item, the unit price shall prevail and, shall be utilized as the basis for determining the lowest responsive, responsible bidder. However, if the amount set forth as a unit price is ambiguous, unintelligible or uncertain for any cause, or is omitted, or is the same amount as the entry in the "Item Cost" column, then the amount set forth in the "Item Cost" column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price. If any of the above discrepancies exist, the City may recalculate the bid price on the basis of the unit price and the bidder agrees to be bound by such recalculation. Final payment shall be determined by the Engineer from measured quantities of work performed based upon the unit price.

TOTAL BID PRICE (BASED ON BID SCHEDULE):

\$ _____

Total Bid Price in Numbers

SECTION 00400
BID FORM

Total Bid Price in Written Form

In case of discrepancy between the written price and the numerical price, the written price shall prevail.

The undersigned agrees that this Bid Form constitutes a firm offer to City which cannot be withdrawn for the number of calendar days indicated in the Notice Inviting Bids from the bid opening, or until a Contract for the Work is fully executed by City and a third party, whichever is earlier.

The Contract duration shall commence on the date stated in City's Notice to Proceed, and shall be completed by the Contractor in the time specified in the Contract Documents. In no case shall the Contractor commence construction prior to the date stated in City's Notice to Proceed.

Bidder certifies that it is licensed in accordance with the law providing for the registration of Contractors, License No. _____, Expiration Date _____, class of license _____. If the bidder is a joint venture, each member of the joint venture must include the above information.

The undersigned acknowledges receipt, understanding and full consideration of the following addenda to the Contract Documents.

Addenda No. _____

Addenda No. _____

Addenda No. _____

Bidder has attached the following:

1. The required bid security in the amount of not less than 10% of the Total Bid Price.
2. The fully executed Noncollusion Declaration form.
3. The completed Designation of Subcontractors form.
4. The completed Bidder Information Form.
5. The completed Contractor's Certificate Regarding Workers' Compensation form.
6. The completed Iran Contracting Act Certification form.
7. The completed Public Works Contractor Registration Certification form.

I hereby certify under penalty of perjury under the laws of the State of California, that all of the information submitted in connection with this Bid and all of the representations made herein are true and correct.

Name of Bidder _____

SECTION 00400
BID FORM

Signature _____

Name _____

Title _____

Dated _____

END OF BID FORM

**SECTION 00405
CONTRACTOR'S CERTIFICATE REGARDING WORKERS' COMPENSATION**

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 Bidder_____

Signature_____

Name_____

Title_____

Dated_____

END OF CONTRACTOR'S CERTIFICATE REGARDING WORKERS' COMPENSATION

**SECTION 00410
BID BOND**

The makers of this bond are _____, as Principal, and _____, as Surety and are held and firmly bound unto the City of Lake Forest, hereinafter called City, in the penal sum of TEN PERCENT (10%) OF THE TOTAL BID PRICE of the Principal submitted to City for the work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has submitted the accompanying bid dated _____, 2016 for the Portola Parkway Resurfacing Project, PW 2016.05B, STPL-5469 (017)

If the Principal does not withdraw its bid within the time specified in the Contract Documents; and if the Principal is awarded the Contract and provides all documents to City as required by the Contract Documents; then this obligation shall be null and void. Otherwise, this bond will remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents shall in affect its obligation under this bond, and Surety does hereby waive notice of any such changes.

In the event a lawsuit is brought upon this bond by City and judgment is recovered, the Surety shall pay all litigation expenses incurred by City in such suit, including reasonable attorneys' fees, court costs, expert witness fees and expenses.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals this _____ day of _____, 2016, the name and corporate seal of each corporation.

(Corporate Seal)_____

Contractor/ Principal

By

Title

(Corporate Seal)_____

Surety

By

Attorney-in-Fact

(Attach Attorney-in-Fact Certificate) Title_____

SECTION 00410
BID BOND

Notary Acknowledgment

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

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally
Date Name And Title Of Officer (e.g. "Jane Doe, Notary Public")
appeared _____, who proved to me on the basis of satisfactory
Name(s) of Signer(s)

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

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

WITNESS my hand and official seal.

Place Notary Seal Above

Signature of Notary Public

OPTIONAL

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

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- Individual
- Corporate Officer

Title(s)

Title or Type of Document

- Partner(s) Limited
- General

Number of Pages

- Attorney-In-Fact
- Trustee(s)
- Guardian/Conservator
- Other:

Date of Document

Signer is representing:
Name Of Person(s) Or Entity(ies)

Signer(s) Other Than Named Above

**SECTION 00420
NONCOLLUSION DECLARATION**

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. 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, to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____[date], at _____[city], _____[state].

Name of Bidder _____

Signature _____

Name _____

Title _____

Dated _____

END OF NONCOLLUSION DECLARATION

**SECTION 00430
CONTRACTOR INFORMATION AND EXPERIENCE FORM**

A. INFORMATION ABOUT BIDDER

Failure to complete all information may render your bid nonresponsive - indicate not applicable ("N/A") where appropriate.

NOTE: Where Bidder is a joint venture, pages shall be duplicated and information provided for all parties to the joint venture.

1.0 Name of Bidder: _____

2.0 Type, if Entity: _____

3.0 Bidder Address: _____

Facsimile Number _____ Telephone Number _____

Website Address _____

4.0 How many years has Bidder's organization been in business as a Contractor?

5.0 How many years has Bidder's organization been in business under its present name? _____

5.1 Under what other or former names has Bidder's organization operated?: _____

6.0 If Bidder's organization is a corporation, answer the following:

6.1 Date of Incorporation: _____

6.2 State of Incorporation: _____

6.3 President's/CEO Name: _____

6.4 Vice President's Name(s): _____

6.5 Secretary's Name: _____

6.6 Treasurer's Name: _____

7.0 If an individual or a partnership, answer the following:

7.1 Date of Organization: _____

SECTION 00430
CONTRACTOR INFORMATION AND EXPERIENCE FORM

7.2 Name and address of all partners (state whether general or limited partnership):

8.0 If other than a corporation or partnership, describe organization and name principals:

9.0 List other states in which Bidder's organization is legally qualified to do business.

10.0 What type of work does the Bidder normally perform with its own forces?

11.0 Has Bidder ever failed to complete any work awarded to it? If so, note when, where, and why:

12.0 Has the Bidder ever been in default, debarred or suspended in any way? If so, note when and why:

13.0 Within the last five years, has any officer or partner of Bidder's organization ever been an officer or partner of another organization when it failed to complete a contract? If so, attach a separate sheet of explanation:

14.0 List Trade References (Materials Suppliers, Vendors, Union Representatives, etc.):

SECTION 00430
CONTRACTOR INFORMATION AND EXPERIENCE FORM

15.0 List Bank References (Bank and Branch Address):

16.0 Name of Bonding Company and Name and Address, email address and phone number of Agent:

SECTION 00430
CONTRACTOR INFORMATION AND EXPERIENCE FORM

D. EXPERIENCE AND TECHNICAL QUALIFICATIONS QUESTIONNAIRE

Personnel:

The Bidder shall identify the key personnel to be assigned to this project in a management, construction supervision or engineering capacity.

1. List each person's job title, name and percent of time to be allocated to this project:

2. Summarize each person's specialized education:

3. List each person's years of construction experience relevant to the project:

4. Summarize such experience:

Bidder agrees that any personnel named in this Bid will remain on this Project until completion of all relevant Work, unless substituted by personnel of equivalent experience and qualifications approved in advance by City.

SECTION 00430
CONTRACTOR INFORMATION AND EXPERIENCE FORM

Additional Bidder's Statements:

If the Bidder feels that there is additional information which has not been included in the questionnaire above, and which would contribute to the qualification review, it may add that information in a statement here or on an attached sheet, appropriately marked:

E. VERIFICATION AND EXECUTION

These Bid Forms shall be executed only by a duly authorized official of the Bidder:

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

Name of Bidder _____

Signature _____

Name _____

Title _____

Dated _____

END OF CONTRACTOR INFORMATION AND EXPERIENCE FORM

**SECTION 00440
LIST OF SUBCONTRACTORS FORM**

In compliance with the Subletting and Subcontracting Fair Practices Act of the Public Contract Code of the State of California, each bidder shall set forth below: (a) the name and the location of the place of business, (b) the California contractor license number, and (c) the portion of the work which will be done by each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work in an amount in excess of one-half of one percent (1/2%) of the Contractor's Total Bid Price. Notwithstanding the foregoing, if the work involves streets and highways, then the Contractor shall list each subcontractor who will perform work or labor or render service to Contractor in or about the work in an amount in excess of one-half of one percent (1/2%) of the Contractor's Total Bid Price or \$10,000, whichever is greater. No additional time shall be granted to provide the below requested information.

If no subcontractor is specified, for a portion of the work, or if more than one subcontractor is specified for the same portion of Work, then the Contractor shall be deemed to have agreed that it is fully qualified to perform that Work, and that it shall perform that portion itself. **The Prime Contractor is required to complete at least 50% of the contract value with its own forces.**

Work to be done by Subcontractor	Subcontractor	Location of Business	CSLB Contractor License No.	DIR Registration Number	% of the Work

SECTION 00440
LIST OF SUBCONTRACTORS FORM

Work to be done by Subcontractor	Subcontractor	Location of Business	CSLB Contractor License No.	DIR Registration Number	% of the Work

In addition to submitting this Designation of Subcontractor form with its bid submission, each bidder shall, within 24 hours of the bid submission deadline, provide the City with a list of bid items that correspond to the portion of work listed for each designated subcontractor. Failure to provide this information within the time prescribed may be cause for the City to deem the Bid non-responsive and the City may reject the Bid.

Name of Bidder _____

Signature _____

Name _____

Title _____

Dated _____

END OF LIST OF SUBCONTRACTORS FORM

SECTION 00450

IRAN CONTRACTING ACT CERTIFICATION (Public Contract Code Section 2200 et seq.)

As required by California Public Contract Code Section 2204, the Contractor certifies subject to penalty for perjury that the option checked below relating to the Contractor's status in regard to the Iran Contracting Act of 2010 (Public Contract Code Section 2200 et seq.) is true and correct:

The Contractor is not:

(i) identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203; or

(ii) a financial institution that extends, for 45 days or more, credit in the amount of \$20,000,000 or more to any other person or entity identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203, if that person or entity uses or will use the credit to provide goods or services in the energy sector in Iran.

The City has exempted the Contractor from the requirements of the Iran Contracting Act of 2010 after making a public finding that, absent the exemption, the City will be unable to obtain the goods and/or services to be provided pursuant to the Contract.

The amount of the Contract payable to the Contractor for the Project does not exceed \$1,000,000.

Signed: _____

Titled: _____

Firm: _____

Date: _____

Note: In accordance with Public Contract Code Section 2205, false certification of this form shall be reported to the California Attorney General and may result in civil penalties equal to the greater of \$250,000 or twice the Contract amount, termination of the Contract and/or ineligibility to bid on contracts for three years.

END OF IRAN CONTRACTING ACT CERTIFICATION

**SECTION 00460
PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION**

If this bid is due on or after March 1, 2015, then pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. See <http://www.dir.ca.gov/Public-Works/PublicWorks.html> for additional information.

No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work.

Bidder hereby certifies that it is aware of the registration requirements set forth in Labor Code sections 1725.5 and 1771.1 and is currently registered as a contractor with the Department of Industrial Relations.

Name of Bidder: _____

DIR Registration Number: _____

Bidder further acknowledges:

1. Bidder shall maintain a current DIR registration for the duration of the project.
2. Bidder shall include the requirements of Labor Code sections 1725.5 and 1771.1 in its contract with subcontractors and ensure that all subcontractors are registered at the time of bid opening and maintain registration status for the duration of the project.
3. Failure to submit this form or comply with any of the above requirements may result in a finding that the bid is non-responsive.

Name of Bidder _____

Signature _____

Name _____

Title _____

Dated _____

END OF PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION

**SECTION 00500
CONTRACT**

THIS CONTRACT is made this _____ day of _____, 2016, in the County of Orange, State of California, by and between the City of Lake Forest hereinafter called City, and _____, hereinafter called Contractor. City and the Contractor for the considerations stated herein agree as follows:

ARTICLE 1. SCOPE OF WORK. The Contractor shall perform all Work within the time stipulated the contract and shall provide all labor, materials, equipment, tools, utility services, and transportation to complete all of the Work required in strict compliance with the Contract Documents as specified in Article 5 below for the following Project:

PORTOLA PARKWAY RESURFACING PROJECT, PW 2016.05B, STPL-5469 (017)

The Contractor and its surety shall be liable to City for any damages arising as a result of the Contractor's failure to comply with this obligation.

ARTICLE 2. TIME FOR COMPLETION. The Work shall be commenced on the date stated in City's Notice to Proceed. The Contractor shall complete all Work required by the Contract Documents within **[**INSERT CALENDAR DAYS (XXX)**]** calendar days from the commencement date stated in the Notice to Proceed. By its signature hereunder, Contractor agrees the time for completion set forth above is adequate and reasonable to complete the Work.

ARTICLE 3. CONTRACT PRICE. City shall pay to the Contractor as full compensation for the performance of the Contract, subject to any additions or deductions as provided in the Contract Documents, and including all applicable taxes and costs, the sum of _____ Dollars (\$_____). Payment shall be made as set forth in the General Conditions.

At any time during the term of the Contract, City may, pursuant to the terms and provisions of the Contract Documents, request that the Contractor perform additional work. Contractor shall not perform, nor be compensated for, additional work without written authorization from the City pursuant to the terms and provisions of the Contract Documents. Notwithstanding any other provisions of the Contract Documents, for contracts in excess of \$175,000.00, the City Manager may approve additional work not to exceed 10% of the original Contract amount, **[**insert 10% dollar amount (\$XXXXX)**]**, as set forth in this Article 3. Any additional work in excess of this amount shall be approved by the City Council.

ARTICLE 4. LIQUIDATED DAMAGES. In accordance with Government Code section 53069.85, it is agreed that the Contractor will pay City the sum of **[**INSERT AMOUNT**]** for each and every calendar day of delay beyond the time prescribed in the Contract Documents for finishing the Work, as Liquidated Damages and not as a penalty or forfeiture. **[**DELETE FOLLOWING SENTENCE IF NOT USED**]** This Liquidated Damages amount does not include, and the City specifically reserves the right to pursue damages in addition to Liquidated Damages for the direct costs associated with **[**specify direct costs excluded from LDs**]** **[**DELETE PREVIOUS SENTENCE IF NOT USED**]**. In the event that Liquidated Damages are not paid, the Contractor agrees City may deduct that amount from any money due or that

SECTION 00500
CONTRACT

may become due the Contractor under the Contract. This Article does not exclude recovery of other damages specified in the Contract Documents.

ARTICLE 5. COMPONENT PARTS OF THE CONTRACT. The "Contract Documents" include the following:

- Notice Inviting Bids
- Instructions to Bidders
- Bid Form
- Contractor's Certificate Regarding Workers' Compensation
- Bid Bond
- Designation of Subcontractors
- Information Required of Bidders
- Noncollusion Declaration form
- Iran Contracting Act Certification
- Public Works Contractor Registration Certification
- Contract
- Performance Bond
- Payment Bond
- General Conditions
- Special Conditions
- Technical Specifications
- Addenda
- Plans and Drawings
- Approved and fully executed change orders
- Any other documents contained in or incorporated into the Contract

The Contractor shall complete the Work in strict accordance with all of the Contract Documents.

All of the Contract Documents are intended to be complementary. Work required by one of the Contract Documents and not by others shall be done as if required by all. This Contract shall supersede any prior agreement of the parties.

ARTICLE 6. PROVISIONS REQUIRED BY LAW. Each and every provision of law required to be included in these Contract Documents shall be deemed to be included in these Contract Documents. The Contractor shall comply with all requirements of applicable federal, state and local laws, rules and regulations, including, but not limited to, the provisions of the California Labor Code and California Public Contract Code which are applicable to this Project.

ARTICLE 7. INDEMNIFICATION. Contractor shall provide indemnification as set forth in the General Conditions.

ARTICLE 8. PREVAILING WAGES. Contractor shall be required to pay the prevailing rate of wages in accordance with the Labor Code which such rates shall be made available at **[**INSERT OFFICE NAME**]** or may be obtained online at <http://www.dir.ca.gov/dlsr>. and which must be posted at the job site.

IN WITNESS WHEREOF, this Contract has been duly executed by the above-named parties, on the day and year above written.

SECTION 00500
CONTRACT

[NAME OF CONTRACTOR]

CITY OF LAKE FOREST

By _____

By _____

Name and Title: _____

License No. _____

**[[If Corporation, TWO SIGNATURES,
President OR Vice President AND Secretary
OR Treasurer REQUIRED]]**

END OF CONTRACT

**SECTION 00610
PERFORMANCE BOND**

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, the City of Lake Forest (hereinafter referred to as "City") has awarded to _____, (hereinafter referred to as the "Contractor") an agreement for _____ (hereinafter referred to as the "Project").

WHEREAS, the work to be performed by the Contractor is more particularly set forth in the Contract Documents for the Project dated _____, (hereinafter referred to as "Contract Documents"), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, the Contractor is required by said Contract Documents to perform the terms thereof and to furnish a bond for the faithful performance of said Contract Documents.

NOW, THEREFORE, we, _____, the _____ undersigned _____ Contractor and _____ as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held and firmly bound unto the City in the sum of _____

DOLLARS and _____ CENTS (\$ _____), said sum being not less than one hundred percent (100%) of the total amount of the Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the Contractor, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations including, if provided as part of the Contract Documents, the one-year guarantee of all materials and workmanship; and shall indemnify and save harmless the City, its officers and agents, as stipulated in said Contract Documents, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a condition precedent to the satisfactory completion of the Contract Documents, unless otherwise provided for in the Contract Documents, the guarantee obligation shall hold good for a period of one (1) year after the acceptance of the work by City, during which time if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect the City from loss or damage resulting from or caused by defective materials or faulty workmanship the above obligation in penal sum thereof shall remain in full force and effect. However, anything in this paragraph to the contrary notwithstanding, the obligations of Surety hereunder shall continue so long as any obligation of Contractor remains. Nothing herein shall limit the City's rights or the Contractor or Surety's obligations under the Contract Documents, law or equity, including, but not limited to, California Code of Civil Procedure section 337.15.

SECTION 00610
PERFORMANCE BOND

Whenever Contractor shall be, and is declared by the City to be, in default under the Contract Documents, the Surety shall remedy the default pursuant to the Contract Documents, or shall promptly, at the City's option:

- (1) Take over and complete the Project in accordance with all terms and conditions in the Contract Documents; or
- (2) Obtain a bid or bids for completing the Project in accordance with all terms and conditions in the Contract Documents and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a contract between such bidder, the Surety and the City, and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the City under the Contract Documents and any modification thereto, less any amount previously paid by the City to the Contractor and any other set offs pursuant to the Contract Documents.
- (3) Permit the City to complete the Project in any manner consistent with California law and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the City under the Contract Documents and any modification thereto, less any amount previously paid by the City to the Contractor and any other set offs pursuant to the Contract Documents.

Surety expressly agrees that the City may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Contractor.

Surety shall not utilize Contractor in completing the Project nor shall Surety accept a bid from Contractor for completion of the Project if the City, when declaring the Contractor in default, notifies Surety of the City's objection to Contractor's further participation in the completion of the Project.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project and the provisions of Section 2819 and 2845 of the California Civil Code. Without limiting the foregoing, such changes, extensions of time and alterations or additions shall include, but are not limited to, changes or alterations to the Contract Documents (including, without limitation, an increase in the total dollar amount of the Contract Documents), extensions of time, or modifications of the time, terms, or conditions of payment to the Contractor.

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

SECTION 00610
PERFORMANCE BOND

CONTRACTOR/PRINCIPAL
(Corporate Seal of Contractor/
Principal, if a Corporation)

Name of Contractor/Principal (Type or Print)

By: _____
Name (Signature)

Name (Type or Print)

Title (Type or Print)

SURETY
(Seal of Surety)

Name of Surety (Type or Print)

By: _____
Attorney-In-Fact

Signatures of those signing for the Contractor and Surety must be notarized and evidence of corporate authority attached.

The rate of premium on this bond is _____ per thousand. The total amount of premium charges, \$_____.

(The above must be filled in by corporate attorney.)

THIS IS A REQUIRED FORM

Any claims under this bond may be addressed to:

(Name and Address of Surety)

(Name and Address of Agent or
Representative for service of
process in California, if different
from above)

(Telephone number of Surety and
Agent or Representative for service
of process in California)

SECTION 00610
PERFORMANCE BOND

Notary Acknowledgment

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

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally
Date Name And Title Of Officer (e.g. "Jane Doe, Notary Public")
appeared _____, who proved to me on the basis of satisfactory
Name(s) of Signer(s)

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

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

WITNESS my hand and official seal.

Place Notary Seal Above

Signature of Notary Public

OPTIONAL

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

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- Individual
 Corporate Officer

Title(s)

Title or Type of Document

- Partner(s) Limited
 General

Number of Pages

- Attorney-In-Fact
 Trustee(s)
 Guardian/Conservator
 Other:

Date of Document

Signer is representing:
Name Of Person(s) Or Entity(ies)

Signer(s) Other Than Named Above

NOTE: A copy of the Power-of-Attorney to local representatives of the bonding company must be attached hereto.

END OF PERFORMANCE BOND FORM

**SECTION 00620
PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENTS That

WHEREAS, the City of Lake Forest (hereinafter designated as the "City"), by action taken or a resolution passed _____, 20____ has awarded to _____ hereinafter designated as the "Principal," a contract for the work described as follows: _____ (the "Project"); and

WHEREAS, the work to be performed by the Principal is more particularly set forth in the Contract Documents for the Project dated _____, (hereinafter referred to as "Contract Documents"), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, said Principal is required to furnish a bond in connection with said Contract Documents; providing that if said Principal or any of its Subcontractors shall fail to pay for any materials, provisions, provender, equipment, or other supplies used in, upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, or for amounts due under the Unemployment Insurance Code or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of said Principal and its Subcontractors with respect to such work or labor, the Surety on this bond will pay for the same to the extent hereinafter set forth.

NOW THEREFORE, we, the Principal and _____ as Surety, are held and firmly bound unto the City in the penal sum of _____ DOLLARS and _____ CENTS (\$_____) lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, his or its subcontractors, heirs, executors, administrators, successors or assigns, shall fail to pay any of the persons named in Section 9100 of the Civil Code, fail to pay for any materials, provisions or other supplies, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the Contract Documents, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department or Franchise Tax Board from the wages of employees of the contractor and his subcontractors pursuant to Section 18663 of the Revenue and Taxation Code, with respect to such work and labor the Surety or Sureties will pay for the same, in an amount not exceeding the sum herein above specified, and also, in case suit is brought upon this bond, all litigation expenses incurred by the City in such suit, including reasonable attorneys' fees, court costs, expert witness fees and investigation expenses.

This bond shall inure to the benefit of any of the persons named in Section 9100 of the Civil Code so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

SECTION 00620
PAYMENT BOND

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract (including the Contract Documents), plans, specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described, or pertaining or relating to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission or attempted rescission of the Contract Documents, agreement or bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the owner or City and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in Section 9100 of the Civil Code, and has not been paid the full amount of his claim and that Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned.

Notwithstanding any other provision of this bond, it is expressly understood, acknowledged and agreed that it shall provide all of the protections required by California Civil Code Sections 9550 through 9566, including the specific coverage protections required by Section 9554.

REMAINDER OF PAGE LEFT INTENTIONALLY BLANK

SIGNATURES ON FOLLOWING PAGE

SECTION 00620
PAYMENT BOND

IN WITNESS WHEREOF, two (2) identical counterparts of this instrument, each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety above named, on the ____ day of _____ 20____ the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

CONTRACTOR/PRINCIPAL
(Corporate Seal of Contractor/
Principal, if a Corporation)

Name of Contractor/Principal (Type or Print)

By: _____
Name (Signature)

Name (Type or Print)

Title (Type or Print)

SURETY
(Seal of Surety)

Name of Surety (Type or Print)

By: _____
Attorney-In-Fact

SECTION 00620
PAYMENT BOND

Notary Acknowledgment

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

STATE OF CALIFORNIA
COUNTY OF _____

On _____, 20____, before me, _____, Notary Public, personally
Date Name And Title Of Officer (e.g. "Jane Doe, Notary Public")
appeared _____, who proved to me on the basis of satisfactory
Name(s) of Signer(s)

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

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

WITNESS my hand and official seal.

Place Notary Seal Above

Signature of Notary Public

OPTIONAL

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

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

- Individual
 Corporate Officer

Title(s)

Title or Type of Document

- Partner(s) Limited
 General

Number of Pages

- Attorney-In-Fact
 Trustee(s)
 Guardian/Conservator
 Other:

Date of Document

Signer is representing:
Name Of Person(s) Or Entity(ies)

Signer(s) Other Than Named Above

NOTE: A copy of the Power-of-Attorney to local representatives of the bonding company must be attached hereto.

END OF PAYMENT BOND FORM

SECTION 00630
FEDERAL PROVISIONS & FORMS (FR-1 TO FR-35)

SECTION 00630
FEDERAL PROVISIONS & FORMS (FR-1 TO FR-35)

EXHIBIT 12-B BIDDER'S LIST OF SUBCONTRACTORS (DBE AND NON-DBE)

PART I

The bidder shall list all subcontractors (both DBE and non-DBE) in accordance with Section 2-1.054 of the Standard Specifications and per Title 49, Section 26.11 of the Code of Federal Regulations. This listing is required in addition to listing DBE Subcontractors elsewhere in the proposal. **Photocopy this form for additional firms.**

Firm Name/ Address/ City, State, ZIP	Phone/ Fax	Annual Gross Receipts	Description of Portion of Work to be Performed	Local Agency Use Only (Certified DBE?)
<i>Name</i>	<i>Phone</i>	<input type="checkbox"/> < \$1 million		<input type="checkbox"/> YES
<i>Address</i>		<input type="checkbox"/> < \$5 million		<input type="checkbox"/> NO
	<i>Fax</i>	<input type="checkbox"/> < \$10 million		<i>If YES list DBE #:</i>
<i>City State ZIP</i>		<input type="checkbox"/> < \$15 million		Age of Firm (Yrs.)
		<input type="checkbox"/> > \$15 million		
<i>Name</i>	<i>Phone</i>	<input type="checkbox"/> < \$1 million		<input type="checkbox"/> YES
<i>Address</i>		<input type="checkbox"/> < \$5 million		<input type="checkbox"/> NO
	<i>Fax</i>	<input type="checkbox"/> < \$10 million		<i>If YES list DBE #:</i>
<i>City State ZIP</i>		<input type="checkbox"/> < \$15 million		Age of Firm (Yrs.)
		<input type="checkbox"/> > \$15 million		
<i>Name</i>	<i>Phone</i>	<input type="checkbox"/> < \$1 million		<input type="checkbox"/> YES
<i>Address</i>		<input type="checkbox"/> < \$5 million		<input type="checkbox"/> NO
	<i>Fax</i>	<input type="checkbox"/> < \$10 million		<i>If YES list DBE #:</i>
<i>City State ZIP</i>		<input type="checkbox"/> < \$15 million		Age of Firm (Yrs.)
		<input type="checkbox"/> > \$15 million		
<i>Name</i>	<i>Phone</i>	<input type="checkbox"/> < \$1 million		<input type="checkbox"/> YES
<i>Address</i>		<input type="checkbox"/> < \$5 million		<input type="checkbox"/> NO
	<i>Fax</i>	<input type="checkbox"/> < \$10 million		<i>If YES list DBE #:</i>
<i>City State ZIP</i>		<input type="checkbox"/> < \$15 million		Age of Firm (Yrs.)
		<input type="checkbox"/> > \$15 million		

Distribution: 1) Original - Local Agency File

The bidder shall list all subcontractors (both DBE and non-DBE) in accordance with Title 49, Section 26.11 of the Code of Federal Regulations. This listing is required in addition to listing DBE Subcontractors elsewhere in the proposal. Photocopy this form for additional firms.

Firm Name/ Address/ City, State, ZIP	Phone/ Fax	Annual Gross Receipts	Description of Portion of Work to be Performed	Local Agency Use Only (Certified DBE?)
<i>Name</i>	<i>Phone</i>	<input type="checkbox"/> < \$1 million		<input type="checkbox"/> YES
		<input type="checkbox"/> < \$5 million		<input type="checkbox"/> NO
<i>Address</i>	<i>Fax</i>	<input type="checkbox"/> < \$10 million		<i>If YES list DBE #:</i>
		<input type="checkbox"/> < \$15 million		
<i>City State ZIP</i>		<input type="checkbox"/> > \$15 million		Age of Firm (Yrs.)
<i>Name</i>	<i>Phone</i>	<input type="checkbox"/> < \$1 million		<input type="checkbox"/> YES
		<input type="checkbox"/> < \$5 million		<input type="checkbox"/> NO
<i>Address</i>	<i>Fax</i>	<input type="checkbox"/> < \$10 million		<i>If YES list DBE #:</i>
		<input type="checkbox"/> < \$15 million		
<i>City State ZIP</i>		<input type="checkbox"/> > \$15 million		Age of Firm (Yrs.)
<i>Name</i>	<i>Phone</i>	<input type="checkbox"/> < \$1 million		<input type="checkbox"/> YES
		<input type="checkbox"/> < \$5 million		<input type="checkbox"/> NO
<i>Address</i>	<i>Fax</i>	<input type="checkbox"/> < \$10 million		<i>If YES list DBE #:</i>
		<input type="checkbox"/> < \$15 million		
<i>City State ZIP</i>		<input type="checkbox"/> > \$15 million		Age of Firm (Yrs.)
<i>Name</i>	<i>Phone</i>	<input type="checkbox"/> < \$1 million		<input type="checkbox"/> YES
		<input type="checkbox"/> < \$5 million		<input type="checkbox"/> NO
<i>Address</i>	<i>Fax</i>	<input type="checkbox"/> < \$10 million		<i>If YES list DBE #:</i>
		<input type="checkbox"/> < \$15 million		
<i>City State ZIP</i>		<input type="checkbox"/> > \$15 million		Age of Firm (Yrs.)

Distribution: 1) Original – Local Agency File

EXHIBIT 12-G REQUIRED FEDERAL-AID CONTRACT LANGUAGE
(For Local Assistance Construction Projects)

The following language must be incorporated into all Local Assistance Federal-aid construction contracts. The following language, with minor edits, was taken from the 2010 Caltrans Standard Specifications, Revised Standard Specifications issued by Caltrans Office Engineer, and the Code of Federal Regulations.

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1. DISADVANTAGED BUSINESS ENTERPRISES (DBE) (CT Std Spec 2-1.12)

Under 49 CFR 26.13(b):

The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

Take necessary and reasonable steps to ensure that DBEs have opportunity to participate in the contract (49 CFR 26).

To ensure equal participation of DBEs provided in 49 CFR 26.5, the Agency shows a goal for DBEs.

Make work available to DBEs and select work parts consistent with available DBE subcontractors and suppliers.

Meet the DBE goal shown elsewhere in these special provisions or demonstrate that you made adequate good faith efforts to meet this goal.

It is your responsibility to verify that the DBE firm is certified as DBE at date of bid opening. For a list of DBEs certified by the California Unified Certification Program, go to: http://www.dot.ca.gov/hq/bep/find_certified.htm.

All DBE participation will count toward the California Department of Transportation's federally mandated statewide overall DBE goal.

Credit for materials or supplies you purchase from DBEs counts towards the goal in the following manner:

- 100 percent counts if the materials or supplies are obtained from a DBE manufacturer.
- 60 percent counts if the materials or supplies are obtained from a DBE regular dealer.
- Only fees, commissions, and charges for assistance in the procurement and delivery of materials or supplies count if obtained from a DBE that is neither a manufacturer nor regular dealer. 49 CFR 26.55 defines "manufacturer" and "regular dealer."

You receive credit towards the goal if you employ a DBE trucking company that performs a commercially useful function as defined in 49 CFR 26.55(d)(1) through (4) and (6).

a. DBE Commitment Submittal (CT Std Spec 2-1.12B(2))

Submit the Exhibit 15-G *Local Agency Bidder DBE Commitment (Construction Contracts)* form, included in the Bid book. If the form is not submitted with the bid, remove the form from the Bid book before submitting your bid.

If the DBE Commitment form is not submitted with the bid, the apparent low bidder, the 2nd low bidder, and the 3rd low bidder must complete and submit the DBE Commitment form to the Agency. DBE Commitment form must be received by the Agency no later than 4:00 p.m. on the 4th business day after bid opening.

Other bidders do not need to submit the DBE Commitment form unless the Agency requests it. If the Agency requests you to submit a DBE Commitment form, submit the completed form within 4 business days of the request.

Submit written confirmation from each DBE stating that it is participating in the contract. Include confirmation with the DBE Commitment form. A copy of a DBE's quote will serve as written confirmation that the DBE is participating in the contract.

If you do not submit the DBE Commitment form within the specified time, the Agency will find your bid nonresponsive.

b. Good Faith Efforts Submittal (CT Std Spec 2-1.12B(3))

If you have not met the DBE goal, complete and submit the DBE Information - Good Faith Efforts, Exhibit 15-H, form with the bid showing that you made adequate good faith efforts to meet the goal. Only good faith efforts directed towards obtaining participation by DBEs will be considered. If good faith efforts documentation is not submitted with the bid, it must be received by the Agency no later than 4:00 p.m. on the 4th business day after bid opening.

If your DBE Commitment form shows that you have met the DBE goal or if you are required to submit the DBE Commitment form, you must also submit good faith efforts documentation within the specified time to protect your eligibility for award of the contract in the event the Agency finds that the DBE goal has not been met.

Good faith efforts documentation must include the following information and supporting documents, as necessary:

1. Items of work you have made available to DBE firms. Identify those items of work you might otherwise perform with your own forces and those items that have been broken down into economically feasible units to facilitate DBE participation. For each item listed, show the dollar value and percentage of the total contract. It is your responsibility to demonstrate that sufficient work to meet the goal was made available to DBE firms.
2. Names of certified DBEs and dates on which they were solicited to bid on the project. Include the items of work offered. Describe the methods used for following up initial solicitations to determine with certainty if the DBEs were interested, and the dates of the follow-up. Attach supporting documents such as copies of letters, memos, facsimiles sent, telephone logs, telephone billing statements, and other evidence of solicitation. You are reminded to solicit certified DBEs through all reasonable and available means and provide sufficient time to allow DBEs to respond.
3. Name of selected firm and its status as a DBE for each item of work made available. Include name, address, and telephone number of each DBE that provided a quote and their price quote. If the firm selected for the item is not a DBE, provide the reasons for the selection.
4. Name and date of each publication in which you requested DBE participation for the project. Attach copies of the published advertisements.
5. Names of agencies and dates on which they were contacted to provide assistance in contacting, recruiting, and using DBE firms. If the agencies were contacted in writing, provide copies of supporting documents.
6. List of efforts made to provide interested DBEs with adequate information about the plans, specifications, and requirements of the contract to assist them in responding to a solicitation. If you have provided information, identify the name of the DBE assisted, the nature of the information provided, and date of contact. Provide copies of supporting documents, as appropriate.
7. List of efforts made to assist interested DBEs in obtaining bonding, lines of credit, insurance, necessary equipment, supplies, and materials, excluding supplies and equipment that the DBE subcontractor purchases or leases from the prime contractor or its affiliate. If such assistance is provided by you, identify the name of the DBE assisted, nature of the assistance offered, and date assistance was provided. Provide copies of supporting documents, as appropriate.
8. Any additional data to support demonstration of good faith efforts.

The Agency may consider DBE commitments of the 2nd and 3rd bidders when determining whether the low bidder made good faith efforts to meet the DBE goal.

**c. *Exhibit 15-G - Local Agency Bidder DBE Information (Construction Contracts)*
(CT Std Spec 3-1.12)**

Complete and sign Exhibit 15-G *Local Agency Bidder DBE Commitment (Construction Contracts)* included in the contract documents regardless of whether DBE participation is reported.

Provide written confirmation from each DBE that the DBE is participating in the Contract. A copy of a DBE's quote serves as written confirmation. If a DBE is participating as a joint venture partner, the Agency encourages you to submit a copy of the joint venture agreement.)

d. *Subcontractor and Disadvantaged Business Enterprise Records (CT Std Spec 5-1.13B(1))*

Use each DBE subcontractor as listed on Exhibit 12-B *Bidder's List of Subcontractors (DBE and Non-DBE)* and Exhibit 15-G *Local Agency Bidder DBE Commitment (Construction Contracts)* form unless you receive authorization for a substitution.

The Agency requests the Contractor to:

1. Notify the Engineer of any changes to its anticipated DBE participation
2. Provide this notification before starting the affected work
3. Maintain records including:
 - Name and business address of each 1st-tier subcontractor
 - Name and business address of each 1st-tier subcontractor
 - Name and business address of each DBE subcontractor, DBE vendor, and DBE trucking company, regardless of tier
 - Date of payment and total amount paid to each business

If you are a DBE contractor, include the date of work performed by your own forces and the corresponding value of the work.

Before the 15th of each month, submit a Monthly DBE Trucking Verification form.

If a DBE is decertified before completing its work, the DBE must notify you in writing of the decertification date. If a business becomes a certified DBE before completing its work, the business must notify you in writing of the certification date. Submit the notifications. On work completion, complete a Disadvantaged Business Enterprises (DBE) Certification Status Change, Exhibit 17-O, form. Submit the form within 30 days of contract acceptance.

Upon work completion, complete Exhibit 17-F *Final Report – Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors*. Submit it within 90 days of contract acceptance. The Agency will withhold \$10,000 until the form is submitted. The Agency releases the withhold upon submission of the completed form.

e. *Performance of Disadvantaged Business Enterprises (CT Std Spec 5-1.13B(2))*

DBEs must perform work or supply materials as listed in the Exhibit 15-G *Local Agency Bidder DBE Commitment (Construction Contracts)* form, included in the Bid.

Do not terminate or substitute a listed DBE for convenience and perform the work with your own forces or obtain materials from other sources without authorization from the Agency.

The Agency authorizes a request to use other forces or sources of materials if it shows any of the following justifications:

1. Listed DBE fails or refuses to execute a written contract based on plans and specifications for the project.
2. You stipulated that a bond is a condition of executing the subcontract and the listed DBE fails to meet your bond requirements.

3. Work requires a contractor's license and listed DBE does not have a valid license under Contractors License Law.
4. Listed DBE fails or refuses to perform the work or furnish the listed materials.
5. Listed DBE's work is unsatisfactory and not in compliance with the contract.
6. Listed DBE is ineligible to work on the project because of suspension or debarment.
7. Listed DBE becomes bankrupt or insolvent.
8. Listed DBE voluntarily withdraws with written notice from the Contract
9. Listed DBE is ineligible to receive credit for the type of work required.
10. Listed DBE owner dies or becomes disabled resulting in the inability to perform the work on the Contract.
11. Agency determines other documented good cause.

Notify the original DBE of your intent to use other forces or material sources and provide the reasons. Provide the DBE with 5 days to respond to your notice and advise you and the Agency of the reasons why the use of other forces or sources of materials should not occur. Your request to use other forces or material sources must include:

1. One or more of the reasons listed in the preceding paragraph
2. Notices from you to the DBE regarding the request
3. Notices from the DBEs to you regarding the request

If a listed DBE is terminated or substituted, you must make good faith efforts to find another DBE to substitute for the original DBE. The substitute DBE must perform at least the same amount of work as the original DBE under the contract to the extent needed to meet the DBE goal.

The substitute DBE must be certified as a DBE at the time of request for substitution.

Unless the Agency authorizes (1) a request to use other forces or sources of materials or (2) a good faith effort for a substitution of a terminated DBE, the Agency does not pay for work listed on the Exhibit 15-G *Local Agency Bidder DBE Commitment (Construction Contracts)* form unless it is performed or supplied by the listed DBE or an authorized substitute.

2. *BID OPENING (CT Std Spec 2-1.43)*

The Agency publicly opens and reads bids at the time and place shown on the *Notice to Bidders*.

3. *BID RIGGING (CT Std Spec 2-1.50)*

The U.S. Department of Transportation (DOT) provides a toll-free hotline to report bid rigging activities. Use the hotline to report bid rigging, bidder collusion, and other fraudulent activities. The hotline number is (800) 424-9071. The service is available 24 hours 7 days a week and is confidential and anonymous.. The hotline is part of the DOT's effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General.

4. *CONTRACT AWARD (CT Std Spec 3-1.04)*

If the Agency awards the contract, the award is made to the lowest responsible bidder.

5. *CONTRACTOR LICENSE (CT Std Spec 3-1.06)*

The Contractor must be properly licensed as a contractor from contract award through Contract acceptance (Public Contract Code § 10164).

6. *DIFFERING SITE CONDITIONS (23 CFR 635.109) (CT Std Spec 4-1.06)*

a. Contractor's Notification (CT Std Spec 4-1.06B)

Promptly notify the Agency's Engineer if you find either of the following conditions:

1. Physical conditions differing materially from either of the following:

- Contract documents
 - Job site examination
2. Physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract

Include details explaining the information you relied on and the material differences you discovered.

If you fail to promptly notify the Engineer, you waive the differing site condition claim for the period between your discovery of the differing site condition and your notification to the Engineer.

If you disturb the site after discovery and before the Engineer's investigation, you waive the differing site condition claim.

b. Engineer's Investigation and Decision (CT Std Spec 4-1.06C)

Upon your notification, the Engineer investigates job site conditions and:

1. Notifies you whether to resume affected work
2. Decides whether the condition differs materially and is cause for an adjustment of time, payment, or both

7. BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES

The Contractor shall begin work within ten (10) calendar days after the contract has been approved by the City of Lake Forest City Council.

This construction work shall be diligently prosecuted to completion before the expiration of ninety (90) working days beginning on the tenth calendar day after approval of the contract.

The Contractor shall pay to the City of Lake Forest the sum of \$500 per day, for each and every calendar days delay in finishing the work in excess of the number of working days prescribed above.

8. BUY AMERICA (CT Std Spec 4-1.06C)

Furnish steel and iron materials to be incorporated into the work with certificates of compliance. Steel and iron materials must be produced in the U.S. except:

1. Foreign pig iron and processed, pelletized, and reduced iron ore may be used in the domestic production of the steel and iron materials [60 Fed Reg 15478 (03/24/1995)];
2. If the total combined cost of the materials does not exceed the greater of 0.1 percent of the total bid or \$2,500, materials produced outside the U.S. may be used.

Production includes:

1. Processing steel and iron materials, including smelting or other processes that alter the physical form or shape (such as rolling, extruding, machining, bending, grinding, and drilling) or chemical composition;
2. Coating application, including epoxy coating, galvanizing, and painting, that protects or enhances the value of steel and iron materials.

9. QUALITY ASSURANCE (CT Std Spec 6-3.05)

The Agency uses a Quality Assurance Program (QAP) to ensure a material is produced to comply with the Contract.

You may examine the records and reports of tests the Agency performs if they are available at the job site. Schedule work to allow time for QAP.

10. PROMPT PAYMENT OF FUNDS WITHHELD TO SUBCONTRACTORS

(The local agency must include one of the following three provisions to ensure prompt and full payment of any retainage from the prime contractor, or subcontractor, to a subcontractor. Remove or strike out the methods not used.)

The agency shall hold retainage from the prime contractor and shall make prompt and regular incremental acceptances of portions, as determined by the agency, of the contract work, and pay retainage to the prime contractor based on these acceptances. The prime contractor, or subcontractor, shall return all monies withheld in retention from a subcontractor within 30 days after receiving payment for work satisfactorily completed and accepted including incremental acceptances of portions of the contract work by the agency. Federal law (49CFR26.29) requires that any delay or postponement of payment over 30 days may take place only for good cause and with the agency's prior written approval. Any violation of this provision shall subject the violating prime contractor or subcontractor to the penalties, sanctions and other remedies specified in Section 7108.5 of the Business and Professions Code. These requirements shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the prime contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the prime contractor, deficient subcontract performance, or noncompliance by a subcontractor.

11. FORM FHWA-1273 REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONTRACTS (Excluding ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS)

[The following 10 pages must be physically inserted into the contract without modification.]

FHWA-1273 -- Revised May 1, 2012

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: 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, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics 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 (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

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

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

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

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

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

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the

classification under this contract from the first day on which work is performed in the classification.

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

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

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

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

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division [Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm](http://www.dol.gov/esa/whd/forms/wh347instr.htm) or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

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

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

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

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment,

advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

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

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

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal

certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts

contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

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

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers,

contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers to any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier

prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

12. The following sections "Female and Minority Goals" and "Training" were updated to match Sections 7-1.50C and 7-1.50D, respectively of the CT Amendments to the Standard Specifications.

1. FEMALE AND MINORITY GOALS

To comply with Section II, "Nondiscrimination," of "Required Contract Provisions Federal-Aid Construction Contracts," the following are goals for female and minority utilization goals for Federal-aid construction contracts and subcontracts that exceed \$10,000:

The nationwide goal for female utilization is 6.9 percent.

The goals for minority utilization [45 Fed Reg 65984 (10/3/1980)] are as follows:

MINORITY UTILIZATION GOALS

Economic Area		Goal (Percent)
174	Redding CA: Non-SMSA (Standard Metropolitan Statistical Area) Counties: CA Lassen; CA Modoc; CA Plumas; CA Shasta; CA Siskiyou; CA Tehama	6.8
175	Eureka, CA Non-SMSA Counties: CA Del Norte; CA Humboldt; CA Trinity	6.6
176	San Francisco-Oakland-San Jose, CA: SMSA Counties: 7120 Salinas-Seaside-Monterey, CA	28.9
	CA Monterey	
	7360 San Francisco-Oakland	25.6
	CA Alameda; CA Contra Costa; CA Marin; CA San Francisco; CA San Mateo	
	7400 San Jose, CA	
	CA Santa Clara, CA	19.6
	7485 Santa Cruz, CA	
	CA Santa Cruz	14.9
177	7500 Santa Rosa	
	CA Sonoma	9.1
	8720 Vallejo-Fairfield-Napa, CA	
	CA Napa; CA Solano	17.1
	Non-SMSA Counties: CA Lake; CA Mendocino; CA San Benito	23.2
	Sacramento, CA: SMSA Counties: 6920 Sacramento, CA	16.1
178	CA Placer; CA Sacramento; CA Yolo	
	Non-SMSA Counties CA Butte; CA Colusa; CA El Dorado; CA Glenn; CA Nevada; CA Sierra; CA Sutter; CA Yuba	14.3
178	Stockton-Modesto, CA: SMSA Counties: 5170 Modesto, CA	12.3
	CA Stanislaus	
	8120 Stockton, CA	24.3
	CA San Joaquin	
	Non-SMSA Counties CA Alpine; CA Amador; CA Calaveras; CA Mariposa; CA Merced; CA Tuolumne	19.8

179	Fresno-Bakersfield, CA	19.1
	SMSA Counties:	
	0680 Bakersfield, CA	
	CA Kern	
180	2840 Fresno, CA	26.1
	CA Fresno	
	Non-SMSA Counties:	
	CA Kings; CA Madera; CA Tulare	
181	Los Angeles, CA:	11.9
	SMSA Counties:	
	0360 Anaheim-Santa Ana-Garden Grove, CA	
	CA Orange	
	4480 Los Angeles-Long Beach, CA	
	CA Los Angeles	
	6000 Oxnard-Simi Valley-Ventura, CA	
	CA Ventura	
	6780 Riverside-San Bernardino-Ontario, CA	
	CA Riverside; CA San Bernardino	
7480 Santa Barbara-Santa Maria-Lompoc, CA		
CA Santa Barbara		
Non-SMSA Counties		
CA Inyo; CA Mono; CA San Luis Obispo		
181	San Diego, CA:	16.9
	SMSA Counties	
	7320 San Diego, CA	
	CA San Diego	
181	Non-SMSA Counties	18.2
	CA Imperial	

For each July during which work is performed under the contract, you and each non material-supplier subcontractor with a subcontract of \$10,000 or more must complete Form FHWA PR-1391 (Appendix C to 23 CFR 230). Submit the forms by August 15.

2. **FEDERAL TRAINEE PROGRAM**

For the Federal training program, the number of trainees or apprentices is zero

This section applies if a number of trainees or apprentices is specified in the special provisions.

As part of your equal opportunity affirmative action program, provide on-the-job training to develop full journeymen in the types of trades or job classifications involved.

You have primary responsibility for meeting this training requirement.

If you subcontract a contract part, determine how many trainees or apprentices are to be trained by the subcontractor.

Include these training requirements in your subcontract.

Where feasible, 25 percent of apprentices or trainees in each occupation must be in their 1st year of apprenticeship or training.

Distribute the number of apprentices or trainees among the work classifications on the basis of your needs and the availability of journeymen in the various classifications within a reasonable recruitment area.

Before starting work, submit to the City of Lake Forest:

1. Number of apprentices or trainees to be trained for each classification
2. Training program to be used
3. Training starting date for each classification

Obtain the **City of Lake Forest's** approval for this submitted information before you start work. **The City of Lake Forest** credits you for each apprentice or trainee you employ on the work who is currently enrolled or becomes enrolled in an approved program.

The primary objective of this section is to train and upgrade minorities and women toward journeymen status. Make every effort to enroll minority and women apprentices or trainees, such as conducting systematic and direct recruitment through public and private sources likely to yield minority and women apprentices or trainees, to the extent they are available within a reasonable recruitment area. Show that you have made the efforts. In making these efforts, do not discriminate against any applicant for training.

Do not employ as an apprentice or trainee an employee:

1. In any classification in which the employee has successfully completed a training course leading to journeyman status or in which the employee has been employed as a journeyman
2. Who is not registered in a program approved by the US Department of Labor, Bureau of Apprenticeship and Training

Ask the employee if the employee has successfully completed a training course leading to journeyman status or has been employed as a journeyman. Your records must show the employee's answers to the questions.

In your training program, establish the minimum length and training type for each classification. **The City of Lake Forest** and FHWA approve a program if one of the following is met:

1. It is calculated to:
 - Meet the your equal employment opportunity responsibilities
 - Qualify the average apprentice or trainee for journeyman status in the classification involved by the end of the training period
2. It is registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, and it is administered in a way consistent with the equal employment responsibilities of Federal-aid highway construction contracts

Obtain the State's approval for your training program before you start work involving the classification covered by the program.

Provide training in the construction crafts, not in clerk-typist or secretarial-type positions. Training is allowed in lower level management positions such as office engineers, estimators, and timekeepers if the training is oriented toward construction applications. Training is allowed in the laborer classification if significant and meaningful training is provided and approved by the division office. Off-site training is allowed if the training is an integral part of an approved training program and does not make up a significant part of the overall training.

The **City of Lake Forest** reimburses you 80 cents per hour of training given an employee on this contract under an approved training program:

1. For on-site training
2. For off-site training if the apprentice or trainee is currently employed on a Federal-aid project and you do at least one of the following:
 - Contribute to the cost of the training
 - Provide the instruction to the apprentice or trainee
 - Pay the apprentice's or trainee's wages during the off-site training period
3. If you comply this section.

Each apprentice or trainee must:

1. Begin training on the project as soon as feasible after the start of work involving the apprentice's or trainee's skill
2. Remain on the project as long as training opportunities exist in the apprentice's or trainee's work classification or until the apprentice or trainee has completed the training program

Furnish the apprentice or trainee:

1. Copy of the program you will comply with in providing the training
2. Certification showing the type and length of training satisfactorily completed

3. *TITLE VI ASSURANCES*

During the performance of this Agreement, the contractor, for itself, its assignees and successors in interest (hereinafter collectively referred to as CONTRACTOR) agrees as follows:

- (1) Compliance with Regulations: CONTRACTOR shall comply with the regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the REGULATIONS), which are herein incorporated by reference and made a part of this agreement.
- (2) Nondiscrimination: CONTRACTOR, with regard to the work performed by it during the AGREEMENT, shall not discriminate on the grounds of race, color, sex, national origin, religion, age, or disability in the selection and retention of sub-applicants, including procurements of materials and leases of equipment. CONTRACTOR shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the agreement covers a program set forth in Appendix B of the Regulations.
- (3) Solicitations for Sub-agreements, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by CONTRACTOR for work to be performed under a Sub-agreement, including procurements of materials or leases of equipment, each potential sub-applicant or supplier shall be notified by CONTRACTOR of the CONTRACTOR'S obligations under this Agreement and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
- (4) Information and Reports: CONTRACTOR shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the California Department of Transportation or FHWA to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of CONTRACTOR is in the exclusive possession of another who fails or refuses to furnish this information, CONTRACTOR shall so certify to the California Department of Transportation or the FHWA as appropriate, and shall set forth what efforts CONTRACTOR has made to obtain the information.
- (5) Sanctions for Noncompliance: In the event of CONTRACTOR'S noncompliance with the nondiscrimination provisions of this agreement, the California Department of Transportation shall impose such agreement sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:
 - (a) withholding of payments to CONTRACTOR under the Agreement within a reasonable period of time, not to exceed 90 days; and/or
 - (b) cancellation, termination or suspension of the Agreement, in whole or in part.
- (6) Incorporation of Provisions: CONTRACTOR shall include the provisions of paragraphs (1) through (6) in every sub-agreement, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

CONTRACTOR shall take such action with respect to any sub-agreement or procurement as the California Department of Transportation or FHWA may direct as a means of enforcing such provisions

including sanctions for noncompliance, provided, however, that, in the event CONTRACTOR becomes involved in, or is threatened with, litigation with a sub-applicant or supplier as a result of such direction, CONTRACTOR may request the California Department of Transportation enter into such litigation to protect the interests of the State, and, in addition, CONTRACTOR may request the United States to enter into such litigation to protect the interests of the United States.

15. CONTRACTOR MUST COMPLY WITH CLAUSE 46 CFR 381.7(A)-(B):

Use Of United States- Flag Vessels:

The Contractor Agrees-

- (1) To Utilize Privately Owned United State-Flag Commercial Vessels To Ship At Least 50 Percent Of The Gross Tonnage (Computed Separately For Dry Bulk Carriers, Dry Cargo Liners, And Tankers) Involved, Whenever Shipping Any Equipment, Material, Or Commodities Pursuant To This Contract, To The Extent Such Vessels Are Available At Fair And Reasonable Rates For Unites States-Flag Commercial Vessels.*
- (2) To Furnish Within 20 Days Following The Date Of Loading For Shipments Originating Within The United States Or Within 30 Working Days Following The Date Of Loading For Shipments Originating Outside The United States, A Legible Copy Of A Rated, 'On-Board' Commercial Ocean Bill-Of-Lading In English For Each Shipment Of Cargo Described In Paragraph (1) Of This Section To Both The Contracting Officer (Through The Prime Contractor In The Case Of Subcontractor Bills-Of Lading) And To The Division Of National Cargo, Office Of Market Development, Maritime Administration, Washington, Dc 20590.*
- (3) To Insert The Substance Of The Provisions Of This Clause In All Subcontracts Issued Pursuant To This Contract*

MAINTAIN RECORDS AND SUBMIT REPORTS DOCUMENTING YOUR PERFORMANCE UNDER THIS SECTION

(THE BIDDER'S EXECUTION ON THE SIGNATURE PORTION OF THIS PROPOSAL SHALL ALSO CONSTITUTE AN ENDORSEMENT AND EXECUTION OF THOSE CERTIFICATIONS WHICH ARE A PART OF THIS PROPOSAL)

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

The bidder _____, proposed subcontractor _____, hereby certifies that he has _____, has not _____, participated in a previous contract or subcontract subject to the equal opportunity clauses, as required by Executive Orders 10925, 11114, or 11246, and that, where required, he has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b) (1)), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b) (1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

Noncollusion Affidavit
(Title 23 United States Code Section 112 and
Public Contract Code Section 7106)

To the City of Lake Forest

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

Note: The above Non-collusion Affidavit is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Non-collusion Affidavit. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

DEBARMENT AND SUSPENSION CERTIFICATION

TITLE 49, CODE OF FEDERAL REGULATIONS, PART 29

The bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, manager:

- is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency;
- has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal agency within the past 3 years;
- does not have a proposed debarment pending; and
- has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

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

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

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

**NONLOBBYING CERTIFICATION
FOR FEDERAL-AID CONTRACTS**

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in conformance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

DISCLOSURE OF LOBBYING ACTIVITIES

COMPLETE THIS FORM TO DISCLOSE LOBBYING ACTIVITIES PURSUANT TO 31 U.S.C. 1352

<p>1. Type of Federal Action:</p> <input type="checkbox"/> a. contract <input type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance	<p>2. Status of Federal Action:</p> <input type="checkbox"/> a. bid/offer/application <input type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award	<p>3. Report Type:</p> <input type="checkbox"/> a. initial <input type="checkbox"/> b. material change
<p>For Material Change Only: year _____ quarter _____ date of last report _____</p>		
<p>4. Name and Address of Reporting Entity</p> <input type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, if known	<p>5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime:</p>	
<p>Congressional District, if known</p>	<p>Congressional District, if known</p>	
<p>6. Federal Department/Agency:</p>	<p>7. Federal Program Name/Description:</p>	
<p>8. Federal Action Number, if known:</p>	<p>9. Award Amount, if known:</p>	
<p>10. a. Name and Address of Lobby Entity (If individual, last name, first name, MI)</p>	<p>b. Individuals Performing Services (including address if different from No. 10a) (last name, first name, MI)</p>	
<p>(attach Continuation Sheet(s) if necessary)</p>		
<p>11. Amount of Payment (check all that apply) \$ _____ <input type="checkbox"/> actual <input type="checkbox"/> planned</p>	<p>13. Type of Payment (check all that apply)</p> <input type="checkbox"/> a. retainer <input type="checkbox"/> b. one-time fee <input type="checkbox"/> c. commission <input type="checkbox"/> d. contingent fee <input type="checkbox"/> e. deferred <input type="checkbox"/> f. other, specify _____	
<p>12. Form of Payment (check all that apply):</p> <input type="checkbox"/> a. cash <input type="checkbox"/> b. in-kind; specify: nature _____ value _____		
<p>14. Brief Description of Services Performed or to be performed and Date(s) of Service, including officer(s), employee(s), or member(s) contacted, for Payment Indicated in Item 11:</p>		
<p>(attach Continuation Sheet(s) if necessary)</p>		
<p>15. Continuation Sheet(s) attached: Yes <input type="checkbox"/> No <input type="checkbox"/></p>		
<p>16. Information requested through this form is authorized by Title 31 U.S.C. Section 1352. This disclosure of lobbying reliance was placed by the tier above when his transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to Congress semiannually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.</p>	<p>Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____</p>	
<p>Federal Use Only:</p>		
<p>Authorized for Local Reproduction Standard Form - LLL</p>		

Standard Form LLL Rev. 09-12-97

**INSTRUCTIONS FOR COMPLETION OF SF-LLL,
DISCLOSURE OF LOBBYING ACTIVITIES**

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of covered Federal action or a material change to previous filing pursuant to title 31 U.S.C. section 1352. The filing of a form is required for such payment or agreement to make payment to lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress an officer or employee of Congress or an employee of a Member of Congress in connection with a covered Federal action. Attach a continuation sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence, the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a follow-up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last, previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District if known. Check the appropriate classification of the reporting entity that designates if it is or expects to be a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the first tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in Item 4 checks "Subawardee" then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organization level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identification in item 1 (e.g., Request for Proposal (RFP) number, Invitation for Bid (IFB) number, grant announcement number, the contract grant or loan award number, the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitments for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influenced the covered Federal action.
(b) Enter the full names of the individual(s) performing services and include full address if different from 10 (a). Enter Last Name, First Name and Middle Initial (MI).
11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item 4) to the lobbying entity (item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material change report, enter the cumulative amount of payment made or planned to be made.
12. Check the appropriate box. Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.
13. Check the appropriate box. Check all boxes that apply. If other, specify nature.
14. Provide a specific and detailed description of the services that the lobbyist has performed or will be expected to perform and the date(s) of any services rendered. Include all preparatory and related activity not just time spent in actual contact with Federal officials. Identify the Federal officer(s) or employee(s) contacted or the officer(s) employee(s) or Member(s) of Congress that were contacted.
15. Check whether or not a continuation sheet(s) is attached.
16. The certifying official shall sign and date the form, print his/her name title and telephone number.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, D.C. 20503.

SF-LLL-Instructions Rev. 06-04-90<END

EXHIBIT 15-G CONSTRUCTION CONTRACT DBE COMMITMENT

1. Local Agency: City of Lake Forest 2. Contract DBE Goal: 7 %
3. Project Description: Portola Parkway Resurfacing Project
4. Project Location: Portola Parkway between Alton Parkway and El Toro Road
5. Bidder's Name: _____ 6. Prime Certified DBE: 7. Bid Amount: _____
8. Total Dollar Amount for **ALL** Subcontractors: _____ 9. Total Number of **ALL** Subcontractors: _____

10. Bid Item Number	11. Description of Work, Service, or Materials Supplied	12. DBE Certification Number	13. DBE Contact Information (Must be certified on the date bids are opened)	14. DBE Dollar Amount
Local Agency to Complete this Section			15. TOTAL CLAIMED DBE PARTICIPATION	\$
21. Local Agency Contract Number: _____ 22. Federal-Aid Project Number: <u>STPL - 5469 (017)</u> 23. Bid Opening Date: _____ 24. Contract Award Date: _____ Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate. _____ 25. Local Agency Representative's Signature 26. Date _____ 27. Local Agency Representative's Name 28. Phone _____ 29. Local Agency Representative's Title				%
			IMPORTANT: Identify all DBE firms being claimed for credit, regardless of tier. Names of the First Tier DBE Subcontractors and their respective item(s) of work listed above must be consistent, where applicable with the names and items of the work in the "Subcontractor List" submitted with your bid. Written confirmation of each listed DBE is required. _____ 16. Preparer's Signature 17. Date _____ 18. Preparer's Name 19. Phone _____ 20. Preparer's Title	

DISTRIBUTION: 1. Original – Local Agency
 2. Copy – Caltrans District Local Assistance Engineer (DLAE). Failure to submit to DLAE within 30 days of contract execution may result in de-obligation of federal funds on contract. Include additional copy with award package.

ADA Notice: For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

INSTRUCTIONS – CONSTRUCTION CONTRACT DBE COMMITMENT

CONTRACTOR SECTION

- 1. Local Agency** - Enter the name of the local or regional agency that is funding the contract.
- 2. Contract DBE Goal** - Enter the contract DBE goal percentage as it appears on the project advertisement.
- 3. Project Location** - Enter the project location as it appears on the project advertisement.
- 4. Project Description** - Enter the project description as it appears on the project advertisement (Bridge Rehab, Seismic Rehab, Overlay, Widening, etc).
- 5. Bidder's Name** - Enter the contractor's firm name.
- 6. Prime Certified DBE** - Check box if prime contractor is a certified DBE.
- 7. Bid Amount** - Enter the total contract bid dollar amount for the prime contractor.
- 8. Total Dollar Amount for ALL Subcontractors** – Enter the total dollar amount for all subcontracted contractors. SUM = (DBEs + all Non-DBEs). Do not include the prime contractor information in this count.
- 9. Total number of ALL subcontractors** – Enter the total number of all subcontracted contractors. SUM = (DBEs + all Non-DBEs). Do not include the prime contractor information in this count.
- 10. Bid Item Number** - Enter bid item number for work, services, or materials supplied to be provided.
- 11. Description of Work, Services, or Materials Supplied** - Enter description of work, services, or materials to be provided. Indicate all work to be performed by DBEs including work performed by the prime contractor's own forces, if the prime is a DBE. If 100% of the item is not to be performed or furnished by the DBE, describe the exact portion to be performed or furnished by the DBE. See LAPM Chapter 9 to determine how to count the participation of DBE firms.
- 12. DBE Certification Number** - Enter the DBE's Certification Identification Number. All DBEs must be certified on the date bids are opened.
- 13. DBE Contact Information** - Enter the name, address, and phone number of all DBE subcontracted contractors. Also, enter the prime contractor's name and phone number, if the prime is a DBE.
- 14. DBE Dollar Amount** - Enter the subcontracted dollar amount of the work to be performed or service to be provided. Include the prime contractor if the prime is a DBE. See LAPM Chapter 9 for how to count full/partial participation.
- 15. Total Claimed DBE Participation** - \$: Enter the total dollar amounts entered in the "DBE Dollar Amount" column. %: Enter the total DBE participation claimed ("Total Claimed DBE Participation Dollars" divided by item "Bid Amount"). If the total % claimed is less than item "Contract DBE Goal," an adequately documented Good Faith Effort (GFE) is required (see Exhibit 15-H DBE Information - Good Faith Efforts of the LAPM).
- 16. Preparer's Signature** - The person completing the DBE commitment form on behalf of the contractor's firm must sign their name.
- 17. Date** - Enter the date the DBE commitment form is signed by the contractor's preparer.
- 18. Preparer's Name** - Enter the name of the person preparing and signing the contractor's DBE commitment form.
- 19. Phone** - Enter the area code and phone number of the person signing the contractor's DBE commitment form.
- 20. Preparer's Title** - Enter the position/title of the person signing the contractor's DBE commitment form.

LOCAL AGENCY SECTION

- 21. Local Agency Contract Number** - Enter the Local Agency contract number or identifier.
- 22. Federal-Aid Project Number** - Enter the Federal-Aid Project Number.
- 23. Bid Opening Date** - Enter the date contract bids were opened.
- 24. Contract Award Date** - Enter the date the contract was executed.
- 25. Local Agency Representative's Signature** - The person completing this section of the form for the Local Agency must sign their name to certify that the information in this and the Contractor Section of this form is complete and accurate.
- 26. Date** - Enter the date the DBE commitment form is signed by the Local Agency Representative.
- 27. Local Agency Representative's Name** - Enter the name of the Local Agency Representative certifying the contractor's DBE commitment form.
- 28. Phone** - Enter the area code and phone number of the person signing the contractor's DBE commitment form.
- 29. Local Agency Representative Title** - Enter the position/title of the Local Agency Representative certifying the contractor's DBE commitment form.

EXHIBIT 15-H DBE INFORMATION —GOOD FAITH EFFORTS

DBE INFORMATION - GOOD FAITH EFFORTS

Federal-aid Project No. STPL - 5469 (017)

Bid Opening Date ___?

The City of Lake Forest has established a Disadvantaged Business Enterprise (DBE) goal of 7% for this project. The information provided herein shows that a good faith effort was made.

Lowest, second lowest and third lowest bidders shall submit the following information to document adequate good faith efforts. Bidders should submit the following information even if the "Local Agency Bidder DBE Commitment" form indicates that the bidder has met the DBE goal. This will protect the bidder's eligibility for award of the contract if the administering agency determines that the bidder failed to meet the goal for various reasons, e.g., a DBE firm was not certified at bid opening, or the bidder made a mathematical error.

Submittal of only the "Local Agency Bidder DBE Commitment" form may not provide sufficient documentation to demonstrate that adequate good faith efforts were made.

The following items are listed in the Section entitled "Submission of DBE Commitment" of the Special Provisions:

- A. The names and dates of each publication in which a request for DBE participation for this project was placed by the bidder (please attach copies of advertisements or proofs of publication):

Table with 2 columns: Publications, Dates of Advertisement. Includes three blank rows for data entry.

- B. The names and dates of written notices sent to certified DBEs soliciting bids for this project and the dates and methods used for following up initial solicitations to determine with certainty whether the DBEs were interested (please attach copies of solicitations, telephone records, fax confirmations, etc.):

Table with 3 columns: Names of DBEs Solicited, Date of Initial Solicitation, Follow Up Methods and Dates. Includes six blank rows for data entry.

DBE INFORMATION - GOOD FAITH EFFORT

C. The items of work which the bidder made available to DBE firms including, where appropriate, any breaking down of the contract work items (including those items normally performed by the bidder with its own forces) into economically feasible units to facilitate DBE participation. It is the bidder's responsibility to demonstrate that sufficient work to facilitate DBE participation was made available to DBE firms.

Items of Work	Bidder Normally Performs (Y/N)	Item	Breakdown of Items	Amount (\$)	Percentage Of Contract

D. The names, addresses and phone numbers of rejected DBE firms, the reasons for the bidder's rejection of the DBEs, the firms selected for that work (please attach copies of quotes from the firms involved), and the price difference for each DBE if the selected firm is not a DBE:

Names, addresses and phone numbers of rejected DBEs and the reasons for the bidder's rejection of the DBEs:

Names, addresses and phone numbers of firms selected for the work above:

E. Efforts made to assist interested DBEs in obtaining bonding, lines of credit or insurance, and any technical assistance or information related to the plans, specifications and requirements for the work which was provided to DBEs:

F. Efforts made to assist interested DBEs in obtaining necessary equipment, supplies, materials or related assistance or services, excluding supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate:

G. The names of agencies, organizations or groups contacted to provide assistance in contacting, recruiting and using DBE firms (please attach copies of requests to agencies and any responses received, i.e., lists, Internet page download, etc.):

Name of Agency/Organization	Method/Date of Contact	Results
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>

H. Any additional data to support a demonstration of good faith efforts (use additional sheets if necessary):

NOTE: USE ADDITIONAL SHEETS OF PAPER IF NECESSARY.

**SECTION 00700
GENERAL CONDITIONS**

ARTICLE 1. DEFINITIONS

- a. Acceptable, Acceptance or words of similar import shall be understood to be the acceptance of the Engineer and/or City.
- b. Act of God is an earthquake in excess of a magnitude of 3.5 on the Richter scale and tidal waves.
- c. Approval means written authorization by Engineer and/or City .
- d. Contract Documents includes all documents as stated in the Contract.
- e. City and Contractor are those stated in the Contract. The terms City and Owner may be used interchangeably.
- f. Day shall mean calendar day unless otherwise specifically designated.
- g. Engineer shall mean the City Manager, or his or her designee, of the City, acting either directly or through properly authorized agents, such as agents acting within the scope of the particular duties entrusted to them. Also sometimes referred to as “City’s Representative” or “Representative” in the Contract Documents.
- h. Equal, Equivalent, Satisfactory, Directed, Designated, Selected, As Required and similar words shall mean the written approval, selection, satisfaction, direction, or similar action of the Engineer and/or City.
- i. Indicated, Shown, Detailed, Noted, Scheduled or words of similar meaning shall mean that reference is made to the drawings, unless otherwise noted. It shall be understood that the direction, designation, selection, or similar import of the Engineer and/or City is intended, unless stated otherwise.
- j. Install means the complete installation of any item, equipment or material.
- k. Material shall include machinery, equipment, manufactured articles, or construction such as form work, fasteners, etc., and any other classes of material to be furnished in connection with the Contract. All materials shall be new unless specified otherwise.
- l. Perform shall mean that the Contractor, at Contractor’s expense, shall take all actions necessary to complete The Work, including furnishing of necessary labor, tools, and equipment, and providing and installing Materials that are indicated, specified, or required to complete such performance.
- m. Project is The Work planned by City as provided in the Contract Documents.
- n. Provide shall include provide, complete in place, that is furnish, install, test and make ready for use.

SECTION 00700
GENERAL CONDITIONS

- o. Recyclable Waste Materials shall mean materials removed from the Project site which are required to be diverted to a recycling center rather than an area landfill. Recyclable Waste Materials include asphalt, concrete, brick, concrete block, and rock.
- p. Specifications means that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards and workmanship for the work. Except for Sections 1-9 of the Standard Specifications for Public Works Construction ("Greenbook"), 2015 Edition, which are specifically excluded from incorporation into these Contract Documents, the Work shall be done in accordance with the Greenbook, including all current supplements, addenda, and revisions thereof. In the case of conflict between the Greenbook and the Contract Documents, the Contract Documents shall prevail.
- q. The Work means the entire improvement planned by City pursuant to the Contract Documents.
- r. Work means labor, equipment and materials incorporated in, or to be incorporated in the construction covered by the Contract Documents.

ARTICLE 2. CONTRACT DOCUMENTS

- a. Contract Documents. The Contract Documents are complementary, and what is called for by one shall be as binding as if called for by all.
- b. Interpretations. The Contract Documents are intended to be fully cooperative and to be complementary. If Contractor observes that any documents are in conflict, the Contractor shall promptly notify the Engineer in writing. In case of conflicts between the Contract Documents, the order of precedence shall be as follows:
 - 1) Change Orders or Work Change Directives
 - 2) Addenda
 - 3) Special Provisions (or Special Conditions)
 - 4) Technical Specifications
 - 5) Plans (Contract Drawings)
 - 6) Contract
 - 7) General Conditions
 - 8) Instructions to Bidders
 - 9) Notice Inviting Bids
 - 10) Contractor's Bid Forms

SECTION 00700
GENERAL CONDITIONS

- 11) Greenbook Standard Specifications (Sections 1-9 Excluded)
- 12) Standard Plans
- 13) Reference Documents

With reference to the Drawings, the order of precedence shall be as follows:

- 1) Figures govern over scaled dimensions
 - 2) Detail drawings govern over general drawings
 - 3) Addenda or Change Order drawings govern over Contract Drawings
 - 4) Contract Drawings govern over Standard Drawings
 - 5) Contract Drawings govern over Shop Drawings
- c. Conflicts in Contract Documents. Notwithstanding the orders of precedence established above, in the event of conflicts, the higher standard shall always apply.
- d. Organization of Contract Documents. Organization of the Contract Documents into divisions, sections, and articles, and arrangement of drawings shall not control the Contractor in dividing The Work among subcontractors or in establishing the extent of Work to be performed by any trade.

ARTICLE 3. CONTRACTS DOCUMENTS: COPIES & MAINTENANCE

Contractor will be furnished, free of charge, two copies of the Contract Documents. Additional copies may be obtained at cost of reproduction.

Contractor shall maintain a clean, undamaged set of Contract Documents at the Project site.

ARTICLE 4. DETAIL DRAWINGS AND INSTRUCTIONS

- a. Examination of Contract Documents. Before commencing any portion of The Work, Contractor shall again carefully examine all applicable Contract Documents, the Project site and other information given to Contractor as to materials and methods of construction and other Project requirements. Contractor shall immediately notify the Engineer of any potential error, inconsistency, ambiguity, conflict or lack of detail or explanation. If Contractor performs, permits, or causes the performance of any Work which is in error, inconsistent or ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all resulting costs, including, without limitation, the cost of correction. In no case shall the Contractor or any subcontractor proceed with Work if uncertain as to the applicable requirements.
- b. Additional Instructions. After notification of any error, inconsistency, ambiguity, conflict or lack of detail or explanation, the Engineer will provide any required

SECTION 00700
GENERAL CONDITIONS

additional instructions, by means of drawings or other written direction, necessary for proper execution of Work.

- c. Quality of Parts, Construction and Finish. All parts of The Work shall be of the best quality of their respective kinds and the Contractor must use all diligence to inform itself fully as to the required construction and finish. In no case shall Contractor proceed with The Work without obtaining first from the Engineer such Approval may be necessary for the proper performance of Work.
- d. Contractor's Variation from Contract Document Requirements. If it is found that the Contractor has varied from the requirements of the Contract Documents including the requirement to comply with all applicable laws, ordinances, rules and regulations, the Engineer may at any time, before or after completion of the Work, order the improper Work removed, remade or replaced by the Contractor at the Contractor's expense.

ARTICLE 5. EXISTENCE OF UTILITIES AT THE WORK SITE

- a. City has endeavored to determine the existence of utilities at the Project site from the records of the owners of known utilities in the vicinity of the Project. The positions of these utilities as derived from such records are shown on the Plans.
- b. No excavations were made to verify the locations shown for underground utilities. No guarantee is made or implied that the information is complete or accurate. It shall be the Contractor's responsibility alone to determine the exact location of underground utilities or substructures of every nature and to protect them from damage.
- c. The service connections to these utilities are not shown on the plans. It shall be the responsibility of the Contractor to determine the exact location of all service connections and, if necessary, Contractor shall arrange for the relocation of service connections. The Contractor shall make its own investigations, including exploratory excavations, to determine the locations and type of service connections, prior to commencing Work which could result in damage to such utilities. The Contractor shall immediately notify City in writing of any utility discovered in a different position than shown on the Plans or which is not shown on the Plans.
- d. All water meters, water valves, fire hydrants, electrical utility vaults, telephone vaults, gas utility valves, and other subsurface structures shall be relocated or adjusted to final grade by the Contractor. Locations of existing utilities shown on the Plans are approximate and may not be complete. The Contractor shall be responsible for coordinating its Work with all utility companies during the construction of The Work. The Contractor will not be entitled to damages or additional payment for delays attributable to utility relocations or alterations
- e. Notwithstanding the above, pursuant to Section 4215 of the Government Code, City has the responsibility to identify, with reasonable accuracy, main or trunkline facilities on the plans and specifications. In the event that main or trunkline utility facilities are not identified with reasonable accuracy in the plans and

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specifications made a part of the invitation for bids, City shall assume the responsibility for their timely removal, relocation, or protection.

- f. Contractor, except in an emergency, shall contact the appropriate regional notification center, Southern California Underground Service Alert at 1-800-227-2600 at least two working days prior to commencing any excavation if the excavation will be performed in an area which is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by City, and obtain an inquiry identification number from that notification center. No excavation shall be commenced or carried out by the Contractor unless such an inquiry identification number has been assigned to the Contractor or any subcontractor of the Contractor and City has been given the identification number by the Contractor.

ARTICLE 6. SCHEDULE

- a. Estimated Schedule. Within fourteen (14) days after the issuance of the Notice to Proceed, Contractor shall prepare a Project schedule and shall submit this to the Engineer for Approval. The receipt or Approval of any schedules by the Engineer or City shall not in any way relieve the Contractor of its obligations under the Contract Documents. The Contractor is fully responsible to determine and provide for any and all staffing and resources at levels which allow for good quality and timely completion of the Project. Contractor's failure to incorporate all elements of Work required for the performance of the Contract or any inaccuracy in the schedule shall not excuse the Contractor from performing all Work required for a completed Project within the specified Contract time period. If the required schedule is not received by the time the first payment under the Contract is due, Contractor shall not be paid until the schedule is received, reviewed and accepted by the Engineer.
- b. Schedule Contents. The schedule shall allow enough time for inclement weather. The schedule shall indicate the beginning and completion dates of all phases of construction; critical path for all critical, sequential time related activities; and "float time" for all "slack" or "gaps" in the non-critical activities. The schedule shall clearly identify all staffing and other resources which in the Contractor's judgment are needed to complete the Project within the time specified for completion. Schedule duration shall match the Contract time. Schedules indicating early completion will be rejected.
- c. Schedule Updates. Contractor shall continuously update its construction schedule. Contractor shall submit an updated and accurate construction schedule to the Engineer whenever requested to do so by Engineer and with each progress payment request. The Engineer may withhold progress payments or other amounts due under the Contract Documents if Contractor fails to submit an updated and accurate construction schedule.

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ARTICLE 7. SUBSTITUTIONS

- a. Pursuant to Public Contract Code Section 3400(b) City may make a finding that is described in the invitation for bids that designates certain products, things, or services by specific brand or trade name.
- b. Unless specifically designated in the Contract Documents, whenever any material, process, or article is indicated or specified by grade, patent, or proprietary name or by name of manufacturer, such Specifications shall be deemed to be used for the purpose of facilitating the description of the material, process or article desired and shall be deemed to be followed by the words “or equal.” Contractor may, unless otherwise stated, offer for substitution any material, process or article which shall be substantially equal or better in every respect to that so indicated or specified in the Contract Documents. However, City may have adopted certain uniform standards for certain materials, processes and articles.
- c. Contractor shall submit requests, together with substantiating data, for substitution of any “or equal” material, process or article no later than thirty-five (35) days after award of the Contract. To facilitate the construction schedule and sequencing, some requests may need to be submitted before thirty-five (35) days after award of Contract. Provisions regarding submission of “or equal” requests shall not in any way authorize an extension of time for performance of this Contract. If a proposed “or equal” substitution request is rejected, Contractor shall be responsible for providing the specified material, process or article. The burden of proof as to the equality of any material, process or article shall rest with the Contractor. City has the complete and sole discretion to determine if a material, process or article is an “or equal” material, process or article that may be substituted.
- d. Data required to substantiate requests for substitutions of an “or equal” material, process or article data shall include a signed affidavit from the Contractor stating that, and describing how, the substituted “or equal” material, process or article is equivalent to that specified in every way except as listed on the affidavit. Substantiating data shall include any and all illustrations, specifications, and other relevant data including catalog information which describes the requested substituted “or equal” material, process or article, and substantiates that it is an “or equal” to the material, process or article. The substantiating data must also include information regarding the durability and lifecycle cost of the requested substituted “or equal” material, process or article. Failure to submit all the required substantiating data, including the signed affidavit, to City in a timely fashion will result in the rejection of the proposed substitution.
- e. The Contractor shall bear all of City’s costs associated with the review of substitution requests.
- f. The Contractor shall be responsible for all costs related to a substituted “or equal” material, process or article.

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- g. Contractor is directed to the Special Conditions (if any) to review any findings made pursuant to Public Contract Code section 3400.

ARTICLE 8. SHOP DRAWINGS

- a. Contractor shall check and verify all field measurements and shall submit with such promptness as to provide adequate time for review and cause no delay in his own Work or in that of any other contractor, subcontractor, or worker on the Project, six (6) copies of all shop or setting drawings, calculations, schedules, and materials list, and all other provisions required by the Contract. Contractor shall sign all submittals affirming that submittals have been reviewed and approved by Contractor prior to submission to Engineer. Each signed submittal shall affirm that the submittal meets all the requirements of the Contract Documents except as specifically and clearly noted and listed on the cover sheet of the submittal.
- b. Contractor shall make any corrections required by the Engineer, and file with the Engineer six (6) corrected copies each, and furnish such other copies as may be needed for completion of the Work. Engineer's approval of shop drawings shall not relieve Contractor from responsibility for deviations from the Contract Documents unless Contractor has, in writing, called Engineer's attention to such deviations at time of submission and has secured the Engineer's written Approval. Engineer's Approval of shop drawings shall not relieve Contractor from responsibility for errors in shop drawings.

ARTICLE 9. SUBMITTALS

- a. Contractor shall furnish to the Engineer for approval, prior to purchasing or commencing any Work, a log of all samples, material lists and certifications, mix designs, schedules, and other submittals, as required in the specifications. The log shall indicate whether samples will be provided in accordance with other provisions of this Contract.
- b. Contractor will provide samples and submittals, together with catalogs and supporting data required by the Engineer, to the Engineer within a reasonable time period to provide for adequate review and avoid delays in the Work.
- c. These requirements shall not authorize any extension of time for performance of this Contract. Engineer will check and approve such samples, but only for conformance with design concept of work and for compliance with information given in the Contract Documents. Work shall be in accordance with approved samples and submittals.

ARTICLE 10. MATERIALS

- a. Except as otherwise specifically stated in the Contract Documents, Contractor shall provide and pay for all materials, labor, tools, equipment, water, lights, power, transportation, superintendence, temporary constructions of every nature, and all other services and facilities of every nature whatsoever necessary to execute and complete this Contract within specified time.

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- b. Unless otherwise specified, all materials shall be new and the best of their respective kinds and grades as noted and/or specified, and workmanship shall be of good quality.
- c. Materials shall be furnished in ample quantities and at such times as to ensure uninterrupted progress of The Work and shall be stored properly and protected as required by the Contract Documents. Contractor shall be entirely responsible for damage or loss by weather or other causes to materials or Work.
- d. No materials, supplies, or equipment for Work under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. Contractor warrants good title to all material, supplies, and equipment installed or incorporated in the work and agrees upon completion of all work to deliver the Project, to City free from any claims, liens, or charges.
- e. Materials shall be stored on the Project site in such manner so as not to interfere with any operations of City or any independent contractor.

ARTICLE 11. CONTRACTOR'S SUPERVISION

Contractor shall continuously keep at the Project site, a competent and experienced full-time Project superintendent approved by City. Superintendent must be able to proficiently speak, read and write in English. Contractor shall continuously provide efficient supervision of the Project.

ARTICLE 12. WORKERS

- a. Contractor shall at all times enforce strict discipline and good order among its employees. Contractor shall not employ on the Project any unfit person or any one not skilled in the Work assigned to him or her.
- b. Any employee of the Contractor whom City determines is incompetent or unfit shall be removed from this Project.

ARTICLE 13. SUBCONTRACTORS

- a. Contractor agrees to bind every subcontractor to the terms of the Contract Documents as far as such terms are applicable to subcontractor's portion of The Work. All subcontracts entered into by Contractor relating to any of the Work under this Contract shall comply with and be limited to the extent required by Civil Code section 2872.05. Contractor shall be as fully responsible to City for the acts and omissions of its subcontractors and of persons either directly or indirectly employed by its subcontractors, as Contractor is for acts and omissions of persons directly employed by Contractor. Nothing contained in these Contract Documents shall create any contractual relationship between any subcontractor and City.

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- b. City reserves the right to Approve all subcontractors. City's Approval of any subcontractor under this Contract shall not in any way relieve Contractor of its obligations in the Contract Documents.
- c. Prior to substituting any subcontractor listed in the Bid Forms, Contractor must comply with the requirements of the Subletting and Subcontracting Fair Practices Act pursuant to California Public Contract Code section 4100 et seq.

ARTICLE 14. PERMITS AND LICENSES

Permits and licenses necessary for prosecution of The Work shall be secured and paid for by Contractor, unless otherwise specified in the Contract Documents.

- a. Contractor shall obtain and pay for all other permits and licenses required for The Work, including excavation permit and for plumbing, mechanical and electrical work and for operations in or over public streets or right of way under jurisdiction of public agencies other than City.
- b. The Contractor shall arrange and pay for all off-site inspection of the Work related to permits and licenses, including certification, required by the specifications, drawings, or by governing authorities, except for such off-site inspections delineated as City's responsibility pursuant to the Contract Documents.
- c. Before Acceptance of the Project, the Contractor shall submit all licenses, permits, certificates of inspection and required approvals to City.

ARTICLE 15. UTILITY USAGE

- a. All temporary utilities, including but not limited to electricity, water, gas, and telephone, used on the Work shall be furnished and paid for by Contractor. Contractor shall Provide necessary temporary distribution systems, including meters, if necessary, from distribution points to points on The Work where the utility is needed. Upon completion of The Work, Contractor shall remove all temporary distribution systems.
- b. Contractor shall provide necessary and adequate utilities and pay all costs for water, electricity, gas, oil, and sewer charges required for completion of the Project.
- c. All permanent meters Installed shall be listed in the Contractor's name until the Work is accepted.
- d. If the Contract is for construction in existing facilities, Contractor may, with prior written Approval of City, use City's existing utilities by compensating City for utilities used by Contractor.

ARTICLE 16. INSPECTION FEES FOR PERMANENT UTILITIES

All inspection fees and other municipal charges for permanent utilities including, but not limited to, sewer, electrical, phone, gas, water, and irrigation shall be paid for by City. Contractor shall be responsible for arranging the payment of such fees, but inspection fees and other municipal fees relating to permanent utilities shall be paid by City. Contractor may either request reimbursement from City for such fees, or shall be responsible for arranging and coordination with City for the payment of such fees.

ARTICLE 17. TRENCHES

- a. Trenches Five Feet or More in Depth. The Contractor shall submit to City, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any trench or trenches five feet or more in depth. If the plan varies from shoring system standards, the plan shall be prepared by a registered civil or structural engineer. The plan shall not be less effective than the shoring, bracing, sloping, or other provisions of the Construction Safety Orders, as defined in the California Code of Regulations.
- b. Excavations Deeper than Four Feet. If work under this Contract involves digging trenches or other excavation that extends deeper than four feet below the surface, Contractor shall promptly, and before the following conditions are disturbed, notify City, in writing, of any:
 - 1) Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.
 - 2) Subsurface or latent physical conditions at the site differing from those indicated.
 - 3) Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

City shall promptly investigate the conditions, and if it finds that the conditions do so materially differ, or do involve hazardous waste, and cause a decrease or increase in Contractor's cost of, or the time required for, performance of any part of The Work, shall issue a change order under the procedures described in the Contract Documents.

In the event that a dispute arises between City and the Contractor as to whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of The Work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all Work to be performed under the Contract. Contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the parties.

ARTICLE 18. DIVERSION OF RECYCLABLE WASTE MATERIALS

In compliance with the applicable City's waste reduction and recycling efforts, Contractor shall divert all Recyclable Waste Materials to appropriate recycling centers. Contractor will be required to submit weight tickets and written proof of diversion with its monthly progress payment requests. Contractor shall complete and execute any certification forms required by City or other applicable agencies to document Contractor's compliance with these diversion requirements. All costs incurred for these waste diversion efforts shall be the responsibility of the Contractor.

ARTICLE 19. REMOVAL OF HAZARDOUS MATERIALS

Should Contractor encounter material reasonably believed to be polychlorinated biphenyl (PCB) or other toxic wastes and hazardous materials which have not been rendered harmless at the Project site, the Contractor shall immediately stop work at the affected Project site and shall report the condition to City in writing. City shall contract for any services required to directly remove and/or abate PCBs and other toxic wastes and hazardous materials, if required by the Project site(s), and shall not require the Contractor to subcontract for such services. The Work in the affected area shall not thereafter be resumed except by written agreement of City and Contractor.

ARTICLE 20. SANITARY FACILITIES

Contractor shall provide sanitary temporary toilet buildings for the use of all workers. All toilets shall comply with local codes and ordinances. Toilets shall be kept supplied with toilet paper and shall have workable door fasteners. Toilets shall be serviced no less than once weekly and shall be present in a quantity of not less than 1 per 20 workers as required by CAL-OSHA regulation. The toilets shall be maintained in a sanitary condition at all times. Use of toilet facilities in The Work under construction shall not be permitted. Any other Sanitary Facilities required by CAL-OSHA shall be the responsibility of the Contractor.

ARTICLE 21. AIR POLLUTION CONTROL

Contractor shall comply with all air pollution control rules, regulations, ordinances and statutes. All containers of paint, thinner, curing compound, solvent or liquid asphalt shall be labeled to indicate that the contents fully comply with the applicable material requirements.

Without limiting the foregoing, Contractor must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the South Coast Air Quality Management District (SCAQMD) and/or California Air Resources Board (CARB). Although the SCAQMD and CARB limits and requirements are more broad, Contractor shall specifically be aware of their application to "portable equipment", which definition is considered by SCAQMD and CARB to include any item of equipment with a fuel-powered engine. Contractor shall indemnify City against any fines or penalties imposed by SCAQMD, CARB, or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by Contractor, its subcontractors, or others for whom Contractor is responsible under its indemnity obligations provided for in Article 50.

ARTICLE 22. WATER QUALITY MANAGEMENT AND COMPLIANCE

- a. Storm, surface, ground, nuisance, or other waters may be encountered at various times during the Work. Contractor hereby acknowledges that it has investigated the risk arising from such waters, has prepared its Bid accordingly, and assumes any and all risks and liabilities arising therefrom.
- b. Contractor shall keep itself and all subcontractors, staff, and employees fully informed of and in compliance with all local, state and federal laws, rules and regulations that may impact, or be implicated by the performance of the Work including, without limitation, all applicable provisions of the City's ordinances regulating discharges of storm water; the Federal Water Pollution Control Act (33 U.S.C. § 1251 *et seq.*); the California Porter-Cologne Water Quality Control Act (Water Code § 13000 *et seq.*); and any and all regulations, policies, or permits issued pursuant to any such authority. These include, but are not limited to California Regional Water Quality Control Boards (Santa Ana and San Diego Regions) Order No. R8-2009-0030 (NPDES Permit No. CAS 618030), Order No. R9-2009-0002, Order No. R8-2009-0045, Order No. R9-2008-0002, and State Water Resources Control Board Order No. 2010-0014-DWQ, Order No. 2009-0009-DWQ, and Order No. 2012-0006-DWQ, and any amendment or renewal thereof.
- c. Contractor shall comply with the lawful requirements of the City, and any other municipality, drainage district, or other local agency with jurisdiction over the location where the Work is to be conducted, regarding discharges of storm water to separate storm drain systems or watercourses, including, but not limited to, all applicable requirements of the Orange County Drainage Area Management Plan ("DAMP"), the City of Lake Forest Local Implementation Plan ("LIP"), and the applicable Water Quality Management Plan ("WQMP"). Sections 5, 7, and 8 of the DAMP contain requirements related to design and construction of public projects. Contractor shall be familiar the DAMP, and the LIP and shall comply with the requirements as specified therein.

A copy of the DAMP is available on the internet at:

<https://media.ocgov.com/gov/pw/watersheds/documents/damp/default.asp>

A copy of the LIP is available on the internet at:

http://www.lakeforestca.gov/depts/pw/water/local_implementation_plan_%28lip%29.asp

More information on the applicable WQMP is available on the internet at:

[http://www.lakeforestca.gov/depts/pw/water/water_quality_management_plan_\(wqmp\).asp](http://www.lakeforestca.gov/depts/pw/water/water_quality_management_plan_(wqmp).asp)

- d. Contractor shall be required to comply with all aspects of the State Water Resources Control Board ("State Board") Water Quality Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction Activity, including any amendment or renewal thereof, ("Construction General Permit") for all projects

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that involve construction on or disturbance of one acre or more of land or which are part of a larger common area of development.

- e. City may require Contractor to file the Notice of Intent (“NOI”) and obtain coverage for the Project under the Construction General Permit. This may include filing all necessary documentation including the Permit Registration Documents (“PRDs”) through the Stormwater Multiple Applications and Report Tracking System (“SMARTS”); preparing and implementing a Storm Water Pollution Prevention Plan (“SWPPP”) for the Work site; implementing all other provisions, and monitoring and reporting requirements required by the Construction General Permit; and providing a Qualified SWPPP Developer (“QSD”) and Qualified SWPPP Practitioner (“QSP”), as necessary for all Work site activities, including but not limited to preparation and submittal of all reports, plans, inspections, and monitoring information in compliance with the Construction General Permit. City retains the right to develop its own documentation for the project site, including but not limited to the SWPPP, and in the alternative may require Contractor to adopt and implement portions of the City developed SWPPP. Specific requirements for the Work site shall be set forth in the Special Conditions. Contractor shall include all costs of compliance with specified requirements in the Contract amount.
- f. For those Work sites where construction activity results in the disturbance of less than one acre of total land area and/or do not need coverage under the Construction General Permit, the Contractor shall be responsible for preparing and implementing an Erosion and Sediment Control Plan in accordance with California Regional Water Quality Control Board Order No. R8-2009-0030, Order No. R9-2009-0002 and any amendment or renewal thereof, and the City’s LIP and Orange County DAMP.
- g. Notwithstanding the above, before any PRDs, SWPPP, or other Construction General Permit related document may be submitted to the State Water Resources Control Board or implemented on the Work site, it must first be reviewed and approved by the City and/or the City’s designee. The City expressly reserves the right to procure coverage under the Construction General Permit for the Work site if Contractor fails to draft satisfactory PRDs or SWPPP or otherwise fails to proceed in a manner that complies with the requirements of the Construction General Permit. The City additionally reserves the right to hire additional contractors to maintain compliance at the Work site. Whether Contractor has adequately maintained compliance with the Construction General Permit shall be the City’s sole determination. Any costs incurred by the City in procuring coverage under the Construction General Permit, or drafting and/or implementing a SWPPP for the Work site shall be paid by Contractor.
- h. Failure to comply with laws, regulations, and ordinances listed in this Article 22 is a violation of federal and state law. Notwithstanding any other indemnity contained in this Agreement, Contractor agrees to indemnify and hold harmless the City, its officials, officers, agents, employees and authorized volunteers from and against any and all claims, demands, losses or liabilities of any kind or nature which the City, its officials, officers, agents, employees and authorized volunteers may sustain or incur for noncompliance with the laws, regulations, and

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ordinances listed above, arising out of or in connection with the Work, except for liability resulting from the sole established negligence, willful misconduct or active negligence of the City, its officials, officers, agents, employees or authorized volunteers.

- i. City reserves the right to defend any enforcement action or civil action brought against the City for Contractor's failure to comply with any applicable water quality law, regulation, or policy. Contractor hereby agrees to be bound by, and to reimburse the City for the costs associated with, any settlement reached between the City and any relevant enforcement entity.
- j. City may seek damages from Contractor for delay in completing the Work in accordance with the Contract Documents, caused by Contractor's failure to comply with the laws, regulations and policies described in this Article 22, or any other relevant water quality law, regulation, or policy.

ARTICLE 23. CLEANING UP

- a. Contractor at all times shall keep premises free from debris such as waste, rubbish, and excess materials and equipment. Contractor shall not store debris under, in, or about the premises. Upon completion of Work, Contractor shall clean the interior and exterior of the building or improvement including fixtures, equipment, walls, floors, ceilings, roofs, window sills and ledges, horizontal projections, and any areas where debris has collected so surfaces are free from foreign material or discoloration. Contractor shall clean and polish all glass, plumbing fixtures, and finish hardware and similar finish surfaces and equipment and contractor shall also remove temporary fencing, barricades, planking and construction toilet and similar temporary facilities from site. Contractor shall also clean all buildings, asphalt and concrete areas to the degree necessary to remove oil, grease, fuel, or other stains caused by Contractor operations or equipment.
- b. Contractor shall fully clean up the site at the completion of The Work. If the Contractor fails to immediately clean up at the completion of The Work, City may do so and the cost of such clean up shall be charged back to the Contractor.

ARTICLE 24. LAYOUT AND FIELD ENGINEERING

All field engineering required for laying out The Work and establishing grades for earthwork operations, location and alignment of any and all site elements (buildings, paving, walks, fencing, furnishings, etc.) shall be furnished by the Contractor at its expense. A digital AutoCAD (version 2011) file shall be provided to the Contractor by the City indicating the location and layout of all site elements for the use by the Contractors surveyor. Layout shall be done by a registered civil engineer or a licensed land surveyor Approved by the Engineer. Any surveying necessary to establish the grade and line of the work is to be done by a properly licensed land surveyor retained by the contractor. Any required "as-built" drawings of the Work shall be prepared by the registered civil engineer.

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ARTICLE 25. EXCESSIVE NOISE

- a. The Contractor shall use only such equipment on the work and in such state of repair so that the emission of sound therefrom is within the noise tolerance level of that equipment as established by CAL-OSHA.
- b. The Contractor shall comply with the most restrictive of the following: (1) local sound control and noise level rules, regulations and ordinances and (2) the requirements contained in these Contract Documents, including hours of operation requirements. No internal combustion engine shall be operated on the Project without a muffler of the type recommended by the manufacturer. Should any muffler or other control device sustain damage or be determined to be ineffective or defective, the Contractor shall promptly remove the equipment and shall not return said equipment to the job until the device is repaired or replaced. Said noise and vibration level requirements shall apply to all equipment on the job or related to the job, including but not limited to, trucks, transit mixers or transit equipment that may or may not be owned by the Contractor.

ARTICLE 26. TESTS AND INSPECTIONS

- a. If the Contract Documents, the Engineer, or any instructions, laws, ordinances, or public authority require any part of The Work to be tested or Approved, Contractor shall provide the Engineer at least two (2) working days notice of its readiness for observation or inspection. If inspection is by a public authority other than City, Contractor shall promptly inform City of the date fixed for such inspection. Required certificates of inspection (or similar) shall be secured by Contractor. Costs for City testing and City inspection shall be paid by City. Costs of tests for Work found not to be in compliance shall be paid by the Contractor.
- b. If any Work is done or covered up without the required testing or approval, the Contractor shall uncover or deconstruct the Work, and the Work shall be redone after completion of the testing at the Contractor's cost in compliance with the Contract Documents.
- c. Where inspection and testing are to be conducted by an independent laboratory or agency, materials or samples of materials to be inspected or tested shall be selected by such laboratory or agency, or by City, and not by Contractor. All tests or inspections of materials shall be made in accordance with the commonly recognized standards of national organizations.
- d. In advance of manufacture of materials to be supplied by Contractor which must be tested or inspected, Contractor shall notify City so that City may arrange for testing at the source of supply. Any materials which have not satisfactorily passed such testing and inspection shall not be incorporated into The Work.
- e. If the manufacture of materials to be inspected or tested will occur in a plant or location outside the geographic limits of City, the Contractor shall pay for any excessive or unusual costs associated with such testing or inspection, including but not limited to excessive travel time, standby time and required lodging.

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- f. Reexamination of Work may be ordered by City. If so ordered, Work must be uncovered or deconstructed by Contractor. If Work is found to be in accordance with the Contract Documents, City shall pay the costs of reexamination and reconstruction. If such work is found not to be in accordance with the Contract Documents, Contractor shall pay all costs.

ARTICLE 27. PROTECTION OF WORK AND PROPERTY

- a. The Contractor shall be responsible for all damages to persons or property that occur as a result of The Work. Contractor shall be responsible for the proper care and protection of all materials delivered and Work performed until completion and final Acceptance by City. All Work shall be solely at the Contractor's risk. Contractor shall adequately protect adjacent property from settlement or loss of lateral support as necessary. Contractor shall comply with all applicable safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the Project site where Work is being performed. Contractor shall erect and properly maintain at all times, as required by field conditions and progress of work, all necessary safeguards, signs, barriers, lights, and watchmen for protection of workers and the public, and shall post danger signs warning against hazards created in the course of construction.
- b. In an emergency affecting safety of life or of work or of adjoining property, Contractor, without special instruction or authorization from the Engineer, is hereby permitted to act to prevent such threatened loss or injury; and Contractor shall so act, without appeal, if so authorized or instructed by the Engineer or City. Any compensation claimed by Contractor on account of emergency work shall be determined by and agreed upon by City and the Contractor.
- c. Contractor shall provide such heat, covering, and enclosures as are necessary to protect all Work, materials, equipment, appliances, and tools against damage by weather conditions.
- d. Contractor shall take adequate precautions to protect existing sidewalks, curbs, pavements, utilities, and other adjoining property and structures, and to avoid damage thereto, and Contractor shall repair any damage thereto caused by The Work operations. Contractor shall:
 - 1) Enclose the working area with a substantial barricade, and arrange work to cause minimum amount of inconvenience and danger to the public.
 - 2) Provide substantial barricades around any shrubs or trees indicated to be preserved.
 - 3) Deliver materials to the Project site over a route designated by the Engineer.
 - 4) Provide any and all dust control required and follow the Applicable air quality regulations as appropriate. If the Contractor does not comply, City shall have the immediate authority to provide dust control and deduct the cost from payments to the Contractor.

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- 5) Confine Contractor's apparatus, the storage of materials, and the operations of its workers to limits required by law, ordinances, permits, or directions of the Engineer. Contractor shall not unreasonably encumber the Project site with its materials.
 - 6) Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by an approved civil engineer or land surveyor, at no cost to City.
 - 7) Ensure that existing facilities, fences and other structures are all adequately protected and that, upon completion of all Work, all facilities that may have been damaged are restored to a condition acceptable to City.
 - 8) Preserve and protect from injury all buildings, pole lines and all direction, warning and mileage signs that have been placed within the right-of-way.
 - 9) At the completion of work each day, leave the Project site in a clean, safe condition.
 - 10) Comply with any stage construction and traffic handling plans. Access to residences and businesses shall be maintained at all times.
- e. These precautionary measures will apply continuously and not be limited to normal working hours. Full compensation for the Work involved in the preservation of life, safety and property as above specified shall be considered as included in the prices paid for the various contract items of Work, and no additional allowance will be made therefor.
- f. Should damage to persons or property occur as a result of The Work, Contractor shall be responsible for proper investigation, documentation, including video or photography, to adequately memorialize and make a record of what transpired. City shall be entitled to inspect and copy any such documentation, video, or photographs.

ARTICLE 28. CONTRACTORS MEANS AND METHODS

Contractor is solely responsible for the means and methods utilized to Perform The Work. In no case shall the Contractor's means and methods deviate from commonly used industry standards.

ARTICLE 29. AUTHORIZED REPRESENTATIVES

City shall designate representatives, who shall have the right to be present at the Project site at all times. City may designate an inspector who shall have the right to observe all of the Contractor's Work. The inspector is not authorized to make changes in the Contract Documents. The inspector shall not be responsible for the Contractor's failure to carry out The Work in accordance with the Contract Documents.

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ARTICLE 30. HOURS OF WORK

- a. Eight (8) hours of work shall constitute a legal day's work. The Contractor and each subcontractor shall forfeit, as penalty to City, twenty-five dollars (\$25) for each worker employed in the execution of Work by the Contractor or any subcontractor for each day during which such worker is required or permitted to work more than eight (8) hours in any one day and forty (40) hours in any week in violation of the provisions of the Labor Code, and in particular, Section 1810 to Section 1815, except as provided in Labor Code Section 1815.
- b. Unless otherwise provided in the Special Conditions, Work shall be accomplished on a regularly scheduled eight (8) hour per day work shift basis, Monday through Friday, between the hours of 7:00 a.m. and 5:00 p.m.
- c. It shall be unlawful for any person to operate, permit, use, or cause to operate any of the following at the Project site, other than between the hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, with no Work allowed on City-observed holidays, unless otherwise Approved by the Engineer:
 - 1) Powered Vehicles
 - 2) Construction Equipment
 - 3) Loading and Unloading Vehicles
 - 4) Domestic Power Tool.

ARTICLE 31. PAYROLL RECORDS

- a. Pursuant to Labor Code Section 1776, the Contractor and each subcontractor shall maintain weekly certified payroll records showing the name, address, social security number, work classification, straight time and overtime hours paid each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker or other employee employed in connection with the work. Contractor shall certify under penalty of perjury that records maintained and submitted by Contractor are true and accurate. Contractor shall also require subcontractor(s) to certify weekly payroll records under penalty of perjury.
- b. In accordance with Labor Code section 1771.4, the Contractor and each subcontractor shall furnish the certified payroll records directly to the Department of Industrial Relations ("DIR") on a weekly basis and in the format prescribed by the DIR, which may include electronic submission. Contractor shall comply with all requirements and regulations from the DIR relating to labor compliance monitoring and enforcement.
- c. The payroll records described herein shall be certified and submitted by the Contractor at a time designated by City. The Contractor shall also provide the following:

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- 1) A certified copy of the employee's payroll records shall be made available for inspection or furnished to such employee or his or her authorized representative on request.
 - 2) A certified copy of all payroll records described herein shall be made available for inspection or furnished upon request of the Department of Industrial Relations ("DIR").
- d. The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement ("DLSE") of the DIR or shall contain the same information as the forms provided by the DLSE.
- e. Any copy of records made available for inspection and furnished upon request to the public shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address, and social security number. The name and address of the Contractor or any subcontractor shall not be marked or obliterated.
- f. In the event of noncompliance with the requirements of this Section, the Contractor shall have ten (10) days in which to comply subsequent to receipt of written notice specifying any item or actions necessary to ensure compliance with this section. Should noncompliance still be evident after such ten (10) day period, the Contractor shall, as a penalty to City, forfeit one hundred dollars (\$100.00) for each day, or portion thereof, for each worker until strict compliance is effectuated. Upon the request of the DIR, such penalties shall be withheld from contract payments.

ARTICLE 32. PREVAILING RATES OF WAGES

- a. The Contractor is aware of the requirements of Labor Code Sections 1720 et seq. and 1770 et seq., as well as California Code of Regulations, Title 8, Section 16000 et seq. ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects. Since this Project involves an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and since the total compensation is \$1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. The Contractor shall obtain a copy of the prevailing rates of per diem wages at the commencement of this Agreement from the website of the Division of Labor Statistics and Research of the Department of Industrial Relations located at www.dir.ca.gov/dlsr/. In the alternative, the Contractor may view a copy of the prevailing rates of per diem wages at City. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to perform work on the Project available to interested parties upon request, and shall post copies at the Contractor's principal place of business and at the Project site. Contractor shall defend, indemnify and hold City, its elected officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or allege failure to comply with the Prevailing Wage Laws.

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- b. The Contractor and each subcontractor shall forfeit as a penalty to City not more than two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the stipulated prevailing wage rate for any work done by him, or by any subcontract under him, in violation of the provisions of the Labor Code. The difference between such stipulated prevailing wage rate and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by the Contractor.
- c. Contractor shall post, at appropriate conspicuous points on the Project site, a schedule showing all determined general prevailing wage rates and all authorized deductions, if any, from unpaid wages actually earned.

ARTICLE 33. EMPLOYMENT OF APPRENTICES

The Contractor's attention is directed to the provisions of Sections 1777.5, 1777.6, and 1777.7 of the Labor Code concerning employment of apprentices by the Contractor or any subcontractor. The Contractor shall obtain a certificate of apprenticeship before employing any apprentice pursuant to Section 1777.5, 1777.6, and 1777.7 of the Labor Code. Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, the Administrator of Apprenticeships, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

ARTICLE 34. NONDISCRIMINATION/EQUAL EMPLOYMENT OPPORTUNITY

Pursuant to Labor Code Section 1735 and other applicable provisions of law, the Contractor and its subcontractors shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap on this Project. The Contractor will take affirmative action to insure that employees are treated during employment or training without regard to their race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap.

ARTICLE 35. LABOR/EMPLOYMENT SAFETY

The Contractor shall maintain emergency first aid treatment for his employees which complies with the Federal Occupational Safety and Health Act of 1970 (29 U.S.C. § 651 et seq.), and California Code of Regulations, Title 8, Industrial Relations Division 1, Department of Industrial Relations, Chapter 4.

ARTICLE 36. INSURANCE

Contractor agrees to procure and maintain, at Contractor's expense all insurance specified in Appendix "1" attached hereto and by this reference incorporated herein. Contractor shall require all subcontractors to carry the same policies and limits of insurance that the Contractor is required to maintain, unless otherwise approved in writing by the City.

ARTICLE 37. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

- a. Time for Completion/Liquidated Damages. Work shall be commenced within ten (10) days of the date stated in City's Notice to Proceed and shall be completed

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by Contractor in the time specified in the Contract Documents. City is under no obligation to consider early completion of the Project; and the Contract completion date shall not be amended by City's receipt or acceptance of the Contractor's proposed earlier completion date. Furthermore, Contractor shall not, under any circumstances, receive additional compensation from City (including but not limited to indirect, general, administrative or other forms of overhead costs) for the period between the time of earlier completion proposed by the Contractor and the Contract completion date. If The Work is not completed as stated in the Contract Documents, it is understood that City will suffer damage. In accordance with Government Code section 53069.85, being impractical and infeasible to determine the amount of actual damage, it is agreed that Contractor shall pay to City as fixed and liquidated damages, and not as a penalty, the sum stipulated in the Contract for each day of delay until The Work is fully completed. Contractor and its surety shall be liable for any liquidated damages. Any money due or to become due the Contractor may be retained to cover liquidated damages.

- b. Inclement Weather. Contractor shall abide the Engineer's determination of what constitutes inclement weather. Time extensions for inclement weather shall only be granted when the Work stopped during inclement weather is on the critical path of the Project schedule.
- c. Extension of Time. Contractor shall not be charged liquidated damages because of any delays in completion of The Work due to unforeseeable causes beyond the control and without the fault or negligence of Contractor (or its subcontractors or suppliers). Contractor shall within five (5) Days of identifying any such delay notify City in writing of causes of delay. City shall ascertain the facts and extent of delay and grant extension of time for completing The Work when, in its judgment, the facts justify such an extension. Time extensions to the Project shall be requested by the Contractor as they occur and without delay. No delay claims shall be permitted unless the event or occurrence delays the completion of the Project beyond the Contract completion date.
- d. No Damages for Reasonable Delay. City's liability to Contractor for delays for which City is responsible shall be limited to only an extension of time unless such delays were unreasonable under the circumstances. In no case shall City be liable for any costs which are borne by the Contractor in the regular course of business, including, but not limited to, home office overhead and other ongoing costs. Damages caused by unreasonable City delay, including delays caused by items that are the responsibility of City pursuant to Government Code section 4215, shall be based on actual costs only, no proportions or formulas shall be used to calculate any delay damages.

ARTICLE 38. COST BREAKDOWN AND PERIODIC ESTIMATES

Contractor shall furnish on forms Approved by City:

- a. Within ten (10) Days of award of the Contract a detailed estimate giving a complete breakdown of the Contract price;

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- b. A monthly itemized estimate of Work done for the purpose of making progress payments. In order for City to consider and evaluate each progress payment application, the Contractor shall submit a detailed measurement of Work performed and a progress estimate of the value thereof before the tenth (10th) Day of the following month.
- c. Contractor shall submit, with each of its payment requests, an adjusted list of actual quantities, verified by the Engineer, for unit price items listed, if any, in the Bid Form.
- d. Following City's Acceptance of the Work, the Contractor shall submit to City a written statement of the final quantities of unit price items for inclusion in the final payment request.
- e. City shall have the right to adjust any estimate of quantity and to subsequently correct any error made in any estimate for payment.

Contractor shall certify under penalty of perjury, that all cost breakdowns and periodic estimates accurately reflect the Work on the Project.

ARTICLE 39. MOBILIZATION

- a. When a bid item is included in the Bid Form for mobilization, the costs of Work in advance of construction operations and not directly attributable to any specific bid item will be included in the progress estimate ("Initial Mobilization"). When no bid item is provided for "Initial Mobilization," payment for such costs will be deemed to be included in the other items of The Work.
- b. Payment for Initial Mobilization based on the lump sum provided in the Bid Form, which shall constitute full compensation for all such Work. No payment for Initial Mobilization will be made until all of the listed items have been completed to the satisfaction of the Engineer. The scope of the Work included under Initial Mobilization shall include, but shall not be limited to, the following principal items:
 - 1) Obtaining and paying for all bonds, insurance, and permits.
 - 2) Moving on to the Project site of all Contractor's plant and equipment required for first month's operations.
 - 3) Installing temporary construction power, wiring, and lighting facilities.
 - 4) Establishing fire protection system.
 - 5) Developing and installing a construction water supply.
 - 6) Providing and maintaining the field office trailers for the Contractor and the Engineer, complete, with all specified furnishings and utility services including telephones, telephone appurtenances, computer and printer, and copying machine.

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- 7) Providing on-site communication facilities for the Owner and the Engineer, including telephones, radio pagers, and fax machines.
- 8) Providing on-site sanitary facilities and potable water facilities as specified per Cal-OSHA and these Contract Documents.
- 9) Furnishing, installing, and maintaining all storage buildings or sheds required for temporary storage of products, equipment, or materials that have not yet been installed in the Work. All such storage shall meet manufacturer's specified storage requirements, and the specific provisions of the specifications, including temperature and humidity control, if recommended by the manufacturer, and for all security.
- 10) Arranging for and erection of Contractor's work and storage yard.
- 11) Posting all OSHA required notices and establishment of safety programs per Cal-OSHA.
- 12) Full-time presence of Contractor's superintendent at the job site as required herein.
- 13) Submittal of Construction Schedule as required by the Contract Documents.

ARTICLE 40. PAYMENTS

- a. City shall make monthly progress payments following receipt of undisputed and properly submitted payment requests. Contractor shall be paid a sum equal to ninety-five percent (95%) of the value of Work performed up to the last day of the previous month, less the aggregate of previous payments, except where the City has adopted a finding that the Work done under the Contract is substantially complex, and then the Contractor shall be paid a sum equal to ninety percent (90%) of the value of the Work performed up to the last day of the previous month, less the aggregate of previous payments.
- b. The Contractor shall, after the full completion of The Work, submit a final payment application. All prior progress estimates shall be subject to correction in the final estimate and payment.
- c. Unless otherwise required by law, the final payment of five percent (5%) of the value of the Work (or ten percent (10%) in the event the City has adopted a finding that the Work under the Contract is substantially complex), if unencumbered, shall be paid no later than sixty (60) Days after the date of recordation of the Notice of Completion.
- d. Acceptance by Contractor of the final payment shall constitute a waiver of all claims against City arising from this Contract.

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- e. Payments to the Contractor shall not be construed to be an acceptance of any defective work or improper materials, or to relieve the Contractor of its obligations under the Contract Documents.
- f. The Contractor shall submit with each payment request the Contractor's conditional waiver of lien for the entire amount covered by such payment request, as well as a valid unconditional waiver of lien from the Contractor and all subcontractors and materialmen for all work and materials included in any prior invoices. Waivers of lien shall be in the forms prescribed by California Civil Code Section 8132. Prior to final payment by City, the Contractor shall submit a final waiver of lien for the Contractor's work, together with releases of lien from any subcontractor or materialmen.

ARTICLE 41. PAYMENTS WITHHELD AND BACKCHARGES

- a. In addition to amounts which City may retain under other provisions of the Contract Documents City may withhold payments due to Contractor as may be necessary to cover:
 - 1) Stop Notice Claims.
 - 2) Defective work not remedied.
 - 3) Failure of Contractor to make proper payments to its subcontractors or suppliers.
 - 4) Completion of the Contract if there exists a reasonable doubt that the work can be completed for balance then unpaid.
 - 5) Damage to another contractor or third party.
 - 6) Amounts which may be due City for claims against Contractor.
 - 7) Failure of Contractor to keep the record ("as-built") drawings up to date.
 - 8) Failure to provide updates on the construction schedule.
 - 9) Site clean up.
 - 10) Failure of the Contractor to comply with requirements of the Contract Documents.
 - 11) Liquated damages.
 - 12) Legally permitted penalties.
- b. Upon completion of the Contract, City will reduce the final Contract amount to reflect costs charged to the Contractor, backcharges or payments withheld pursuant to the Contract Documents.

ARTICLE 42. CHANGES AND EXTRA WORK

- a. Change Order Work.
- 1) City, without invalidating the Contract, may order changes in the Work consisting of additions, deletions or other revisions, the Contract amount and Contract time being adjusted accordingly. All such changes in the Work shall be authorized by Change Order, shall be performed under the applicable conditions of the Contract Documents, and shall be subject to the approval authority requirements of Article 4 of the Contract. A Change Order signed by the Contractor indicates the Contractor's agreement therewith, including any adjustment in the Contract amount or the Contract time, and the full and final settlement of all costs (direct, indirect and overhead) related to the Work authorized by the Change Order.
 - 2) All claims for additional compensation to the Contractor shall be presented in writing before the expense is incurred and will be adjusted as provided herein. No work shall be allowed to lag pending such adjustment, but shall be promptly executed as directed, even if a dispute arises. No claim will be considered after the work in question has been done unless a written contract change order has been issued or a timely written notice of claim has been made by Contractor. Contractor shall not be entitled to claim or bring suit for damages, whether for loss of profits or otherwise, on account of any decrease or omission of any item or portion of Work to be done. Whenever any change is made as provided for herein, such change shall be considered and treated as though originally included in the Contract, and shall be subject to all terms, conditions and provisions of the original Contract.
 - 3) Owner Initiated Change. The Contractor must submit a complete cost proposal, including any change in the Contract time, within seven (7) Days after receipt of a scope of a proposed change order, unless City requests that proposals be submitted in less than seven (7) Days.
 - 4) Contractor Initiated Change. The Contractor must give written notice of a proposed change order required for compliance with the Contract Documents within seven (7) Days of discovery of the facts giving rise to the proposed change order.
 - 5) Whenever possible, any changes to the Contract amount shall be in a lump sum mutually agreed to by the Contractor and City.
 - 6) Price quotations from the Contractor shall be accompanied by sufficiently detailed supporting documentation to permit verification by City.
 - 7) If the Contractor fails to submit the cost proposal within the seven (7) Day period (or as requested), City has the right to order the Contractor in writing to commence the work immediately on a force account basis and/or issue a lump sum change to the contract price in accordance with

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City's estimate of cost. If the change is issued based on City estimate, the Contractor will waive its right to dispute the action unless within fifteen (15) Days following completion of the added/deleted work, the Contractor presents written proof that City's estimate was in error.

- 8) Estimates for lump sum quotations and accounting for cost-plus-percentage work shall be limited to direct expenditures necessitated specifically by the subject extra work, and shall be segregated as follows:
- (a) Labor. The costs of labor will be the actual cost for wages prevailing locally for each craft or type of worker at the time the extra work is done, plus employer payments of payroll taxes and insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State or local laws, as well as assessment or benefits required by lawful collective bargaining agreements. The use of a labor classification which would increase the extra work cost will not be permitted unless the contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.
 - (b) Materials. The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available in the quantities involved, plus sales tax, freight and delivery. Materials cost shall be based upon supplier or manufacturer's invoice. If invoices or other satisfactory evidence of cost are not furnished within fifteen (15) Days of delivery, then the Engineer shall determine the materials cost, at its sole discretion.
 - (c) Tool and Equipment Use. No payment will be made for the use of small tools, tools which have a replacement value of \$1,000 or less. Regardless of ownership, the rates to be used in determining equipment use costs shall not exceed listed rates prevailing locally at equipment rental agencies, or distributors, or Caltrans Equipment Rental Rates (without surcharge) at the time the work is performed.
 - (d) Overhead, Profit and Other Charges. The mark-up for overhead (including supervision) and profit on work added to the Contract shall be according to the following:
 - i. "Net Cost" is defined as consisting of costs of labor, materials and tools and equipment only excluding overhead and profit. The costs of applicable insurance and bond premium will be reimbursed to the Contractor and subcontractors at cost only, without mark-up.

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- ii. For Work performed by the Contractor's forces the added cost for overhead and profit shall not exceed fifteen percent (15%) of the Net Cost of the Work.
 - iii. For Work performed by a subcontractor, the added cost for overhead and profit shall not exceed fifteen percent (15%) of the Net Cost of the Work to which the Contractor may add five percent (5%) of the subcontractor's Net Cost.
 - iv. For Work performed by a sub-subcontractor the added cost for overhead and profit shall not exceed fifteen percent (15%) of the Net Cost for Work to which the subcontractor and general contractor may each add an additional five percent (5%) of the Net Cost of the lower tier subcontractor.
 - v. No additional mark up will be allowed for lower tier subcontractors, and in no case shall the added cost for overhead and profit payable by City exceed twenty-five percent (25%) of the Net Cost as defined herein.
- 9) All of the following costs are included in the markups for overhead and profit described above, and Contractor shall not receive any additional compensation for: Submittals, drawings: field drawings, Shop Drawings, including submissions of drawings; field inspection; General Superintendence; General administration and preparation of cost proposals, schedule analysis, Change Orders, and other supporting documentation; computer services; reproduction services; Salaries of project engineer, superintendent, timekeeper, storekeeper, and secretaries; Janitorial services; Small tools, incidentals and consumables; Temporary on Site facilities (Offices, Telephones, Internet access, Plumbing, Electrical Power, lighting; Platforms, Fencing, Water), Jobsite and Home office overhead or other expenses; vehicles and fuel used for work otherwise included in the Contract Documents; Surveying; Estimating; Protection of Work; Handling and disposal fees; Final cleanup; Other incidental Work; Related warranties.
- 10) For added or deducted Work by subcontractors, the Contractor shall furnish to City the subcontractor's signed detailed estimate of the cost of labor, material and equipment, including the subcontractor markup for overhead and profit. The same requirement shall apply to sub-subcontractors.
- 11) For added or deducted work furnished by a vendor or supplier, the Contractor shall furnish to City a detailed estimate or quotation of the cost to the Contractor, signed by such vendor or supplier.
- 12) Any change in The Work involving both additions and deletions shall indicate a net total cost, including subcontracts and materials. Allowance for overhead and profit, as specified herein, shall be applied if the net

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total cost is an extra; overhead and profit allowances shall not be applied if the net total cost is a credit. The estimated cost of deductions shall be based on labor and material prices on the date the Contract was executed.

- 13) Contractor shall not reserve a right to assert impact costs, extended job site costs, extended overhead, constructive acceleration and/or actual acceleration beyond what is stated in the change order for work. No claims shall be allowed for impact, extended overhead costs, constructive acceleration and/or actual acceleration due to a multiplicity of changes and/or clarifications. The Contractor may not change or modify City's change order form in an attempt to reserve additional rights.
- 14) If City disagrees with the proposal submitted by Contractor, it will notify the Contractor and City will provide its opinion of the appropriate price and/or time extension. If the Contractor agrees with City, a change order will be issued by City. If no agreement can be reached, City shall have the right to issue a unilateral change order setting forth its determination of the reasonable additions or savings in costs and time attributable to the extra or deleted work. Such determination shall become final and binding if the Contractor fails to submit a claim in writing to City within fifteen (15) Days of the issuance of the unilateral change order, disputing the terms of the unilateral change order.
- 15) No dispute, disagreement or failure of the parties to reach agreement on the terms of the change order shall relieve the Contractor from the obligation to proceed with performance of the work, including extra work, promptly and expeditiously.
- 16) Any alterations, extensions of time, extra work or any other changes may be made without securing consent of the Contractor's surety or sureties.

b. Contract Unit Prices

- 1) Increases more than twenty-five percent (25%) percent. Should the actual quantity of an item of work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications exceed the Bid quantity by more than twenty-five percent (25%), payment for the quantity in excess of one hundred twenty-five percent (125%) of the Bid quantity will be made on the basis of an adjustment in the Contract Unit Price mutually agreed to by the Contractor and the City, or at the option of the Engineer, on the basis of the Extra Work per paragraph (a) above.
- 2) Decreases of more than twenty-five percent (25%). Should the actual quantity of an item of work covered by a Contract Unit Price, and constructed in conformance with Plans and Specifications, be less than seventy-five percent (75%) of the Bid quantity, an adjustment in payment will not be made unless so requested in writing by the Contractor. If the Contractor so requests, payment will be made on the basis of an adjustment in the Contract Unit Price mutually agreed to by the

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Contractor and the City, or at the option of the Engineer, on the basis of the Extra Work per paragraph (a) above; however, in no case will payment be less than would be made for the actual quantity at the Contract Unit Price nor more than would be made for seventy-five percent (75%) of the Bid quantity at the Contract Unit Price.

ARTICLE 43. OCCUPANCY

City reserves the right to occupy or utilize any portion of The Work at any time before completion, and such occupancy or use shall not constitute Acceptance of any part of Work covered by this Contract. This use shall not relieve the Contractor of its responsibilities under the Contract.

ARTICLE 44. INDEMNIFICATION

Contractor shall defend (with counsel of City Council's choosing), indemnify and hold City, its officials, officers, agents, employees, and representatives free and harmless from any and all claims, demands, causes of action, costs, expenses, liabilities, losses, damages or injuries, in law or equity, regardless of whether the allegations are false, fraudulent, or groundless, to property or persons, including wrongful death, to the extent arising out of or incident to any acts, omissions or willful misconduct of Contractor, its officials, officers, employees, agents, consultants and contractors arising out of or in connection with the performance of the Work or this Contract, including claims made by subcontractors for nonpayment, including without limitation the payment of all consequential damages and attorneys fees and other related costs and expenses. To the fullest extent permitted by law, Contractor shall defend, at Contractor's own cost, expense and risk, with City Council's choosing, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against City, its officials, officers, agents, employees and representatives. To the extent of its liability, Contractor shall pay and satisfy any judgment, award or decree that may be rendered against City, its officials, officers, employees, agents, employees and representatives, in any such suit, action or other legal proceeding. Contractor shall reimburse City, its officials, officers, agents, employees and representatives for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. The only limitations on this provision shall be those imposed by Civil Code Section 2782.

ARTICLE 45. RECORD ("AS BUILT") DRAWINGS

- a. Contractor shall prepare and maintain a complete set of record drawings (herein referred to as "as-builts") and shall require each trade to prepare its own as-builts. The as-builts must show the entire site for each major trade, including but not limited to water, sewer, electrical, data, telephone, cable, fire alarm, gas and plumbing. Contractor shall mark the as-builts to show the actual installation where the installation varies from the Work as originally shown. Contractor shall mark whichever drawings are most capable of showing conditions fully and where shop drawings are used, Contractor must record a cross-reference at the corresponding location on the contract drawings. Contractor shall give particular attention to concealed elements that would be difficult to measure and record at a later date. Contractor shall use colors to distinguish variations in separate categories of The Work.

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- b. Contractor shall note related change order, request for information, request for proposals, or Architect's Supplemental Instructions where applicable. Contractor shall organize as-builts into manageable sets, bound with durable paper cover sheets and shall print suitable title, dates and other identification on the cover of each set. Contractor to also provide an electronic version of the as-builts in .pdf or other approved format. The suitability of the as-builts will be determined by the Engineer.

ARTICLE 46. RESOLUTION OF CONSTRUCTION CLAIMS

- a. In accordance with Public Contract Code Sections 20104 et seq. and other applicable law, public works claims of \$375,000 or less which arise between the Contractor and City shall be resolved under the following procedure unless City has elected to resolve the dispute pursuant to Public Contract Code Section 10240 et seq.
- b. All Claims. All claims shall be submitted in writing and accompanied by substantiating documentation. Claims must be filed on or before the date of final payment unless other notice requirements are provided in the contract. "Claim" means a separate demand by the Contractor for (1) a time extension, (2) payment of money or damages arising from work done by or on behalf of the Contractor and payment of which is not otherwise expressly provided for or the Contractor is not otherwise entitled, or (3) an amount the payment of which is disputed by City.
- c. Claims Under \$50,000. City shall respond in writing to the claim within 45 days of receipt of the claim, or, City may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses or claims City may have. If additional information is needed thereafter, it shall be provided upon mutual agreement of City and the Contractor. City's written response shall be submitted 15 days after receiving the additional documentation, or within the same period of time taken by the Contractor to produce the additional information, whichever is greater.
- d. Claims over \$50,000 but less than or equal to \$375,000. City shall respond in writing within 60 days of receipt, or, may request in writing within 30 days of receipt of the claim, any additional documents supporting the claim or relating to defenses or claims City may have against the Contractor. If additional information is needed thereafter, it shall be provided pursuant to mutual agreement between City and the Contractor. City's response shall be submitted within 30 days after receipt of the further documents, or within the same period of time taken by the Contractor to produce the additional information or documents, whichever is greater. The Contractor shall make these records and documents available at all reasonable times, without any direct charge.
- e. Claims in excess of \$375,000. The City shall respond in writing within a reasonable period of time to review and evaluate the Claim. The City may request in writing any additional documents supporting the claim or relating to defenses or claims the City may have against the claimant. The Contractor shall

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make these records and documents available at all reasonable times, without any direct charge.

- f. All Claims. The Contractor will submit the claim justification in the following format:
- 1) Summary of claim merit and price, and Contract clause pursuant to which the claim is made.
 - 2) List of documents relating to claim
 - (a) Specifications
 - (b) Drawings
 - (c) Clarifications (Requests for Information)
 - (d) Schedules
 - (e) Other
 - 3) Chronology of events and correspondence
 - 4) Analysis of claim merit
 - 5) Analysis of claim cost
 - 6) Analysis of time impact analysis in CPM format
 - 7) Cover letter and certification of validity of the claim
- g. All Claims. If the Contractor disputes City's response, or if City fails to respond within the statutory time period(s), the Contractor may so notify City within 15 days of the receipt of the response or the failure to respond, and demand an informal conference to meet and confer for settlement. Upon such demand, City shall schedule a meet and confer conference within 30 days.
- h. The Contractor must comply with the claims filing procedures set forth in Government Code sections 900 et seq. for any claim or any portion thereof that remains in dispute after the meet and confer conference. For purposes of those provisions, the time within which a claim must be filed shall be tolled from the time the Contractor submits the written claim until the time the claim is denied, including any time utilized for the meet and confer conference.
- i. Submission of a claim, properly certified, with all required supporting documentation, and written rejection or denial of all or part of the claim by City, is a condition precedent to any action, proceeding, litigation, suit, general conditions claim, or demand for arbitration by Contractor.
- j. i. Government Code Claim. In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra work,

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GENERAL CONDITIONS

disputed work, construction claims and/or changed conditions, the Contractor must comply with the claim procedures set forth in Government Code section 900 et seq. prior to filing any lawsuit against the City. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to extra work, disputed work, construction claims, and/or changed conditions have been followed by Contractor. If no such Government Code claim is submitted, or if the prerequisite contractual requirements are not otherwise satisfied as specified herein, Contractor shall be barred from bringing and maintaining a valid lawsuit against the City.

ARTICLE 47. CITY'S RIGHT TO TERMINATE CONTRACT

- a. Termination for Cause. City may, without prejudice to any other right or remedy, serve written notice upon Contractor of its intention to terminate this Contract in whole or in part if the Contractor: (i) refuses or fails to prosecute The Work or any part thereof with such diligence as will ensure its completion within the time required; (ii) fails to complete The Work within the required time; (iii) should file a bankruptcy petition or be adjudged a bankrupt; (iv) should make a general assignment for the benefit of its creditors; (v) should have a receiver appointed; (vi) should persistently or repeatedly refuse or fail to supply enough properly skilled workers or proper materials to complete the work; (vii) should fail to make prompt payment to subcontractors or for material or labor; (viii) persistently disregard laws, ordinances, other requirements or instructions of City; or (ix) should violate any of the provisions of the Contract Documents.

The notice of intent to terminate shall contain the reasons for such intention to terminate. Unless within ten (10) Days after the service of such notice, such condition shall cease or satisfactory arrangements (acceptable to City) for the required correction are made, this Contract shall be terminated. In such case, Contractor shall not be entitled to receive any further payment until the Project has been finished. City may take over and complete The Work by any method it may deem appropriate. Contractor and its surety shall be liable to City for any excess costs or other damages incurred by City to complete the Project. If City takes over The Work, City may, without liability for so doing, take possession of and utilize in completing The Work such materials, appliances, plant, and other property belonging to the Contractor as may be on the Project site.

- b. Termination For Convenience. City may terminate performance of The Work in whole or, in part, if City determines that a termination is in City's interest.

The Contractor shall terminate all or any part of The Work upon delivery to the Contractor of a Notice of Termination specifying that the termination is for the convenience of City, the extent of termination, and the effective date of such termination.

After receipt of Notice of Termination, and except as directed by City, the Contractor shall, regardless of any delay in determining or adjusting any amounts due under this Termination for Convenience clause, immediately proceed with the following obligations:

- 1) Stop Work as specified in the Notice.

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GENERAL CONDITIONS

- 2) Complete any Work specified in the Notice of Termination in a least cost/shortest time manner while still maintaining the quality called for under the Contract Documents.
 - 3) Leave the property upon which the Contractor was working and upon which the facility (or facilities) forming the basis of the Contract Documents is situated in a safe and sanitary manner such that it does not pose any threat to the public health or safety.
 - 4) Terminate all subcontracts to the extent that they relate to the portions of The Work terminated.
 - 5) Place no further subcontracts or orders, except as necessary to complete the remaining portion of The Work.
 - 6) Submit to City, within ten (10) Days from the effective date of the Notice of Termination, all of the documentation called for by the Contract Documents to substantiate all costs incurred by the Contractor for labor, materials and equipment through the Effective Date of the Notice of Termination. Any documentation substantiating costs incurred by the Contractor solely as a result of City's exercise of its right to terminate this Contract pursuant to this clause, which costs the Contractor is authorized under the Contract Documents to incur, shall: (i) be submitted to and received by City no later than thirty (30) Days after the Effective Date of the Notice of Termination; (ii) describe the costs incurred with particularity; and (iii) be conspicuously identified as "Termination Costs Occasioned by City's Termination for Convenience."
 - 7) These provisions are in addition to and not in limitation of any other rights or remedies available to City.
- c. Savings Clause. If City terminates Contractor for cause, and if it is later determined that the termination was wrongful, such default termination shall automatically be converted to and treated as a termination for convenience. In such event, Contractor shall be entitled to receive only the amounts payable under this section, and Contractor specifically waives any claim for any other amounts or damages, including, but not limited to, any claim for consequential damages or lost profits.
- d. Exception. Notwithstanding any other provision of this Article, when immediate action is necessary to protect life and safety or to reduce significant exposure or liability, City may immediately order Contractor to cease Work on the Project until such safety or liability issues are addressed to the satisfaction of City or the Contract is terminated.

ARTICLE 48. WARRANTY AND GUARANTEE

- a. Contractor warrants that all materials and equipment furnished under this Contract shall be new unless otherwise specified in the Contract Documents; and

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that all Work conforms to the Contract Document requirements and is free of any defect whether performed by the Contractor or any subcontractor or supplier.

- b. Unless otherwise stated, all warranty periods shall begin upon the filing of the Notice of Completion. Unless otherwise stated, the warranty period shall be for one year.
- c. The Contractor shall remedy at its expense any damage to City-owned or controlled real or personal property.
- d. Contractor shall furnish City with all warranty and guarantee documents prior to final Acceptance of the Project by City.
- e. City shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage. The Contractor shall within ten (10) Days after being notified commence and perform with due diligence all necessary Work. If the Contractor fails to promptly remedy any defect, or damage; the City have the right to replace, repair, or otherwise remedy the defect, or damage at the Contractor's expense.
- f. In the event of any emergency constituting an immediate hazard to health, safety, property, or licensees, when caused by Work of the Contractor not in accordance with the Contract requirements, City may undertake at Contractor's expense, and without prior notice, all Work necessary to correct such condition.
- g. With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for Work performed and Materials furnished under this Contract, the Contractor shall:
 - 1) Obtain for City all warranties that would be given in normal commercial practice;
 - 2) Require all warranties to be executed, in writing, for the benefit of City; and
 - 3) Enforce all warranties for the benefit of City, unless otherwise directed in writing by City.

This Article shall not limit City's rights under this Contract or with respect to latent defects, gross mistakes, or fraud. City specifically reserves all rights related to defective work, including but not limited to the defect claims pursuant to California Code of Civil Procedure Section 337.15.

ARTICLE 49. DOCUMENT RETENTION & EXAMINATION

- a. In accordance with Government Code Section 8546.7, records of both City and the Contractor shall be subject to examination and audit by the State Auditor General for a period of three (3) years after final payment.
- b. Contractor shall make available to City any of the Contractor's other documents related to the Project immediately upon request of City.

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GENERAL CONDITIONS

- c. In addition to the State Auditor rights above, City shall have the right to examine and audit all books, estimates, records, contracts, documents, bid documents, subcontracts, and other data of the Contractor (including computations and projections) related to negotiating, pricing, or performing the modification in order to evaluate the accuracy and completeness of the cost or pricing data at no additional cost to City, for a period of four (4) years after final payment.

ARTICLE 50. SOILS INVESTIGATIONS

When a soils investigation report for the Project site is available, such report shall not be a part of the Contract Documents. Any information obtained from such report as to subsurface soil condition, or to elevations of existing grades or elevations of underlying rock, is approximate only and is not guaranteed. Contractor acknowledges that any soils investigation report (including any borings) was prepared for purposes of design only and Contractor is required to examine the site before submitting its bid and must make whatever tests it deems appropriate to determine the underground condition of the soil.

ARTICLE 51. SEPARATE CONTRACTS

- a. City reserves the right to let other contracts in connection with this Work or on the Project site. Contractor shall permit other contractors reasonable access and storage of their materials and execution of their work and shall properly connect and coordinate its Work with theirs.
- b. To ensure proper execution of its subsequent Work, Contractor shall immediately inspect work already in place and shall at once report to the Engineer any problems with the work in place or discrepancies with the Contract Documents.
- c. Contractor shall ascertain to its own satisfaction the scope of the Project and nature of any other contracts that have been or may be awarded by City in prosecution of the Project to the end that Contractor may perform this Contract in the light of such other contracts, if any. Nothing herein contained shall be interpreted as granting to Contractor exclusive occupancy at site of the Project. Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on the Project. If simultaneous execution of any contract for the Project is likely to cause interference with performance of some other contract or contracts, the Engineer shall decide which Contractor shall cease Work temporarily and which contractor shall continue or whether work can be coordinated so that contractors may proceed simultaneously. City shall not be responsible for any damages suffered or for extra costs incurred by Contractor resulting directly or indirectly from award, performance, or attempted performance of any other contract or contracts on the Project site.

ARTICLE 52. NOTICE AND SERVICE THEREOF

All notices shall be in writing and either served by personal delivery or mailed to the other party as designated in the Bid Forms. Written notice to the Contractor shall be addressed to Contractor's principal place of business unless Contractor designates another address in writing for service of notice. Notice to City shall be addressed to City as designated in the Notice Inviting Bids unless City designates another address in writing for service of notice. Notice shall

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be effective upon receipt or five (5) Days after being sent by first class mail, whichever is earlier. Notice given by facsimile shall not be effective unless acknowledged in writing by the receiving party.

ARTICLE 53. NOTICE OF THIRD PARTY CLAIMS

Pursuant to Public Contract Code Section 9201, City shall provide Contractor with timely notification of the receipt of any third-party claim relating to the Contract.

ARTICLE 54. STATE LICENSE BOARD NOTICE

Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

ARTICLE 55. INTEGRATION

- a. Oral Modifications Ineffective. No oral order, objection, direction, claim or notice by any party or person shall affect or modify any of the terms or obligations contained in the Contract Documents.
- b. Contract Documents Represent Entire Contract. The Contract Documents represent the entire agreement of City and Contractor.

ARTICLE 56. ASSIGNMENT

Contractor shall not assign, transfer, convey, sublet, or otherwise dispose of this Contract or any part thereof including any claims, without prior written consent of City. Any assignment without the written consent of City shall be void. Any assignment of money due or to become due under this Contract shall be subject to a prior lien for services rendered or Material supplied for performance of Work called for under the Contract Documents in favor of all persons, firms, or corporations rendering such services or supplying such Materials to the extent that claims are filed pursuant to the Civil Code, the Code of Civil Procedure or the Government Code.

ARTICLE 57. CHANGE IN NAME AND NATURE OF CONTRACTOR'S LEGAL ENTITY

Should a change be contemplated in the name or nature of the Contractor's legal entity, the Contractor shall first notify City in order that proper steps may be taken to have the change reflected on the Contract.

ARTICLE 58. ASSIGNMENT OF ANTITRUST ACTIONS

Pursuant to Section 7103.5 of the Public Contract Code, in entering into a public works contract or subcontract to supply goods, services, or materials pursuant to a public works contract, Contractor or subcontractor offers and agrees to assign to City all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or

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under the Cartwright Act (chapter 2 (commencing with Section 16700) of part 2 of division 7 of the Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to this Contract or any subcontract. This assignment shall be made and become effective at the time City makes final payment to the Contractor, without further acknowledgment by the parties.

ARTICLE 59. PROHIBITED INTERESTS

No City official or representative who is authorized in such capacity and on behalf of City to negotiate, supervise, make, accept, or approve, or to take part in negotiating, supervising, making, accepting or approving any engineering, inspection, construction or material supply contract or any subcontract in connection with construction of the project, shall be or become directly or indirectly interested financially in the Contract.

ARTICLE 60. LAWS AND REGULATIONS

- a. Contractor shall give all notices and comply with all federal, state and local laws, ordinances, rules and regulations bearing on conduct of work as indicated and specified by their terms. References to specific laws, rules or regulations in this Contract are for reference purposes only, and shall not limit or affect the applicability of provisions not specifically mentioned. If Contractor observes that drawings and specifications are at variance therewith, he shall promptly notify the Engineer in writing and any necessary changes shall be adjusted as provided for in this Contract for changes in work. If Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Engineer, he shall bear all costs arising therefrom.
- b. Contractor shall be responsible for familiarity with the Americans with Disabilities Act ("ADA") (42 U.S.C. § 12101 et seq.). The Work will be performed in compliance with ADA regulations.

ARTICLE 61. PATENT FEES OR ROYALTIES

The Contractor shall include in its bid amount the patent fees or royalties on any patented article or process furnished or used in the Work. Contractor shall assume all liability and responsibility arising from the use of any patented, or allegedly patented, materials, equipment, devices or processes used in or incorporated with The Work, and shall defend, indemnify and hold harmless City, its officials, officers, agents, employees and representatives from and against any and all liabilities, demands, claims, damages, losses, costs and expenses, of whatsoever kind or nature, arising from such use.

ARTICLE 62. OWNERSHIP OF DRAWING

All Contract Documents furnished by City are City property. They are not to be used by Contractor or any subcontractor on other work nor shall Contractor claim any right to such documents. With exception of one complete set of Contract Documents, all documents shall be returned to City on request at completion of The Work.

SECTION 00700
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ARTICLE 63. NOTICE OF TAXABLE POSSESSORY INTEREST

In accordance with Revenue and Taxation Code Section 107.6, the Contract Documents may create a possessory interest subject to personal property taxation for which Contractor will be responsible.

END OF GENERAL CONDITIONS

**SECTION 00750
SPECIAL CONDITIONS**

1. SPECIFIC MATERIALS

City has not made findings pursuant to Public Contract Code Section 3400(b) regarding the use of specific materials, products, things, and/or services that must be utilized for the Project.]

2. STORM WATER SPECIFICATIONS

City has not prepared a SWPPP or other storm water compliance plan for the Project site. Contractor shall be responsible for filing the NOI and for obtaining coverage under the Permit. This includes preparing and implementing a SWPPP for the Project site, and coordinating all submittals with the City's Legally Responsible Person and Authorized Signatory as those terms are defined in the Permit. Before any NOI, SWPPP, or other Permit related document may be submitted to the State Board or implemented on the Project site, it must first be reviewed and approved by the City. If the Project is less than one acre in size Contractor is still required to develop and implement an erosion and sediment control plan for the Work site. Contractor shall include all costs of compliance with specified requirements in the Contract amount.

3. PRE-CONSTRUCTION MEETING.

After, or upon, notification of Contract Award, the Engineer will set the time and location for the Pre-Construction Meeting. Attendance of the Contractor's management personnel responsible for the management, administration, and execution of the project is mandatory for the meeting to be convened. Failure of the Contractor to have the Contractor 's responsible project personnel attend the Pre-Construction Meeting will be grounds for default by Contractor. No separate payment will be made for the Contractor 's attendance at the meeting. The Notice to Proceed will only be issued on or after the completion of the Pre-Construction meeting.

4. MODIFICATION OF HOURS OF WORK

The Contractor's activities shall be confined to Monday through Friday, excluding City holidays and weekends. The Contractor's activities shall be confined to the hours between 8:00 a.m. and 5:00 p.m. **Working hours on arterial streets, including closure of travel lanes, will be allowed only between the hours of 9:00 a.m. and 3:00 p.m.** Deviation from these hours will not be permitted without written request and the prior consent of the Engineer, except in emergencies involving immediate hazard to persons or property. In the event of either a requested, or emergency deviation, inspection service fees will be charged against the Contractor. The service fees will be calculated at overtime rates, including benefits, overhead, and travel time. The service fees will be deducted from any amounts due the Contractor.

5. STREET CLOSURES, DETOURS, BARRICADES

Existing electrical systems (traffic signal, highway and street lighting, flashing beacon, sign illumination and other facilities), or approved temporary replacements thereof, shall be kept in effective operation for the benefit of the traveling public during the progress of the work, except when shutdown is permitted to allow for alterations or final removal of the systems. The traffic signal shutdowns shall be limited to normal working hours, or shall be as specified in the special provisions. Lighting system shutdowns shall not interfere with the regular lighting schedule,

SECTION 00750
SPECIAL CONDITIONS

unless otherwise permitted by the Engineer. The Contractor shall notify the Engineer prior to performing any work on existing systems.

The Contractor shall notify the City prior to any operational shutdown of a traffic signal. The City will:

1. Continue the operation and maintenance of existing electrical facilities.
2. Continue to provide for electrical energy for the operation of existing electrical facilities.
3. Repair or replace existing facilities damaged by public traffic.
4. Pay the cost of electrical energy for the operation of existing or new facilities that are undergoing the functional tests.

The Contractor shall ascertain the exact location and depth of existing detectors, conduits, pull boxes and other electrical facilities before using any tools or equipment that may damage those facilities or interfere with any electrical system.

Where damage is caused by the Contractor's operations, the Contractor shall, at the Contractor's expense, repair or replace damaged facilities promptly in conformance with these specifications. If any existing loop conductor, including the portion leading to the detector handhole or termination pull box, is damaged by the contractor's operations, the Contractor shall immediately notify the Engineer. The affected detectors shall be replaced at the Contractor's expense and as directed by the Engineer within 24 hours. If the Contractor fails to complete the repairs within this period, the repairs will be made by the City at the Contractor's expense.

Should the Contractor fail to perform the required repairs or replacements, the cost of performing the repairs or replacements will be deducted from any moneys due or to become due to the Contractor.

Where roadways are to remain open to traffic and existing lighting systems are to be modified, the lighting systems shall remain in operation and the final connection to the modified circuit shall be made so that the modified circuit will be in operation by nightfall of the same day.

Temporary electrical installations shall be kept in effective operation until the temporary installations are no longer required for the traveling public.

During traffic signal system shutdown the Contractor shall place "STOP AHEAD" and "STOP" signs to direct vehicle and pedestrian traffic through the intersection. All signal faces shall be covered when the system is shutdown overnight. Temporary "STOP AHEAD" and "STOP" signs shall be either covered or removed when the system is turned on.

"STOP AHEAD" and "STOP" signs shall be furnished by the Contractor and shall conform to the provisions in Caltrans Standard Specification section 12-3.06, "Construction Area Signs." Minimum size of "STOP" signs shall be 30 inches.

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SPECIAL CONDITIONS

One "STOP AHEAD" sign and one "STOP" sign shall be placed for each direction of traffic. For two-lane approaches, 2 "STOP" signs shall be placed. Location of the signs shall be as directed by the Engineer.

Barricades shall be equipped with flashing warning lights. All power required devices shall be operated by batteries, rather than generators.

Street closures will not be allowed, except as specifically permitted by the Engineer. Traffic control shall be approved by the Engineer.

Lane transitions shall conform to the latest edition of the California Manual on Uniform Traffic Control Devices (MUTCD).

Temporary traffic channelization shall be accomplished with barricades or delineators. Temporary striping will not be allowed unless specifically permitted by the Engineer. The Contractor shall prepare any plans that may be required for temporary striping to the satisfaction of the Engineer. In no event will temporary striping be allowed on finished pavement surfaces, which are to remain. The Contractor shall prepare any traffic control or detour plans that may be required as directed by the Engineer. The Contractor shall submit Traffic Control Plans for all work on arterial roads, prepared and signed by a California Registered Civil or Traffic Engineer at least ten (10) working days prior to commencing work.

The Contractor shall schedule an employee to police the temporary delineators and barricades within the travel way during weekday, nonworking hours, and over Saturdays, Sundays, and holidays. Any corrective work required to be done by City forces shall be back charged to the Contractor based on the actual costs, plus City overhead and withheld from the final payment.

All costs to the Contractor for street closures, detours, barricades, and associated plans shall be included in various lump sum contract bid items, and no separate payment will be made therefore.

6. SURVEY CONTROL AND REFERENCE POINTS

Prior to the start of construction, the Contractor (its licensed surveyor or qualified engineer) shall locate all monuments (both of record and not of record), bench marks, and centerline ties within one hundred feet of the construction activity. Additional ties to monuments shall be set when ties are missing (min. four ties per monument). The Contractor shall prepare and submit for review to the City Engineer separate tie sheets and Corner Record sheets (monuments not of record shall have only tie sheets prepared). Corner Records shall conform to the County Engineers' Association of California's "Guide to the Preparation of Records of Survey and Corner Records" document as provided by the County of Orange Land Surveyor's Office and on file in the City of Lake Forest City Engineers Office. Upon review by the City Engineer, the Contractor shall file the Corner Records with the County of Orange Land Surveyor's Office. Certified Corner Records shall be filed with the City Engineer. Prior to final Acceptance by the City, the Contractor shall re-survey all field monuments and centerline ties within the construction zone, prepare tie sheets and corner record sheets as indicated above, and file them with the City Engineer for review. After review by the City Engineer, the land surveyor shall file the corner records with the County Land Surveyors Office, and file certified copies of the corner records with the City Engineer.

SECTION 00750
SPECIAL CONDITIONS

All survey monuments removed or altered as a result of construction shall be reset, corner records shall be filed with the County of Orange Land Surveyor's Office, and approved final corner records shall be filed with the City Engineer. Centerline ties removed as a result of construction shall be reset and tie sheets filed with the City Engineer.

Contractor shall provide a letter of certification for all monuments having four or more existing ties which are within 0.02 ft plus or minus of the original City tie sheet records. When several monuments and ties appear on one tie sheet and one of the ties has changed the land surveyor shall re-measure all of the ties and re-file a new ties sheet with the City as required herein.

County of Orange permanent and temporary bench marks within the construction zone shall be located by survey, and the Contractor shall send a written notification of impending construction to the County of Orange Land Surveyor's Office two weeks prior to construction.

END OF SPECIAL CONDITIONS

**SECTION 00800
TECHNICAL CONDITIONS**

**PORTOLA PARKWAY RESURFACING PROJECT
FROM ALTON PARKWAY TO EL TORO ROAD**

**CITY PROJECT #: PW 2016.05B
FEDERAL PROJECT #: STPL-5469 (017)
ADVANTAGE ID: 121600041**

CITY OF LAKE FOREST
25550 COMMERCENTRE DRIVE
LAKE FOREST, CA 92630

PREPARED BY:
TAIT & ASSOCIATES
701 N. PARKCENTER DRIVE
SANTA ANA, CA 92705

AUGUST 2016

- A. THESE ADDITIONS, DELETIONS, AND AMENDMENTS MODIFY THE SPECIFICATIONS IN THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", 2015 EDITION.
- B. THESE ADDITIONS, DELETIONS, AND AMENDMENTS SHALL TAKE PRECEDENCE IN THE EVENT OF A CONFLICT WITH ANY STANDARD SPECIFICATIONS.
- C. AS A CONVENIENCE, THESE ADDITIONS, DELETIONS, AND AMENDMENTS HAVE BEEN ARRANGED IN A FORMAT THAT PARALLELS THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", 2015 EDITION.

PART 2

CONSTRUCTION MATERIALS

SECTION 201 --- CONCRETE, MORTAR, AND RELATED MATERIALS

201-1 PORTLAND CEMENT CONCRETE

201-1.1.2 Concrete Specified by Class. Add to this section: "Portland Cement concrete for construction shall be Class 560-C-3250."

SECTION 214 --- PAVEMENT MARKERS

214-4 NONREFLECTIVE PAVEMENT MARKERS

Add to this Section: "All new non-reflective pavement markers types A and AY shall be ceramic."

214-5 REFLECTIVE PAVEMENT MARKERS

Add to this Section: "All new reflective pavement markers shall have glass-covered reflective faces."

PART 3
CONSTRUCTION METHODS
SECTION 300 – EARTHWORK

300-1 CLEARING AND GRUBBING

300-1.3 Removal and Disposal of Materials

300-1.3.1 General. *After the last paragraph, ADD the following text:*

All soils and materials are subject to testing by the Agency.

300-1.3.2 Requirements. *after paragraph a), ADD the following text:*

The Contractor shall scan the work area using a metal detector of adequate strength prior to any saw cutting, excavation or cold milling of the existing pavement. The Contractor shall be responsible for locating and protecting manhole, water valve, utility access frames and covers or other metal appurtenances buried below the existing pavement surface whether shown on the plans or not.

All existing asphalt concrete pavement that is to be joined by new construction shall be sawcut in a straight line. The Contractor shall not disturb or damage existing improvements to be protected in place. Any damage done by the Contractor and/or its equipment shall be repaired or replaced as called out in Section 7-9 of the Standard Specifications at Contractor's expense. The Contractor shall call USA prior to excavation and shall "pothole" existing utilities that fall within the proposed pavement "dig-out" areas to determine their depth.

AC pavement shall be sawcut to full depth around entire join perimeter. Removal of existing pavement sections shall be to the depth required for construction of the replacement roadway sections as shown on the plans and will include the removal of existing AC pavement, cement treated base and/or aggregate base. All removed material becomes the property of the Contractor and shall be hauled away and legally disposed of properly outside of the roadway right of way.

The Contractor shall remove slurry/asphalt concrete buildup on the existing gutter lip to the satisfaction of the owner's representative.

No crushing operations by Contractor will be allowed at the job site or within the Irvine City limits. Contractor shall price the unclassified excavation and other related bid items accordingly.

After paragraph c), ADD the following text:

The following items of work are included in concrete pavement excavation:

- Saw-cutting, removal and disposal of existing concrete curb and gutter sidewalk, cross gutter and concrete ramps within the project site and as shown on the plan or directed

SECTION 00800
TECHNICAL CONDITIONS

by the Engineer, and in addition, 1- foot full-depth AC pavement removal adjacent to the proposed concrete improvements.

- Removal of excess spoil from milling, excavation, disposal of debris, shrubs, rubbish and excess material away from site and disposal and payment of all required fees at a licensed disposal site.
- Maintaining dust control at all times by watering.
- Removal and disposal of any additional items not specifically mentioned herein, which may be found within the work limits or are shown on the plans to be removed.
- Removal and disposal of unnamed concrete improvements.
- Restoration and clean-up of the site.
- Providing for traffic control and maintenance of access, security and safety including signs, barricades, flashers, covers, plates and chain link fencing as specified elsewhere in the Special Provisions.
- Protecting in place of existing water mains, sewers, storm drains, meters, valve covers, walls, fences, curbs, fire hydrants, telephone and power poles, and other existing structures.
- Providing all necessary means to avoid tracking of asphaltic material on existing or new asphalt pavement during paving operations including landscaped and hardscaped facilities.
- Removing and relocating all sprinkler lines, heads, valves, etc. interfering with construction of improvements.

All materials removed will be lawfully disposed of at a site secured by the Contractor. The Contractor will make every effort to recycle excavated and demolition materials. The Contractor will provide the Engineer with a letter indicating the final disposition of all excavated and demolition materials from the project within five (5) working days after project completion.

No excavated or demolition materials will be left in the public right of way overnight.

All existing improvements to be joined shall be sawcut in a clean straight line along the join line by use of a concrete cutting saw. Compensation for this requirement shall be considered as included in the price bid in the proposal form and no additional compensation will be allowed therefore.

Saw-cutting shall consist of cutting existing Portland cement concrete to facilitate its removal. Cutting shall be accomplished by the use of a power driven saw. The depth of the cut shall be deep enough to provide a clean, straight break without loosening, cracking, or damaging adjoining asphalt or concrete. Under this item, the use of a grinder will not be allowed in lieu of power-driven saw. Residue from saw-cutting shall be vacuumed up while saw-cutting.

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TECHNICAL CONDITIONS

300-1.4 Payment. *After the last paragraph, ADD the following text:*

Measurement & Payment for Remove Existing PCC Median Curb will be at the contract unit price bid per **Linear Foot (LF)**, as field measured in the field, and shall be considered full compensation for furnishing labor, materials, equipment, and disposal to complete the construction and no additional compensation will be allowed therefore.

Measurement & Payment for Remove Existing PCC Median Infill will be at the contract unit price bid per **Square Foot (SF)**, as field measured in plan view, and shall be considered full compensation for furnishing labor, materials, equipment, sawcutting, clearing and grubbing, removals, haul away and disposal to complete the construction and no additional compensation will be allowed therefore.

300-2 UNCLASSIFIED EXCAVATION

300-2.8 Measurement *After the last paragraph, ADD the following text:*

Measurement for Excavate Roadway will be based on plan view field measurements of the proposed pavement reconstruction surface area and shall include all roadway excavation required to remove and prepare the subgrade for the proposed median curb, infill area, and the full pavement section at Bake Parkway. No additional area may be included for necessary excavations within the bake parkway median replacement area except for the actual square footage of new pavement surface installed within the saw cut limits. All other miscellaneous excavations shall be included under the various payment items and no additional compensation will be allowed.

300-2.9 Payment *After the last paragraph, ADD the following text:*

Payment for Excavate Roadway to required depth for Pavement Section (6" AC/11.5" CMB) will be at the contract unit price bid per **SQUARE FOOT (SF)**, as field measured in plan view of the proposed pavement surface area, and shall be considered full compensation for furnishing labor, materials, equipment, and incidentals for doing all the work involved, including excavation of all surfacing, saw-cutting, base and subgrade materials to the lines and grades shown on the plans, as specified in the Standard Specifications and these Special Provisions, as approved by the Engineer and no additional compensation will be allowed therefore.

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300-4 UNCLASSIFIED FILL

300-4.2 Preparation of Fill Areas. *After the first paragraph, ADD the following:*

Prior to placing any fill required to achieve subgrade elevation, the exposed surface shall be brought to optimum moisture content and compacted to at least 90% relative compaction for a depth of one foot (1').

300-4.5 Placing Materials for Fill. *1st paragraph, DELETE the last sentence and SUBSTITUTE with the following:*

All fill should be placed in 6- to 8-inch lifts, brought to about optimum moisture content, and compacted to at least 90% relative compaction. Fill should consist of approved earth materials free of trash debris, roots, vegetation, or other deleterious material.

300-4.9 Measurement & Payment. *After the first paragraph, ADD the following:*

All unclassified fill necessitated as part of this job shall be included under the respective bid items, and no additional payment will be allowed.

SECTION 301 – TREATED SOIL, SUBGRADE PREPARATION, AND PLACEMENT OF BASE MATERIALS

301-1 SUBGRADE PREPARATION

301-1.6 Adjustment of Manhole Frame and Cover Sets to Grade. *After the last paragraph, ADD the following text:*

Adjustment of utility appurtenances to grade shall be in conformance with 301-1.6 and 302-5.8 of the Standard Specifications and these Special Provisions:

Adjusting City of Lake Forest storm drain manhole and storm drain cleanout covers to grade shall conform to SPPWC Std. Plan No. 205-2.

It is anticipated that a number of storm drain cleanouts throughout the project limits currently utilized water valve frame and covers labeled as IRWD water valves. Said frame and covers that are identified on the plans as storm drain manholes shall be adjusted to grade per SPPWC Std. Plan No 205-2 and shall be paid for as part of the Storm Drain Manhole adjustment bid item.

All IRWD water can and lids shall be removed and replaced with new cans and lids provided by IRWD and adjusted to grade. Adjusting Irvine Ranch Water District (IRWD) water valves to grade shall conform to IRWD Standard Plan W-7, adjusting IRWD sewer manhole frames and covers to grade shall conform to IRWD Standard Plan S-1.

All surface utility covers (even those to be adjusted to grade by others) shall be located in the field prior to beginning any work on this project. The Contractor shall remove existing concrete pads or collars that might interfere with the adjustment of the valve cover to the grade of the asphalt concrete surface. Any damage to existing utility systems or appurtenances by the Contractor shall be replaced at the Contractor's expense.

All IRWD water valves shall be accessible at all times. The Contractor shall notify the Engineer to contact IRWD inspector at (949) 476-7500 for inspection of this work.

The following method shall be utilized to adjust manhole frames and covers, water valve covers, and survey well monument covers.

- a) After the asphalt concrete pavement overlay has been completed, circular holes shall be cut where the cover exists. The diameter of the circular hole shall be at least twenty-four inches (24") larger than the outer diameter of the cover.
- b) The cover shall then be raised to the finished pavement grade and suitably blocked and concreted in place to the satisfaction of the Owner's Representative.
- c) A PCC collar shall be poured around the cover to an elevation no more than two inches (2") below finished pavement grade. Said PCC collar shall have a minimum depth of eight inches (8") or (as shown per plan) and be placed over four inches (4") of crushed aggregate base (CAB), thoroughly compacted to 95% minimum relative compaction.

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d) After the concrete has cured sufficiently, a tack coat shall be applied and ARHM-GG-C surface course material shall be placed to finished pavement grade.

All utility facilities other than City or IRWD facilities within the paving limits shall be protected in place. Existing SCE and AT&T vaults/manholes existing within the project limits. Temporary asphalt ramping shall be required around each vault/manhole until the completion of the final paving operations.

All existing SCG slip can lids shall protected in place and sipped/raised to grade during the paving operations. No separate bid item or payment will be provided for this adjustment.

Adjustment of monument well frame and cover to grade shall include the protection of the existing monument in place. Any damage caused to the monument shall require the Contractor to re-set and file the existing monument per County of Orange Surveyor requirements.

The contact information for the utility agencies notified and present within the project limits are as follows:

Utility Agency	Utility Coordinator	Phone Number
AT&T - DISTRIBUTION	Bob Fleisher	(949) 480-6066
COX COMMUNICATIONS	Debbi Borroel	(949)546-2750
CROWN CASTLE- LA & VEN	Bryant Lowe	(724)416-2193
EL TORO WATER DISTRICT	Bobby Young	(949)837-7050
IRVINE RANCH WATER DISTRICT	Christian Kessler	(949)453-5441
LEVEL 3 COMMUNICATIONS	John Trujillo	(720)888-4465
ORANGE COUNTY PUBLIC WORKS OCFCD	Sal Gutierrez	(704)647-3992
SC GAS - ALISO VIEJO	Brad Morrison	(714)634-3061
SC GAS - TRANSMISSION	Rosalyn Squires	(818)701-4546
SCE - TELECOM	Eric Lopez	626-422-9256
TRANSPORTATION CORRIDOR AGENCIES	David Lowe	(949)754-3488
TRBUCO CANYON WATER DISTRICT	Neil Mckenna	(949)858-0277

ADD the following subsection:

301-1.6.1 Measurement and Payment

Measurement & Payment for Adjust Storm Drain Manhole to Grade and Adjust Monument Well Frame and Cover to Grade will be at the contract unit price bid per **Each (EA)** and shall include all related ARHM and PCC work, traffic control, coordination with the City, and protection of the work during PCC curing and all incidentals to accomplish the work as specified herein, and no additional compensation will be allowed therefore.

Measurement & Payment for Adjust Sanitary Sewer Manhole to Grade (IWRD Facility) will be at the contract unit price bid per **Each (EA)** and shall include all related ARHM and PCC work, Coordination with IRWD and traffic control, and protection of the work during PCC curing and all incidentals to accomplish the work as specified herein, and no additional compensation

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will be allowed therefore.

Measurement & Payment for Remove Existing and Install New Water Valve Frame and Cover to Grade (IRWD Facility) will be at the contract unit price bid per **Each (EA)** and shall include all related asphalt concrete and PCC work, Coordination with IRWD, traffic control, and protection of the work during PCC curing and all incidentals to accomplish the work as specified herein. New frame and covers for the water vales will be provided by IRWD. Contractor whall assume all necessary hours for coordination and delivery of materials to the project site.

SECTION 302 – ROADWAY SURFACING

302-1 COLD MILLING OF EXISTING PAVEMENT

302-1.1 General. *After the last paragraph, ADD the following text:*

Cold milling shall be a variable or constant depth cut for the various widths of cold millings called for on the plans. Cold milling shall conform to the details shown on the plans and these Special Provisions. All temporary striping required after cold milling operations shall be installed per City Standards. All required temporary striping shall be considered paid for under the bid item for Traffic Control. No additional compensation will be allowed.

2" uniform depth Cold milling shall not be performed more than three (3) days ahead of final paving operations. Locations designated for 4" uniform depth cold milling shall have the associated 2" leveling/base course asphalt installed on the same day as the grinding operations and shall not be performed more than three (3) days ahead of final paving operations.

Residue from grinding shall not be permitted to flow or travel into gutters, onto adjacent street surfaces or parkways. All residues shall be completely removed by a vacuum sweeper and properly disposed. Sweeping is to take place immediately after the grinding has been completed, continue daily until all residue is removed, and as directed by the Engineer. No washing of any residue into gutters and/or drainage structures shall be allowed. The Contractor shall cover and protect all storm drain inlets prior to the start of cold milling operations.

All pavement transitions and temporary striping/markings shall be in place prior to the opening of a lane for traffic. Any pavement grade differential between adjacent lanes that will, with the permission of the Engineer, remain during non-working hours shall be indicated with the appropriate warning signage.

Cold mix A.C. shall be placed and maintained at the interface between milled and non-milled areas to eliminate the hazard caused by sudden elevation differences, especially in pedestrian path of travel areas adjacent to wheelchair ramps, and shall be removed prior to placement of surface course pavement.

The Contractor shall provide ADA access and detours at all times for pedestrian facilities and bike lanes when cold milling.

The Contractor is to notify the Engineer at least two (2) working days prior to and immediately after the cold mill operations so that observations and measurements may be made of areas before the placement of permanent asphalt.

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302-1.1 Measurement. *After the last paragraph, ADD the following text:*

Measurement for all cold mill bid items shall be done on a square foot basis as measured in the plan view. No additional square footage will be allowed for additional passes of the grinder, or overlaps between the passes.

302-1.12 Payment. *After the last paragraph, ADD the following text:*

Payment for 0" - 2" Variable Depth Cold Mill, Cold Mill 2" Existing Pavement, and Cold mill 4" Existing Pavement will be at the contract unit price bid per **Square Foot (SF)** as detailed in the Bid Proposal and as indicated on the plans and specified. No additional payment will be given for additional passes of the grinder or the overlap between passes. Any temporary AC required due to cold milling operations shall be included in the lump sum cost for Traffic Control and no additional compensation will be allowed.

302-5 ASPHALT CONCRETE PAVEMENT

302-5.1 General. *After the last paragraph, ADD the following text:*

All conventional asphalt for the full depth asphalt removal and replacement section as well as the 2" AC leveling course shall be Type III B2-PG 64-10 Asphalt.

Tack coat shall be Grade SS-1H, per Section 302-5.4 and shall be applied to the perimeter of all AC removal and replacement locations and cold milling locations. (All tack coat over spray on gutter edges shall be removed.) Additionally, all excessive tack left on the roads from trucking operations and the paving operations on adjacent streets shall be cleaned and removed by the contractor. Any striping that is smeared or dirtied by the paving operation shall also be re-striped at no additional cost.

Materials

The Contractor shall furnish asphalt in conformance with the State of California Department of Transportation (Caltrans) "Certification Program for Suppliers of Asphalt." Caltrans maintains the program requirements, procedures, and a list of approved suppliers at:

<http://www.dot.ca.gov/hq/esc/Translab/fpmcoc.htm>.

The Contractor shall ensure the safe transportation, storage, use, and disposal of asphalt.

The Contractor shall prevent the formation of carbonized particles caused by overheating asphalt during manufacturing or construction.

Sampling

The Contractor shall provide a sampling device in the asphalt feed line connecting the plant storage tanks to the asphalt weighing system or spray bar. The sampling device shall be accessible between 600 and 750 mm above the platform. The Contractor shall provide a receptacle for flushing the sampling device.

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The sampling device shall include a valve:

- With a diameter between 10 and 20 mm
- Manufactured in a manner that a one-liter sample may be taken slowly at any time during plant operations.
- Maintained in good condition.

The Contractor shall replace failed valves.

In the presence of the Engineer, the Contractor shall take 2 one-liter samples per operating day. The Contractor shall provide round friction top containers with one-liter capacity for storing samples.

302-5.5 Distribution and Spreading. *After the last paragraph, ADD the following text:*

The Contractor shall be responsible for maintaining location of and access to all water line gate valves during construction operations. Locations of water valves shall be marked to IRWD standards.

Prior to placing the asphalt leveling and ARHM finished course all cracks greater than or equal to ¼ inch in width shall be sprayed with soil sterilant. Soil Sterilant shall be "Poly-Bor Chlorate" or Monbar Chlorate" (U.S. Borax and Chemical Corporation, or approved equal), applied in solution of one (1) pound of chemical to one (1) gallon of water at least 10 days prior to placing of the Rubberized Asphalt Overlay. The sterilant shall be applied to cracks larger than one-fourth (1/4) inch with a paddle agitator spray rig. The Contractor shall provide all necessary protection to prevent injury to animals or adjacent plant life and property occasioned by the application of the soil sterilant. The Contractor will be held responsible for all personal

302-5.6 Rolling

302.5.6.1 General. *After the last paragraph, ADD the following text:*

Initial or breakdown compaction shall consist of a minimum of three coverages of a layer of asphalt mixture. A pass shall be a movement of a roller in both directions over the same path. A coverage shall be as many passes as are necessary to cover the entire width being paved. Overlap between passes during any coverage made to insure compaction without displacement of material in accordance with good rolling practice shall be considered a part of the coverage being made and not a part of a subsequent coverage. Each coverage shall be completed before subsequent coverages are started. Pneumatic rollers shall not be used without prior approval of the Engineer. The top layer of each lane, once commenced, shall be placed without interruption.

302-5.9 Measurement and Payment. *After the last paragraph, ADD the following text:*

Measurement & Payment for Construct 4" AC / 11.5" CMB Pavement will be at the contract unit price bid per **Square Foot (SF)** as measured in the field in plan view and shall include all labor, materials and work required to fully complete the noted items including subgrade preparation, installation of CMB, installation of AC leveling course, tack coat, traffic control, and the protection of improvements until the construction of the final ARHM finished course and any other work required to complete this item as specified and directed by the City.

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Measurement & Payment for Construct 2" AC Leveling Course will be at the contract unit price bid per **Ton** as measured by the actual tonnage (ton) of material placed in accordance with the plans and no additional compensation will be allowed therefore. The Contractor shall furnish to the Engineer at the time of delivery of the material on the job site a legible copy of a licensed weighmaster's certificate showing gross, tare, and net weights of each truckload of asphalt concrete mixture. Material that is delivered but not placed within the allotted bid item will not be measured or paid for. This work item shall include all surface preparation and weed abatement as well as labor, materials and work required to fully complete the noted item of work.

The City will not compensate the Contractor for any additional costs incurred by change or lack of availability of asphalt binders.

Temporary asphalt concrete work, where required by the Engineer for traffic control or other purposes, shall be considered included in the price bid for Traffic Control and no additional compensation will be allowed therefore.

302-9 ASPHALT RUBBER HOT MIX (ARHM)

302-9.1 General. *After the last paragraph, ADD the following text:*

All ARHM shall comply with section 203-11 of the standard specifications. The Contractor shall submit a copy of the asphalt concrete mix design, a sample of the asphalt concrete, a sample of the aggregate, and a sample of the paving asphalt to the City or its designated laboratory a minimum of two weeks prior to the start of construction.

The ARHM Overlay shall be ARHM-GG-C.

Materials

The Contractor shall furnish asphalt in conformance with the State of California Department of Transportation (Caltrans) "Certification Program for Suppliers of Asphalt." Caltrans maintains the program requirements, procedures, and a list of approved suppliers at:
<http://www.dot.ca.gov/hq/esc/Translab/fpmcoc.htm>.

The Contractor shall ensure the safe transportation, storage, use, and disposal of asphalt.

The Contractor shall prevent the formation of carbonized particles caused by overheating asphalt during manufacturing or construction.

Sampling

The Contractor shall provide a sampling device in the asphalt feed line connecting the plant storage tanks to the asphalt weighing system or spray bar. The sampling device shall be accessible between 600 and 750 mm above the platform. The Contractor shall provide a receptacle for flushing the sampling device.

The sampling device shall include a valve:

- With a diameter between 10 and 20 mm

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- Manufactured in a manner that a one-liter sample may be taken slowly at any time during plant operations.
- Maintained in good condition.

The Contractor shall replace failed valves. In the presence of the Engineer, the Contractor shall take 2 one-liter samples per operating day. The Contractor shall provide round friction top containers with one-liter capacity for storing samples.

302-9.4 Distribution and Spreading. *After the last paragraph, ADD the following text:*

The Contractor shall make modifications to the proposed mix design as required by the City or its designated laboratory to insure that the proposed asphalt concrete mix will meet the minimum stability ("S") values. No asphalt concrete shall be placed until such time as the City has tested and approved the Contractor's proposed asphalt concrete mix design. Aggregate produced from slag resulting from any steel-making process or from air-cooled iron blast furnace slag shall not be used on this project.

Asphalt concrete shall be placed with a paving machine equipped with a "Preco" attachment or similar device for use in obtaining constant cross- slope and maximum joint quality.

Apply SS-1H tack coat at a rate not to exceed one-tenth (1/10) gallon per square yard uniformly in one coat on all vertical joints of AC patching and P.C.C. surfaces and edges against which ARHM is to be placed. Diesel fuel shall not be used for cleaning purposes within the limits of this project.

All surfaces to be overlaid shall be cleaned by the use of a broom and a vacuum sweeper. The overlaid surface shall be free of water, dust, or foreign material before tack coat is applied. All raised pavement markers shall be removed prior to the placement of any asphalt concrete overlay. Removal of all AC slurry seal residue from gutter edge should be completed prior to paving.

The Contractor shall utilize a paving machine equipped with an automatic adjusting screed, which is actuated by a 30-foot "ski", for the entire ARHM overlay.

Breakdown compaction shall be performed with a two-axle or three-axle tandem or three-wheel roller weighing not less than 12 tons for all ARHM lift thickness of four (4) inches or less. Breakdown compaction shall be performed with a vibratory roller weighing not less than 12 tons for all ARHM lift thickness between two (2) and four (4) inches. When more than one layer of ARHM is required, the layers shall be of equal thickness.

302-9.5 Rolling. *After the last paragraph, ADD the following text:*

Rolling along a joint shall be such that the widest part of the roller is on the hot side of the joint. Join lines between successive runs shall be within six (6) inches of lane lines or a minimum of twelve (12) feet outside of the outer most lane line.

Lots consisting of 500 tons will be established for ARHM areas to be tested. The City or its designated laboratory shall perform density testing utilizing a properly calibrated nuclear

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asphalt-testing device. The City shall pay for all initial testing and a reasonable amount of retesting utilizing the nuclear asphalt-testing device. If the test results for any lot of ARHM indicate that the relative compaction is below 95 percent the Contractor will be advised that he is not attaining the required relative compaction and that his materials or his procedures, or both, need adjustment. ARHM spreading operations shall not continue until the Contractor has notified the Engineer of the adjustment that will be made in order to meet the required compaction. Core testing of areas not meeting the 95 percent requirement will be conducted by the City's designated lab. Any and all testing beyond the initial core testing will be at the sole expense of the Contractor.

If the test results for any lot of ARHM continue to indicate that the relative compaction is less than 95 percent after adjustments have been made, the ARHM represented by that lot may be required to be removed and replaced at the Contractor's expense and the Contractor shall suspend all further paving operations until the Contractor can demonstrate to the City that relative compactions of 95 percent can be obtained. It shall be the sole judgment of the City Engineer to determine adequate remedy and/or a reduction in compensation for any lot failing to meet 95 percent relative compaction.

The City's designated laboratory will obtain samples of the ARHM from each lot to perform extraction tests to insure the proper aggregate gradation and asphalt content is being supplied in accordance with the approved ARHM mix design. If the test results for any lot of ARHM indicate that the ARHM does not meet the requirements of the approved mix design the Contractor will be advised that he is not attaining the required composition and grading and that his materials need adjustment. ARHM spreading operations shall not continue until the Contractor has notified the Engineer of the adjustment that will be made in order to meet the approved mix design. If the test results for any lot of ARHM continue to indicate that the composition and grading does not conform to the approved mix design after adjustments have been made, the ARHM represented by that lot shall be removed and replaced at the Contractor's expense and the Contractor shall suspend all further paving operations until the Contractor can demonstrate to the City that the ARHM is in accordance with the approved mix design.

The Contractor shall provide for adequate quality control measures to insure that delivery of asphalt rubber shall be neither too slow nor too fast to prevent stopping of the paving operation and/or cooling of the asphalt rubber material. Material delivery scheduling and handling is critical to provide for optimum compaction opportunity and maximize ride quality performance.

302-9.6 Rock Dust Blotter. *After the last paragraph, ADD the following text:*

Rock dust blotter material shall be required immediately after the completion of the "finish rolling" and prior to opening to traffic to prevent bleeding and tracking of the asphalt rubber material.

All excess rock dust blotter shall be removed from the street at the end of each workday. The removal of the rock dust blotter shall include removal from adjacent streets as needed. No excess rock dust blotter shall be left on any street after normal work hours. The cost of this application will be included into the contract unit price bid for ARHM.

302-9.7 Material Transfer Device (MTD). *After the last paragraph, ADD the following Subsection:*

General

The material transfer device (Shuttle Buggy) shall be used for the placement of ARHM. The material transfer device speed shall be adjusted to the speed of the paver to maintain a continuous, non-stop paving operation.

Materials and Equipment

The material transfer device shall have a minimum surge capacity of 15 tons, shall be self-propelled and capable of moving independent of the paver, and shall be equipped with the following:

- (a) Front-Dump Hopper and Conveyor. The conveyor shall provide a positive restraint along the sides of the conveyor to prevent material spillage. Material Transfer devices having paver style hoppers shall have a horizontal bar restraint placed across the foldable wings which prevents the wings from being folded.
- (b) Paver Hopper Insert. The paver hopper insert shall have a minimum capacity of 14 tons
- (c) Mixer/Agitator Mechanism. This re-mixing mechanism shall consist of a segmented, anti-segregation, re-mixing auger or two full-length longitudinal paddle mixers designed for the purpose of re-mixing the ARHM. The longitudinal paddle mixers shall be located in the paver hopper insert.

Structures

The material transfer device may be allowed to travel over structures under the following conditions:

- (a) Approval will be given by the Engineer.
- (b) The vehicle shall be emptied of ARHM material prior to crossing the structure and shall travel at crawl speed across the structure.
- (c) The tires of the vehicle shall travel on or in close proximity and parallel to the beam and/or girder lines of the structure.

302-9.8 Measurement and Payment. *After the last paragraph, ADD the following Subsection:*

Measurement for the quantities of the Asphalt Rubber Hot Mix will be measured by the actual tonnage (ton) of material placed in accordance with the plans and no additional compensation will be allowed therefore. The Contractor shall furnish to the Engineer at the time of delivery of the material on the job site a legible copy of a licensed weighmaster's certificate showing gross, tare, and net weights of each truckload of asphalt concrete mixture. Material that is delivered but not placed within the allotted bid item will not be measured or paid for.

Payment for Construct 2" Asphalt Rubber Hot Mix (ARHM) Finish Course will be at the contract unit price bid per **Ton** . The contract unit price per ton shall include full compensation for all surface preparation, furnishing all labor, materials, tools, equipment, removals, disposal, certified weigh tickets, and incidentals and for doing all the work involved, including furnishing, applying and cleaning up excess rock dust blotter. The City will not compensate the Contractor for any additional costs incurred by change or lack of availability of asphalt binders. Temporary surface work where required by the Owner's Representative for traffic control or other purposes

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shall be considered included in the price bid for Traffic Control and no additional compensation will be allowed.

SECTION 303 – CONCRETE AND MASONRY CONSTRUCTION

303-1 CONCRETE STRUCTURES.

303-1.1 General *After the last paragraph, ADD the following text*

As part of the Bake Parkway median replacements, an existing 24"x24" grated inlet must be replaced or, at the contractor's option and City's approval of field conditions, relocated and re-connected to the existing storm drain system. All new grated inlets shall be pre-cast concrete grated inlets with grates matching the existing make, weight, and type of the existing inlet.

Prior to ordering the inlet, the Contractor shall verify existing join elevations to ensure positive drainage can be achieved. The Contractor will be responsible for all trenching, new piping, installation of a 45 degree bend and junction structure to join existing storm drains, and backfill, compaction, and flow testing of the grated inlet prior to approval of the work.

303-1.11 Payment *After the last paragraph, ADD the following text*

Measurement & Payment for Remove & Replace Existing Grated Inlet, Furnish & Install New 8" Storm Drain to Connect to Existing Storm Drain, will be at the contract unit price bid per **Lump Sum (LS)**. The contract unit price shall include full compensation for all field verifications, obtaining approval of the make/model of inlets, coordinating submittals, removal and disposal of existing facilities/materials, installation of the new grated inlet, installation of new storm drain piping (including all bends and junction structures), testing of the storm drain system for positive drainage, backfill and compaction of the proposed improvements, and all other work associated with fully completing the construction and no additional compensation will be allowed.

303-5 CONCRETE CURBS, WALKS, GUTTERS, CROSS GUTTERS, ALLEY INTERSECTIONS, ACCESS RAMPS, AND DRIVEWAYS.

303-5.1 Requirements

303-5.1.1 General. *After the last paragraph, ADD the following text:*

Sidewalk and curb access ramps shall be opened to pedestrian access on the day following concrete placement. In addition, all forms shall be removed, irrigation systems shall be repaired, and backfill or patchback shall be placed within 72 hours following concrete placement. Newly poured P.C.C. improvements subject to vehicle loads shall not be opened to vehicle traffic until the concrete has cured to a minimum strength of 3,000 psi.

Curbs

All Curb/Curb and Gutter shall be constructed to the line and grades shown on the plans or as ordered by the Engineer. Existing curb and gutter to be joined shall be sawcut on a neat, straight line at the join location. Curb or curb and gutter construction shall occur prior to all cold milling and paving operations.

All curb construction shall include the sawcutting and full AC reconstruction of a 2' wide portion of AC pavement next to the curb or curb and gutter as shown on the plans. The pavement section with the 2' slot pave shall be backfilled with 2-sack slurry, and capped with the 2"

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Minimum fished course ARHM overlay.

Curb & Gutter replacement within cross gutter spandrels shall be cut at a 2" offset from the flowline. Epoxied Dowels shall be installed at 24" O.C. within the limits of all curb/curb and gutter replacements within cross gutter limits.

Curb & gutter replacements include the replacement of curb and gutter sections that are transitions to existing cross gutters.

All curb and gutter constructed as part of a curb ramp removal and replacement shall be paid for as part of the curb ramp bid item. Curb/Curb & Gutter replacements within the limits of a curb ramp that is to be protected in place shall be paid for as part of the curb and gutter bid item.

Curb and gutter replacement includes the removal and replacement of depressed curbs at driveways or curb ramps. Contractor shall match existing flowline and curb heights within project limits for all removal and replacements.

Median curb removals include only the quantities of curb removed at Bake Parkway. The cost of the curb removals at Alton parkway shall be included in the removal and replacement price for the channelizing island improvements.

Bake Parkway Median Curb

Construction of the median curb shall be per the elevations and bearings provided on the plans. The curb shall be poured per the provided top of curb elevations at a standard 8" curb height. Per the plan details, the design pavement section elevations have been designed to create a resultant 6" curb face in order to match the adjoining median curbs. Contractor shall pay close attention to the paving operations at the median relocations in order to ensure a continuous 6" resultant curb face, with an underlying total 8" PCC median curb.

Payment for the bake parkway median construction item shall include all associated costs for surveying and staking.

Sidewalk

All Concrete sidewalk shall be constructed to ADA compliant grades and as ordered by the Engineer. Existing surfaces to be joined shall be sawcut on a neat, straight line at the join location. The contractor shall remove and replace any new concrete work with graffiti markings and blemishes at no additional cost to the City.

Should the join limits of a sidewalk be non-ADA compliant, the sidewalk shall be transitioned over a short distance from the non-compliant grades to construct a majority of the new sidewalk panel at fully ADA compliant grades. Weakened plane joints shall be added at the end of the ADA compliant transition limits in order to facilitate future removal and replacement of the non-compliant sections.

This work item shall also include all necessary natural ground import or miscellaneous excavation, removal and export as may be required to install the new 4" PCC Sidewalk and necessary irrigation system modifications, protection and adjustments that may be required. The Contractor shall also be required to conduct all necessary grading at the new back of walk

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in order to ensure that full ADA compliance is achieved within the new sidewalk areas.

Import of backfill soil may be required at select locations during the course of sidewalk/PCC surface removal and replacement. All minor backfill required to achieve the required ADA compliant grades are included as part of the sidewalk removal and replacement bid item.

All sidewalk removal and replacement between the proposed curb ramp and the back of walk as projected back perpendicular from the curb ramp wing limits shall be included as part of the curb ramp removal and replacement item. All sidewalk beyond the wings of a curb ramp removal and replacement limits shall be paid for as part of the sidewalk removal and replacement item.

All additional sidewalk removal limits shall be approved by the City prior to removal and replacement. No compensation will be provided for additional removals that are not authorized.

Curb Ramps

Curb ramp removal limits include all work located within the grooved curb ramp border, as well as the removal and replacement of the existing sidewalk located behind the curb ramp extending to the existing back of walk, as well as the removal and replacement of the curb and gutter and 2'-4' slot pave.

The 2'-4' slot pave shall be backfilled with 2-sack slurry and shall be paved with a 2" minimum ARHM finished course pavement.

The Contractor shall be responsible for verifying the existing pavement grades at the curb ramp and ensuring a minimum 4' long, maximum 5% landing at the bottom of each ramp. The grades of the gutter shall be adjusted at the curb ramp to ensure all gutter pans are set at a maximum of 5%.

All work beyond the curb ramp wing limits and grooved border which has been approved by the engineer, shall be considered as extra sidewalk or curb and gutter items and will be paid for per the respective unit price.

Concrete Curb Ramps shall be constructed to the line, grades and designs shown on the plans or as directed by the Engineer. Existing surfaces to be joined shall be sawcut on a neat, straight line at the join location. All saw cut locations along existing cross gutters shall be cut in a curve conforming to the existing curb return and shall be cut at a set offset from the flow line as approved by the City Engineer. The flow line shall be maintained, ensuring that ponding does not occur in the existing cross gutter.

Any and all Traffic Signal, or utility appurtenances falling within the limits of curb ramp construction shall be adjusted to the finished grade of the new curb ramp and shall be included in the base unit price per ramp unless otherwise noted on the plans. Additionally, all pedestrian push button poles, traffic signal poles and other surface mounted appurtenances shall be protected in place and/or re-attached as part of this bid item. The Contractor shall remove and replace any new concrete work with graffiti markings and blemishes at no additional cost to the City.

All water or gas valve can and lids within curb ramp limits shall also be adjusted to the finished

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grade of the new curb ramp and shall be paid for per the unit price for each respective bid item.

It shall be the Contractors responsibility to implement the given standard plan and case/type of curb ramp at each project location to ensure full ADA compliance. The Contractor shall provide adequate means for setting and forming grades to ensure the final curb ramp is fully ADA compliant.

The City Engineer shall have final say regarding the case and type of curb ramp to be installed and shall retain the right to revise the ramp designation at any point prior to construction.

Alton Parkway Channelizing Island ADA Path of Travel

The scope of work for the ADA path of travel at the SEC of Alton Parkway and Portola Parkway shall include all removals, grading, subgrade preparation, forming and pouring of PCC walkway and curbs within the channelizing island, and the installation of the 6' wide, 3' deep, wet set truncated domes. The forming and pouring of the curb adjacent to the paved surface shall be paid for as part of the 8" median curb line item. The payment for all PCC sidewalk behind the channelizing island walkway curbs shall be paid for as part of the sidewalk removal and replacement line item. The contractor shall be responsible for verifying, setting, and pouring ADA compliant grades within the path of travel.

Detectable Warning System

All curb ramps shall have a detectable warning surface that extends the full width of the ramp and 3 feet minimum length. The finished surfaces of the detectable warning surface shall be free from blemishes.

The color of the detectable warning surface shall be Onyx Black

Retrofit detectable warning surfaces shall be Onyx Black

All cast in place detectable warning systems shall comply with the following:

GENERAL

1.1 SUBMITTALS

- A. Product Data: Submit manufacturer's literature describing products, installation procedures and routine maintenance.
- B. Samples for Verification Purposes: Submit two (2) tile samples minimum 12"x12" of the kind proposed for use.
- C. Shop drawings are required for products specified showing fabrication details, composite structural system, tile surface profile, sound on cane contact amplification feature, plans of tile placement including joints, and material to be used as well as outlining installation materials and procedure.
- D. Material Test Reports: Submit complete test reports from qualified accredited independent testing laboratories to qualify that materials proposed for use are in compliance with requirements and meet or exceed the properties indicated on the specifications. All tests shall be conducted on a Cast In Place Detectable/Tactile Warning Surface Tile system as certified by a qualified independent testing laboratory.
- E. Maintenance Instructions: Submit copies of manufacturer's specified installation and

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maintenance practices for each type of Detectable Warning Surface Tile and accessory as required.

1.2 QUALITY ASSURANCE

- A. Provide Cast In Place Detectable/Tactile Warning Surface Tiles and accessories as produced by a single manufacturer with a minimum of five (5) years' experience in the manufacturing of Cast In Place Detectable/Tactile Warning Surface Tiles.
- B. Installer's Qualifications: Engage an experienced Installer certified in writing by Cast In Place Detectable/Tactile Warning Surface Tile manufacturer as qualified for installation, who has successfully completed installations similar in material, design, and extent to that indicated for Project.
- C. Americans with Disabilities Act (ADA): Provide Surface Applied Detectable/Tactile Warning Surface Tiles which comply with the detectable warnings on walking surfaces section of the Americans with Disabilities Act (Title III Regulations, 28 CFR Part 36 ADA STANDARDS FOR ACCESSIBLE DESIGN, Appendix A, Section 4.29.2 DETECTABLE WARNINGS ON WALKING SURFACES).
- D. California Code of Regulations (CCR): Provide only approved DSAAC detectable warning products as provided in the California Code of Regulations (CCR) Title 24, Chapter 2, Section 202 definition of "Detectable Warning". Section 11B-247 and 11B-705 "Detectable Warnings And Detectable Directional Texture"
- E. Vitrified Polymer Composite (VPC) Cast In Place Detectable/Tactile Warning Surface Tiles shall be an epoxy polymer composition with an ultra violet stabilized coating employing aluminum oxide particles in the truncated domes. The tile shall incorporate an in-line pattern of truncated domes measuring nominal 0.2" height, 0.9" base diameter, and 0.45" top diameter, spaced center-to-center 2.35" to 2.40 as measured "In Line". For wheelchair safety the field area shall consist of a non-slip surface with a minimum of 40 - 90° raised points 0.045" high, per square inch.
 - 1. Dimensions: Cast In Place Detectable/Tactile Warning Surface Tiles shall be held within the following dimensions and tolerances:
 - Length and Width:
 - [36x48] [36x60]
 - nominal Depth:
 - 1.375 (1-3/8") (+/-)
 - 5% max.
 - Face Thickness: 0.1875
 - (1-3/8") (+/-) 5% max.
 - Warpage of Edge: 0.5%
 - max.
 - Embedment Flange Spacing: shall be no greater than 3.1"
- 2. Water Absorption of Tile when tested by ASTM D 570-98 not to exceed 0.05%.
- 3. Slip Resistance of Tile when tested by ASTM C 1028-96 the combined Wet and Dry Static Co-Efficients of Friction not to be less than 0.80 on top of domes and field area.
- 4. Compressive Strength of Tile when tested by ASTM D 695-02a not to be less than 28,000 psi.
- 5. Tensile Strength of Tile when tested by ASTM D 638-03 not to be less than 19,000 psi.
- 6. Flexural Strength of Tile when tested by ASTM D 790-03 not to be less than 25,000 psi.
- 7. Chemical Stain Resistance of Tile when tested by ASTM D 543-95 (re approved 2001) to withstand without discoloration or staining - 10% hydrochloric acid, urine, saturated

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calcium chloride, black stamp pad ink, chewing gum, red aerosol paint, 10% ammonium hydroxide, 1% soap solution, turpentine, Urea 5%, diesel fuel and motor oil.

8. Abrasive Wear of Tile when tested by BYK - Gardner Tester ASTM D 2486-00 with reciprocating linear motion of $37 \pm$ cycles per minute over a 10" travel. The abrasive medium, a 40 grit Norton Metallite sand paper, to be fixed and leveled to a holder. The combined mass of the sled, weight and wood block is to be 3.2 lb. Average wear depth shall not exceed 0.060 after 1000 abrasion cycles when measured on the top surface of the dome representing the average of three measurement locations per sample.
9. Resistance to Wear of Unglazed Ceramic Tile by Taber Abrasion per ASTM C501-84 (re approved 2002) shall not be less than 500.
10. Gardner Impact to Geometry "GE" of the standard when tested by ASTM D 5420-04 to have a mean failure energy expressed as a function of specimen thickness of not less than 550 in. lbf/in. A failure is noted when a crack is visible on either surface or when any brittle splitting is observed on the bottom plaque in the specimen.
11. Accelerated Weathering of Tile when tested by ASTM G 155-05a for 3000 hours shall exhibit the following result – $\Delta E < 4.5$, as well as no deterioration, fading or chalking of surface of tile color No 33538
12. Accelerated Aging and Freeze Thaw Test of Tile and Adhesive System when tested to ASTM D 1037-99 shall show no evidence of cracking, delamination, warpage, checking, blistering, color change, loosening of tiles or other detrimental defects.
13. Salt and Spray Performance of Tile when tested to ASTM B 117-03 not to show any deterioration or other defects after 200 hours of exposure.
14. AASHTO HB-17 single wheel HS20-44 loading "Standard Specifications for Highways and Bridges". The Cast In Place Tile shall be mounted on a concrete platform with a $\frac{1}{2}$ " airspace at the underside of the tile top plate then subjected to the specified maximum load of 10,400 lbs., corresponding to an 8000 lb individual wheel load and a 30% impact factor. The tile shall exhibit no visible damage at the maximum load of 10,400 lbs.
15. Embedment flange spacing shall be no greater than 3.1" center to center spacing as illustrated on the product Cast In Place drawing.

1.3 DELIVERY, STORAGE AND HANDLING

- A. Cast In Place Detectable/Tactile Warning Surface Tiles shall be suitably packaged or crated to prevent damage in shipment or handling. Finished surfaces shall be protected by sturdy plastic wrappings to protect tile from concrete residue during installation and tile type shall be identified by part number.
- B. Cast In Place Detectable/Tactile Warning Surface Tiles shall be delivered to location at building site for storage prior to installation.

1.4 SITE CONDITIONS

- A. Environmental Conditions and Protection: Maintain minimum temperature of 40°F in spaces to receive Cast In Place Detectable/Tactile Warning Surface Tiles for at least 24 hours prior to installation, during installation, and for not less than 24 hours after installation.
- B. The use of water for work, cleaning or dust control, etc. shall be contained and controlled and shall not be allowed to come into contact with the general public. Provide barricades or

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screens to protect the general public.

1.5 GUARANTEE

- A. Cast In Place Detectable/Tactile Warning Surface Tiles shall be guaranteed in writing for a period of five (5) years from date of final completion. The guarantee includes defective work, breakage, deformation, fading and loosening of tiles.

EXECUTION

3.1 INSTALLATION

- A. During Cast In Place Detectable/Tactile Warning Surface Tile installation procedures, ensure adequate safety guidelines are in place and that they are in accordance with the applicable industry and government standards.
- B. Prior to placement of the Cast In Place Detectable/Tactile Warning Surface Tile system, review manufacturer and contract drawings with the Contractor prior to the construction and refer any and all discrepancies to the Engineer.
- C. The specifications of the structural embedment flange system and related materials shall be in strict accordance with the contract documents and the guidelines set by their respective manufacturers. Not recommended for asphalt applications.
- D. The physical characteristics of the concrete shall be consistent with the contract specifications while maintaining a slump range of 4 - 7 to permit solid placement of the Cast In Place Detectable/Tactile Warning Surface Tile system. An overly wet mix will cause the tile to float. Under these conditions, suitable weights such as 2 concrete blocks or sandbags (25 lb) shall be placed on each tile.
- E. The concrete pouring and finishing operations require typical mason's tools, however, a 4' long level with electronic slope readout, 25 lb. weights, and a large non-marring rubber mallet are specific to the installation of the Cast In Place Detectable/Tactile Warning Surface Tile system. A vibrating mechanism can be employed, if desired. The vibrating unit should be fixed to a soft base such as wood, at least 1 foot square.
- F. The factory-installed plastic sheeting must remain in place during the entire installation process to prevent the splashing of concrete onto the finished surface of the tile.
- G. When preparing to set the tile, it is important that no concrete be removed in the area to accept the tile. It is imperative that the installation technique eliminates any air voids under the tile. Holes in the tile perimeter allow air to escape during the installation process. Concrete will flow through the large holes in each embedment flange on the underside of the tile. This will lock the tile solidly into the cured concrete.
- H. The concrete shall be poured and finished true and smooth to the required dimensions and slope prior to the tile placement. Immediately after finishing concrete, the electronic level should be used to check that the required slope is achieved. The tile shall be placed true and square to the curb edge in accordance with the contract drawings. The Cast In Place Detectable/Tactile Warning Surface Tiles shall be tamped (or vibrated) into the fresh concrete to ensure that the field level of the tile is flush to the adjacent concrete surface. The embedment process should not be accomplished by stepping on the tile as this may cause uneven setting which can result in air voids under the tile surface. The contract drawings indicate that the tile field level (base of truncated dome) is flush to adjacent surfaces to permit proper water drainage and eliminate tripping hazards between adjacent finishes.
- I. In cold weather climates it is recommended that the Cast In Place Detectable/Tactile Warning Surface Tiles be set deeper such that the top of domes are level to the adjacent concrete on the top and sides of ramp and that the base of domes to allow water drainage. This installation will reduce the possibility of damage due to snow clearing operations.

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- J. Immediately after placement, the tile elevation is to be checked to adjacent concrete. The elevation and slope should be set consistent with contract drawings to permit water drainage to curb as the design dictates. Ensure that the field surface of the tile is flush with the surrounding concrete and back of curb so that no ponding is possible on the tile at the back side of curb.
- K. While concrete is workable, a 3/8" radius edging tool shall be used to create a finished edge of concrete, then a steel trowel shall be used to finish the concrete around the tile's perimeter, flush to the field level of the tile.
- L. During and after the tile installation and the concrete curing stage, it is imperative that there is no walking, leaning or external forces placed on the tile that may rock the tile causing a void between the underside of tile and concrete.
- M. Following tile placement, review installation tolerances to contract drawings and adjust tile before the concrete sets. Two suitable weights of 25 lb each may be required to be placed on each tile as necessary to ensure solid contact of the underside of tile to concrete.
- N. Following the concrete curing stage, protective plastic wrap is to be removed from the tile surface by cutting the plastic with a sharp knife, tight to the concrete/tile interface. If concrete bled under the plastic, a soft brass wire brush will clean the residue without damage to the tile surface.
- O. If desired, individual tiles can be bolted together using ¼ inch or equivalent hardware. This can help to ensure that adjacent tiles are flush to each other during the installation process. Tape or caulking can be placed on the underside of the bolted butt joint to ensure that concrete does not rise up between the tiles during installation. Any protective plastic wrap which was peeled back to facilitate bolting or cutting, should be replaced and taped to ensure that the tile surface remains free of concrete during the installation process.
- P. Tiles can be cut to custom sizes, or to make a radius, using a continuous rim diamond blade in a circular saw or mini-grinder. Use of a straightedge to guide the cut is advisable where appropriate.
- Q. Any sound-amplifying plates on the underside of the tile, which are dislodged during handling or cutting, should be replaced and secured with construction adhesive. The air gap created between these plates and the bottom of the tile is important in preserving the sound on cane audible properties as required in various jurisdictions.

3.2 CLEANING, PROTECTING AND MAINTENANCE

- A. Protect tiles against damage during construction period to comply with Tactile Tile manufacturer's specification.
- B. Protect tiles against damage from rolling loads following installation by covering with plywood or hardwood.
- C. Clean Tactile Tiles not more than four days prior to date scheduled for inspection intended to establish date of substantial completion in each area of project. Clean Tactile Tile by method specified by Tactile Tile manufacturer.
- D. Comply with manufacturers maintenance manual for cleaning and maintaining tile surface and it is recommended to perform annual inspections for safety and tile integrity.

All surface mounted detectable warning systems shall comply with the following:

GENERAL

1.1 SUBMITTALS

- A. Product Data: Submit manufacturer's literature describing products, installation procedures and routine maintenance.
- B. Samples for Verification Purposes: Submit two (2) tile samples minimum 12"x12" of the kind proposed for use.

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- C. Shop drawings are required for products specified showing fabrication details, composite structural system, tile surface profile, fastener locations, sound on cane contact amplification feature, plans of tile placement including joints, and material to be used as well as outlining installation materials and procedure.
- D. Material Test Reports: Submit complete test reports from qualified accredited independent testing laboratory's to qualify that materials proposed for use are in compliance with requirements and meet or exceed the properties indicated on the specifications. All tests shall be conducted on a Surface Applied Detectable/Tactile Warning Surface Tile system as certified by a qualified independent testing laboratory.
- E. Maintenance Instructions: Submit copies of manufacturer's specified installation and maintenance practices for each type of Detectable Warning Surface Tile and accessory as required.

1.2 QUALITY ASSURANCE

- A. Provide Surface Applied Detectable/Tactile Warning Surface Tiles and accessories as produced by a single manufacturer with a minimum of five (5) years' experience in the manufacturing of Surface Applied Detectable/Tactile Warning Surface Tiles.
- B. Installer's Qualifications: Engage an experienced Installer certified in writing by Surface Applied Detectable/Tactile Warning Surface Tile manufacturer as qualified for installation, who has successfully completed installations similar in material, design, and extent to that indicated for Project.
- C. Americans with Disabilities Act (ADA): Provide Surface Applied Detectable/Tactile Warning Surface Tiles which comply with the detectable warnings on walking surfaces section of the Americans with Disabilities Act (Title III Regulations, 28 CFR Part 36 ADA STANDARDS FOR ACCESSIBLE DESIGN, Appendix A, Section 4.29.2 DETECTABLE WARNINGS ON WALKING SURFACES).
- D. California Code of Regulations (CCR): Provide only approved DSAAC detectable warning products as provided in the California Code of Regulations (CCR) Title 24, Chapter 2, Section 202 definition of "Detectable Warning". Section 11B-247 and 11B-705 "Detectable Warnings And Detectable Directional Texture"
- E. Vitrified Polymer Composite (VPC) Surface Applied Detectable/Tactile Warning Surface Tiles shall be an epoxy polymer composition with an ultra violet stabilized coating employing aluminum oxide particles in the truncated domes. The tile shall incorporate an in-line pattern of truncated domes measuring nominal 0.2" height, 0.9" base diameter, and 0.45" top diameter, spaced center-to-center 2.35" to 2.40" as measured side by side in line. For wheelchair safety the field area shall consist of a non-slip surface with a minimum of 40 - 90° raised points 0.045" high, per square inch.

- 1. Dimensions: Surface Applied Detectable/Tactile Warning Surface Tiles shall be held within the following dimensions and tolerances:

Specifiers Note: Edit section below by selecting desired length and width. Delete non-relevant dimensions.

Length and Width:
[36x48] [36x60]
nominal Depth: 0.1875
(3/16"), (+/-) 5% max.

Face Thickness:
0.1875 (3/16), (+/-) 5%
max. Warpage of
Edge: 0.5% max.

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2. Water Absorption of Tile when tested by ASTM D 570-98 not to exceed 0.05%.
3. Slip Resistance of Tile when tested by ASTM C 1028-96 the combined Wet and Dry Static Co-Efficients of Friction not to be less than 0.80 on top of domes and field area.
4. Compressive Strength of Tile when tested by ASTM D 695-02a not to be less than 28,000 psi.
5. Tensile Strength of Tile when tested by ASTM D 638-03 not to be less than 19,000 psi.
6. Flexural Strength of Tile when tested by ASTM D 790-03 not to be less than 25,000 psi.
7. Chemical Stain Resistance of Tile when tested by ASTM D 543-95 (re approved 2001) to withstand without discoloration or staining - 10% hydrochloric acid, urine, saturated calcium chloride, black stamp pad ink, chewing gum, red aerosol paint, 10% ammonium hydroxide, 1% soap solution, turpentine, Urea 5%, diesel fuel and motor oil.
8. Abrasive Wear of Tile when tested by BYK - Gardner Tester ASTM D 2486-00 with reciprocating linear motion of $37 \pm$ cycles per minute over a 10" travel. The abrasive medium, a 40 grit Norton Metallite sand paper, to be fixed and leveled to a holder. The combined mass of the sled, weight and wood block is to be 3.2 lb. Average wear depth shall not exceed 0.060 after 1000 abrasion cycles when measured on the top surface of the dome representing the average of three measurement locations per sample.
9. Resistance to Wear of Unglazed Ceramic Tile by Taber Abrasion per ASTM C501-84 (re approved 2002) shall not be less than 500.
10. Gardner Impact to Geometry "GE" of the standard when tested by ASTM D 5420-04 to have a mean failure energy expressed as a function of specimen thickness of not less than 550 in. lbf/in. A failure is noted when a crack is visible on either surface or when any brittle splitting is observed on the bottom plaque in the specimen.
11. Accelerated Weathering of Tile when tested by ASTM G 155-05a for 3000 hours shall exhibit the following result – $\Delta E < 4.5$, as well as no deterioration, fading or chalking of surface of tile color No 33538
12. Accelerated Aging and Freeze Thaw Test of Tile and Adhesive System when tested to ASTM D 1037-99 shall show no evidence of cracking, delamination, warpage, checking, blistering, color change, loosening of tiles or other detrimental defects.
13. Salt and Spray Performance of Tile and Adhesive System when tested to ASTM B 117-03 not to show any deterioration or other defects after 200 hours of exposure.

1.3 DELIVERY, STORAGE AND HANDLING

- A. Surface Applied Detectable/Tactile Warning Surface Tiles shall be suitably packaged or crated to prevent damage in shipment or handling. Finished surfaces shall be protected by sturdy wrappings and tile type shall be identified by part number.
- B. Surface Applied Detectable/Tactile Warning Surface Tiles shall be delivered to location at building site for storage prior to installation.

1.4 SITE CONDITIONS

- A. Environmental Conditions and Protection: Maintain minimum temperature of 40°F in spaces to receive Surface Applied Detectable/Tactile Warning Surface Tiles for at least 24 hours prior to installation, during installation, and for not less than 24 hours after installation.
- B. The use of water for work, cleaning or dust control, etc. shall be contained and controlled and shall not be allowed to come into contact with the general public. Provide barricades or screens to protect the general public.

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1.5 GUARANTEE

- A. Surface Applied Detectable/Tactile Warning Surface Tiles shall be guaranteed in writing for a period of five (5) years from date of final completion. The guarantee includes defective work, breakage, deformation, fading and loosening of tiles.

EXECUTION

3.1 INSTALLATION

- A. During all surface preparation and Surface Applied Detectable/Tactile Warning Surface Tile installation procedures, ensure adequate safety guidelines are in place and that they are in accordance with the applicable industry and government standards.
- B. The application of all tiles, adhesives, mechanical fasteners, and caulking shall be in strict accordance with the guidelines set by their respective manufacturers. Not recommended for asphalt applications.
- C. Coordinate with the Contractor or Engineer to ensure that the surfaces being prepared and fabricated to receive the tiles are constructed correctly and adequately for tile installation. Review manufacturer and contract drawings with the Contractor prior to the construction and refer any and all discrepancies to the Engineer.
- D. Set the tile true and square to the curb ramp area as detailed in the design drawings, so that its location can be marked on the concrete surface. A thin permanent marker works well. Remove tile when done marking its location.
- E. The surface to receive the Surface Applied Detectable/Tactile Warning Surface Tile is to be mechanically cleaned with a diamond cup grinder or shot blaster to remove any dirt or foreign material. This cleaning and roughening of the concrete surface should include at least 4 inches around the perimeter of the area to receive the tile, and also along the cross pattern established by the corresponding areas on the backside of the tile. Those same areas should then be cleaned with a clean rag soaked in Acetone.
- F. Immediately prior to installing the Surface Applied Detectable/Tactile Warning Surface Tile, the concrete surfaces must be inspected to ensure that they are clean, dry, free of voids, curing compounds, projections, loose material, dust, oil, grease, sealers and determined to be structurally sound and cured for a minimum of 30 days.
- G. Using Acetone, wipe the backside of the tile around the perimeter and along the internal cross pattern, to remove any dirt or dust particles from the area to receive the adhesive.
- H. Apply Tactile Bond & Seal adhesive to the backside of the tile, following the perimeter and internal cross pattern established by the tile manufacturer. Sufficient adhesive must be placed on the prescribed areas to have full coverage across the 2" width of the adhesive locator and shall be applied to within 1/4" continuously around the perimeter edge of the tile. The entire tube of adhesive shall be applied to the back of each tile, sizes 24" x 36" and greater.
- I. Set the tile true and square to the curb ramp area as detailed in the design drawings.
- J. Working from the center of the tile outwards, proceed to drill and install all fasteners in the tile's molded recesses.
- K. Standing with both feet applying pressure around the molded recess provided in the tile, drill a hole true and straight to a depth of 3½" using a 1/4" masonry drill bit. Drill through the tile without hammer option (on the drill) until the tile has been successfully penetrated, then with hammer option (on the drill) to drill into the concrete. Maintaining foot pressure on both sides of the hole while drilling prevents concrete dust from accumulating between the tile and concrete which can affect the tile being installed flush and may compromise installation integrity.
- L. Immediately after drilling each hole, before moving on to the next, and while still applying foot pressure, mechanically fasten tiles to the concrete substrate using a leather bound or

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- hard plastic mallet to set the fasteners. Ensure the fastener has been placed to full depth in the dome, straight, and flush to the top of dome. Drive the pin of the fastener with the mallet, taking care to avoid any inadvertent blows to the truncated dome or tile surface.
- M. Following the installation of the fasteners, the concrete dust should be vacuumed, brushed or blown away from the tile's surface and adjacent concrete. Using Acetone on a rag, wipe the concrete around the tile's perimeter to ensure a clean, dry surface to receive perimeter sealant.
 - N. Tactile Bond & Seal perimeter caulking sealant should be applied following the sealant manufacturer's recommendations. Tape all perimeter edges of the tile back 1/16" from the tile's perimeter edge and tape the adjacent concrete back 1/2" from the tile's perimeter edge to maintain a straight and even caulking line. Apply sealant around tile perimeter using care to work sealant into any void between the tile and concrete interface. Tool the perimeter caulking with a rounded plastic applicator or spatula to create a cove profile between the tile and adjacent concrete. Remove tape immediately after tooling perimeter caulking sealant.
 - O. Do not allow foot traffic on installed tiles until the perimeter caulking sealant has cured sufficiently to avoid tracking. Curing time is weather dependant (average cure time at 75° F is 30 minutes). Adhesive or caulking on the surface of the truncated dome can be removed with Acetone.
 - P. If installing adjacent tiles, note the orientation of each tile. Careful attention will reveal that one of the long edges of the tile is different than the other in regard to the tiny dotted texture.
 - Q. In order to maintain proper spacing between truncated domes on adjacent tiles, the tapered edge should be trimmed off using a continuous rim diamond blade in a circular saw or mini-grinder. The use of a straightedge to guide the cut is required. All cuts should be made prior to installation of the tiles. If installing adjacent tiles, care should be taken to leave a 1/8 inch gap between each tile to allow for expansion and contraction.
 - R. If tiles are custom cut to size, if pre-molded recesses (to receive fasteners) are removed by the cut, or to maintain a tight installation to the substrate then any truncated dome can be center-drilled with a 1/4 inch masonry drill bit to create a through hole, and the through hole must be countersunk with a suitable carbide countersink bit to receive mechanical fasteners. Care should be taken to not countersink too widely or deeply. Fasteners should be flush with the top of the truncated dome when countersunk properly.

3.2 CLEANING, PROTECTING AND MAINTENANCE

- A. Protect tiles against damage during construction period to comply with Tactile Tile manufacturer's specification.
- B. Protect tiles against damage from rolling loads following installation by covering with plywood or hardwood.
- C. Clean Tactile Tiles not more than four days prior to date scheduled for inspection intended to establish date of substantial completion in each area of project. Clean Tactile Tile by method specified by Tactile Tile manufacturer.
- D. Comply with manufacturers maintenance manual for cleaning and maintaining tile surface and it is recommended to perform annual inspections for safety and tile integrity.

Payment:

Payment for the installation of cast in place detectable warning surfaces shall be included in the price of the respective curb ramp or removal and replacement bid item. Payment for the retrofit of detectable warning surfaces on existing ramps/walkways shall be paid for as part of the detectable warning surface bid item.

303-5.5 Finishing

303-5.5.1 General.

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After the last paragraph, ADD the following text:

The Contractor shall patch back A.C., P.C.C. and brick within private property in a manner that matches the adjoining existing private property in structural section, texture and color.

303-5.5.2 Curb.

After the last paragraph, ADD the following text:

The Contractor shall install or replace curb markings that indicate sewer lateral or water valve location on the face of the curb. The Contractor shall mark the curb with a chiseled "S" or "W" for sewer or water lateral and a chiseled "V-X" for water valve locations. "X" shall indicate the number of feet from the curb face to the valve. A two (2) day notice to the Engineer is required for requests to the City to determine the location of sewer laterals and water services.

303-5.9 Measurement and Payment. *After the last paragraph, ADD the following text:*

Measurement & Payment for Remove Existing and Construct New ADA Compliant, Case A and B PCC Access Ramp, Complete in Place, per SPPWC Std Plan No. 111-5, Remove Existing and Construct New ADA Compliant, Case A and B, Colored PCC Access Ramp, Complete in Place, per SPPWC Std Plan No. 111-5. Color and Finish to Match Existing, and Remove Existing and Construct New ADA Compliant Access Path at Channelizing Island per Plan Detail (SE Corner Alton & Portola) will be at the contract unit price bid per **Each (EA)**, as measured by curb ramp location, and shall be considered full compensation for furnishing labor, materials, equipment, and disposal to complete the construction, including the removal of existing improvements, construction of the curb and gutter, construction of the curb ramp and adjoining sidewalk behind the ramp, installation of truncated dome system, infill of the one 2-4 foot wide slot pave adjacent to the proposed concrete improvement, and no additional compensation will be allowed therefore.

Measurement & Payment for Retrofit Surface Mounted Truncated Domes on Existing PCC Access Ramp will be at the contract unit price bid per **Each Location (EA)**, and shall be considered full compensation for furnishing labor, materials, equipment, and disposal to complete the construction, including the ordering of material, application of surface mounted truncated dome system and no additional compensation will be allowed therefore. Truncated domes installed as part of a new curb ramp will not be subject to this measurement clause, and shall be measured under the curb ramp bid item.

Measurement & Payment for Construct 8" PCC Median Curb will be at the contract unit price bid per **Linear Foot (LF)**, as measured in the field, and shall be considered full compensation for furnishing labor, materials, surveying and staking, equipment, and disposal to complete the construction, including the infill of the two (2) foot wide full-depth pavement adjacent to the proposed concrete improvement, and no additional compensation will be allowed therefore. In addition, payment for constructing concrete median curb shall include full compensation for all related forming, sub-grade preparation, all related sprinkler system modifications and adjustment to protect in place or to set aside in order to install the item shall be included and no additional compensation will be allowed therefore.

Measurement & Payment for Construct 4" PCC Median Infill will be at the contract unit price bid per **Square Foot (SF)**, as measured in the field, and shall be considered full compensation

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for furnishing labor, materials, equipment, and disposal to complete the construction, including the ordering of material, pouring of the PCC surface, matching of the existing surface pattern, color, and texture, and no additional compensation will be allowed therefore.

Measurement & Payment for Remove and Replace 4" PCC Sidewalk will be at the contract unit price bid per **Square Foot (SF)**, as measured in the field, and shall be considered full compensation for furnishing labor, materials, equipment, and disposal to complete the construction, as indicated including all sawcutting, root pruning and removals, subgrade preparation, miscellaneous export/import of soil, forming, pouring, and protection of the concrete surface, repair of any damaged adjacent irrigation systems, protection of adjacent improvements, to complete the item of work and no additional compensation will be allowed therefore.

Measurement & Payment for Remove and Replace Curb & Gutter will be at the contract unit price bid per **Linear Foot (LF)**, as measured in the field, and shall be considered full compensation for furnishing labor, materials, equipment, and disposal to complete the construction, including the infill of the one (2) foot wide slurry backfill and slot pave adjacent to the proposed concrete improvement, and no additional compensation will be allowed therefore. In addition, payment for constructing concrete curb and curb and gutter shall include full compensation for all related root pruning adjacent to reconstruction areas, all related forming, sub-grade preparation, all related sprinkler system modifications and adjustment to protect in place or to set aside in order to install the item shall be included and no additional compensation will be allowed therefore.

SECTION 307 – STREET LIGHTING AND TRAFFIC SIGNAL SYSTEMS

307-11 PULL BOXES

307-11.1 General *After the last paragraph, ADD the following:*

Adjustment of pull boxes to grade shall also include any necessary grading, installation of crushed rock per standard plan, as well as conduit, riser and wiring adjustment work in order to accommodate the new grade of the pull box.

307-11.2 Measurement *After the last paragraph, ADD the following:*

Adjustment of pull boxes shall be measured on an each item basis.

307-11.3 Payment *After the last paragraph, ADD the following:*

Payment for Adjust Pull Box To Grade will be at the contract unit price bid per **Each Item (EA)**, as shown in the Bid Schedule, and shall include all related asphalt concrete and PCC work, traffic control, and protection of the work during PCC curing and all incidentals to accomplish the work as specified herein, and no additional compensation will be allowed therefore.

307-17 TRAFFIC SIGNAL CONSTRUCTION

307.17.3 Pull Box Covers. *REPLACE entire subsection with following:*

Traffic signal pull box covers shall be marked "TRAFFIC SIGNAL", except electrical service pull box covers, which shall be marked "EDISON". All markings shall conform to the State Standard Specifications Section 86-2.06B, "Cover Markings."

307-17.7 Vehicle Detectors

REVISE as follows:

307-17.7.1 General. *ADD the following:*

The Contractor shall replace traffic loop detectors at his own expense whenever his cold milling, pavement removal, or other operations damage existing traffic loop detectors not designated for replacement in the contract plans. Traffic loop detectors damaged by the Contractor's operation shall be replaced within the same workday the damage occurs.

The pavement grind and replacement limits have been designed in such a way to avoid replacement of the intersecting street's vehicle detectors. Contractor shall verify location and limits of the existing loops and home runs, in order to ensure protection of adjacent street loop detectors.

As part of the preparation work for traffic signal loop installations, prior to performing any adjacent cold milling, pavement removal or other damaging operations, the Contractor shall disconnect the existing lead-in line and note the existing loop connection configurations. No

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additional compensation will be allowed for the labor required to ensure the proper connection of the detector loops. Upon completion of the traffic detector loop installations the first inspection by the Engineer shall be provided at no cost to the Contractor. Should a second inspection be required due to workmanship of the Contractor, then the cost of re-inspection shall be at the Contractor's expense.

307-17.7.3 Inductive Loop Detectors. *REPLACE entire subsection with the following:*

Loops: All detection loops shall be 6-foot-diameter Type E, except for stop bar loops which shall be type D, installed per the State Standard Plans ES-5A and ES-5B using Type 2 loop wire, unless otherwise approved by the City Engineer. Elongated, oval shaped, loops may be installed to accommodate lanes over 12 feet in width.

Loop Installation: Detector loops shall be installed in a saw-cut slot with a minimum of 3-inches depth below the finished pavement surface, and minimum 2-inches of sealant covering the loop wires (Irvine Traffic Signal Standards Plan TS-8A). All detection loops shall be sealed with hot melt adhesive.

Series Connection: Where two or more loops are to be on one channel of detection, or to a single DLC, the loops shall be connected in series.

Advance Loops: Advance detection loops shall be a single loop per lane with one DLC per loop. Each advanced loop shall be assigned to a separate detection channel. Each advance loop shall have four turns where the total length of the DLC is less than 500 feet; otherwise, five turns are required.

Advance Loop Placement: Advance detection shall be provided on streets where the approach speeds are 25 mph or greater. Separate loops shall be placed in each through lane. Advance loop setback requirements from intersections, based on approach speeds, are shown in Table 307-17.7.3 (A). Table 307-17.7.3 (A) – Advance Detector Loop Setback

Table 307-17.7.3 (A) – Advance Detector Loop Setback
CA-MUTCD Table 4D-101

Approach Speed (mph)	Setback (feet from limit line)
25	105'
30	140'
35	185'
40	230'
45	285'
50	345'
55	405'
60	475'

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307-17.7.6 Measurement. *After the last paragraph, ADD the following text*

Traffic loops shall be measured on an each item basis as measured in the field, installed in place. Type E & Type D traffic loops shall be measured separately.

307-17.7.7 Payment. *After the last paragraph, ADD the following text*

Payment for Install & Connect Type D Traffic Loop and Install & Connect Type E Traffic Loop will be at the contract unit price bid per **Each (EA)** and shall be full compensation for the furnishing of all labor, equipment, materials and performing all of the work shown on the Plans and/or specified herein, including the verification of the existing loop connections and configuration, laying out and obtaining approval of the loop locations/configuration, installation, connection, and testing of the loops, and all other items required to complete this item of work for each type of traffic loop required, as depicted in the Bid Schedule of these Specifications.

307-17.8 Pedestrian Signals

307-17.8.2 Pedestrian Push Buttons: *After the last paragraph, ADD the following text*

Pedestrian push buttons shall conform to the conditions described in Section 86-5.02, "Pedestrian Push Button Assemblies," of the Caltrans Standard Specifications and these Special Provisions.

The new locations of Pedestrian pushbutton posts shall be laid out by the Contractor and approved by the City during construction per the 2012 CA-MUTCD and applicable ADA guidelines. Any holes in existing traffic signal poles left by the removal of the existing pushbutton shall be filled and covered to the City's satisfaction.

Relocation of the pedestrian push button shall also include all necessary sidewalk removals, installation of new conduit and wiring, connection to and testing of existing system, and replacement of the removed additional concrete surface in order to accommodate the new location of the push button. The contractor shall verify existing conditions to confirm the amount of material needed for the relocations.

The new push button pole shall be installed per Caltrans Std. Plan ES-7A and shall include the necessary footing. The push button and sign shall attach to and be securely supported by the framework. Fasteners used shall be stainless steel tamper proof screws for pedestrian push-button assemblies.

307-17.8.3 Measurement *After the last paragraph, ADD the following text*

Measurement of all pedestrian push button relocations shall be on an each item basis.

307-17.8.4 Payment *After the last paragraph, ADD the following text*

Payment for Relocate Existing Pedestrian Push Button and Install New Push Button Post (Including Conduit and Wiring) will be at the contract unit price bid per **Each Item (EA)** and shall be full compensation for the furnishing of all labor, equipment, materials and performing all of the work shown on the Plans and/or specified herein to remove existing button/post, obtain approval for layout location, install necessary conduit, construct new footings (as applies) and install/connect the existing pedestrian push button assembly to the traffic signal system. .

SECTION 314 – TRAFFIC STRIPING, CURB AND PAVEMENT MARKINGS, AND PAVEMENT MARKERS

REPLACE entire section with the following text:

A. STANDARD SPECIFICATIONS:

All materials and installation shall conform to the most recent version of the Caltrans Standard Plans and Specifications, and the most recent version of the California Manual on Uniform Traffic Control Devices (CA MUTCD), except as modified or supplemented herein.

B. DESCRIPTION OF WORK:

The work under this contract consists of the installation of striping and signing and all appurtenant work thereto necessary for the proper construction of the contemplated improvements, in accordance with the Plans and Specifications. Specific attention is brought to the following items within the scope of the signing and striping operations:

- Removal of all existing thermoplastic striping and raised pavement markers is included in the lump sum unit price for signing and striping. Prior to final ARHM paving operations.
- The Installation of the required mast arm traffic sign at Bake Parkway is also included as part of the lump sum unit price for signing and striping.
- Installation and replacement of all existing blue fire hydrant reflective pavement markers per local fire department requirements are also included as part of the lump sum unit price for signing and striping.

C. TRAFFIC STRIPES AND PAVEMENT MARKINGS:

Traffic stripes and pavement markings shall be in accordance with Caltrans Standard Specifications Section 84, except as modified or supplemented herein.

1. Traffic stripes, pavement markings, and curb markings shall be painted unless otherwise shown on the plans. Contractor shall repaint any curb markings removed by construction under this contact.
2. The Contactor shall furnish the necessary control points for all striping and markings, and shall be responsible for the completeness and accuracy thereof to the satisfaction of the Engineer.
3. The Contractor shall establish all traffic striping between these points by string line or other method to provide striping that will vary less than ½ inch in 50 feet from the specified alignment.
4. When no previously applied figures, markings, or traffic striping are available to serve as a guide, suitable layouts shall be spotted in advance of permanent paint application. Traffic lines may be spotted by using a rope as a guide for marking spots every 5 feet, by using a marking wheel mounted on a vehicle, or by any other means satisfactory to the Engineer.

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5. The Contractor shall mark or otherwise delineate the traffic lanes in the new roadway or portion of roadway, or detour before opening it to traffic.
6. The Contractor shall provide an experienced technician to supervise the location, alignment, layout, dimensions, and application of the paint.
7. Spotting shall be completed prior to the removal of any existing stripes. Existing stripes and markings shall be removed prior to painting new stripes and markings. Unless otherwise directed by the City, no street or section of street shall be left without the proper striping for more than 24 hours, or over weekends or holidays.
8. Paint for traffic striping, shall be rapid dry water base paint. Paint for crosswalks, stop bars, arrows other pavement legends and curb markings shall be ready-mixed rapid dry type.
9. Ready-mixed paints shall be suitable for use on either asphalt concrete or Portland cement concrete.
10. Paint shall be applied in two (2) coats. The second coat shall be applied in a time frame as directed by the City, but in no case shall it be applied less than seven (7) days from application of the first coat.
11. Installation of traffic stripes includes placement of raised pavement markers when called for on the plans.
12. Raised pavement markers shall conform to Section 85 "Pavement Markers."
13. Adhesive for raised pavement markers shall be per section 85-1.03, "Construction."
14. Nothing in these Special Provisions shall relieve the Contractor from the responsibilities established in Subsection 7-10, "Public Convenience and Safety", of the State Standard Specifications.
15. Raised pavement markers and existing thermoplastic markings shall be removed from the existing pavement by grinding prior to the application of any overlay as directed by the Engineer. All sandblasting, where approved, shall be wet-sand blasting
16. Pavement legends and arrows shall be thermoplastic except all legends within the bike lane, which shall be paint. Cross walks and limit lines shall also be thermoplastic.
17. The kind of material or paint to be applied will be as designated in the Caltrans Standard Specifications, specified in the Special Provisions, or shown on the plans.
18. Paint and glass beads for traffic stripes and pavement markings shall be furnished by the contractor, including paint for cat tracks and dribble lines.

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19. As part of the striping operations, the Contractor shall be required to place a blue RPM in the street at each fire hydrant location per the direction of the Engineer.

D. TRAFFIC SIGNS:

1. Traffic signs shall be new. All new and relocated signs shall be mounted on new posts with new hardware. Signs designated for installation on street light standards shall be mounted with new hardware.
2. Traffic signs shall comply with the retro-reflectivity requirements of the latest version of the CA MUTCD.
3. Traffic sign dimensions, colors, and lettering shall conform to the latest version of the CA MUTCD. Traffic sign size shall be standard unless otherwise shown on the plans.
4. New sign posts shall be 12 Gage galvanized steel, perforated 4-sides, easy erect break-away base, "uni-strut" or approved equal. Signs shall be mounted at heights in compliance with the CA MUTCD.
5. All removed signs and posts in good condition shall be salvaged and delivered to the City yard.

E. MEASUREMENT & PAYMENT

Measurement & Payment for Traffic Striping, markings, Legends, and Signs will be at the contract unit price bid price per **Lump Sum (LS)** and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in removing existing striping, placing temporary striping, permanent striping, legend markings, arrows, raised pavement markers (including fire hydrant markers), traffic signs (including new signage required on the mast arm at Bake Parkway), etc. as shown on the plans, as specified in the Caltrans Standard Specifications and these specifications, and as directed by the Engineer and no additional compensation will be made therefore.

ADD the following Section and Sub Sections:

SECTION 315 – OTHER CONSTRUCTION ITEMS

315-1 MOBILIZATION:

315-1.1 - General

Mobilization shall consist of all preparatory work listed in ARTICLE 39 of these specifications, including, but not limited to, those necessary for the movement of personnel, equipment, materials and incidentals to the project site necessary for work on the project and for all other work and operations which must be performed or costs incurred including bonds, insurance, and financing prior to beginning work on the various contract items on the project site.

Mobilization shall also include the cost, time and labor to move the necessary construction equipment to and from the job site, supervisory time on the job by the Contractor's personnel to keep the construction site in a safe condition and all other related work as required for all non-working days during the course of construction. Contractor is responsible for securing an adequate storage site for equipment and materials.

Mobilization shall also include the cost of coordinating, obtaining, and paying any necessary Caltrans Permits for Traffic Control Encroachment at the SR-241 Interchange. A permit has been submitted to and approved by Caltrans for the traffic control encroachment. Reference traffic control plans and permit conditions have been included in Appendix B of these specifications. The Contractor shall be responsible for incorporating all Caltrans permit conditions in their scope of work and no additional compensation will be allowed.

Mobilization shall also include any and all require site storm water protection and reporting requirements noted in the special conditions.

The Contractor shall have on the work site at all times, as its agent, a competent English speaking superintendent capable of reading and thoroughly understanding the plans, specifications, other related documents, and directions from the Agency's Representative.

315-1.2 Measurement And Payment

Payment for Project Mobilization and Demobilization shall be at the unit price bid per **Lump-Sum (LS)** and shall include payments as well as obtaining and paying for all permits and business licenses as required from the City of lake forest and other related agencies. The City will waive its permit fee. The Contractor shall comply with the requirements specified by each license or permit. Progress payments for this item shall be paid in accordance with the completion percentage of the project to the Contractor, and shall include the costs of such mobilization and administration for the entire contract period including construction schedule as specified in these specifications. Payments shall be made upon the basis of the formula in Subsection 11-1.02 of the State of California Department of Transportation Standard Specifications dated May 2006 (State Specifications) in lieu of the Standard Specifications for Public Works Construction method. No payment for Mobilization will be made until the Contractor's Construction Schedule has been submitted.

315-2 MONUMENT PRESERVATION

315-2.1 - General

The Contractor shall be responsible for researching, identifying, tying out and re-setting all monumentation which will be demolished during the course of this project. This work item shall include all professional services and work necessary to fully comply with the provisions of the PROFESSIONAL LAND SURVEYORS' ACT (Business and Professions Code §§ 8700 – 8805) Section 8771.(b).

The contractor will be required to submit all required documentation for the monumentation survey prior to the issuance of an encroachment permit.

315-2.2 Measurement and Payment

Payment for Monument Preservations shall be per the **Lump-Sum (LS)** price bid and shall include all work necessary to fully comply with all Federal, State and Local regulations pertaining to the protection and replacement of survey monumentation.

315-3 TRAFFIC CONTROL

315-3.1 General Requirements

The Contractor shall provide and maintain all construction area traffic controls in accordance with Section 7-10 of the Standard Specifications for Public Works Construction, the latest version of the California Manual on Uniform Traffic Control Devices (CA MUTCD), and Work Area Traffic Control Handbook (WATCH), and as noted herein.

The Contractor shall prepare an updated and detailed traffic control plan as part of this project. Plans developed by the contractor shall be prepared by a Registered Civil or Traffic Engineer and submitted to the Public Works Department for approval at least ten (10) working days prior to the beginning of the work. No work shall commence prior to approval of the traffic control plans by the City Engineer.

Portable delineators which conform to the current California Manual of Uniform Traffic Control Devices (CA MUTCD) shall be spaced as necessary for proper delineation of the travel way. The spacing between delineators shall not exceed fifty (50) feet. The minimum lane transitions shall be a fifty to one (50:1) taper unless otherwise shown on the plans. Due to the high average speed of traffic, double base delineators will be required.

If the portable delineators are damaged, displaced or are not in an upright position, from any cause, said portable delineators shall immediately be replaced or restored to their original location, in an upright position, by the Contractor.

Where construction detours and signing conflict with existing signing, the Contractor shall cover existing signs in a manner approved by the Owner's Representative. The Contractor shall also provide temporary traffic re-striping at the conclusion of each working day, if not sooner as directed by the Owner's Representative, for any centerline, painted median or lane line which is obliterated by construction.

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The Contractor shall provide temporary delineation as directed/approved. Temporary delineation shall include sandblasting of conflicting markings; installation and removal of temporary centerlines or lane lines, detour signing, barricading; and replacement of traffic lines and markings in their proper locations upon termination of the detour. Conflicting existing and temporary striping, as required for traffic control during construction, shall be removed by the Contractor by using sandblasting methods with immediate cleanup of residues. Temporary reflective striping tape may be used, except that it shall not be applied to final asphalt surfaces. Said tape shall be removed from temporary surfaces prior to placement of additional asphalt.

The Contractor shall also be responsible for notifying adjacent businesses and residents in writing seven (7) days in advance of any work that involves limited access. Said notice shall be reviewed and approved by the Owner's Representative in advance of its circulation. Contractor shall provide verification to the Owner's Representative that proper circulation of the notice has been accomplished.

The Contractor shall maintain a twenty-four (24) hour emergency service to remove, install, relocate, and maintain warning devices and shall furnish to the Owner's Representative names, and telephone numbers of three persons responsible for this emergency service. In the event these persons do not promptly respond when notified, or it becomes necessary to call other forces to accomplish emergency service, the Contractor will be responsible for any cost incurred.

Prior to the start of each work day, the Contractor shall perform all necessary work incidental to and commensurate with the proper signing, detouring, barricading, etc., heretofore and hereinafter specified that is required for that particular day's schedule of operations. No construction shall be permitted until such signing and detouring operations have been completed.

The Contractor shall furnish such flaggers as are necessary to give adequate warning to traffic or to the public of any dangerous conditions to be encountered. Flaggers, while on duty and assigned to give warning to the public that the highway is under construction and of any dangerous conditions to be encountered as a result thereof, shall perform their duties and shall be provided with the necessary equipment in accordance with the CA MUTCD. The equipment shall be furnished and kept clean and in good repair by the Contractor, at his expense.

Should the Contractor appear to be negligent in furnishing warning and protective measures as above provided, the Engineer may direct attention to the existence of a hazard, and the necessary warning and protective measures shall be furnished and installed by the Contractor, at his/her expense. Should the Engineer point out the inadequacy of warning and protective measures, such action on the part of the Engineer shall not relieve the Contractor from responsibility for public safety or abrogate its obligation to furnish and pay for these devices.

The Contractor shall notify local Police and Fire Departments of its intent to begin work at each location at least ten (10) days before work is to begin. The Contractor shall cooperate with local authorities relative to handling traffic through the area. The Contractor shall also coordinate with Transit Agencies to ensure the safe operation of buses and access to bus stops in the construction area.

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Lanes shall be closed only during the hours specified in the plans and Technical Conditions. No work that interferes with public traffic shall be performed except during the hours specified for lane closures in the following "Lane Requirements/Working Hours" section of these specifications.

Existing traffic loop detector replacement shall be required as necessary such that no traffic signal loop is out of operation at the end of the work day on any given day. The cost for providing all temporary traffic signal loop detectors shall be absorbed into the various related items of work and no additional compensation will be allowed, this includes traffic signal loop detectors damaged by the contractor's operations not designated for replacement in the contract plans.

Areas requiring excavation digouts shall be repaved and open for traffic at the end of the day.

315-3.2 Lane Requirements/Working Hours

The Contractor shall conduct work and provide the necessary traffic control to provide the following:

There shall be a minimum of four (4) foot clearance from open excavations and two (2) foot from other obstructions (curbs, k-rail, etc.). All lanes shall be open to traffic during non-working hours.

AC paving work in any one intersection shall be performed continuously until said work is complete. Work shall not be allowed to proceed on to a second intersection until said work is complete at the first intersection, nor shall any given intersection be subject to multiple separate "move-ins" that require lane closures and disruption to traffic. No two adjacent intersections shall be impacted by lane closures at the same time, regardless of the number of crews that the Contractor utilizes. Work by multiple crews at alternating intersections would be allowed.

The Contractor shall be required to use flashing arrow signs to direct travel and appropriate detour signing to control traffic through and/or around the construction area.

Work shall be permitted and only occur between the hours of 7:00 a.m. and 4:00 p.m. unless directed otherwise by the Owner's Representative. No work that involves lane closures shall take place before 9:00 a.m. or after 3:00 p.m. for the entire project. Prior to 9:00 a.m. or after 3:00 p.m. "All" lanes shall remain open to traffic.

The Contractor will not be allowed to excavate a larger quantity of area ("digouts") than he can successfully repave in the same working day. No incomplete paving work will be allowed to remain during the hours designated as requiring "all" lanes open to traffic, except in specific instances in which a minor amount of area can safely be covered by approved means with non-skid steel plates, capable of carrying HS20 (AASHTO) wheel loading, or patched with temporary AC to bring the excavation up to grade. Said temporary AC shall be ground down to permanent AC sub-grades and approved by the Engineer prior to placement of additional permanent AC.

Excavations of less than four (4) feet in width may be covered with non-skid steel plates capable of carrying HS20 wheel loading over the span of the excavation. Plates shall have a minimum width equal to the excavation width plus twenty-four (24) inches and be securely fastened to the

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street surface. Asphalt fillets, a minimum of six (6) inches wide shall be placed around the perimeter of the plate. When traffic is transferred to any type of temporary pavement surface good drivability of the surfaces shall be maintained and shall be subject to approval by the Engineer prior to allowing traffic to be transferred upon it.

The Contractor shall also ensure that access to all side streets and driveways are maintained at all times. Work in front of or within driveways and side streets shall be conducted in a manner where at no time is access to property denied. Portions of driveway approaches that are not ready to be opened for traffic at the end of the workday shall be plated per the requirements noted in the previous paragraph. The Contractor shall use temporary AC surfacing at his own expense as required to maintain traffic in a safe non-disruptive manner

315-3.3 Portable Changeable Message Sign

Portable changeable message signs shall be furnished, placed, operated, and maintained as designated by the Engineer in conformance with the provisions in Section 12, "Construction Area Traffic Control Devices," of the State Standard Specifications and these special provisions. The Contractor shall furnish four (4) Portable Changeable Message Signs (PCMS). PCMS shall be in place two (2) weeks prior to start of construction.

The Engineer will determine the exact message wording and location. The Contractor may be required to update the changeable message daily, depending on the type of work performed. The Contractor shall be responsible for maintaining, relocating, programming, and re-programming Changeable Message Signs as specified and as directed by the Owner's Representative.

315-3.4 Measurement and Payment

Payment for Traffic Control shall be at the **Lump Sum (LS)** bid price and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the traffic control related work, including the preparation and coordination of detailed traffic control plans, as well as all work involving placing, removing, storing, maintaining, moving to new locations, replacing and disposing of the components of the traffic control system as specified in the Standard Specifications and these specifications, and as directed by the Owner's Representative. The lump sum price shall also include non-skid steel plates and temporary AC including installation and removal; all associated temporary signing and striping; flashing arrow signs; PCMS's; flagging and/or flagger costs; and project notifications where no additional compensation will be made therefore.

315-4 PUBLIC NOTIFICATION

315-4.1 - General

The Contractor shall be required to distribute public notifications to all affected businesses directly fronting Portola Parkway. A Minimum of two notices shall be distributed to the affected properties, being:

1. **General Project Notes:** Prior to the start of the construction project, a general notices shall be prepared outlining the Project Limits, Scope of Work, and Duration. A Contact name and phone number for the Contractor shall also be provided on the notice to

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provide a point of contact for access or construction questions by the business or property owners. Said notices shall be distributed prior to the mobilization of demolition or major construction activities within Portola Parkway. Said notice shall be reviewed and approved by the City prior to distribution.

2. A second notice shall be required to be distributed to all properties which will have limited access or closed driveways during the course of the construction activities. The driveway closure notices shall be delivered to the property owners a minimum of 48 hours prior to the closure of the driveway. The date of the closure, limits and nature of the work, and a contact person for the Contractor shall be listed on the notice. Said notice shall be reviewed and approved by the City prior to distribution. Additional second notices shall be distributed to each property/business for each additional occurrence of limited access.

315-4.2 Measurement and Payment

Payment for Public Notification shall be per the **Lump-Sum (LS)** price bid and shall include all labor, material, and coordination required to prepare, obtain approval for, print, distribute, and coordinate public notices, including the required public coordination and scheduling of phasing and access operation as the businesses, including all labor and materials and no additional compensation will be allowed therefore.

PART 8
LANDSCAPE AND IRRIGATION
SECTION 800 – MATERIALS

800-1 LANDSCAPING MATERIALS *ADD the following text*

All damaged landscaping materials shall be replaced in kind.

Contractor to submit proposed planting and irrigation materials to the City for review and approval prior to installation.

Import of top soil and backfill, where necessary, shall be included under this bit item at no additional cost.

SECTION 801 – INSTALLATION

801-1 GENERAL *ADD the following text after the last paragraph*

All existing landscaping or irrigation damaged as part of the Contractor's operations shall be removed, disposed of, and replaced in kind. Landscaping/irrigation damaged as part of the sidewalk/curb ramp removal and replacement item shall be paid for as part of the removal/replacement bid items and no additional compensation will be allowed.

Landscaping and irrigation within the Bake Parkway median replacement limits will be impacted as part of the median relocation operations. It shall be the contractor's responsibility to verify the existing conditions, coordinate and schedule irrigation shutoff, conduct temporary irrigation during the impacted duration, and to design and replace the damaged irrigation and landscaping. The Irrigation system shall be replaced to provide full coverage for the revised configuration of planting area.

Planting shall also be replaced to match the existing configuration and type of landscaping. Contractor shall submit all proposed planting material to the City for review and approval prior to installation of any material.

810-8 PAYMENT *ADD the following text after the last paragraph*

Payment for Bake Parkway Median Landscaping & Irrigation Repairs/Replacement shall be per the **Lump-Sum (LS)** price bid and shall include all labor, material, and coordination required to document existing conditions, protect the remaining landscaping/irrigation in place, coordination/conduct shutoffs, provide temporary irrigation, design and obtain approval for revised irrigation/planting, install the revised landscaping/irrigation system, and protect the work in place, including all labor and materials and no additional compensation will be allowed therefore.

**APPENDIX A
INSURANCE REQUIREMENTS**

1. WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE

Contractor shall maintain Workers' Compensation Insurance (Statutory Limits) and Employer's Liability Insurance (with limits of at least \$1,000,000) for Contractor's employees in accordance with the laws of the State of California, Section 3700 of the Labor Code. In addition, Contractor shall require each subcontractor to similarly maintain Workers' Compensation Insurance and Employer's Liability Insurance in accordance with the laws of the State of California, Section 3700 for all of the subcontractor's employees.

Contractor shall submit to City, along with the certificate of insurance, a Waiver of Subrogation endorsement in favor of City, its officials, officers, employees, agents, and volunteers. Company or companies providing insurance coverage shall be acceptable to City, if in the form and coverage as set forth in the Contract Documents.

2. COMMERCIAL GENERAL LIABILITY INSURANCE

- a. Contractor shall procure and maintain during the life of this Contract and for such other period as may be required herein, at its sole expense, occurrence form Commercial General Liability insurance coverage, at least as broad as the most current ISO CGL Form 00 01 including but not limited to, premises liability, contractual liability, products/completed operations if applicable, personal and advertising injury which may arise from or out of Contractor's operations, use, and management of the Project site, or the performance of its obligations hereunder. Policy limits shall not be less than \$1,000,000 per occurrence, \$2,000,000 general aggregate, for bodily injury, personal injury and property damage, including without limitation, blanket contractual liability, and a \$2,000,000 completed operations aggregate. Defense costs shall be paid in addition to the limits.
- b. Such policy shall comply with all the requirements of this Article. The limits set forth herein shall apply separately to each insured against whom claims are made or suits are brought, except with respect to the limits of liability. Further the limits set forth herein shall not be construed to relieve the Contractor from liability in excess of such coverage, nor shall it limit Contractor's indemnification obligations to City, and shall not preclude City from taking such other actions available to City under other provisions of the Contract Documents or law.
- c. Contractor shall make certain that any and all subcontractors hired by Contractor are insured in accordance with this Contract. If any subcontractor's coverage does not comply with the foregoing provisions, Contractor shall indemnify and hold City harmless from any damage, loss, cost, or expense, including attorneys' fees, incurred by City as a result thereof.
- d. All general liability policies provided pursuant to the provisions of this Article shall comply with the provisions of the Contract Documents.

APPENDIX A
INSURANCE REQUIREMENTS

- e. All general liability policies shall be written to apply to all bodily injury, including death, property damage, personal injury, owned and non-owned equipment, blanket contractual liability, completed operations liability, explosion, collapse, under-ground excavation, removal of lateral support, and other covered loss, however occasioned, occurring during the policy term, and shall specifically insure the performance by Contractor of that part of the indemnification contained in these General Conditions, relating to liability for injury to or death of persons and damage to property. If the coverage contains one or more aggregate limits, a minimum of 50% of any such aggregate limit must remain available at all times; if over 50% of any aggregate limit has been paid or reserved, City may require additional coverage to be purchased by Contractor to restore the required limits. Any umbrella or excess liability policy shall include the additional insured endorsement described in the Contract Documents.

3. AUTOMOBILE LIABILITY INSURANCE

Contractor shall take out and maintain at all times during the term of this Contract Automobile Liability Insurance at least as broad as ISO CA 00 01 (Any Auto) covering bodily injury and property damage for all activities of the Contractor arising out of or in connection with Work to be performed under these Contract Documents, including coverage for any owned, hired, non-owned or rented vehicles, in an amount not less than \$1,000,000 combined single limit for each accident. Such insurance shall be provided in a form and with insurance companies acceptable to City and comply with the provisions of Section 0 below.

4. UMBRELLA OR EXCESS LIABILITY INSURANCE.

Contractor shall obtain and maintain an umbrella or excess liability insurance policy with limits of not less than \$4,000,000 that will provide bodily injury, personal injury and property damage liability coverage at least as broad as the primary coverages set forth above, including commercial general liability and employer's liability. Such policy or policies shall include the following terms and conditions:

- a. A drop down feature requiring the policy to respond in the event that any primary insurance that would otherwise have applied proves to be uncollectable in whole or in part for any reason;
- b. Pay on behalf of wording as opposed to reimbursement;
- c. Concurrency of effective dates with primary policies; and
- d. Policies shall "follow form" to the underlying primary policies.
- e. Insureds under primary policies shall also be insureds under the umbrella or excess policies.

5. BUILDER'S RISK ["ALL RISK"]

The City has obtained Builder's Risk ["All Risk"] extended coverage insurance for the Project. Contractor shall **NOT** procure Builder's Risk ["All Risk"] insurance for this

APPENDIX A
INSURANCE REQUIREMENTS

Project, and shall **NOT** include the cost of said coverage in its bid price/the Contract Price.

6. FORM AND PROOF OF CARRIAGE OF INSURANCE

- a. Any insurance carrier providing insurance coverage required by the Contract Documents shall be admitted to and authorized to do business in the State of California unless waived, in writing, by City's Risk Manager. Carrier(s) shall have an A.M. Best rating of not less than an A-:VII.
- b. Insurance deductibles or self-insured retentions must be declared by the Contractor, and such deductibles and retentions shall have the prior written consent from City. At the election of City the Contractor shall either 1) reduce or eliminate such deductibles or self-insured retentions, or 2) procure a bond which guarantees payment of losses and related investigations, claims administration, and defense costs and expenses.
- c. Contractor shall cause its insurance carrier(s) to furnish City with either 1) a properly executed original Certificate(s) of Insurance and certified original copies of Endorsements effecting coverage as required herein, or 2) if requested to do so in writing by City's Risk Manager, provide original Certified copies of policies including all Endorsements and all attachments thereto, showing such insurance is in full force and effect. All required policies of Commercial General Liability, Automobile Liability insurance shall be endorsed to name the City, its officials, officers, employees, agents and volunteers as additional insureds. For all policies of Commercial General Liability insurance, Contractor shall provide endorsements in the form of ISO CG 20 10 10 01 and 20 37 01 01 (or endorsements providing the exact same coverage) to effectuate this requirement. Further, all policies of insurance shall contain or shall be endorsed to contain the covenant of the insurance carrier(s) that shall provide no less than thirty (30) days written notice be given to City prior to any material modification or cancellation of such insurance.
- d. In the event of a material modification or cancellation of coverage, City may terminate or Stop Work pursuant to the Contract Documents, unless City receives, prior to such effective date, another properly executed original Certificate of Insurance and original copies of endorsements or certified original policies, including all endorsements and attachments thereto evidencing coverages set forth herein and the insurance required herein is in full force and effect. Contractor shall not take possession, or use the Project site, or commence operations under these Contract Documents until City has been furnished original Certificate(s) of Insurance and certified original copies of Endorsements or policies of insurance including all Endorsements and any and all other attachments as required in this Section. The original Endorsements for each policy and the Certificate of Insurance shall be signed by an individual authorized by the insurance carrier to do so on its behalf.
- e. All required insurance coverages shall contain or be endorsed to waive subrogation against the City, its officials, officers, employees, agents, and

APPENDIX A
INSURANCE REQUIREMENTS

volunteers or shall specifically allow Contractor or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Contractor hereby waives its own right of recovery against City, and shall require similar written express waivers and insurance clauses from each of its Subcontractors.

- f. It is understood and agreed to by the parties hereto and the insurance company(s), that the Certificate(s) of Insurance and policies shall so covenant and shall be construed as primary, and City's insurance and/or deductibles and/or self-insured retentions or self-insured programs shall not be construed as contributory. The Contractor shall provide endorsement(s) to this effect at the City's request.
- g. City reserves the right to adjust the monetary limits of insurance coverage's during the term of this Contract including any extension thereof-if in City's reasonable judgment, the amount or type of insurance carried by the Contractor becomes inadequate.
- h. In the event any policy of insurance required by the Contract Documents does not comply with these specifications or is canceled and not replaced immediately so as to avoid a lapse in the required coverage, City has the right but not the duty to obtain the insurance it deems necessary and any premium paid by City will be promptly reimbursed by Contractor or City will withhold amounts sufficient to pay premium from Contractor payments. In the alternative, City may cancel this Contract, effective upon notice.
- i. Contractor acknowledges and agrees that actual or alleged failure on the part of the City to inform Contractor of non-compliance with any requirement imposed no additional obligation on the City nor does it waive any rights hereunder.
- j. Requirement of specific coverage or limits contained in this section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance.
- k. Contractor shall be responsible for causing all Subcontractors of any tier working under this Contract to purchase insurance meeting the requirements contained herein, including adding the City its officials, officers, employees, agents and volunteers as Additional Insureds to the subcontractor's policies. All policies of Commercial General Liability insurance provided by Subcontractors shall be endorsed to name the City, its officials, officers, employees, agents and volunteers as additional insureds using endorsement form ISO GC 20 38 04 13 (or an endorsement providing the exact same coverage) to effectuate this requirement. Contractor shall not allow any Subcontractor to commence work relating to these Contract Documents until it has received satisfactory evidence of Subcontractor's compliance with all insurance requirements under this Contract. The Contractor shall provide satisfactory evidence of compliance with this section upon request of the City.

END OF APPENDIX A

**APPENDIX B
CALTRANS ENCROACHMENT PERMIT**

STATE OF CALIFORNIA · DEPARTMENT OF TRANSPORTATION
ENCROACHMENT PERMIT
 TR-0120 (REV. 6/2012)

Permit No. 12-16-N-TK-0050	
Dist/Co/Rte/PM 12-ORA-241 PM 21.5	
Date 03/21/2016	
Fee Paid \$ EXEMPT	Deposit \$ EXEMPT
Performance Bond Amount (1) \$ 0.00	Payment Bond Amount (2) \$ 0.00
Bond Company	
Bond Number (1)	Bond Number (2)

In compliance with:

- Your application of January 25, 2016
- Utility Notice No. _____ of _____
- Agreement No. _____ of _____
- R/W Contract No. _____ of _____

TO: City of Lake Forest Public Works Department
 25550 Commercentre Dr. Suite 100
 Lake Forest, CA 92630
 Attn: Doug Erdman 949-282-5233

, PERMITTEE

and subject to the following, PERMISSION IS HEREBY GRANTED to:

Traffic Control within Caltrans Right of way. No construction work will be performed within Caltrans Right of Way. All work will terminate at the Caltrans R/W Line.

All performed work shall be in accordance with current Caltrans Standard Specifications and Standard Plans, Section 500 of the Encroachment Permits Manual, California MUTCD latest edition, the attached Provisions and the latest plans dated 01-22-2016.

Permittee shall contact State Permit Inspector HOSSEIN SHAKERI at 949-756-7648 minimum of five working days prior to the start of work and a pre-construction meeting will be scheduled at the earliest mutually agreeable time. Failure to comply with this requirement will result in suspension of this permit.

THIS PERMIT IS NOT A PROPERTY RIGHT AND DOES NOT TRANSFER WITH THE PROPERTY TO A NEW OWNER.

The following attachments are also included as part of this permit (Check applicable):

- Yes No General Provisions
- Yes No Utility Maintenance Provisions
- Yes No Storm Water Special Provisions
- Yes No Special Provisions
- Yes No A Cal-OSHA permit, if required: Permit No. _____
- Yes No As-Built Plans Submittal Route Slip for Locally Advertised Projects
- Yes No Storm Water Pollution Prevention Plan / Water Pollution Control Plan

In addition to fee, the permittee will be billed actual costs for:

- Yes No Review
- Yes No Inspection
- Yes No Field Work

(if any Caltrans effort expended)

- Yes No The information in the environmental documentation has been reviewed and considered prior to approval of this permit.

This permit is void unless the work is completed before October 1, 2016

This permit is to be strictly construed and no other work other than specifically mentioned is hereby authorized.

No project work shall be commenced until all the other necessary permits and the environmental clearances have been obtained.

PERMIT ENGINEER: Majid Banifhashemi
 COPIES TO:
 Permittee
 File: 1216-0050
 Hossein Shakeri
 Maintenance

APPROVED:

BY:



MAHESH R. BHATT, P.E., District Permit Engineer

FM 91 1436 (D12 Permit App.)

STANDARD ENCROACHMENT PERMIT APPLICATION

TR-0100 (REV. 03/2015)

Please type or print clearly your answers. Complete ALL fields, write "N/A" if not applicable. This application is not complete until all requirements have been approved.

Permission is requested to encroach on the State Highway right-of-way as follows:

1. COUNTY ORANGE		2. ROUTE SR241	3. POSTMILE 21.50		FOR CALTRANS USE PERMIT NO. 12-16-NTK-0050 DIST./COURT/PM 000050 12/01/2016 2:41 / 21.50 SIMPLEX STAMP
4. ADDRESS OR STREET NAME Portola Parkway (From Alton Pkwy to El Toro Rd)			5. CITY Lake Forest		
6. CROSS STREET (Distance and direction from project site) 800' south of Glenn Ranch Rd, and 700' north of Rancho Pkwy			7. PORTION OF RIGHT-OF-WAY Roadway - For Traffic Control Only		
8. WORK TO BE PERFORMED BY <input type="checkbox"/> OWN FORCES <input checked="" type="checkbox"/> CONTRACTOR			9. ESTIMATED START DATE August 2016		
10. ESTIMATED COMPLETION DATE October 2016					DATE OF SIMPLEX STAMP 2016 JAN 22 PM 4 25
11. EXCAVATION	MAX. DEPTH N/A	AVG. DEPTH N/A	AVG. WIDTH N/A	LENGTH N/A	SURFACE TYPE N/A
12. ESTIMATED COST WITHIN STATE HIGHWAY RIGHT-OF-WAY \$ 0.00				FUNDING SOURCE(S) <input checked="" type="checkbox"/> FEDERAL <input type="checkbox"/> STATE <input checked="" type="checkbox"/> LOCAL <input type="checkbox"/> PRIVATE	
13. PIPES	PRODUCT TYPE N/A	DIAMETER N/A	VOLTAGE / PSIG N/A		14. CALTRANS PROJECT CODE (ID)

15. Double Permit Parent Permit Number _____
Applicant's Reference Number / Utility Work Order Number _____

16. Have your plans been reviewed by another Caltrans branch? NO YES (If "YES") Who? _____

17. Completely describe work to be done within STATE Highway right-of-way:

Attach 6 complete sets of plans (folded to 8.5" x 11") and any applicable specifications, calculations, maps, etc.

No construction work will be performed within Caltrans R/W. All work will terminate at the Caltrans R/W line, and only traffic control encroachments will be required within Caltrans R/W.

18. Is a City, County or other public agency involved in the approval of this project?

YES (If "YES", check type of project AND attach environmental documentation and conditions of approval)
 COMMERCIAL DEVELOPMENT BUILDING GRADING OTHER _____
 CATEGORICALLY EXEMPT NEGATIVE DECLARATION ENVIRONMENTAL IMPACT REPORT OTHER _____

NO (If "NO", please check the category below which best describes the project AND answer questions A - K on page 2)

DRIVEWAY OR ROAD APPROACH, RECONSTRUCTION, MAINTENANCE OR RESURFACING FENCE
 PUBLIC UTILITY MODIFICATIONS, EXTENSIONS, HOOKUPS MAILBOX
 FLAGS, SIGNS, BANNERS, DECORATIONS, PARADES AND CELEBRATIONS EROSION CONTROL
 OTHER _____ LANDSCAPING

STANDARD ENCROACHMENT PERMIT APPLICATION

TR-0100 (REV. 03/2015)

PERMIT NO. 12-16-NTK-0080

The following questions must be completed when a City, County or other public agency IS NOT involved in the approval of this project.

Your answers to these questions will assist Departmental staff in identifying any physical, biological, social or economic resources that may be affected by your proposed project within State Highway right-of-way and to determine which type of environmental studies may be required to approve your application for an encroachment permit.

It is the applicant's responsibility for the production of all required environmental documentation and supporting studies and in some cases this may be costly and time consuming. If possible, attach photographs of the location of the proposed project. Please answer these questions to the best of your ability. Provide a description of any "YES" answers (type, name, number, etc.)

A. Will any existing vegetation and/or landscaping within State Highway right-of-way be disturbed?

B. Are there waterways (e.g. river, creek, pond, natural pool or dry streambed) adjacent to or within the limits of the project or State Highway right-of-way?

C. Is the proposed project located within five miles of the coast line?

D. Will the proposed project generate construction noise levels greater than 86 dBA (e.g. jack-hammering, pile driving)?

E. Will the proposed project incorporate land from a public park, recreation area or wildlife refuge open to the public?

F. Are there any recreational trails or paths within the limits of the proposed project or State Highway right-of-way?

G. Will the proposed project impact any structures, buildings, rail lines or bridges within State Highway right-of-way?

H. Will the proposed project impact access to any businesses or residences?

I. Will the proposed project impact any existing public utilities or public services?

J. Will the proposed project impact existing pedestrian facilities, such as sidewalks, crosswalks or overcrossings?

K. Will new lighting be constructed within or adjacent to State Highway right-of-way?

19. Will this project cause a substantial change in the significance of a historical resource (45 years or older), or cultural resource? [] YES [X] NO (If "YES", provide a description)

20. Is this project on an existing State Highway or street where the activity involves removal of a scenic resource including a significant tree or stand of trees, a rock outcropping or a historic building? [] YES [X] NO (If "YES", provide a description)

21. Is work being done on the applicant's property? [X] YES [] NO (If "YES", attach 6 complete sets of site and grading plans.)

22. Will the proposed project require the disturbance of soil? [] YES [X] NO
If "YES", estimate the area within State Highway right-of-way in square feet AND acres: (ft²) AND (acres)
estimate the area outside of State Highway right-of-way in square feet AND acres: (ft²) AND (acres)

23. Will the proposed project require dewatering? [] YES [X] NO
If "YES", estimate total gallons AND gallons/month. (gallons) AND (gallons/month)
SOURCE: [] STORM WATER [] NON-STORM WATER
(*See Caltrans SWMP for definitions of non-storm water discharge: http://www.dot.ca.gov/hq/env/stormwater/index.htm)

24. How will any storm water or ground water be disposed of from within or near the limits of the proposed project?
[X] Storm Drain System [] Combined Sewer / Storm System [] Storm Water Retention Basin
[] Other (explain):

STANDARD ENCROACHMENT PERMIT APPLICATION

TR-0100 (REV. 03/2015)

PERMIT NO.

17-16-NT/2-0050

PLEASE READ THE FOLLOWING CLAUSES PRIOR TO SIGNING THIS ENCROACHMENT PERMIT APPLICATION.

The applicant, understands and herein agrees that an encroachment permit can be denied, and/or a bond required for non-payment of prior or present encroachment permit fees. Encroachment Permit fees may still be due when an application is withdrawn or denied, and that a denial may be appealed, in accordance with the California Streets and Highways Code, Section 671.5. All work shall be done in accordance with the California Department of Transportation's (Department) rules and regulations subject to inspection and approval.

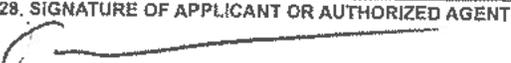
The applicant, understands and herein agrees to the general provisions, special provisions and conditions of the encroachment permit, and to indemnify and hold harmless the State, its officers, directors, agents, employees and each of them (Indemnitees) from and against any and all claims, demands, causes of action, damages, costs, expenses, actual attorneys' fees, judgments, losses and liabilities of every kind and nature whatsoever (Claims) arising out of or in connection with the issuance and/or use of this encroachment permit and the placement and subsequent operation and maintenance of said encroachment for: 1) bodily injury and/or death to persons including but not limited to the Applicant, the State and its officers, directors, agents and employees, the indemnitees, and the public; and 2) damage to property of anyone. Except as provided by law, the indemnification provisions stated above shall apply regardless of the existence or degree of fault of indemnitees. The Applicant, however, shall not be obligated to indemnify indemnitees for Claims arising from the sole negligence and willful misconduct of State, its officers, directors, agents or employees.

An encroachment permit is not a property right and does not transfer with the property to a new owner.

COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) OF 1990: All work within State Highway right-of-way shall be conducted in compliance with all applicable Federal, State and Local Access laws, regulations and guidelines including but not limited to the Americans with Disabilities Act Accessibility Guidelines (ADAAG), the Public Rights-of-Way Guidelines (PROWG), the Department's current Design Information Bulletin 82, "Pedestrian Accessibility Guidelines for Highway Projects", the Department's Encroachment Permits Manual and encroachment permit.

DISCHARGES OF STORM WATER AND NON-STORM WATER: All work within State Highway right-of-way shall be conducted in compliance with all applicable requirements of the National Pollutant Discharge Elimination System (NPDES) permit issued to the Department, to govern the discharge of storm water and non-storm water from its properties. Work shall also be in compliance with all other applicable Federal, State and Local laws and regulations, and with the Department's Encroachment Permits Manual and encroachment permit. Compliance with the Department's NPDES permit requires amongst other things, the preparation and submission of a Storm Water Pollution Protection Plan (SWPPP), or a Water Pollution Control Program (WPCP), and the approval of same by the appropriate reviewing authority prior to the start of any work. Information on the requirements may also be reviewed on the Department's Construction Website at:

<http://www.dot.ca.gov/hq/construc/stormwater>

25. NAME OF APPLICANT OR ORGANIZATION City of Lake Forest Public Works Department, Principal Civil Engineer, Doug Erdman			
ADDRESS OF APPLICANT OR ORGANIZATION WHERE PERMIT IS TO BE MAILED (Include City and Zip Code) 25550 Commercentre Dr. Suite 100 lake Forest, CA 92630			
E-MAIL ADDRESS derdman@lakeforestca.gov		PHONE NUMBER 949-282-5233	FAX NUMBER 949-461-3511
26. NAME OF AUTHORIZED AGENT / ENGINEER (A "Letter of authorization" is required if different from #25) Tait & Associates, David Sloan		IS A LETTER OF AUTHORIZATION ATTACHED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
ADDRESS OF AUTHORIZED AGENT / ENGINEER (Include City and Zip Code) 701 N. Parkcenter Dr. Santa Ana, CA 92705			
E-MAIL ADDRESS dsloan@tait.com		PHONE NUMBER 714-560-8643	FAX NUMBER 714-560-8211
27. NAME OF BILLING CONTACT (Same as #25 <input checked="" type="checkbox"/> Same as #26 <input type="checkbox"/>)			
BILLING ADDRESS WHERE INVOICE(S) IS/ARE TO BE MAILED (Include City and Zip Code)			
E-MAIL ADDRESS		PHONE NUMBER	FAX NUMBER
28. SIGNATURE OF APPLICANT OR AUTHORIZED AGENT 	29. PRINT OR TYPE NAME David Sloan	30. TITLE Project Manager	31. DATE 1/22/2016

In addition to the attached General Provisions (TR-0045), the following Special Provisions are applicable:

The following advance notification procedure shall be followed for permitted work activities requiring Traffic Control within the State Right of Way:

By Noon Monday, permittee shall submit a completed copy of the attached **District 12 Closure Schedule Form** to the assigned Permit Inspector by email (as shown on the Closure Schedule Form) or by Fax (949-724-2265) for the following week period, defined as Saturday through the following Friday. If Monday is a designated holiday, the schedule shall be submitted on Tuesday. Incomplete, illegible or inaccurate information will be returned for correction and resubmittal. Permittee/Permittee's contractor will be notified of disapproved closures or closures that require coordination with other parties as a condition of approval. If email or fax is unavailable, the schedule may be called in by calling the assigned Permit Inspector, and the completed Form be submitted to the Permit Inspector during the pre-job meeting.

- **Notwithstanding General Provision #4, if a contractor is hired, your contractor is required to apply for and obtain an encroachment permit called Double Permit (DP) prior to starting work. A deposit of \$1640.00 is required at the time of application.**
- **Any Electrical item being affected must be repaired by the Contractor (Including Traffic Loops).**
- ADA Compliance requirements shall be met at all times. (DIB 82-05).
- Applicant shall provide ADA Certification when submitting application for works involving sidewalk and pedestrian ramp and also. The ADA certification is also required at the completion of work.
- Permittee shall contact the LOCAL LAW ENFORCEMENT JURISDICTION at least 48 hours prior to implementing traffic control measures. All closures shall conform to State standards and shall follow Chapter 8 of the Safety Manual.
- Except for installing, maintaining and removing traffic control devices, any work encroaching within 3 feet of the edge of a travel lane for areas with a posted speed limit below 45mph, or 6 feet of the edge of a travel lane, for areas with a speed limit posted at 45mph or higher, shall require closing of that travel lane. Any work encroaching within 6 feet of the edge of the shoulder, shall require closing of that shoulder. Permittee shall notify the Department's Representative, and obtain approval of, all traffic control, lane closures or detours, at least seven (7) WORKING DAYS prior to setting up of any traffic control." Orange vests and hard hats shall be worn at all times while working within State right-of-way.
- By acceptance of this permit, the permittee understands and agrees to reimburse the State for all costs incurred for performing corrective work in the event that the permittee or permittee's representatives fail to install, replace, repair, restore, or remove facilities to state specifications for the immediate safe operation of the highway and satisfactory completion of all permit work. State forces may perform corrective work or it

may be contracted out. Understood is that the above charges are in addition to permit fees, and an invoice will be sent to permittee for said charges after satisfactory completion of all work. The issuance of the permit shall not set as precedence for other permits approved in the future.

- It is the responsibility of the permittee, permittee's agents, or contractors to comply with all provisions of this permit and instructions from the State permit inspector. Permittee shall keep the permit package or copies thereof, at the work site at all times and show it upon request to any Department representative or law enforcement officer. When the permit package is not available, then immediate suspension of permit will occur.
- Permittee shall furnish the necessary inspection to provide for public safety and to insure that all work within or affecting the State's right of way pursuant to this permit is in accordance with State Standards and requirements. The State permit inspectors will monitor the work authorized under this permit and the work is subject to the approval of the State permit inspectors.
- **Permittee shall remain solely responsible for compliance with all requirements of this permit.**
- Prior to performing any work pursuant to this permit, the permittee shall obtain all necessary permits and authorizations required of other governmental agencies and by law. The permittee shall make the necessary arrangements with the appropriate agencies to monitor and test performed work to ensure accordance with requirements of those agencies.
- American National Standards Institute (ANSI) compliant Class II vests and hard hats shall be worn while working within State's right-of-way. Workers working at night will be required to wear ANSI Class III warning garments. Class III compliance can be achieved by combining ANSI Class E pants worn with an ANSI Class II vest.
- The State permit inspector must ascertain and agree to all work details and all aspects of traffic control or no work shall begin on this permit.
- If a safe passage way cannot be provided, appropriate signs and barricades shall be installed at the limits and in advance of construction at the nearest Crosswalk or Intersection to detour pedestrians to facilities across the street.
- When the work area encroaches upon a sidewalk, walkway, or crosswalk area, special consideration must be given to pedestrian safety. Protective barricades, fencing, handrails and bridges, together with warning and guidance devices and signs must be utilized so that the passageway for pedestrians, especially blind and other physically handicapped is safe and well defined and shown on the approved permit plan.
- Personal vehicles of the Contractor's employees shall not be parked on paved shoulders or traveled way within the limits of this work.
- Unless otherwise approved by the State Permit Inspector no work that interferes with public traffic shall be performed on weekdays between 6:00 AM and 9:00 AM, and between 3:00 PM and 6:30 PM.

City of Lake Forest

1216-NTK-0050

March 21, 2016

- The full width of traveled way shall be open for use by public traffic on Saturdays, and designated legal holidays, after 3:00 PM on Fridays and on the day preceding designated legal holidays, and when construction operations are not actively in progress.
- Except as specifically provided herein, all requirements of the Vehicle Code and other applicable laws must be complied with in all particulars.
- No lane may be closed or obstructed at any time unless specifically allowed per the encroachment permit, shown in approved traffic control plans, and/or as directed by the Department's Representative.
- The Permittee's work shall be subordinated to any operations which the Department may conduct and shall not delay, nor interfere with the Department's Forces or Department's Contractors.
- Should any deviation from these procedures or conditions be observed, all work shall be suspended until satisfactory steps have been taken to ensure compliance.
- In the event of any discrepancy between Permittee's Permit Plans and these Permit Special Provisions, these Special Provisions shall prevail.

Immediately following completion of the work permitted herein, Permittee shall fill out and fax the attached **Work Completion Notice** to **949-724-2265** to initiate final permit processing.



DISTRICT 12 LANE/SHOULDER CLOSURE REQUEST FORM

THIS FORM MUST BE SUBMITTED BY NODN ON MONDAY PRIOR TO THE WEEK OF THE PLANNED RESTRICTION.

COMPLETE FORM AND SUBMIT BY EMAIL TO THE EMAIL ADDRESSES INDICATED AT THE BDTTOM OF THE PAGE OR BY FAXING IT TO (949) 724-2265.

Today's Date: _____	Time: _____	Contractor: _____
Requestor: _____		Field Contact _____
Office Phone #: _____		Cell _____
Cell Phone #: _____		Office _____
EA # /Permit # _____		Pager _____
Caltrans Inspector: _____		FAX _____

LOCATION & DATE DF CLOSURE: _____ **FOR THE WEEK OF:** _____
 Reporting Week begins on Saturday

Direction: NB SB EB WB

Days(s): Saturday Sunday Monday Tuesday Wednesday Thursday Friday

	COUNTY	ROUTE	PM	DESCRIPTIVE LOCATION	TIME
FROM					
TO					

Types of Closure, Closure Characteristics (check all of the following that apply):

- One-Way
 Complete Closure
 24 - Hour / 7 Day - closure
 Detour Info available
 No detour available
 Ramp Closures
 COZEEP/MAZEEP
 Shoulder

Closure conforms to the FHWA's Manual of Uniform Traffic Control Devices (MUTCD) 2014 EDITION, copies of which are available online at http://www.dot.ca.gov/hq/traffops/engineering/mutcd/ca_mutcd2014.htm

Estimated Delay: _____ **Minutes** **Reason for Restriction:** _____

"REAL-TIME" STATUS INSTRUCTIONS-PLEASE MAKE YOUR FIELD PERSONNEL AWARE & RESPONSIBLE!

Permittee shall **STATUS** (call) scheduled work **DAILY** via District's 24-Hour Communication Center (DCC) at **949-936-3600** and **text the 10-97, 10-98 or 10-22 status to the permit inspector named on the permit (Inspector's cell phone number will be provided during the pre-job meeting).** Status (call) using Closure ID No(s) when work begins (first cone down, **10-97**), and again when work is finished for the day (last cone removed, **10-98**). If the work is cancelled on any scheduled day, Permittee shall call Caltrans DCC at **949-936-3600** and relay: "**(Closure ID #) is 10-22**" (cancelled). The cancellation call shall be made before the scheduled 10-97 time, but no later than 1 hour prior to the scheduled 10-98 time. Any **delay** in picking up your closure must be reported immediately to DCC at **949-936-3600** and Permit Inspector.

PERMITTEE SHALL EMAIL OR FAX THE COMPLETED FDRM TO THE ASSIGNED PERMIT INSPECTDR, AND SUBMIT THE SIGNED ORIGINAL COPY AT THE PRE-JOB MEETING. Permit Inspector's Email Addresses are as follows:
shakeri.hossein@dot.ca.gov, javid.iraji@dot.ca.gov, romouzi.shawn@dot.ca.gov, banihashemi.majid@dot.ca.gov

Name: _____ **Signature** _____ **Date** _____

State of California - Department of Transportation

WORK COMPLETION NOTICE

12-MP-0037 (Rev. 8/03)

Permit No. _____

Dist/Co/Rte/PM _____

Inspector _____

Permittee _____

All work authorized by the above-numbered permit was completed on:

Date _____

Signed _____

CUSTOMER SERVICE QUESTIONNAIRE

PERFORMANCE	EXCELLENT	VERY GOOD	GOOD	POOR
INSIDE THE OFFICE				
Staff courteous and helpful				
Staff quick and efficient				
Explanations and instructions clear				
TELEPHONE ANSWERING				
Timely response				
Give right information/answer				
INSPECTION				
Inspector courteous and helpful				
Pre-construction meeting set and held in a timely manner				
Inspector at the job site frequently				
Inspector able to answer questions and deal with problems				
OVERALL PERFORMANCE				
What would you say is our overall performance				

Fill out the form immediately after the completion of the work and fax it to 949/724-2265

STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION
ENCROACHMENT PERMIT GENERAL PROVISIONS
TR-0045 (REV. 05/2007)

1. **AUTHORITY:** The Department's authority to issue encroachment permits is provided under, Div. 1, Cipt. 3, Art. 1, Sect. 660 to 734 of the Streets and Highways Code.
2. **REVOCATION:** Encroachment permits are revocable on five days notice unless otherwise stated on the permit and except as provided by law for public corporations, franchise holders, and utilities. These General Provisions and the Encroachment Permit Utility Provisions are subject to modification or abrogation at any time. Permittees' joint use agreements, franchise rights, reserved rights or any other agreements for operating purposes in State highway right of way are exceptions to this revocation.
3. **DENIAL FOR NONPAYMENT OF FEES:** Failure to pay permit fees when due can result in rejection of future applications and denial of permits.
4. **ASSIGNMENT:** No party other than the permittee or permittee's authorized agent is allowed to work under this permit.
5. **ACCEPTANCE OF PROVISIONS:** Permittee understands and agrees to accept these General Provisions and all attachments to this permit, for any work to be performed under this permit.
6. **BEGINNING OF WORK:** When traffic is not impacted (see Number 35), the permittee shall notify the Department's representative, two (2) days before the intent to start permitted work. Permittee shall notify the Department's Representative if the work is to be interrupted for a period of five (5) days or more, unless otherwise agreed upon. All work shall be performed on weekdays during regular work hours, excluding holidays, unless otherwise specified in this permit.
7. **STANDARDS OF CONSTRUCTION:** All work performed within highway right of way shall conform to recognized construction standards and current Department Standard Specifications, Department Standard Plans High and Low Risk Facility Specifications, and Utility Special Provisions. Where reference is made to "Contractor and Engineer," these are amended to be read as "Permittee and Department representative."
8. **PLAN CHANGES:** Changes to plans, specifications, and permit provisions are not allowed without prior approval from the State representative.
9. **INSPECTION AND APPROVAL:** All work is subject to monitoring and inspection. Upon completion of work, permittee shall request a final inspection for acceptance and approval by the Department. The local agency permittee shall not give final construction approval to its contractor until final acceptance and approval by the Department is obtained.
10. **PERMIT AT WORKSITE:** Permittee shall keep the permit package or a copy thereof, at the work site and show it upon request to any Department representative or law enforcement officer. If the permit package is not kept and made available at the work site, the work shall be suspended.
11. **CONFLICTING ENCROACHMENTS:** Permittee shall yield start of work to ongoing, prior authorized, work adjacent to or within the limits of the project site. When existing encroachments conflict with new work, the permittee shall bear all cost for rearrangements, (e.g., relocation, alteration, removal, etc.).
12. **PERMITS FROM OTHER AGENCIES:** This permit is invalidated if the permittee has not obtained all permits necessary and required by law, from the Public Utilities Commission of the State of California (PUC), California Occupational Safety and Health Administration (Cal-OSHA), or any other public agency having jurisdiction.
13. **PEDESTRIAN AND BICYCLIST SAFETY:** A safe minimum passageway of 4' shall be maintained through the work area at existing pedestrian or bicycle facilities. At no time shall pedestrians be diverted onto a portion of the street used for vehicular traffic. At locations where safe alternate passageways cannot be provided, appropriate signs and barricades shall be installed at the limits of construction and in advance of the limits of construction at the nearest crosswalk or intersection to detour pedestrians to facilities across the street. Attention is directed to Section 7-1.09 Public Safety of the Department Standard Specifications.
14. **PUBLIC TRAFFIC CONTROL:** As required by law, the permittee shall provide traffic control protection warning signs, lights, safety devices, etc., and take all other measures necessary for traveling public's safety. While providing traffic control, the needs and control of all road users (motorists, bicyclists and pedestrians, including persons with disabilities in accordance with the Americans with Disabilities Act of 1990 (ADA)) shall be an essential part of the work activity.

Day and night time lane closures shall comply with the California Manual on Uniform Traffic Control Devices (Part 6, Temporary Traffic Control), Standard Plans, and Standard Specifications for traffic control systems. These General Provisions are not intended to impose upon the permittee, by third parties, any duty or standard of care, greater than or different from, as required by law.
15. **MINIMUM INTERFERENCE WITH TRAFFIC:** Permittee shall plan and conduct work so as to create the least possible inconvenience to the traveling public; traffic shall not be unreasonably delayed. On conventional highways, permittee shall place properly attired flagger(s) to stop or warn the traveling public in compliance with the California Manual on Uniform Traffic Control Devices (Chapter 6E, Flagger Control).
16. **STORAGE OF EQUIPMENT AND MATERIALS:** The storage of equipment or materials is not allowed within State highway right-of-way, unless specified within the Special Provisions of this specific encroachment permit. If Encroachment Permit Special Provisions allow for the storage of equipment or materials within the State right of way, the equipment and material storage shall comply with Standard Specifications, Standard Plans, Special Provisions, and the Highway Design Manual. The clear recovery zone widths must be followed and are the minimum desirable for the type of facility indicated below: freeways and expressways - 30'; conventional highways (no curbs) - 20'; conventional highways (with curbs) - 15'. If a fixed object cannot be eliminated, moved outside the clear recovery zone, or modified to be made yielding, it should be shielded by a guardrail or a crash cushion.
17. **CARE OF DRAINAGE:** Permittee shall provide alternate drainage for any work interfering with an existing drainage facility in compliance with the Standard Specifications, Standard Plans and/or as directed by the Department's representative.
18. **RESTORATION AND REPAIRS IN RIGHT OF WAY:** Permittee is responsible for restoration and repair of State highway right of way resulting from permitted work (State Streets and Highways Code, Sections 670 et. seq.).

The duty of the permittee to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code. The permittee waives any and all rights to any type of expressed or implied indemnity against the State, its officers, employees, and State contractors. It is the intent of the parties that the permittee will indemnify and hold harmless the State, its officers, employees, and State's contractors, from any and all claims, suits or actions as set forth above regardless of the existence or degree of fault or negligence, whether active or passive, primary or secondary, on the part of the State, the permittee, persons employed by the permittee, or acting on behalf of the permittee.

For the purpose of this section, "State's contractors" shall include contractors and their subcontractors under contract to the State of California performing work within the limits of this permit.

29. **NO PRECEDENT ESTABLISHED:** This permit is issued with the understanding that it does not establish a precedent.
30. **FEDERAL CIVIL RIGHTS REQUIREMENTS FOR PUBLIC ACCOMMODATION:**
A. The permittee, for himself, his personal representative, successors in interest, and assigns as part of the consideration hereof, does hereby covenant and agree that:
1. No person on the grounds of race, color, or national origin shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
 2. That in connection with the construction of any improvements on said lands and the furnishings of services thereon, no discrimination shall be practiced in the selection and retention of first-tier subcontractors in the selection of second-tier subcontractors.
 3. That such discrimination shall not be practiced against the public in their access to and use of the facilities and services provided for public accommodations (such as eating, sleeping, rest, recreation), and operation on, over, or under the space of the right of way.
 4. That the permittee shall use the premises in compliance with all other requirements imposed pursuant to Title 15, Code of Federal Regulations, Commerce and Foreign Trade, Subtitle A, Office of the Secretary of Commerce, Part 8 (15 C.F.R. Part 8) and as said Regulations may be amended.
 5. That in the event of breach of any of the above nondiscrimination covenants, the State shall have the right to terminate the permit and to re-enter and repossess said land and the land and the facilities thereon, and hold the same as if said permit had never been made or issued.
31. **MAINTENANCE OF HIGHWAYS:** The permittee agrees, by acceptance of a permit, to properly maintain any encroachment. This assurance requires the permittee to provide inspection and repair any damage, at permittee's expense, to State facilities resulting from the encroachment.
32. **SPECIAL EVENTS:** In accordance with subdivision (a) of Streets and Highways Code Section 682.5, the Department of Transportation shall not be responsible for the conduct or operation of the permitted activity, and the applicant agrees to defend, indemnify, and hold harmless the State and the city or county against any and all claims arising out of any activity for which the permit is issued.
- The permittee understands and agrees to comply with the obligations of Titles II and III of the Americans with Disabilities Act of 1990 in the conduct of the event, and further agrees to indemnify and save harmless the State of California, all officers and employees thereof, including but not limited to the Director of Transportation, from any claims or liability arising out of or by virtue of said Act.
33. **PRIVATE USE OF RIGHT OF WAY:** Highway right of way shall not be used for private purposes without compensation to the State.

The gifting of public property use and therefore public funds is prohibited under the California Constitution, Article 16.

34. **FIELD WORK REIMBURSEMENT:** Permittee shall reimburse State for field work performed on permittee's behalf to correct or remedy hazards or damaged facilities, or clear debris not attended to by the permittee.
35. **NOTIFICATION OF DEPARTMENT AND TMC:** The permittee shall notify the Department's representative and the Transportation Management Center (TMC) at least 7 days before initiating a lane closure or conducting an activity that may cause a traffic impact. A confirmation notification should occur 3 days before closure or other potential traffic impacts. In emergency situations when the corrective work or the emergency itself may affect traffic, TMC and the Department's representative shall be notified as soon as possible.
36. **SUSPENSION OF TRAFFIC CONTROL OPERATION:** The permittee, upon notification by the Department's representative, shall immediately suspend all lane closure operations and any operation that impedes the flow of traffic. All costs associated with this suspension shall be borne by the permittee.
37. **UNDERGROUND SERVICE ALERT (USA) NOTIFICATION:** Any excavation requires compliance with the provisions of Government Code Section 4216 et. seq., including, but not limited to notice to a regional notification center, such as Underground Service Alert (USA). The permittee shall provide notification at least 48 hours before performing any excavation work within the right of way.

GENERAL NOTES

- ALL TRAFFIC CONTROL WORK FOR CONSTRUCTION SHALL CONFORM TO PART 6, "TEMPORARY TRAFFIC CONTROL" OF THE 2014 CALIFORNIA MUTCD, AND THE 2010 CALTRANS STANDARD PLANS AND SPECIFICATIONS. SIGNING AND STRIPING SHALL CONFORM TO LATEST MUTCD AND 2014 CALIFORNIA MUTCD, STANDARD PLANS AND STANDARD SPECIFICATIONS. SIGNS SHALL BE STANDARD UNLESS NOTED OTHERWISE.
- EXACT LOCATION OF ALL TRAFFIC CONTROL DEVICES SHALL BE AS DIRECTED BY ENGINEER BASED ON CONSTRUCTION CONDITIONS. ADDITIONAL WARNING OR CONSTRUCTION SIGNS MAY BE REQUIRED BY THE ENGINEER.
- ALL NIGHT WORK SHALL BE APPROVED IN ADVANCE BY THE ENGINEER.
- STREET CLOSURES SHALL BE APPROVED BY THE ENGINEER WHENEVER APPLICABLE. DETOUR PLANS SHALL BE SUBMITTED AND APPROVED BY THE CITY WHENEVER APPLICABLE. RESIDENTS/BUSINESSES SHALL BE NOTIFIED ONE WEEK PRIOR TO CONSTRUCTION.
- ALL CONFLICTING STRIPES, PAVEMENT MARKINGS, RAISED PAVEMENT MARKERS AND LEGENDS SHALL BE COMPLETELY REMOVED BY WET SANDBLASTING OR GRINDING PRIOR TO ANY CHANGE IN THE TRAFFIC PATTERN. NO CONFLICTING STRIPES, PAVEMENT MARKINGS OR LEGENDS SHALL BE BLACKED OUT WITH PAINT.
- ALL ADVANCE WARNING SIGN INSTALLATIONS SHALL BE EQUIPPED WITH FLAGS FOR DAYTIME CLOSURES.
- ALL SIGNS SHALL BE REFLECTORIZED AND STANDARD SIZE, UNLESS NOTED OTHERWISE. ALL W20-1, W20-5, AND W4-2 SIGNS SHALL BE MINIMUM 36" x 36".
- ALL DRUMS SHALL BE 36" MINIMUM HEIGHT, PORTABLE, WITH REFLECTORIZED 4" - 6" WHITE AND ORANGE STRIPES, WITH WEIGHTED BASES OR BALLAST RINGS. DRUMS SHALL BE MADE OF A FLEXIBLE MATERIAL, 18" - 36" IN DIAMETER AND SHALL BE KEPT IN THEIR PROPER POSITION AT ALL TIMES, AND SHALL BE REPAIRED, REPLACED, OR CLEANED AS NECESSARY TO PRESERVE THEIR APPEARANCE AND CONTINUITY. DRUMS FOR NIGHT TIME USE SHALL BE PROVIDED WITH FLASHING WARNING LIGHTS.
- TYPE II BARRICADES MAY BE USED IN ADDITION TO THE DRUMS, AT THE DISCRETION OF THE CONTRACTOR, WHEN THEY ARE INTENDED TO PROVIDE ADDITIONAL EMPHASIS IN AREAS WHERE WORKERS ARE PRESENT.
- USE AND PLACEMENT OF FLASHING ARROW BOARD(S) AND CHANGEABLE MESSAGE SIGN(S) SHALL BE AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL MAINTAIN, ON A 24-HOUR BASIS, ALL SIGNS, DRUMS, BARRICADES, ETC., TO ENSURE PROPER FLOW AND SAFETY OF TRAFFIC.
- THE CONTRACTOR SHALL UTILIZE FLAGGERS DURING WORK HOURS AS DEEMED NECESSARY BY THE ENGINEER.
- THE CONTRACTOR SHALL HAVE ALL SIGNS, DRUMS, BARRICADES, ETC., PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION AND BEFORE ATTEMPTING TO SWITCH TO A SUBSEQUENT STAGE DURING WORK HOURS.
- CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO CAUSE AS LITTLE INCONVENIENCE AS POSSIBLE TO ABUTTING BUSINESSES AND PROPERTY OWNERS.
- CONSTRUCTION TRUCK TRAFFIC MERGING INTO TRAFFIC LANES SHALL BE DONE BY USE OF FLAGGER AND APPROPRIATE SIGNAGE AS DIRECTED BY ENGINEER.
- FLASHING ARROW SIGNS (FAS) AND PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL CONFORM TO THE SPECIAL PROVISIONS AND BE EITHER SOLAR OR BATTERY OPERATED. GASOLINE AND DIESEL POWERED FAS AND PCMS ARE PROHIBITED.
- NO TWO CONSECUTIVE CROSS STREETS SHALL BE SIMULTANEOUSLY CLOSED FOR CONSTRUCTION.
- ALL WORK IN EACH PHASE SHALL BE COMPLETE BEFORE WORK IN ANOTHER PHASE MAY BEGIN.
- TRAFFIC SIGNALS (EXISTING, NEW, OR TEMPORARY) SHALL BE IN OPERATION AT ALL TIMES AT SIGNALIZED INTERSECTIONS.
- TEMPORARY "NO PARKING -- TOW AWAY" SIGNS SHALL BE POSTED WITHIN AFFECTED CONSTRUCTION AREAS A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE FOR 24 HOUR ACCESS TO ALL ADJACENT PROPERTIES. THIS SHALL INCLUDE BUT NOT BE LIMITED TO DRIVEWAYS AND WALKWAYS, EXCEPT AS INDICATED ON THESE PLANS AND IN THE SPECIFICATIONS. CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO CAUSE AS LITTLE INCONVENIENCE AS POSSIBLE TO ABUTTING PROPERTY OWNERS/OPERATORS.
- ALL PROPERTIES THAT HAVE ACCESS ADJACENT TO THE WORK AREA SHALL BE NOTIFIED OF ACCESS RESTRICTIONS (IN WRITING 48 HOURS MINIMUM BEFORE START OF WORK). THE NOTIFICATION SHALL DESCRIBE THE ACCESS LIMITATIONS, DATES OF LIMITATION, AND GIVE THE APPROXIMATE DATE AND TIME OF ACCESS RESTORATION. NO ACCESS SHALL BE LIMITED DURING NON-WORKING HOURS EXCEPT AS APPROVED BY THE ENGINEER. NO WORK IS PERMITTED ON SUNDAYS OR HOLIDAYS UNLESS APPROVED BY THE CITY.
- FLASHING YELLOW BEACONS, TYPE "B", SHALL BE USED ON ALL W20-1, C27 SIGNS, AND ALL TYPE III BARRICADES GUARDING THE WORK AREA OVERNIGHT.
- UNEVEN PAVEMENT SIGN(S) (WB-11) SHALL BE PLACED WHERE UNEVENNESS IN PAVEMENT DUE TO CONSTRUCTION OPERATIONS OCCUR.
- THE CONTRACTOR SHALL PROVIDE FOR SAFE PEDESTRIAN ACCESS AT ALL TIMES. TEMPORARY PEDESTRIAN ACCESS SHALL BE 5' MINIMUM WIDTH. ANY AND ALL PEDESTRIAN DETOUR ROUTES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE DETOUR ROUTE IS ESTABLISHED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PROTECTION OF TRAFFIC SIGNAL LOOP-SENSORS AND SIGNAL AND INTERCONNECT CONDUITS. WHERE DAMAGE IS CAUSED BY THE CONTRACTOR'S OPERATION, THE CONTRACTOR SHALL REPLACE DAMAGED CITY FACILITY AT NO COST TO THE CITY.
- THE FOLLOWING AGENCIES SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF ANY DETOUR AND/OR CONSTRUCTION ACTIVITIES.

CITY OF LAKE FOREST (949) 282-5233
 POLICE (GIVE LOCATION AND DURATION) (949) 461-3548
 FIRE DEPARTMENT (714) 573-6000

TRAFFIC CONTROL PHASING NOTES:

- NO LANE CLOSURES SHALL OCCUR PRIOR TO 9AM WITHIN CALTRANS R/W AND ALL LANES SHALL BE OPEN TO TRAFFIC BY 4PM.
- ALL TOLL ROAD OFF AND ON RAMP SHALL REMAIN OPEN AT ALL TIMES.



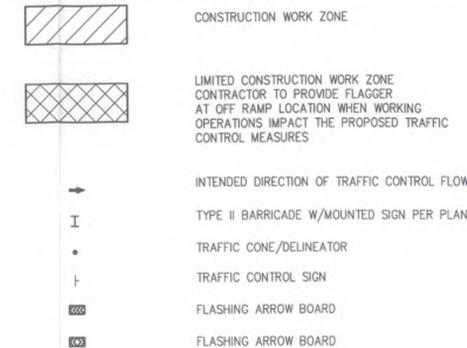
CITY OF LAKE FOREST
 DEPARTMENT OF PUBLIC WORKS
TRAFFIC CONTROL PLANS FOR THE
PORTOLA PARKWAY RESURFACING PROJECT
 CITY PROJECT NO. PW 2016.05B



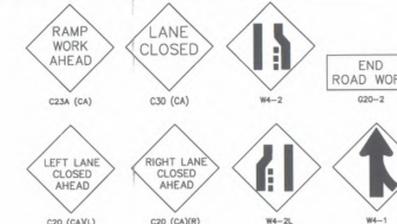
TRAFFIC CONTROL PLAN SHEET INDEX

SHT. NO.	DESCRIPTION
1	TITLE SHEET & GENERAL NOTES
2	TRAFFIC CONTROL - PHASE 1 (OUTSIDE LANES)
3	TRAFFIC CONTROL - PHASE 1 (OUTSIDE LANES)
4	TRAFFIC CONTROL - PHASE 2 (INSIDE LANES)
5	TRAFFIC CONTROL - PHASE 2 (INSIDE LANES)
6	TRAFFIC CONTROL - WB SR 241 OFF RAMP

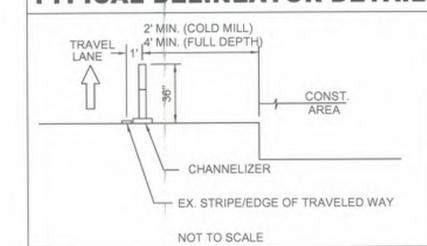
TRAFFIC CONTROL LEGEND:



TRAFFIC SIGN LEGEND:



TYPICAL DELINEATOR DETAIL



DISTRICT 12
 CALTRANS PERMIT PLANS
 MAR 10 2016
 ATTACHED TO
 PERMIT NO.

1216-NTK-0050
 < SECOND REVIEW >

PERMITTEE'S COPY

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 AT LEAST TWO DAYS BEFORE YOU DIG
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REGISTERED PROFESSIONAL ENGINEER
 CIVIL
 No. 82595
 Exp. 09/30/2016
 STATE OF CALIFORNIA

Designed by: RH & MH
 Drawn by: RH & MH
 Checked by: DS
 PLANS PREPARED UNDER SUPERVISION OF
 DAVID SLOAN
 R.C.E. 82595 Exp. 9-30-16
 Date: 1/28/2016

Date	By	REVISIONS	App'd

BENCH MARK:
 AS SHOWN ON APPLICABLE
 DETAIL SHEETS
 Scale AS SHOWN

PLANS APPROVED BY THE
 CITY OF LAKE FOREST
 DATE
 THOMAS E. WHEELER, P.E. PUBLIC
 WORKS DIRECTOR / CITY ENGINEER

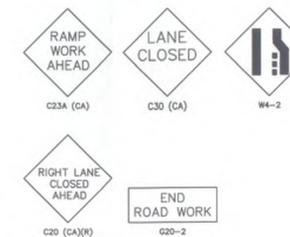
CITY OF LAKE FOREST
 PUBLIC WORKS DEPARTMENT
 PORTOLA PARKWAY RESURFACING PROJECT
 TRAFFIC CONTROL PLANS
 TITLE SHEET & GENERAL NOTES
 FEDERAL PROJECT No.: STPL-5469(017)
 ADVANTAGE ID: 121600041
 Drawing No. 1 OF 6

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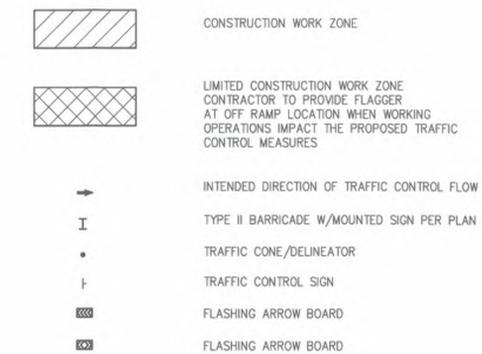
TRAFFIC CONTROL NOTES

- SEE SHEET 1 FOR ALL GENERAL TRAFFIC CONTROL NOTES
- PEDESTRIAN TRAFFIC AT AFFECTED PATHS OF TRAVEL SHALL BE DETOURED PER 2014 CA-MUTCT FIGURE 6H-28. SIGNAGE TO BE IN PLACE ONLY DURING TIMES OF PEDESTRIAN PATH IMPACTS.
- ALL TRAFFIC SHALL BE MAINTAINED WITHIN EXISTING TRAFFIC LANES PER THE PLAN DESIGNATIONS.
- PROVIDE ACCESS OPENINGS AT ALL AFFECTED DRIVEWAYS.

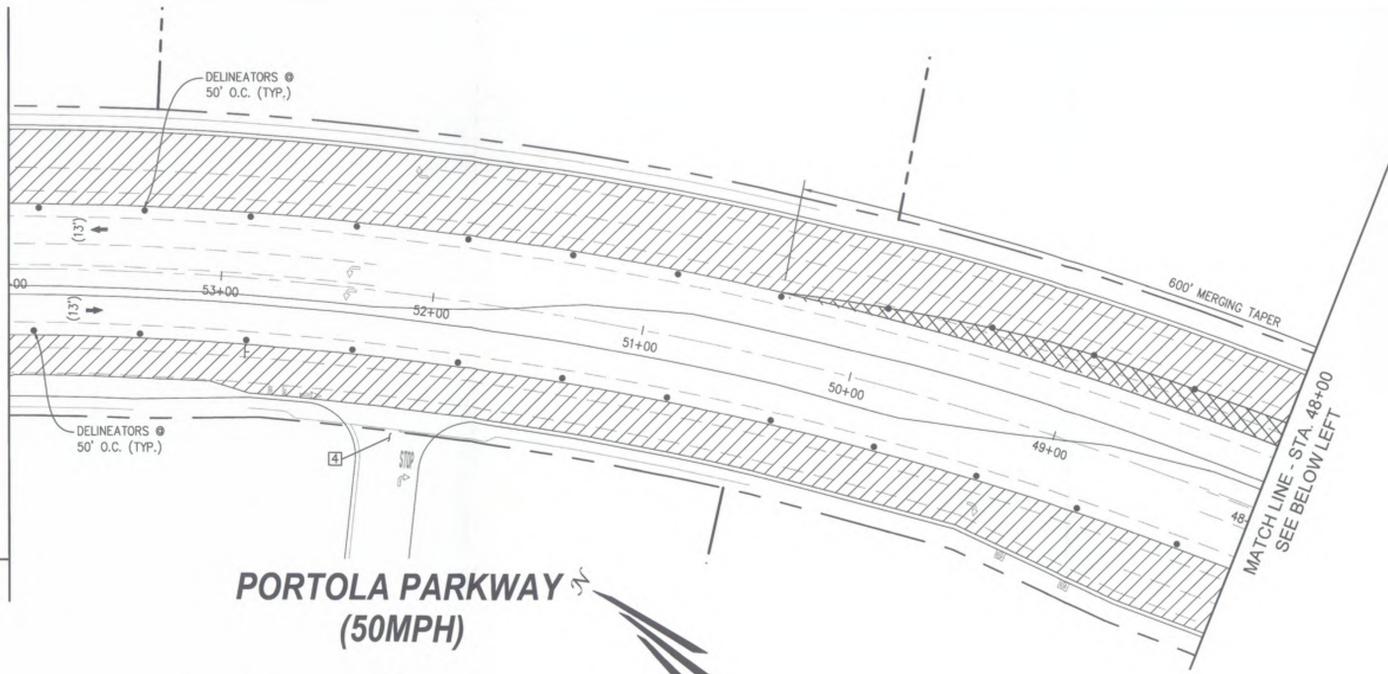
TRAFFIC SIGN LEGEND



TRAFFIC CONTROL LEGEND

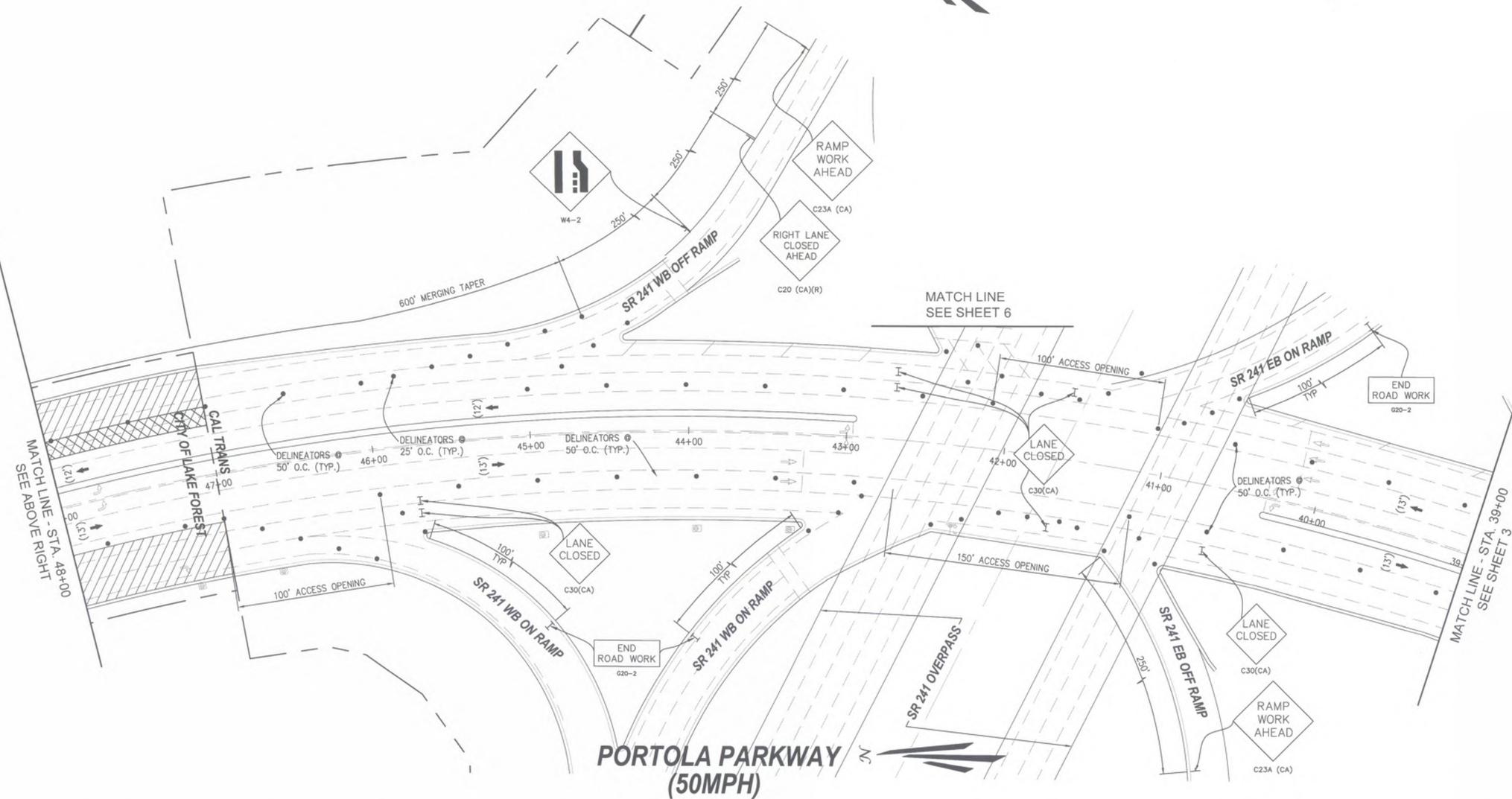


SEE CONTRACTOR SUBMITTED
TC PLANS FOR REMAINDER



**PORTOLA PARKWAY
(50MPH)**

MATCH LINE - STA. 48+00
SEE BELOW LEFT



**PORTOLA PARKWAY
(50MPH)**



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DESIGNED BY: RH & MH
DRAWN BY: RH & MH
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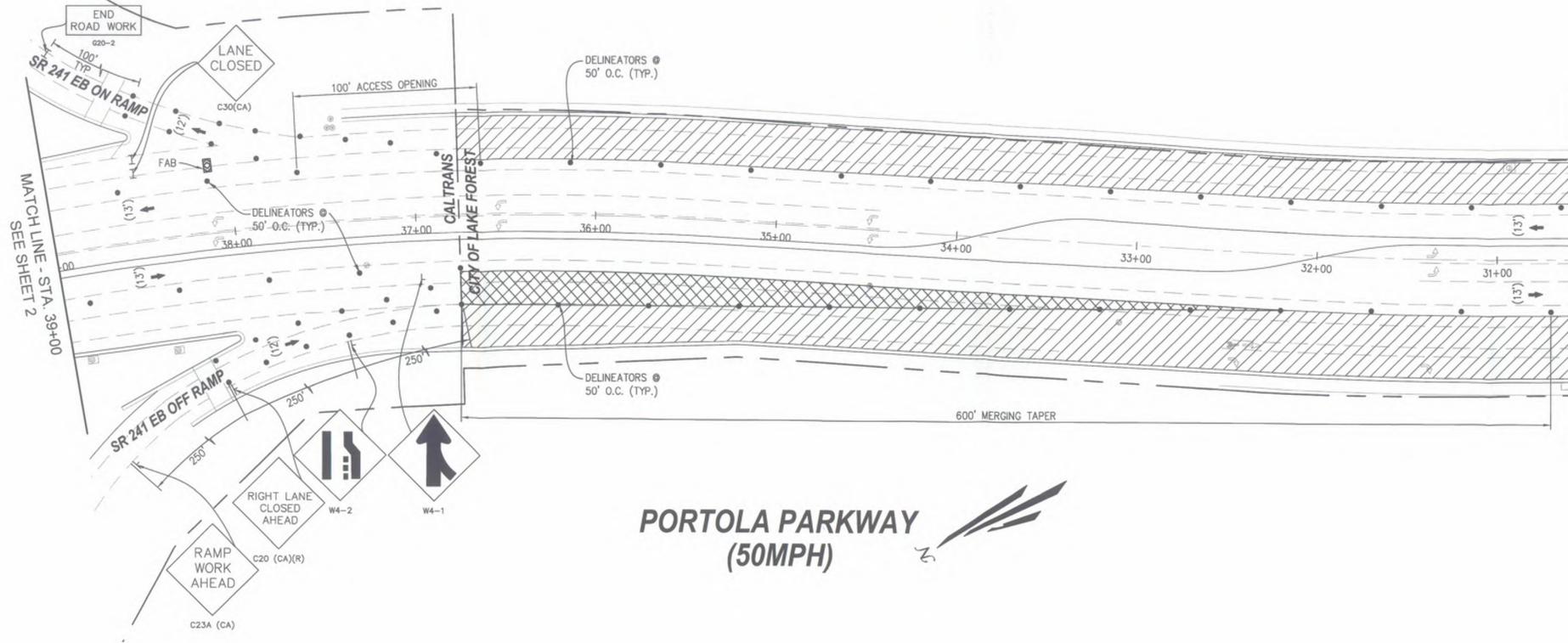
Date	By	REVISIONS	App'd

BENCH MARK:
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Scale AS SHOWN

PLANS APPROVED BY THE
CITY OF LAKE FOREST
THOMAS E. WHEELER, P.E. PUBLIC
WORKS DIRECTOR / CITY ENGINEER

CITY OF LAKE FOREST
PUBLIC WORKS DEPARTMENT
PORTOLA PARKWAY RESURFACING PROJECT
TRAFFIC CONTROL PLANS
PHASE 1 (OUTSIDE LANES)
FEDERAL PROJECT No.: STPL-5469(017)
ADVANTAGE ID: 121600041
Drawing No. 2 OF 6

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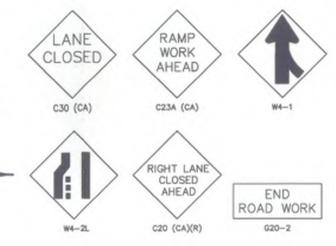


**PORTOLA PARKWAY
(50MPH)**

TRAFFIC CONTROL NOTES

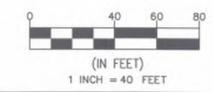
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- PROVIDE ACCESS OPENINGS AT ALL AFFECTED DRIVEWAYS.

TRAFFIC SIGN LEGEND



SEE CONTRACTOR SUBMITTED
TC PLANS FOR REMAINDER

TRAFFIC CONTROL LEGEND



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Designed by RH & MH Drawn by RH & MH Checked by DS
PLANS PREPARED UNDER SUPERVISION OF
DAVID SLOAN
R.C.E. 82595 Exp. 9-30-16
Date 1/28/2016

Date	By	REVISIONS	App'd

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PLANS APPROVED BY THE
CITY OF LAKE FOREST
THOMAS E. WHEELER, P.E. PUBLIC
WORKS DIRECTOR / CITY ENGINEER
DATE

CITY OF LAKE FOREST
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Drawing No.
3 OF 6

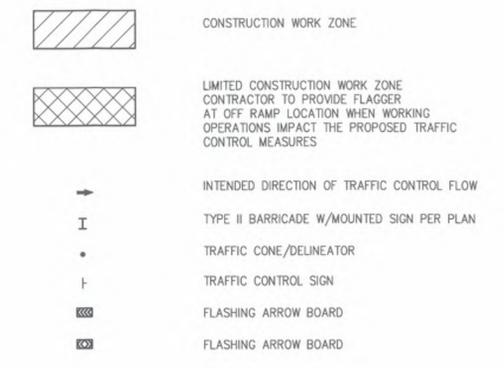
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- ALL TRAFFIC, SHALL BE MAINTAINED WITHIN EXISTING TRAFFIC LANES PER THE PLAN DESIGNATIONS.
- PROVIDE ACCESS OPENINGS AT ALL AFFECTED DRIVEWAYS.

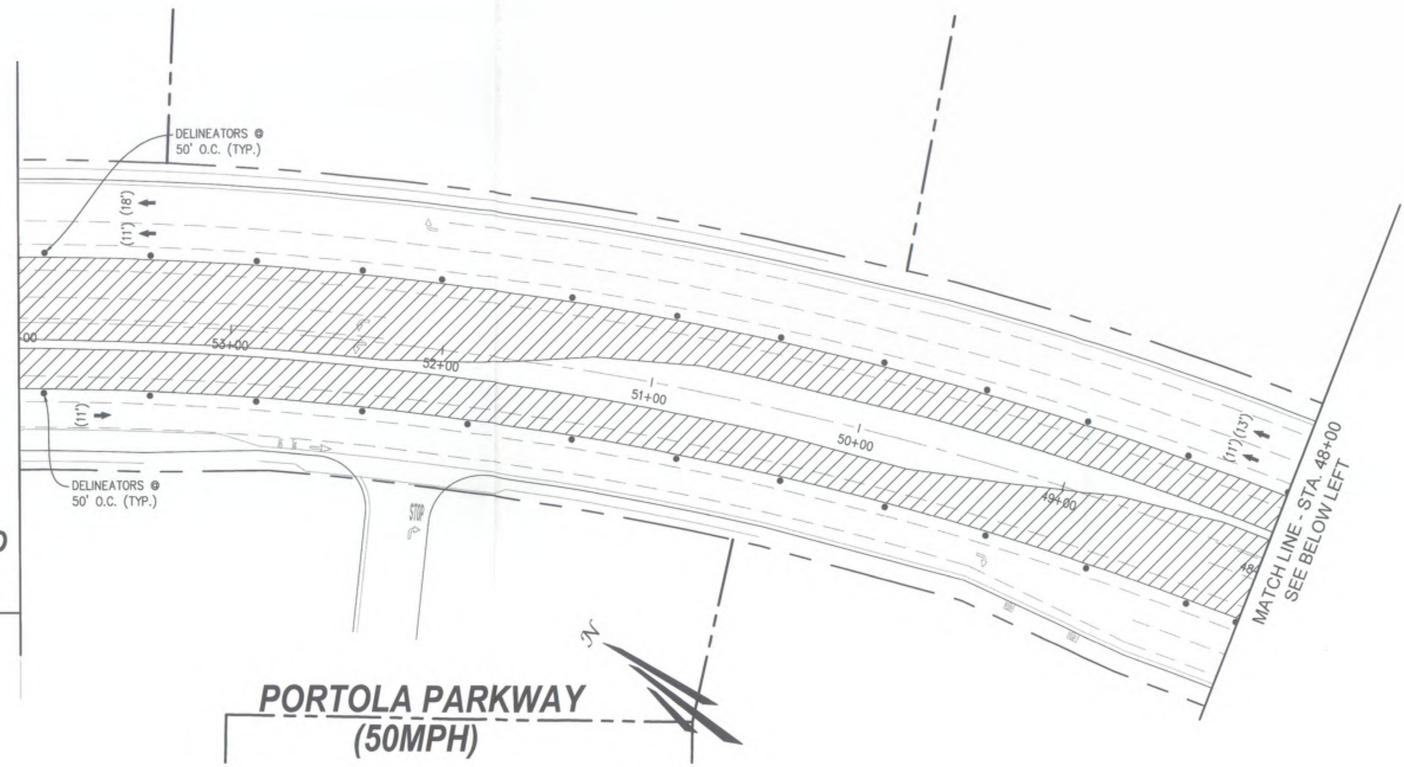
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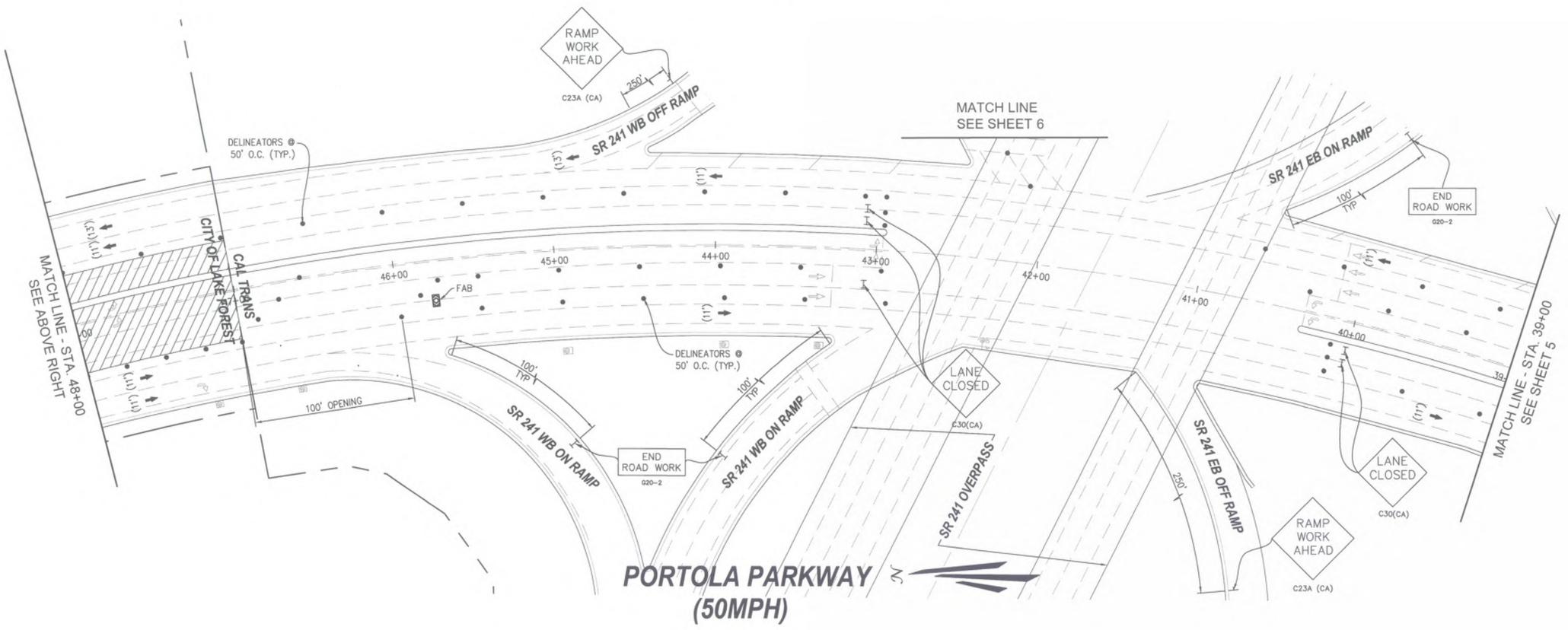
TRAFFIC CONTROL LEGEND



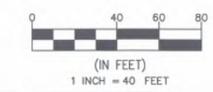
SEE CONTRACTOR SUBMITTED TC PLANS FOR REMAINDER



**PORTOLA PARKWAY
(50MPH)**



**PORTOLA PARKWAY
(50MPH)**



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REGISTERED PROFESSIONAL ENGINEER
DAVID SLOAN
No. 82595
Exp. 09/30/2016
CIVIL
STATE OF CALIFORNIA

Designed by RH & MH
Drawn by RH & MH
Checked by DS
PLANS PREPARED UNDER SUPERVISION OF
DAVID SLOAN
R.C.E. 82595 Exp. 9-30-16
Date 1/28/2016

Date	By	REVISIONS	App'd

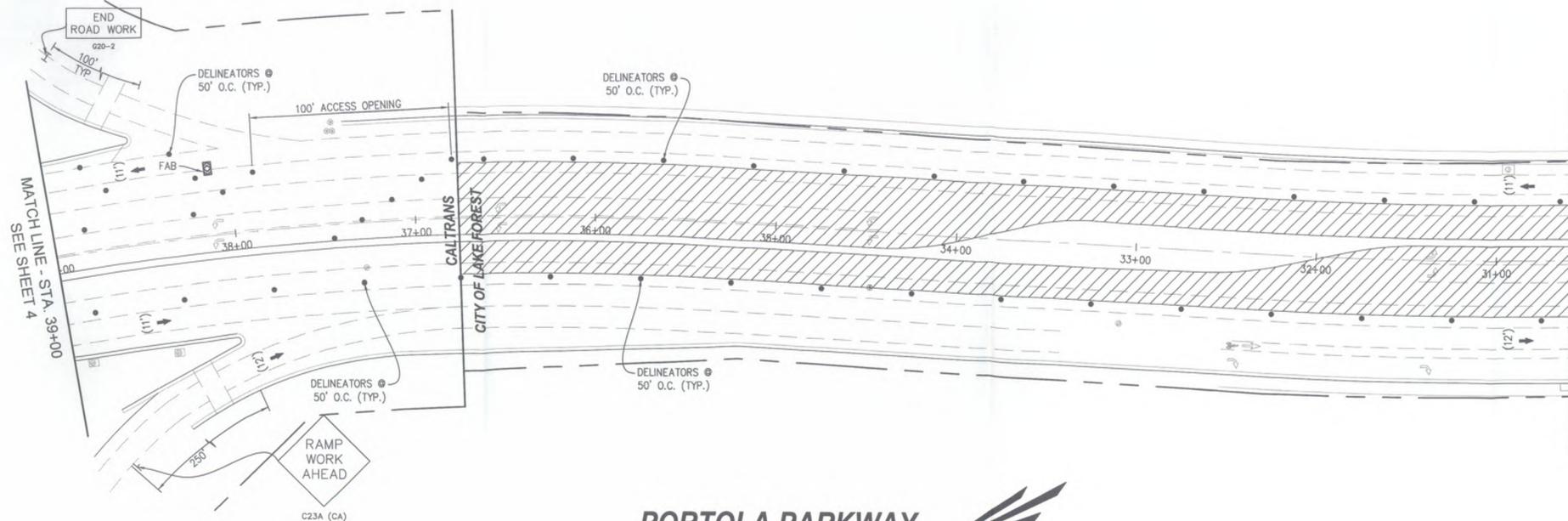
BENCH MARK:
AS SHOWN ON APPLICABLE
DETAIL SHEETS
Scale AS SHOWN

PLANS APPROVED BY THE
CITY OF LAKE FOREST
DATE
THOMAS E. WHEELER, P.E. PUBLIC
WORKS DIRECTOR / CITY ENGINEER

CITY OF LAKE FOREST
PUBLIC WORKS DEPARTMENT
PORTOLA PARKWAY RESURFACING PROJECT
TRAFFIC CONTROL PLANS
PHASE 2 (INSIDE LANES)

FEDERAL PROJECT No.: STPL-5469(017)
ADVANTAGE ID: 121600041
Drawing No.
4 OF 6

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PLOTTED: 3/9/2016 8:37:37 AM BY Jason Morris PAGES: 4 OF 6 PLOTSTYLE: Default R14 pen assignment.ctb



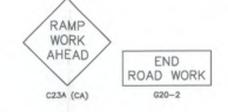
**PORTOLA PARKWAY
(50MPH)**

**SEE CONTRACTOR SUBMITTED
TC PLANS FOR REMAINDER**

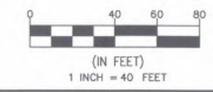
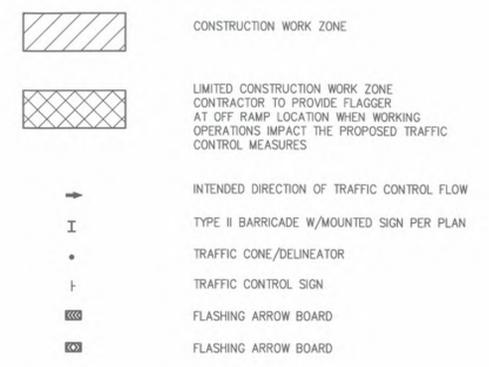
TRAFFIC CONTROL NOTES

1. SEE SHEET 1 FOR ALL GENERAL TRAFFIC CONTROL NOTES
2. PEDESTRIAN TRAFFIC AT AFFECTED PATHS OF TRAVEL SHALL BE DETOURED PER 2014 CA-MUTCT FIGURE 6H-28. SIGNAGE TO BE IN PLACE ONLY DURING TIMES OF PEDESTRIAN PATH IMPACTS.
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4. PROVIDE ACCESS OPENINGS AT ALL AFFECTED DRIVEWAYS.

TRAFFIC SIGN LEGEND



TRAFFIC CONTROL LEGEND



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Designed by RH & MH
Drawn by RH & MH
Checked by DS
PLANS PREPARED UNDER SUPERVISION OF
David Sloan
DAVID SLOAN
R.C.E. 82595 Exp. 9-30-16
Date 1/28/2016

Date	By	REVISIONS	App'd

BENCH MARK:
AS SHOWN ON APPLICABLE
DETAIL SHEETS
Scale AS SHOWN

PLANS APPROVED BY THE
CITY OF LAKE FOREST
DATE
THOMAS E. WHEELER, P.E. PUBLIC
WORKS DIRECTOR / CITY ENGINEER

CITY OF LAKE FOREST
PUBLIC WORKS DEPARTMENT
PORTOLA PARKWAY RESURFACING PROJECT
TRAFFIC CONTROL PLANS
PHASE 2 (INSIDE LANES)

FEDERAL PROJECT No.: STPL-5469(017)
ADVANTAGE ID: 121600041
Drawing No.

5 OF 6

K:\Drawings\ME\ME0372 - City of Lake Forest\Construction Drawings\ME0372-TC.dwg PLOTTED: 3/9/2016 6:37:41 AM BY: Jibson Morris PAGESETUP: --- PLOTSTYLE: Default R14 pen assignments.ctb

APPENDIX B
CALTRANS ENCROACHMENT PERMIT

END OF APPENDIX B

**APPENDIX C
IRWD STANDARD NOTES**

3.7 IRWD STANDARD DOMESTIC WATER NOTES

The following Standard Water Notes shall be included on all improvement plans for the installation of domestic water systems:

- A. All water system work shall conform to the District's "Procedural Guidelines and General Design Requirements" and "Construction Manual", as last revised.
- B. A pre-construction conference of representatives from affected utilities, agencies and the contractor shall be held on the job site (or a location approved by the District) at least forty-eight (48) hours prior to the start of work.
- C. The District Engineering Office shall be called for inspection forty-eight (48) hours before start of work at (949) 453-5615 or (949) 453-5300.
- D. The proposed water system is to be staked at a minimum 50-foot stationing if there are no existing curbs.
- E. Water meters shall not be located within a driveway or sidewalk. All water service laterals shall be constructed perpendicular to the water main without bends or angles from the connection point on the main.
- F. All main line valves shall be maintained so as to be accessible during tract development and construction. All valve stem tops having over 60-inches of cover require an extension meeting District standards.
- G. In residential streets, the top of the pipe, 10-inches and smaller, shall be a minimum of 42-inches below the finished street surface and 48-inches below finished street surface for all pipe 12-inches in diameter and larger.
- H. All fire hydrants shall be set with the bottom flange 4-inches above the concrete pad or sidewalk using one scored-spool as indicated in the Construction Manual and shall be located a minimum of 3 feet from the ECR or BCR at intersection.
- I. All water mains 4-inches through 12-inches shall be SDR-14 or thicker and shall not be rated less than pressure class 200, AWWA C-900 PVC, unless otherwise approved by the District.
- J. No "hot-taps" or other tie-in connections shall be made to existing District water mains prior to conducting and passing an approved pressure test and a bacteriological test on the new water distribution system.

IRWD STANDARD DOMESTIC WATER NOTES

- K. Tapping sleeves, where called for on the plans, shall be pressure tested in an approved manner in the field, in the presence of the District representative, prior to tapping the main line. Tapping of the main line shall not proceed unless a District representative is present. Size on size taps of water mains are not allowed.
- L. Where meters and meter boxes are located within slopes, the angle meter stops shall be located such that the meters and boxes are parallel and flush, with the finished surface. Wherever the surrounding grade exceeds eight (8%) percent, or in the opinion of the District representative, the adjacent slope is too great, a small retaining wall, clear of the meter box, shall be constructed to the satisfaction of the District representative.
- M. Curb faces shall be inscribed with the letter “W” indicating locations of all domestic water services. Letter inscription shall be made using a 4-inch power tool wheel grinder.
- N. Individual pressure regulators are required by the Uniform Plumbing Code if average static pressure in the main is 80 psi or more.
- O. Curbs shall be inscribed with tie downs for all valve locations. Letter inscriptions shall be made using a 4-inch power tool wheel grinder.
- P. The contractor shall expose all points of connection to the existing domestic water system for verification of horizontal and vertical location before construction.
- Q. Final Inspection for waterlines must include water samples that will be tested for the presence of bacteria, conductivity, turbidity and odor. The turbidity must be less than 2.5 NTU and the odor must be less than 1.0 TON, not to include chlorine odor, to be acceptable. Two (2) consecutive “passing” samples are required for acceptance.
- R. The contractor working on IRWD waterlines must have a C-34 license issued by the State Contractor’s License Board or Class “A” General Contractors license (with special approval of the District, based upon actual water and sewer pipeline construction experience.)
- S. Contractor shall obtain and show proof of a construction dewatering permit from the state of California, Regional Water Quality Control Board prior to the start of construction.
- T. All butterfly valves 12-inches in diameter and larger shall be flanged and shall be bi-directionally tested with the operator installed in accordance with the

STANDARD SEWER NOTES

District's requirements outlined in the Construction Manual.

4.13 STANDARD SEWER NOTES

The following notes must appear on the plans under Standard Sewer Notes.

- A. The sewer system is to be installed by the developer. All sewer work shall conform to the District's "Procedural Guidelines and General Design Requirements" and "Construction Manual", as last revised.
- B. The sewer contractor shall have a copy of the District's Construction Manual on the job.
- C. The contractor shall obtain a City or County permit for work done on public right-of-way.
- D. The District Engineering Office shall be called for inspection forty eight (48) hours before start of work at (949) 453-5615 or (949) 453-5300.
- E. A pre-construction conference shall be held 48 hours before starting construction work.
- F. The contractor shall expose all join points to the existing sewer system for verification of location and elevation before construction.
- G. Stations shown as 0+00.00 are sewer stations and are independent of all other street and pipeline stations.
- H. All laterals are to be staked by a surveyor before trenching and a complete set of cut sheets supplied to the District Representative.
- I. All sewer manhole lids are to have "IRWD" cast thereon as shown in the District Standard Drawings.
- J. The District will inspect and test the sewer collection system and lateral sewers to the lateral connection at property line clean-out, terminal clean-out or manhole. Privately owned sewer laterals, house laterals or building sewer laterals from the property line clean-out onto private property will be inspected and tested by the appropriate City or County building agency.
- K. Infiltration and air testing of sewer lines shall be in accordance with the District's "Procedural Guidelines and General Design Requirements" and "Construction Manual", as last revised.

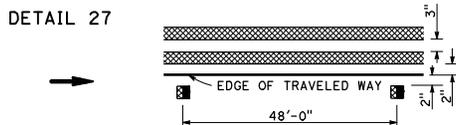
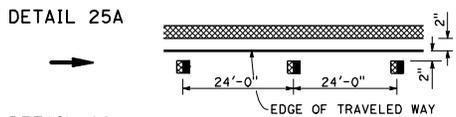
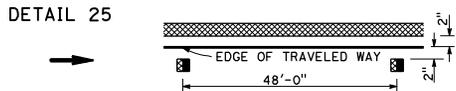
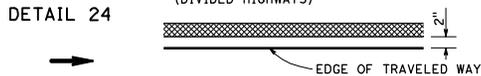
STANDARD SEWER NOTES

- L. All sewer lines shall be cleaned via “Hydro-jet cleaner” or “Wayne Ball” in the presence of the District Representative before completion of all leakage tests.
- M. Pipeline leakage tests shall be made in the presence of the District Representative, only after backfill has been completed, compaction tests on backfill have been made, and the backfill has been accepted by the District Representative and has received written certification from the geotechnical engineer.
- N. All sewer main lines shall be inspected by the District and then shall be CCTV video inspected (by IRWD forces or an approved private contract company under the observation of the District Representative) using a high-resolution closed circuit television system. A DVD video recording shall be made of the inspection and provided to the District Representative.
- O. The contractor is to provide the District with an as-built set of construction plans.
- P. Before final acceptance, the developer’s engineer signing the plans shall furnish the District with a set of as-built mylars, a PDF scan of the red-line mark-up and an as-built CAD file of the sewer plan.
- Q. Curbs shall be inscribed with an “S” indicating locations of all sewer laterals using a 4-inch power tool wheel-grinder.
- R. Curbs shall be inscribed with tie downs for all manhole locations using a 4-inch power tool wheel-grinder.
- S. The contractor working on IRWD sewer mains must have a C-34 license or a Class A Contractors license.
- T. Manholes deeper than twenty (20’) feet shall have steel-reinforced concrete bases. Reinforcement shall be provided for the specific soils conditions at each deep manhole location. The reinforcement design shall be submitted to the District under the signature and stamp of a Licensed California Civil Engineer.

STANDARD SEWER NOTES

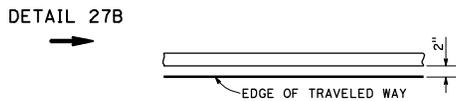
END OF APPENDIX C

LEFT EDGELINES
(DIVIDED HIGHWAYS)

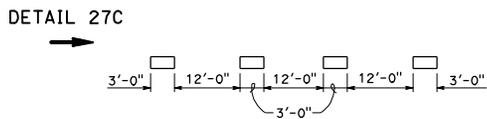


RIGHT EDGELINES

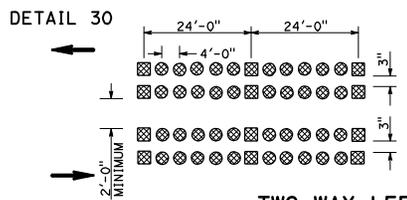
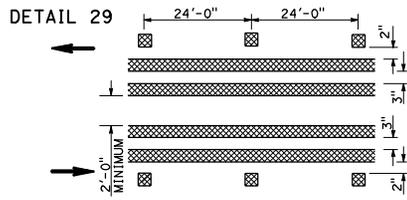
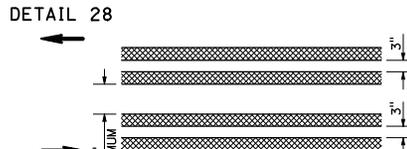
DETAIL 27A
DETAIL 27A DELETED



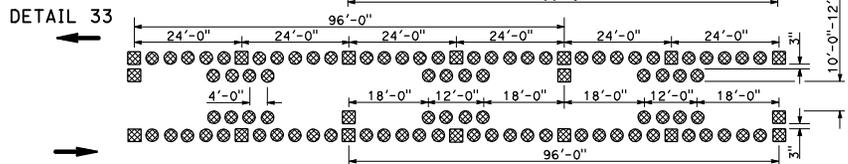
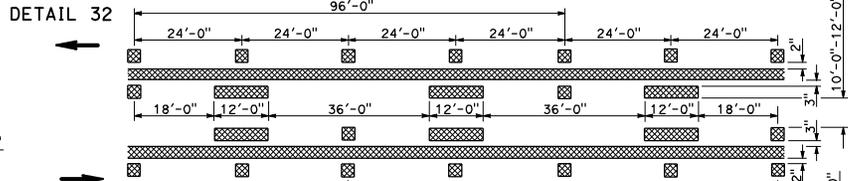
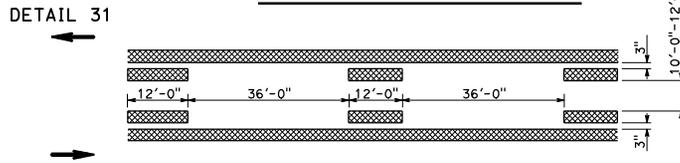
RIGHT EDGELINE EXTENSION THROUGH INTERSECTIONS



MEDIAN ISLANDS



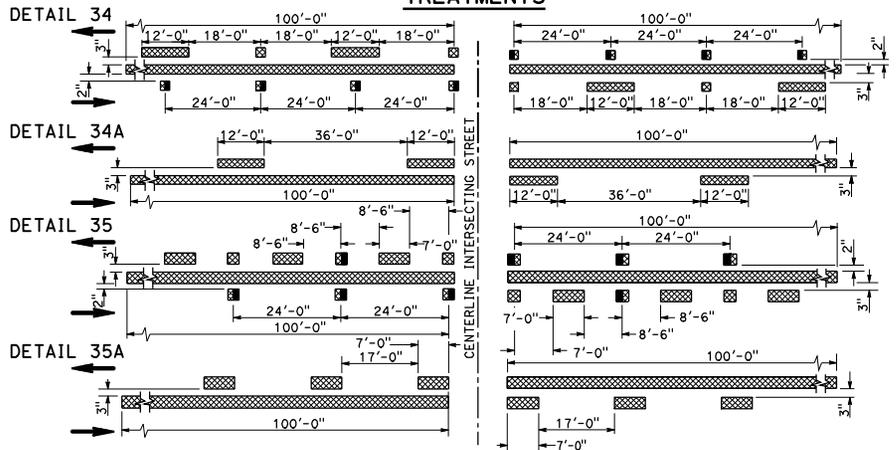
TWO-WAY LEFT TURN LANES



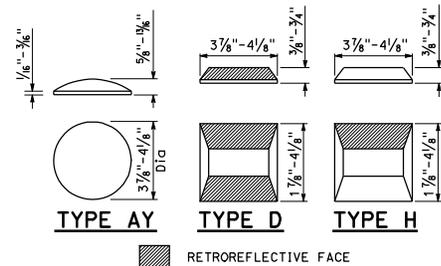
LEGEND

- MARKERS**
- TYPE AY YELLOW NON-REFLECTIVE
 - ⊗ TYPE D TWO-WAY YELLOW RETROREFLECTIVE
 - ⊠ TYPE H ONE-WAY YELLOW RETROREFLECTIVE
- LINES**
- ▭ 4" WHITE
 - ▨ 4" YELLOW
 - ← DIRECTION OF TRAVEL

INTERSECTION TREATMENTS



MARKER DETAILS



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKERS AND TRAFFIC LINES TYPICAL DETAILS
NO SCALE

A20B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

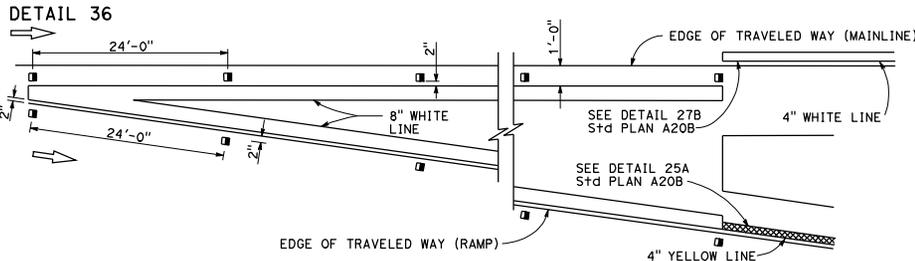
Roberto L. McLaughlin
REGISTERED CIVIL ENGINEER

May 20, 2011
PLANS APPROVAL DATE

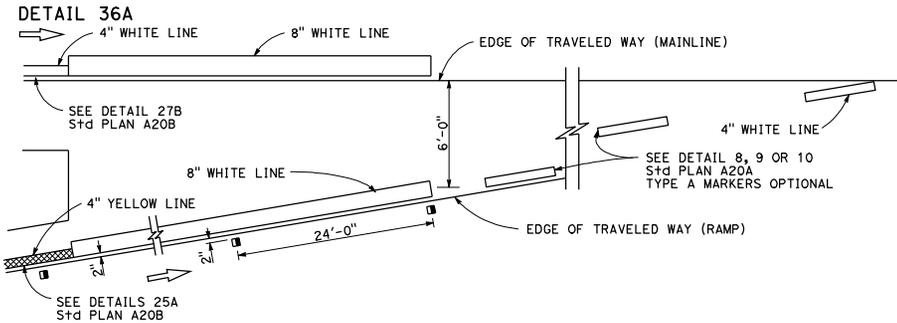
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Roberto L. McLaughlin
No. C40375
Exp. 3-31-13
CIVIL ENGINEER

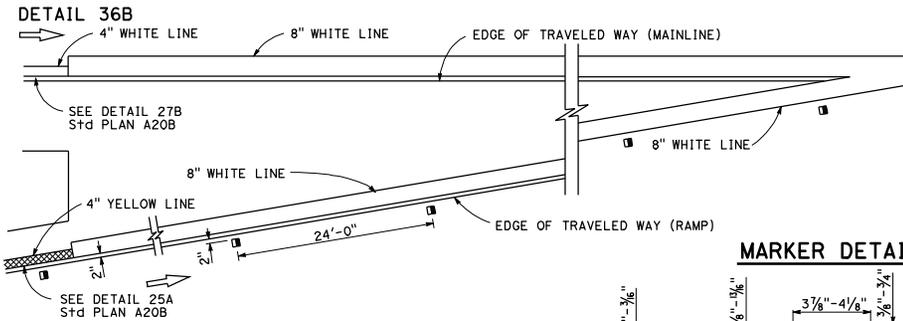
EXIT RAMP NEUTRAL AREA (GORE) TREATMENT



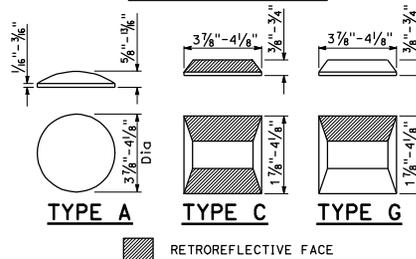
ENTRANCE RAMP NEUTRAL AREA (MERGE) TREATMENT



ENTRANCE RAMP NEUTRAL AREA (ACCELERATION LANE) TREATMENT



MARKER DETAILS



LEGEND:

MARKERS

- TYPE A WHITE NON-REFLECTIVE
- ◻ TYPE C RED-CLEAR RETROREFLECTIVE
- ◼ TYPE G ONE-WAY CLEAR RETROREFLECTIVE

▨ RETROREFLECTIVE FACE

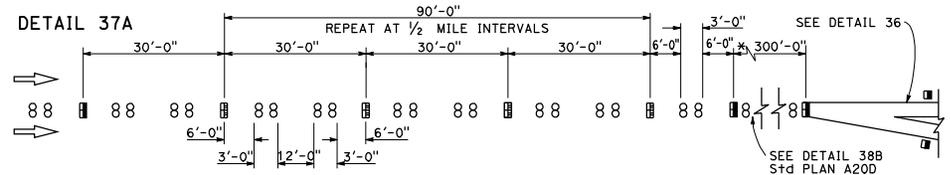
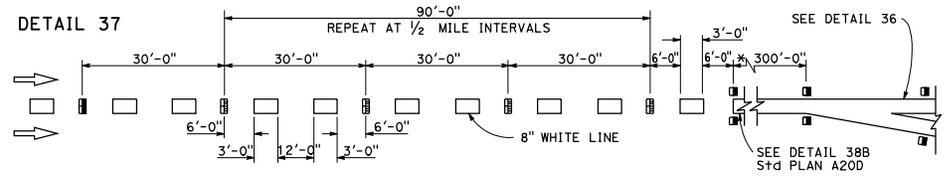
D16+	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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Roberto L. McLaughlin
 REGISTERED CIVIL ENGINEER
 No. C40375
 Exp. 3-31-15
 CIVIL
 STATE OF CALIFORNIA

July 19, 2013
 PLANS APPROVAL DATE
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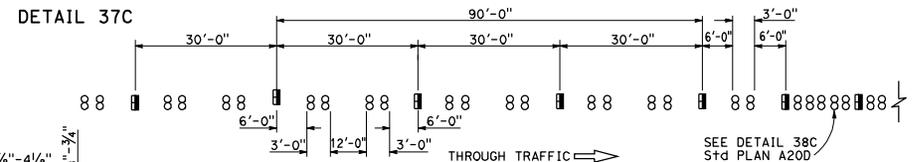
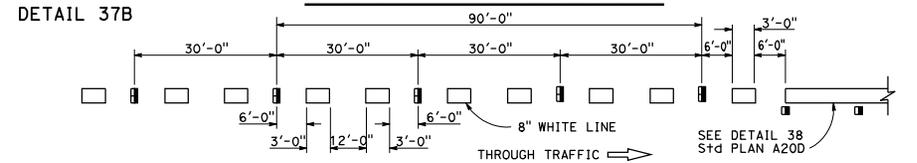
TO ACCOMPANY PLANS DATED _____

LANE DROP AT EXIT RAMP



* The solid channelizing line shown may be omitted on short auxiliary lanes where weaving length is critical.

LANE DROP AT INTERSECTIONS



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKERS AND TRAFFIC LINE TYPICAL DETAILS

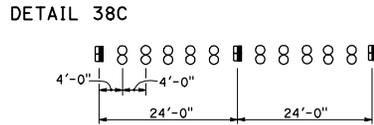
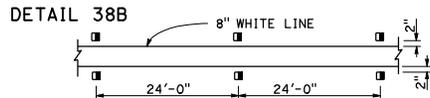
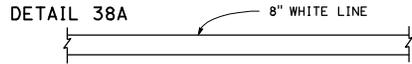
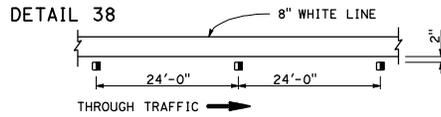
NO SCALE

RSP A20C DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A20C DATED MAY 20, 2011 - PAGE 11 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A20C

2010 REVISED STANDARD PLAN RSP A20C

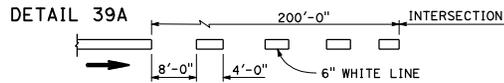
CHANNELIZING LINE



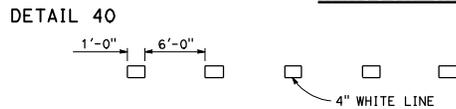
BIKE LANE LINE



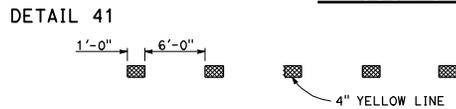
INTERSECTION LINE BIKE LANE



LANE LINE EXTENSIONS THROUGH INTERSECTIONS



CENTER LINE EXTENSIONS THROUGH INTERSECTIONS



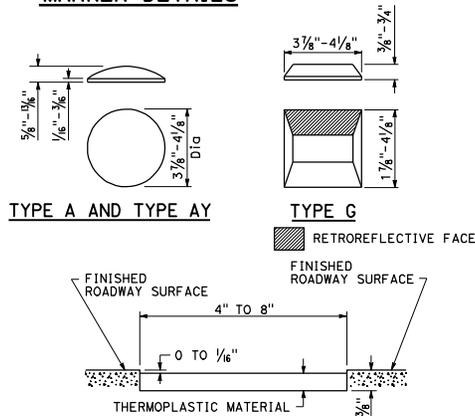
LEGEND

MARKERS

- TYPE A WHITE NON-REFLECTIVE
- ⊗ TYPE AY YELLOW NON-REFLECTIVE
- TYPE G ONE-WAY CLEAR RETROREFLECTIVE
- ▨ 4" YELLOW LINE

← DIRECTION OF TRAVEL

MARKER DETAILS



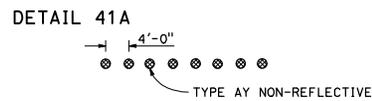
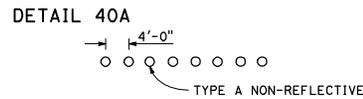
DETAIL FOR RECESSED THERMOPLASTIC TRAFFIC STRIPE

See Notes A and B.

RECESSED THERMOPLASTIC NOTES

A. See typical traffic line details for pavement marking patterns.

B. The top of the thermoplastic installed in recessed pavement shall be 0 to 1/16" below the pavement surface.

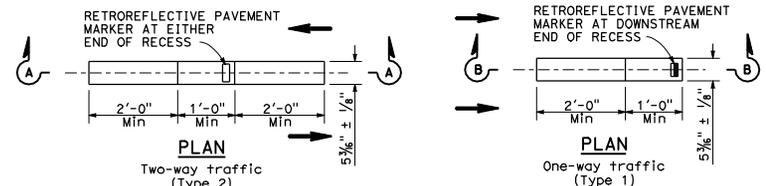
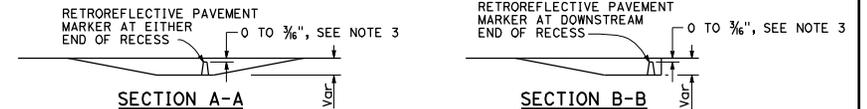


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS

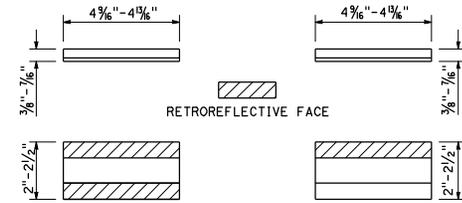
REGISTERED CIVIL ENGINEER
 Roberto L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

May 20, 2011
 PLANS APPROVAL DATE

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RECESS DETAIL FOR RETROREFLECTIVE PAVEMENT MARKER



RECESSED MARKER NOTES:

- See typical traffic line details for marker patterns to be used with recessed pavement markers. Detail 14A requires a Type 2 recess.
- The retroreflective pavement markers shown for recessed installations are not to be used for non-recessed installations.
- The top of pavement markers installed in recesses shall be 0 to 3/16" below the pavement surface.

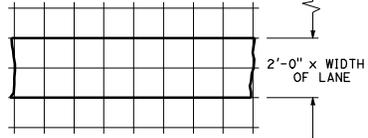
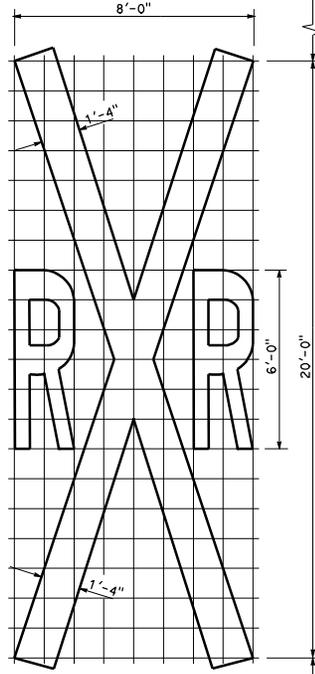
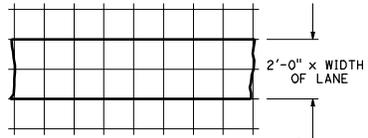
TYPE C AND TYPE D TYPE G AND TYPE H
 See Notes 1 and 2.

RETROREFLECTIVE PAVEMENT MARKER FOR RECESSED INSTALLATION

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKERS AND TRAFFIC LINES TYPICAL DETAILS

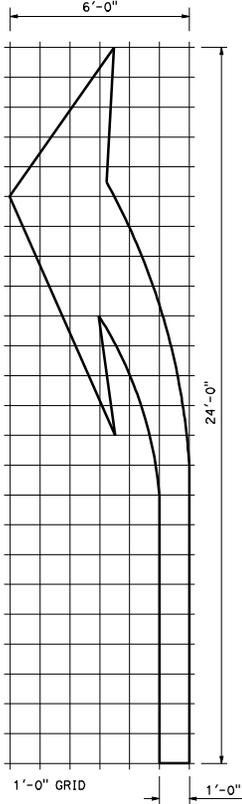
NO SCALE

A20D

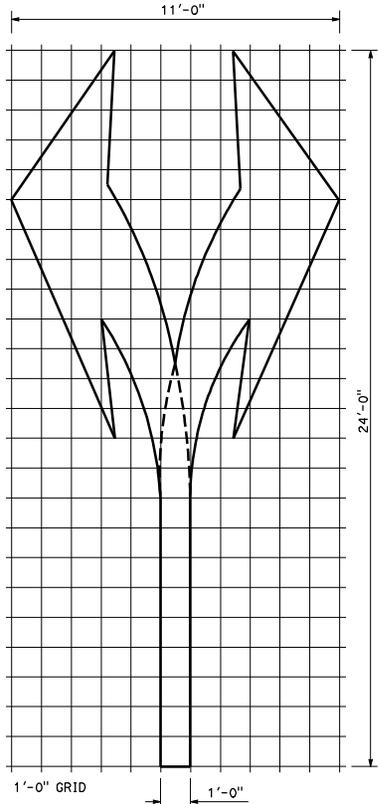


RAILROAD CROSSING SYMBOL

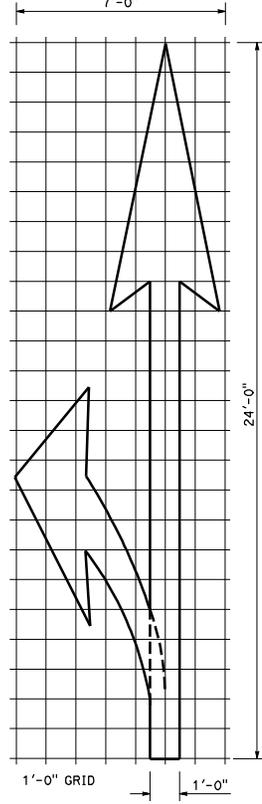
* 70 ft² does not include the 2'-0" x variable width transverse lines.



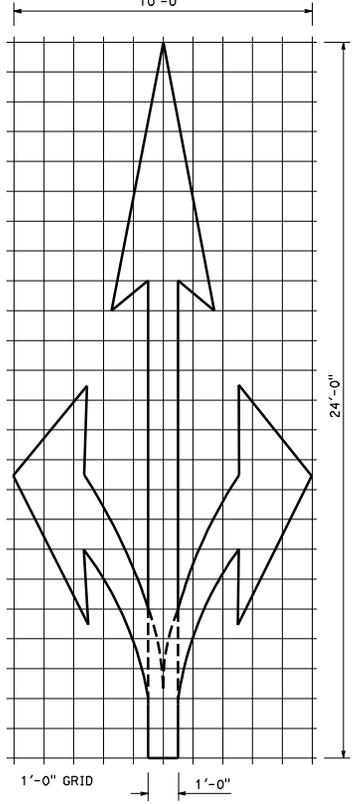
A=42 ft²
TYPE III (L) ARROW
(For Type III (R) use mirror image)



A=73 ft²
TYPE III (B) ARROW



A=45 ft²
TYPE II (L) ARROW
(For Type II (R) use mirror image)



A=59 ft²
TYPE II (B) ARROW

NOTE:
Minor variations in dimensions may be accepted by the Engineer.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
ARROWS AND SYMBOLS**

NO SCALE

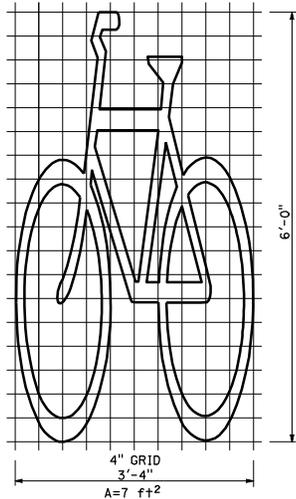
A24B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

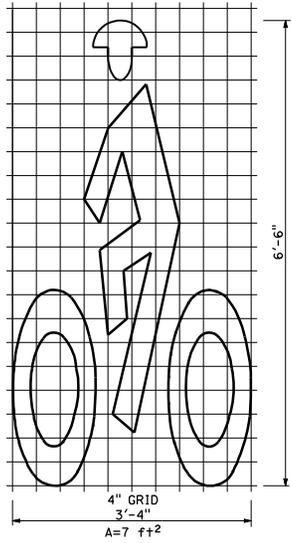
REGISTERED CIVIL ENGINEER
 Roberto L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

May 20, 2011
 PLANS APPROVAL DATE

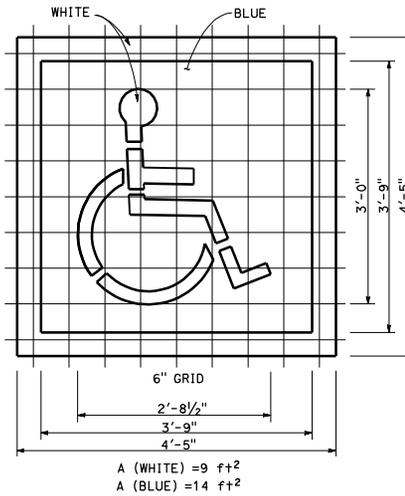
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



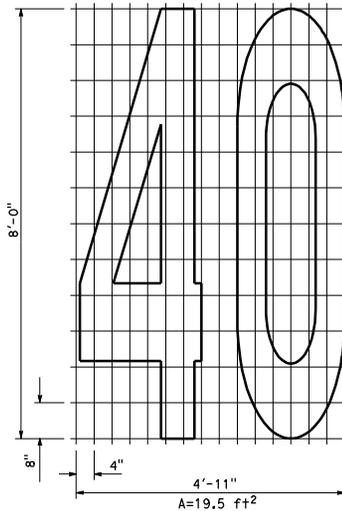
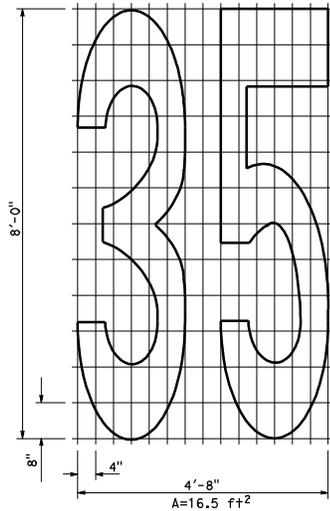
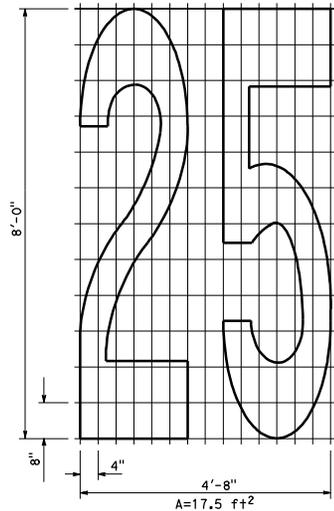
**BIKE LANE SYMBOL
WITHOUT PERSON**



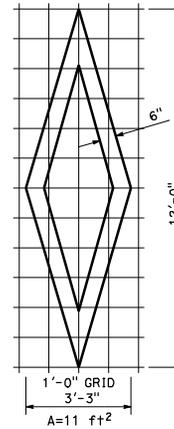
**BIKE LANE SYMBOL
WITH PERSON**



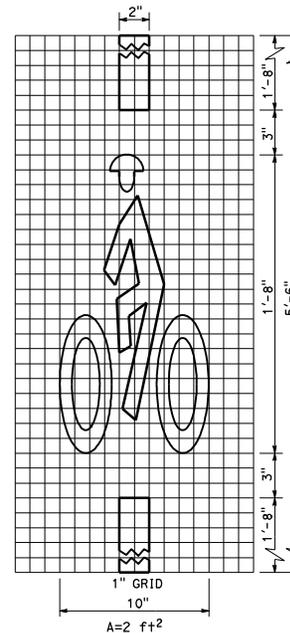
**INTERNATIONAL SYMBOL
OF ACCESSIBILITY (ISA) MARKING**



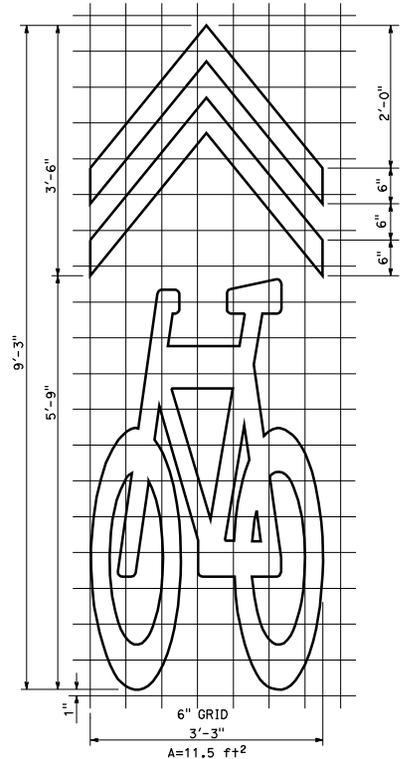
NUMERALS



DIAMOND SYMBOL



**BIKE LOOP
DETECTOR SYMBOL**



SHARED ROADWAY BICYCLE MARKING

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
SYMBOLS AND NUMERALS**
NO SCALE

RSP A24C DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN A24C
DATED MAY 20, 2011 - PAGE 15 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A24C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

Roberto L. McLaughlin
REGISTERED CIVIL ENGINEER

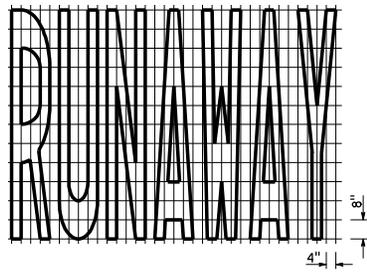
October 19, 2012
PLANS APPROVAL DATE

Roberto L. McLaughlin
No. C40375
Exp. 3-31-13
CIVIL
STATE OF CALIFORNIA

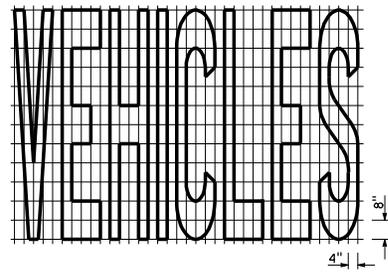
REGISTERED PROFESSIONAL ENGINEER

THE STATE OF CALIFORNIA OR ITS OFFICERS
OR AGENTS SHALL NOT BE RESPONSIBLE FOR
THE ACCURACY OR COMPLETENESS OF SCANNED
COPIES OF THIS PLAN SHEET.

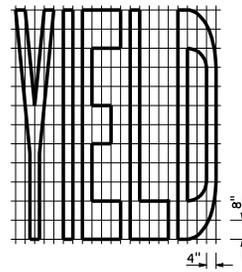
NOTE: TO ACCOMPANY PLANS DATED _____
Minor variations in dimensions may be accepted
by the Engineer.



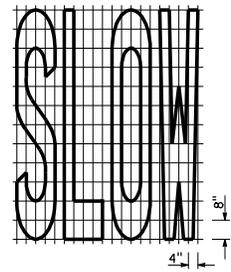
A=43 ft+2



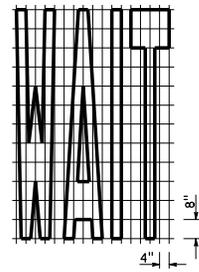
A=42 ft+2



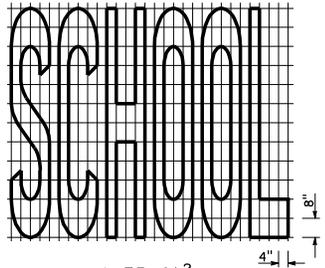
A=24 ft+2



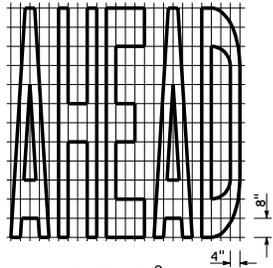
A=23 ft+2



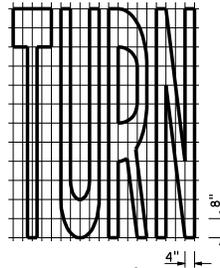
A=19 ft+2



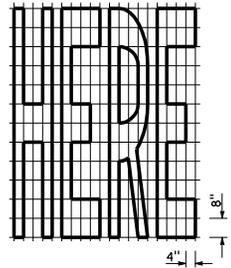
A=35 ft+2



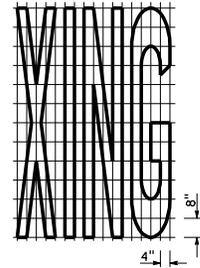
A=31 ft+2



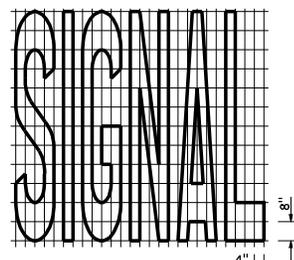
A=24 ft+2



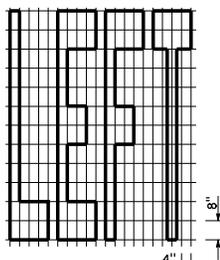
A=26 ft+2



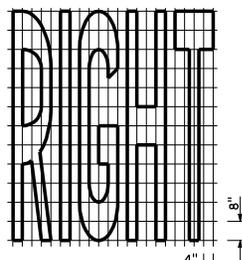
A=21 ft+2



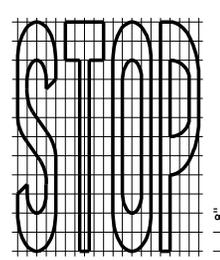
A=32 ft+2



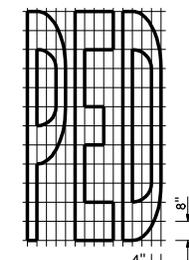
A=19 ft+2



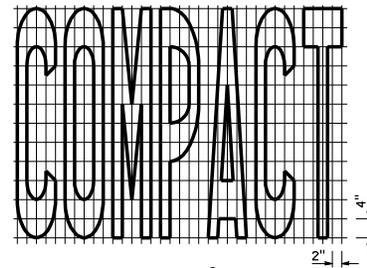
A=26 ft+2



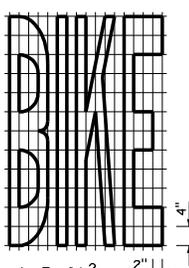
A=22 ft+2



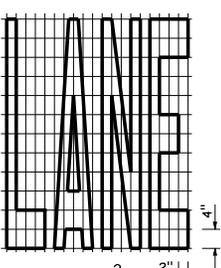
A=18 ft+2



A=10 ft+2



A=5 ft+2



A=6 ft+2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS

Robert L. McLaughlin
 REGISTERED CIVIL ENGINEER

May 20, 2011
 PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 Roberto L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

NOTES:

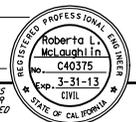
1. If a message consists of more than one word, it should read "UP", i.e., the first word should be nearest the driver.
2. The space between words should be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.

WORD MARKINGS					
ITEM	ft+2	ITEM	ft+2	ITEM	ft+2
XING	21	YIELD	24	BIKE	5
AHEAD	31	SCHOOL	35	SLOW	23
WAIT	19	SIGNAL	32	STOP	22
LANE	6	TURN	24	LEFT	19
RIGHT	26	HERE	26	VEHICLES	42
				COMPACT	10
				RUNAWAY	43
				PED	18

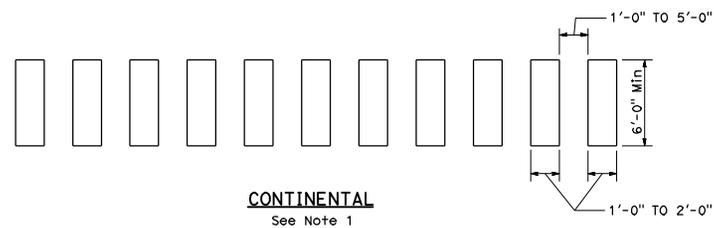
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKINGS WORDS
 NO SCALE

A24D

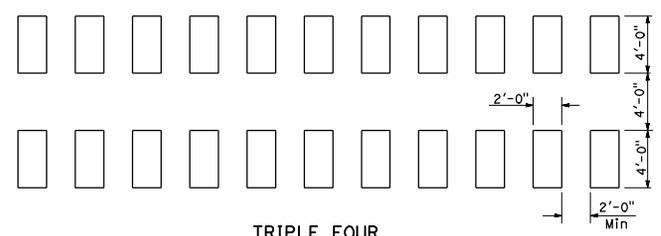
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
<i>Roberta L. McLaughlin</i> REGISTERED CIVIL ENGINEER					
July 20, 2012 PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



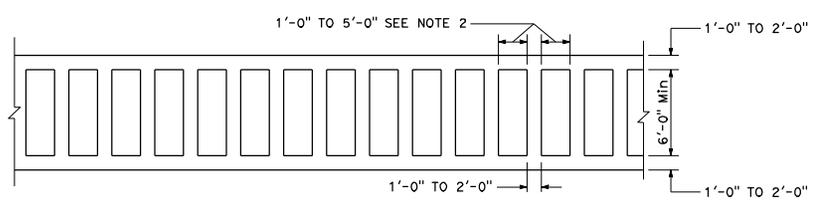
TO ACCOMPANY PLANS DATED _____



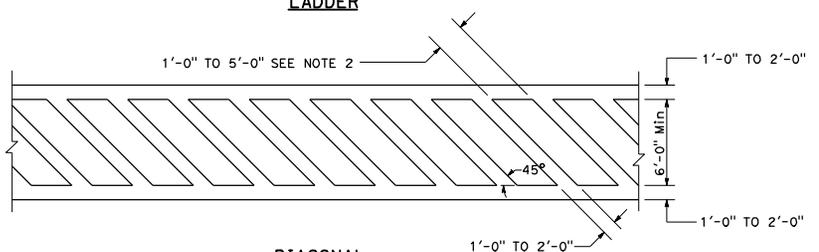
CONTINENTAL
See Note 1



TRIPLE FOUR
See Note 1



LADDER

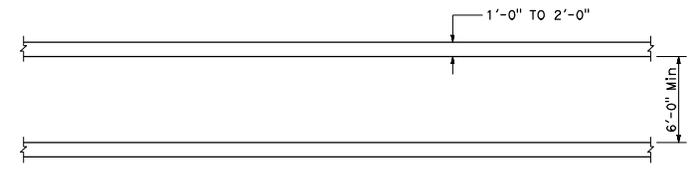


DIAGONAL

HIGHER VISIBILITY CROSSWALKS

NOTES:

1. Spaces between markings should be placed in wheel tracks of each lane.
2. Spacings not to exceed 2.5 times width of longitudinal line.
3. All crosswalk markings must be white except for those near schools must be yellow.



BASIC

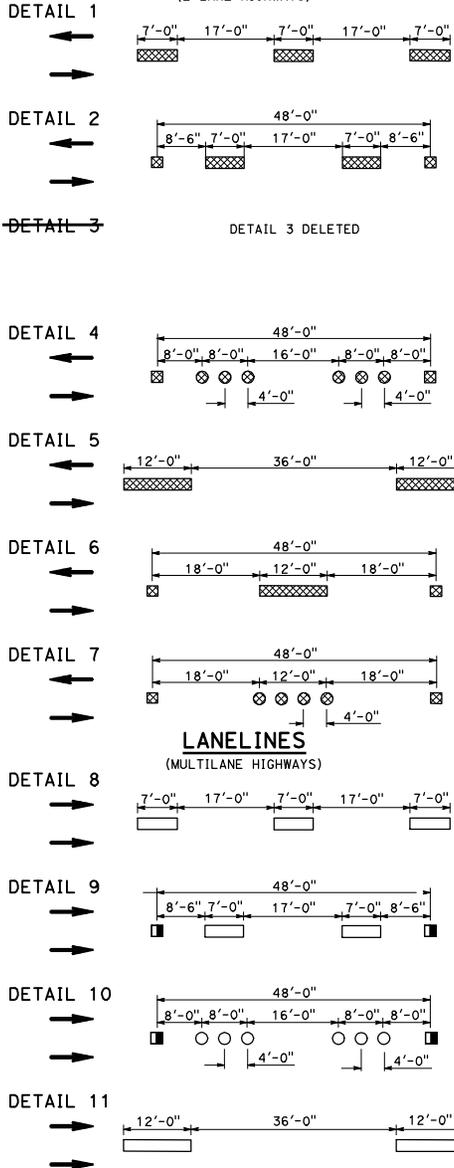
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
CROSSWALKS**
NO SCALE

RSP A24F DATED JULY 20, 2012 SUPPLEMENTS THE
STANDARD PLANS BOOK DATED 2010.

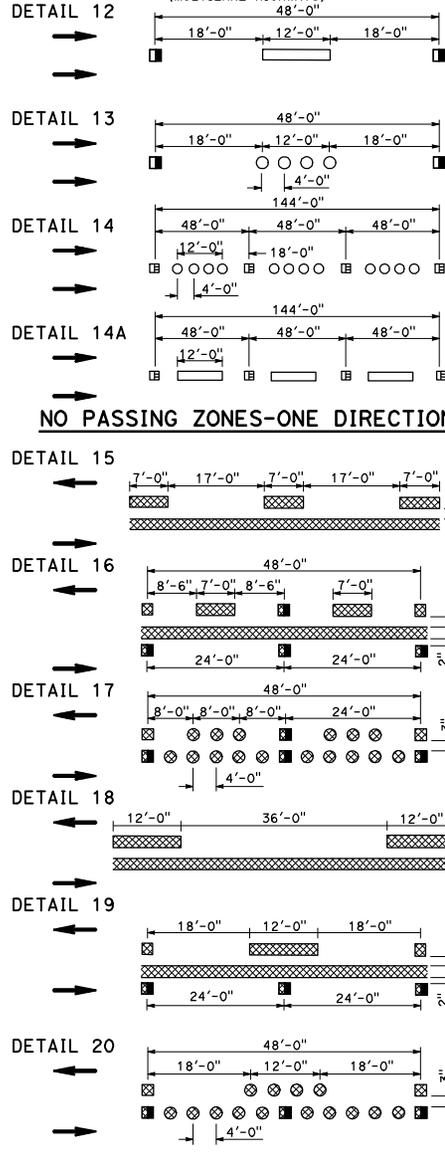
REVISED STANDARD PLAN RSP A24F

2010 REVISED STANDARD PLAN RSP A24F

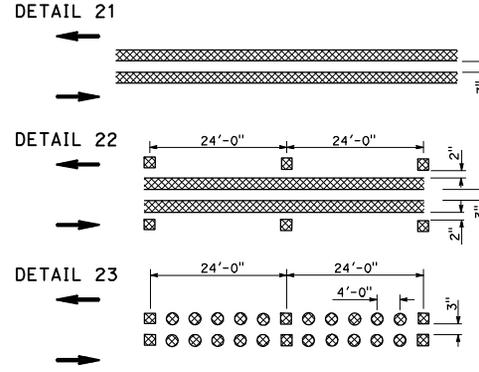
CENTERLINES (2 LANE HIGHWAYS)



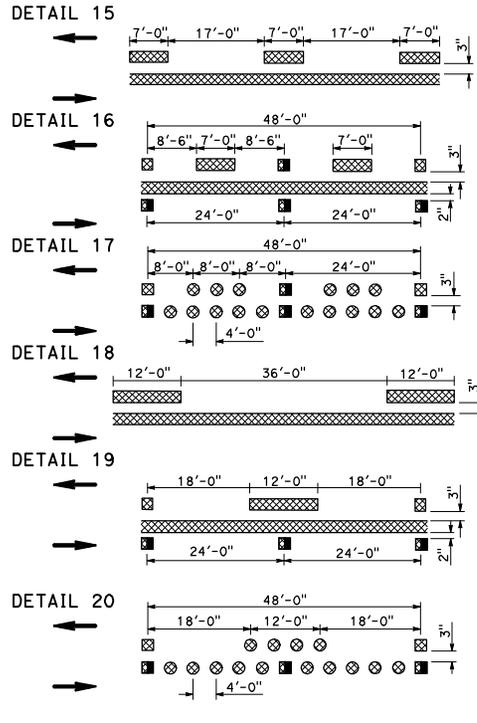
LANELINES (Cont)



NO PASSING ZONES-TWO DIRECTION



NO PASSING ZONES-ONE DIRECTION



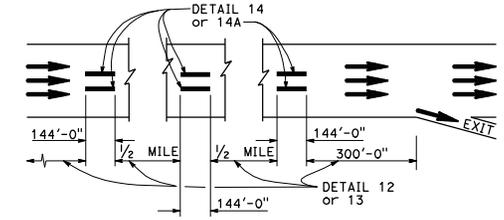
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
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Registered Civil Engineer
 Roberto L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

May 20, 2011
 PLANS APPROVAL DATE

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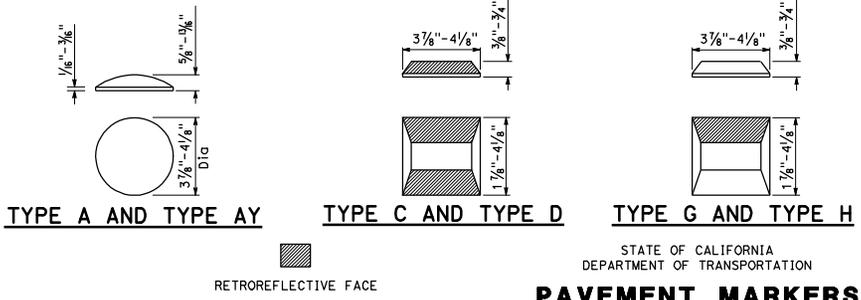
TYPICAL LANE LINE DELINEATION IN ADVANCE OF EXIT RAMP



NOTE:
 Detail 14 is to be used in combination with Detail 13. Detail 14A is to be used in combination with Detail 12.

- LEGEND**
- MARKERS**
- TYPE A WHITE NON-REFLECTIVE
 - ⊗ TYPE AY YELLOW NON-REFLECTIVE
 - ▣ TYPE C RED-CLEAR RETROREFLECTIVE
 - ⊠ TYPE D TWO-WAY YELLOW RETROREFLECTIVE
 - ▣ TYPE G ONE-WAY CLEAR RETROREFLECTIVE
 - ⊠ TYPE H ONE-WAY YELLOW RETROREFLECTIVE
- LINES**
- ▬ 4" WHITE
 - ▨ 4" YELLOW
- ← DIRECTION OF TRAVEL

MARKER DETAILS



TYPE A AND TYPE AY TYPE C AND TYPE D TYPE G AND TYPE H

RETROREFLECTIVE FACE

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKERS
 AND TRAFFIC LINES
 TYPICAL DETAILS**

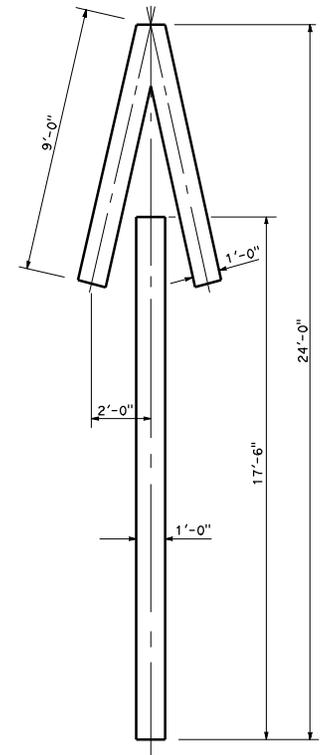
NO SCALE **A20A**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

Roberto L. McLaughlin
 REGISTERED CIVIL ENGINEER
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

April 20, 2012
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED _____

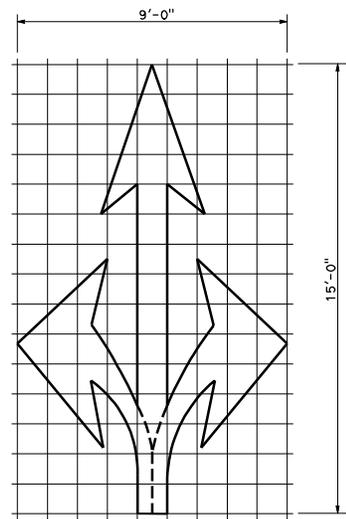


A=33 ft²
TYPE V ARROW

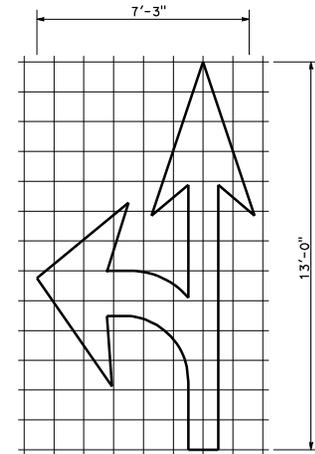
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
ARROWS**
NO SCALE

RSP A24A DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN A24A
DATED MAY 20, 2011 - PAGE 13 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A24A

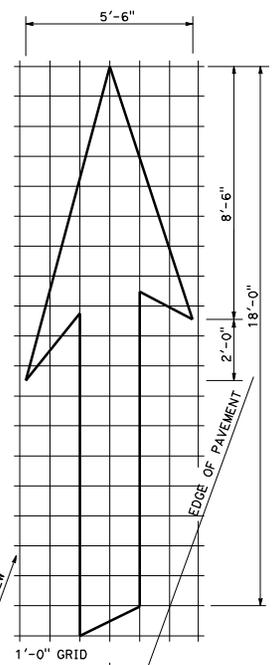


A=36 ft²
TYPE VIII ARROW



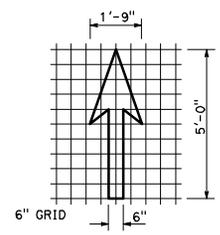
A=27 ft²
TYPE VII (L) ARROW

(For Type VII (R) arrow, use mirror image)

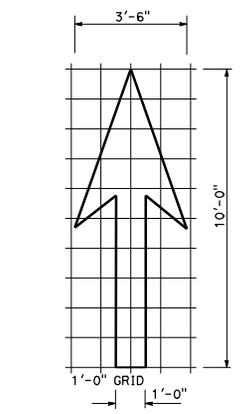


A=42 ft²
TYPE VI ARROW

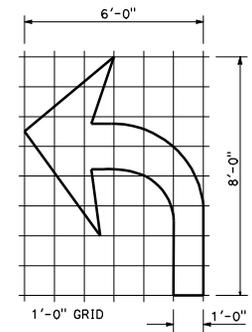
Right lane drop arrow
(For left lane, use mirror image)



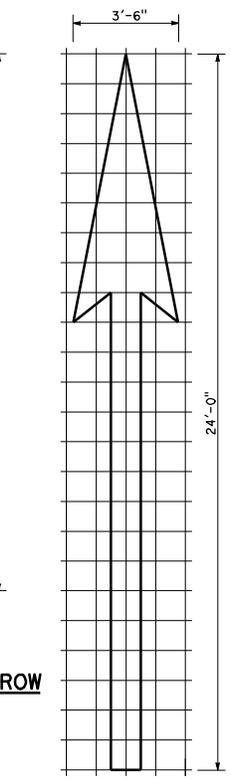
A=3.5 ft²
BIKE LANE ARROW



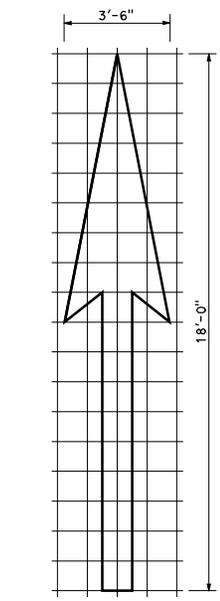
A=14 ft²
TYPE I 10'-0" ARROW



A=15 ft²
TYPE IV (L) ARROW
(For Type IV (R) arrow, use mirror image)



A=31 ft²
TYPE I 24'-0" ARROW



A=25 ft²
TYPE I 18'-0" ARROW

NOTE:
Minor variations in dimensions may be accepted by the Engineer.

2010 REVISED STANDARD PLAN RSP A24A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS

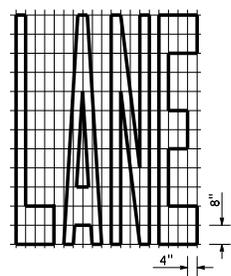
Roberta L. McLaughlin
 REGISTERED CIVIL ENGINEER

July 20, 2012
 PLANS APPROVAL DATE

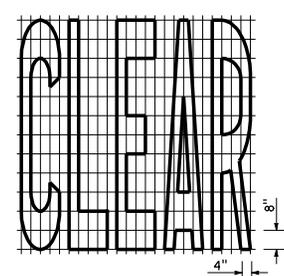
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 Roberta L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

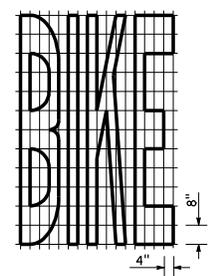
TO ACCOMPANY PLANS DATED _____



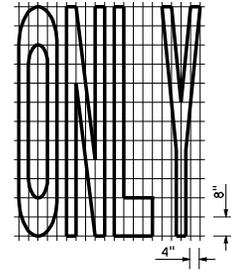
A=24 f+2



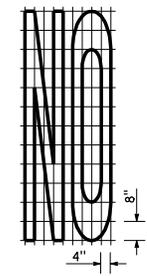
A=27 f+2



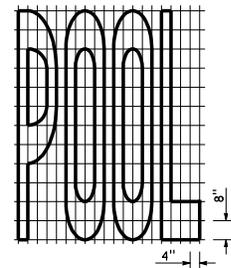
A=21 f+2



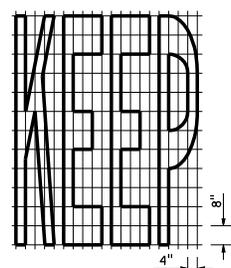
A=22 f+2



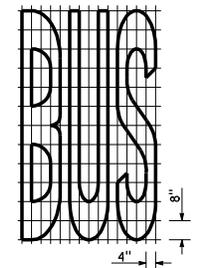
A=14 f+2



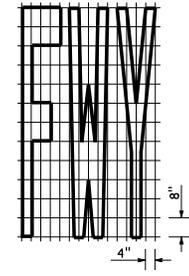
A=23 f+2



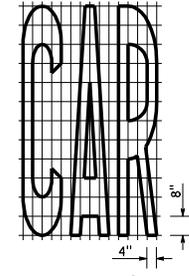
A=24 f+2



A=20 f+2



A=16 f+2

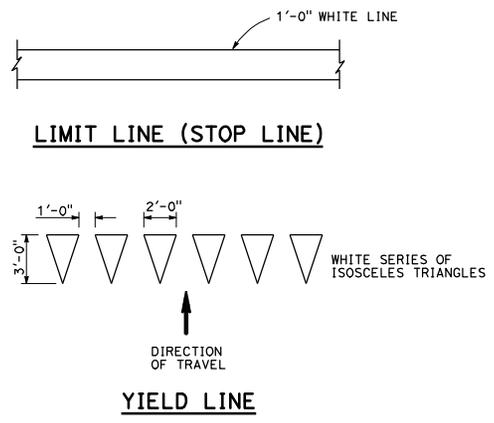
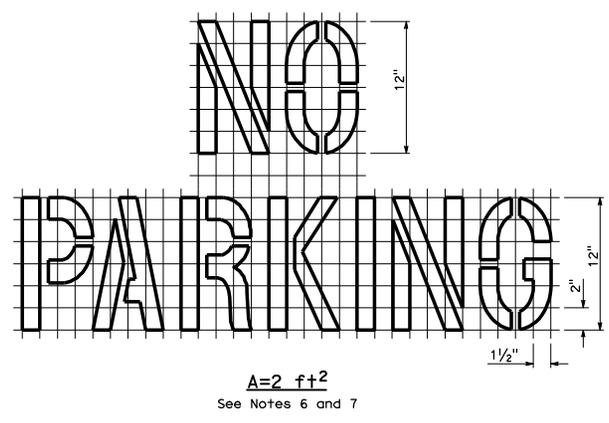


A=17 f+2

WORD MARKINGS			
ITEM	f+2	ITEM	f+2
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16

NOTES:

- If a message consists of more than one word, it should read "UP", i.e., the first word should be nearest the driver.
- The space between words should be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
- Minor variations in dimensions may be accepted by the Engineer.
- Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.
- The words "NO PARKING" pavement marking is to be used for parking facilities. For typical locations of markings, see Standard Plans A90A and A90B.
- The words "NO PARKING", shall be painted in white letters no less than 1'-0" high on a contrasting background and located so that it is visible to traffic enforcement officials.



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS
WORDS, LIMIT AND YIELD LINES

NO SCALE

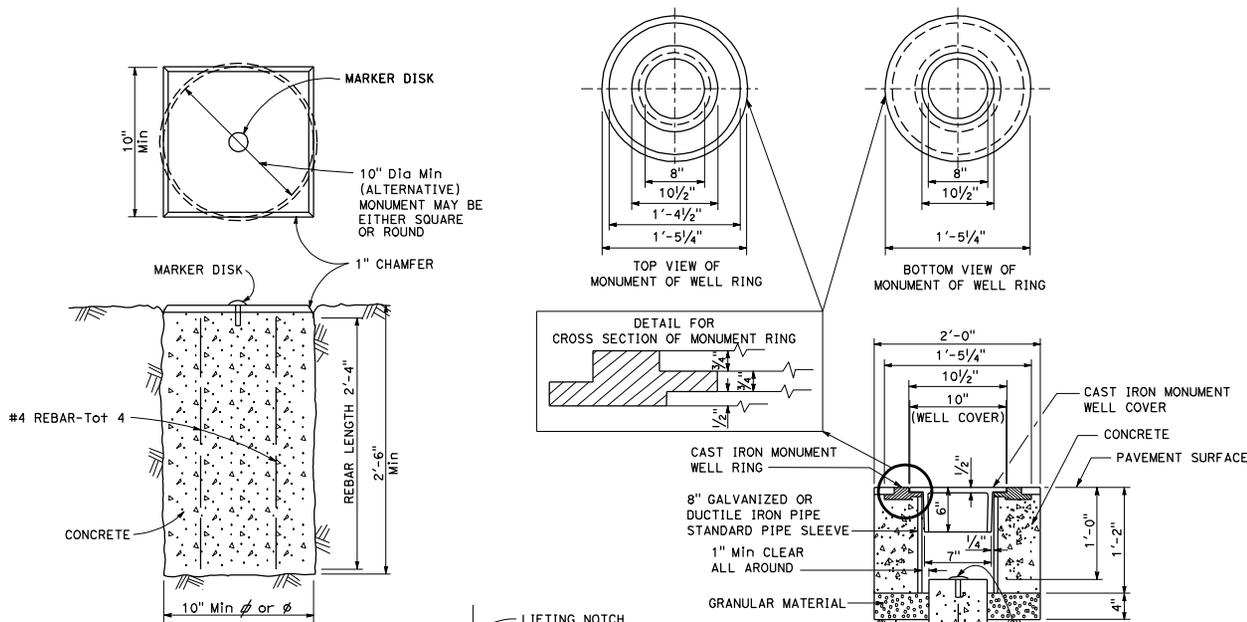
RSP A24E DATED JULY 20, 2012 SUPERSEDES STANDARD PLAN A24E
DATED MAY 20, 2011 - PAGE 17 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A24E

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS

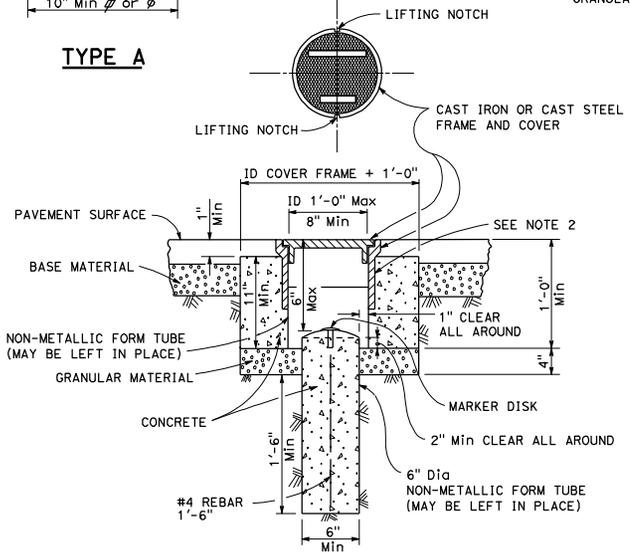
Mark S. Turner
 PROFESSIONAL LAND SURVEYOR
 LICENSED LAND SURVEYOR
 Mark S. Turner
 No. 6228
 Exp. 3-31-12
 STATE OF CALIFORNIA

May 20, 2011
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



TYPE A

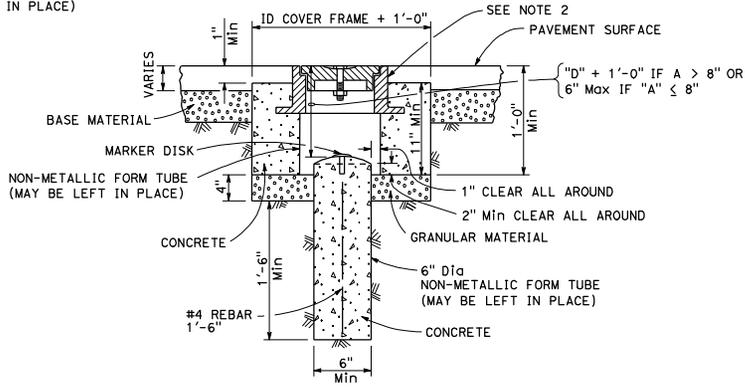
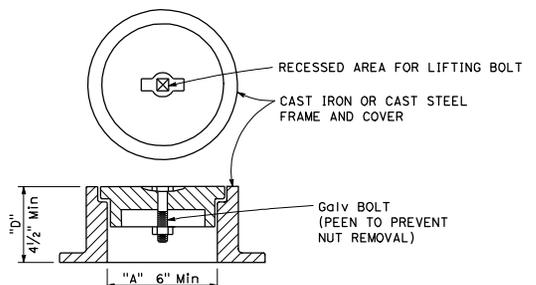
TYPE B



TYPE D
Alternative No. 1

NOTES:

1. The configuration of the cast iron or cast steel frame and cover may vary from that shown.
2. Frame shall be embedded in the concrete a minimum of 3".



TYPE D
Alternative No. 2

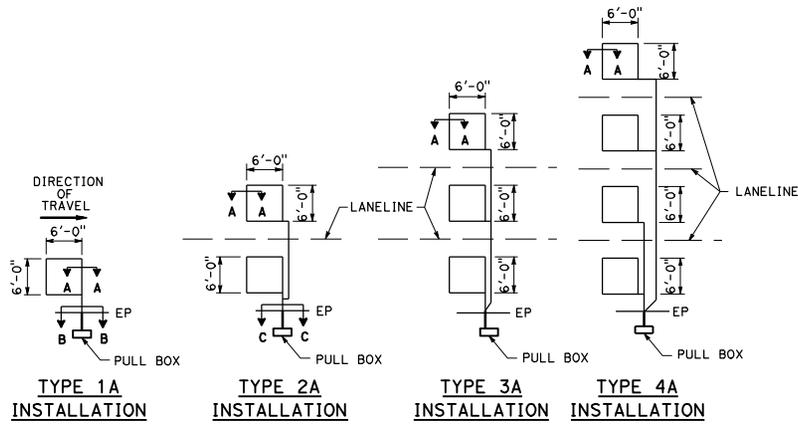
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
SURVEY MONUMENTS

NO SCALE

A74

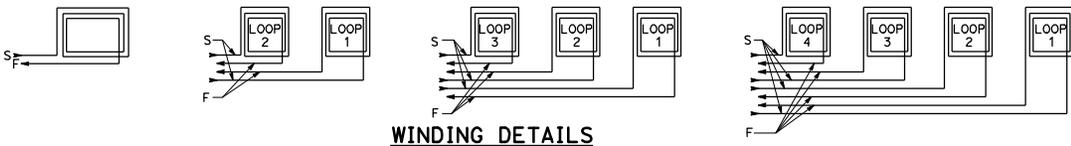
LOOP INSTALLATION PROCEDURE

1. Loops shall be centered in lanes.
2. Saw slots in pavement for loop conductors as shown in details.
3. Distance between side of loop and a lead-in saw cut from adjacent detectors shall be 2'-0" minimum. Distance between lead-in saw cuts shall be 6" minimum.
4. Bottom of saw slot shall be smooth with no sharp edges.
5. Slots shall be washed until clean, blown out and thoroughly dried before installing loop conductors.
6. Adjacent loops on the same sensor unit channel shall be wound in opposite directions.
7. Identify and tag loop circuit pairs in the pull box with loop number, start (S) and finish (F) of conductor. Identify and tag lead-in-cable with sensor number and phase.
8. Install loop conductor in slot using a 3/16" to 1/4" thick wood paddle. Hold loop conductors with wood paddles (at the bottom of the sawed slot) during sealant placement.
9. No more than 2 twisted pairs shall be installed in one sawed slot.
10. Allow additional 5'-0" of slack length of conductor for the lead-in run to pull box.
11. The additional length of each conductor for each loop shall be twisted together into a pair (2 turns per foot minimum) before being placed in the slot and conduit leading to the pull box.
12. Test each loop circuit for continuity, circuit resistance and insulation resistance at the pull box before filling slots.
13. Fill slots as shown in details.
14. Splice loop conductors to lead-in-cable. Splices shall be soldered.
15. End of lead-in-cable and Type 2 loop conductor shall be waterproofed prior to installing in conduit to prevent moisture from entering the cable.
16. Lead-in-cable shall not be spliced between the pull box and the controller cabinet terminals.
17. Test each loop circuit for continuity, circuit resistance and insulation resistance at the controller cabinet location.
18. Where loop conductors are not to be spliced to a lead-in-cable, the ends of the conductors shall be taped and waterproofed with electrical insulating coating.



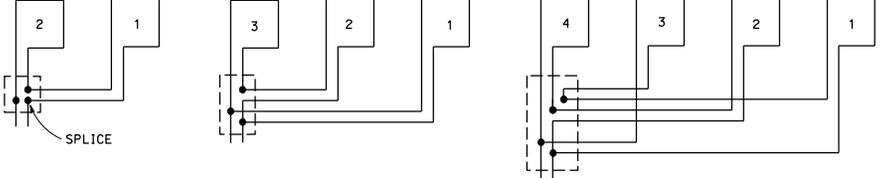
SAWCUT DETAILS

- Type A loop detector configurations illustrated
1. 1A thru 4A = 1 Type A loop configuration in each lane.
 2. 1B thru 4B = 1 Type B loop configuration in each lane.
 3. 1C = 1 Type C loop configuration entering lanes as required.
 4. 1D thru 4D = 1 Type D loop configuration in each lane.
 5. 1E thru 4E = 1 Type E loop configuration in each lane.
 6. 10 thru 40 = 1 Type Q loop configuration in each lane.
- Use Type A, B, C, D, E or Q loop detector configurations only when specified or shown on plans.



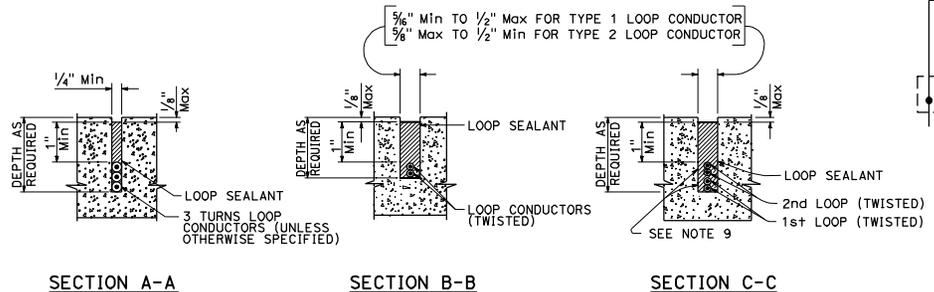
WINDING DETAILS

See Notes 6 and 7



TYPICAL LOOP CONNECTIONS

Dashed lines represent the pull box



SLOT DETAILS - TYPE 1 AND TYPE 2 LOOP CONDUCTOR

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
(DETECTORS)**

NO SCALE

ES-5A

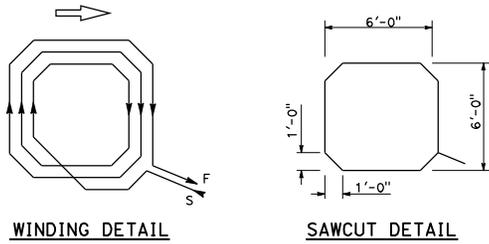
D16+	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
------	--------	-------	-----------------------------	--------------	-----------------

Jeffery G. McFar
REGISTERED ELECTRICAL ENGINEER

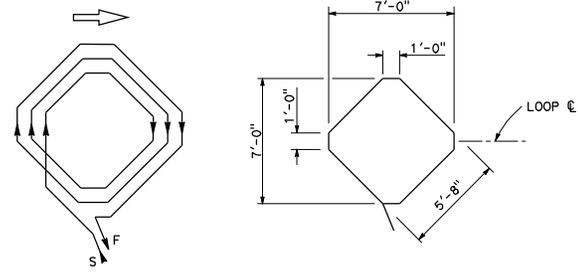
May 20, 2011
PLANS APPROVAL DATE

Jeffery G. McFar
No. E14512
Exp. 6-30-12
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
STATE OF CALIFORNIA

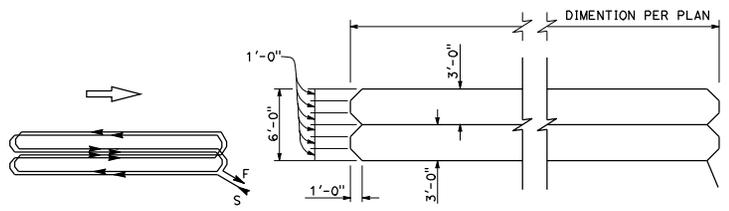
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



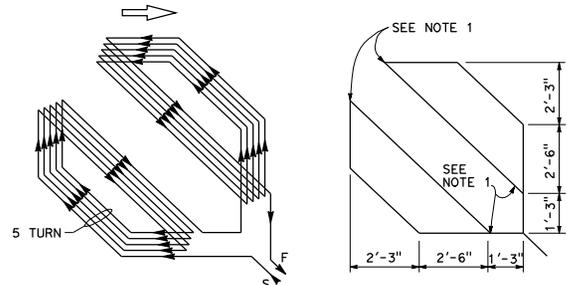
WINDING DETAIL SAWCUT DETAIL
TYPE A LOOP DETECTOR CONFIGURATION



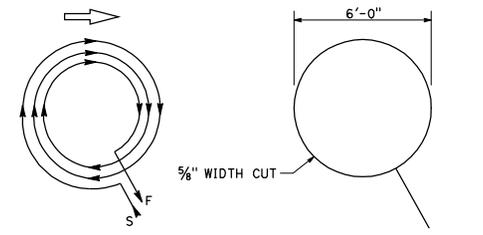
WINDING DETAIL SAWCUT DETAIL
TYPE B LOOP DETECTOR CONFIGURATION



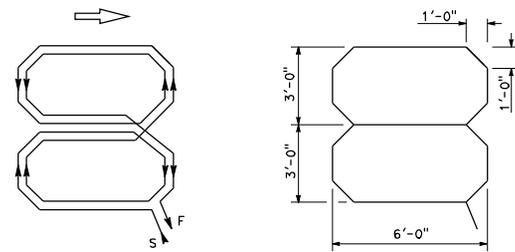
WINDING DETAIL SAWCUT DETAIL
TYPE C LOOP DETECTOR CONFIGURATION



WINDING DETAIL SAWCUT DETAIL
TYPE D LOOP DETECTOR CONFIGURATION



WINDING DETAIL SAWCUT DETAIL
TYPE E LOOP DETECTOR CONFIGURATION



WINDING DETAIL SAWCUT DETAIL
TYPE Q LOOP DETECTOR CONFIGURATION

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

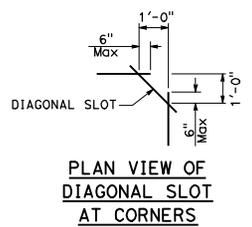
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER

July 19, 2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Theresa Aziz Gabriel
 No. E15129
 Exp. 6-30-14
 ELECTRICAL
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED _____



- NOTES:**
1. Round corners of acute angle sawcuts to prevent damage to conductors.
 2. Typical distance separating loops from edge to edge is 10' for Type A, B, D and E installation in single lane.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (DETECTORS)**
 NO SCALE

RSP ES-5B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-5B
 DATED MAY 20, 2011 - PAGE 449 OF THE STANDARD PLANS BOOK DATED 2010.
REVISED STANDARD PLAN RSP ES-5B

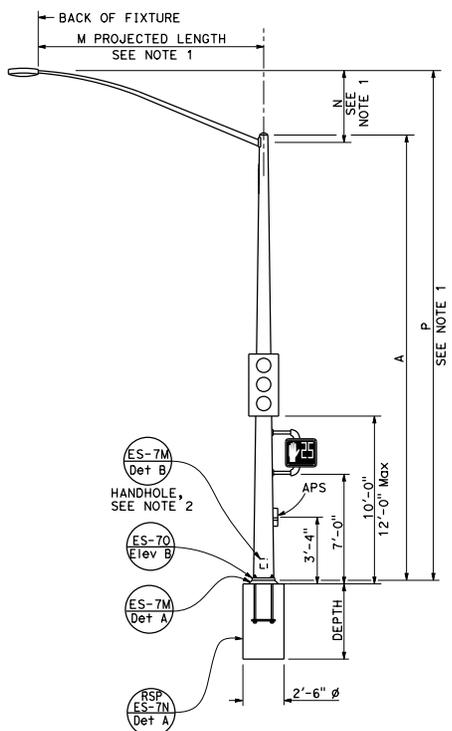
2010 REVISED STANDARD PLAN RSP ES-5B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS

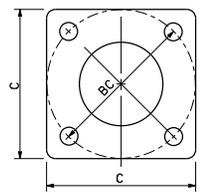
Stanley P. Johnson
 REGISTERED CIVIL ENGINEER
 No. CS7793
 Exp. 3-31-16
 CIVIL
 STATE OF CALIFORNIA

October 30, 2015
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

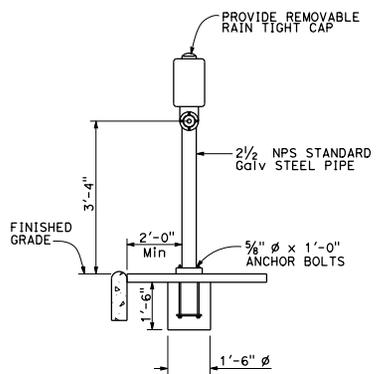
- NOTES:**
- For additional notes, details and data for Type 15TS and Type 21TS Standards, see Revised Standard Plan RSP ES-6A.
 - Handhole shall be located on the downstream side of traffic.



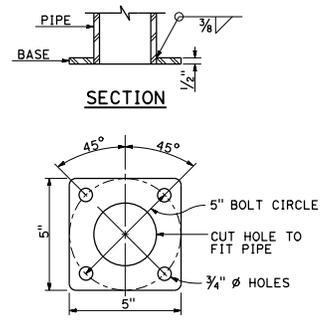
TYPE 15TS AND 21TS STANDARD
ELEVATION A
 (See Note 1)



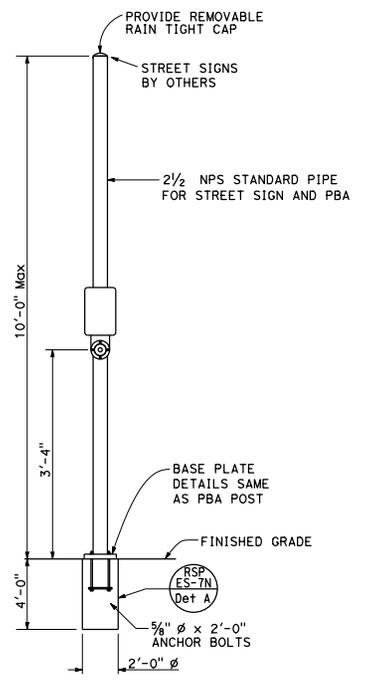
BASE PLATE
TYPE 15TS AND 21TS
DETAIL A



PUSH BUTTON ASSEMBLY POST
DETAIL B



BASE PLATE
PBA POST



COMBINED STREET SIGN
PUSH BUTTON ASSEMBLY POST
DETAIL C

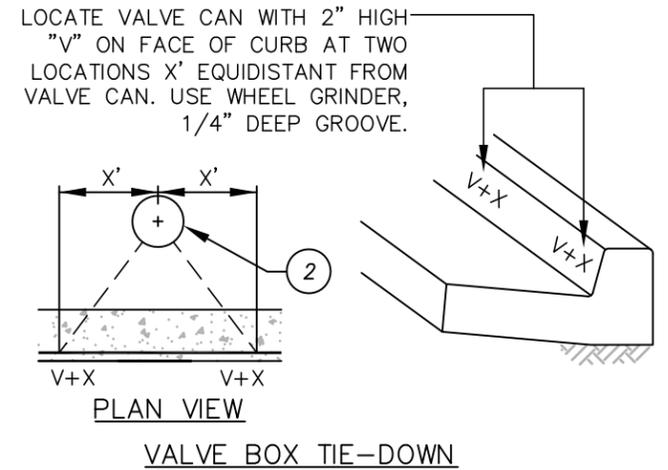
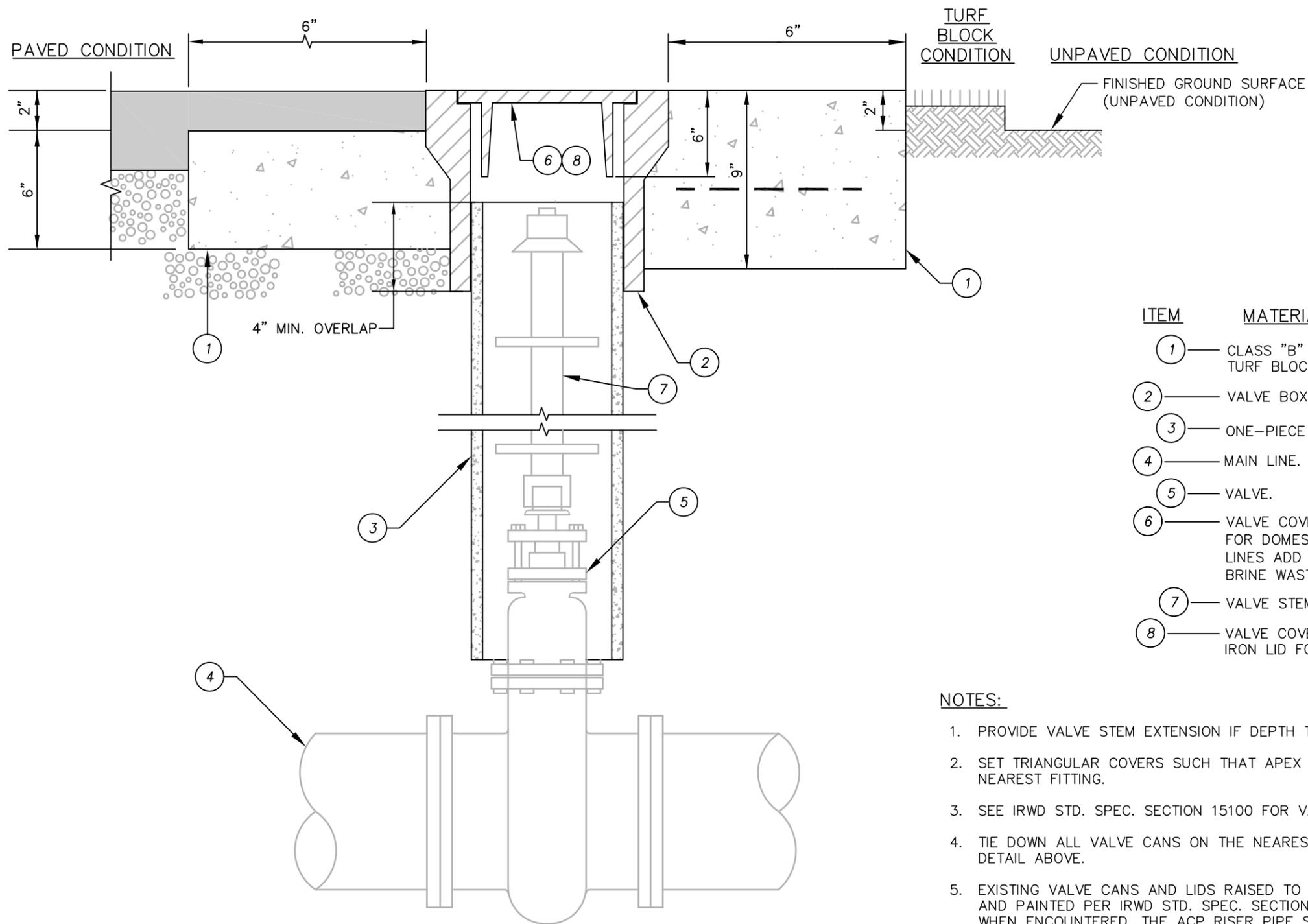
POLE TYPE	POLE DATA				BASE PLATE DATA				CIDH
	A HEIGHT	Min OD		WALL THICKNESS	C	BC = BOLT CIRCLE	THICKNESS	ANCHOR BOLT SIZE	
		BASE	TOP						
15TS	30'-0"	8"	3 1/8"	0.1793"	1'-1 1/2"	1'-0"	2"	1 1/2" Ø x 42"	7'-6"
21TS	35'-0"	9 3/8"	3 3/8"		1'-3"	1'-2"			8'-6"

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(SIGNAL AND LIGHTING STANDARD, TYPE TS, AND PUSH BUTTON ASSEMBLY POST)
 NO SCALE

RSP ES-7A DATED OCTOBER 30, 2015 SUPERSEDES RSP ES-7A DATED JULY 19, 2013 AND STANDARD PLAN ES-7A DATED MAY 20, 2011 - PAGE 462 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-7A

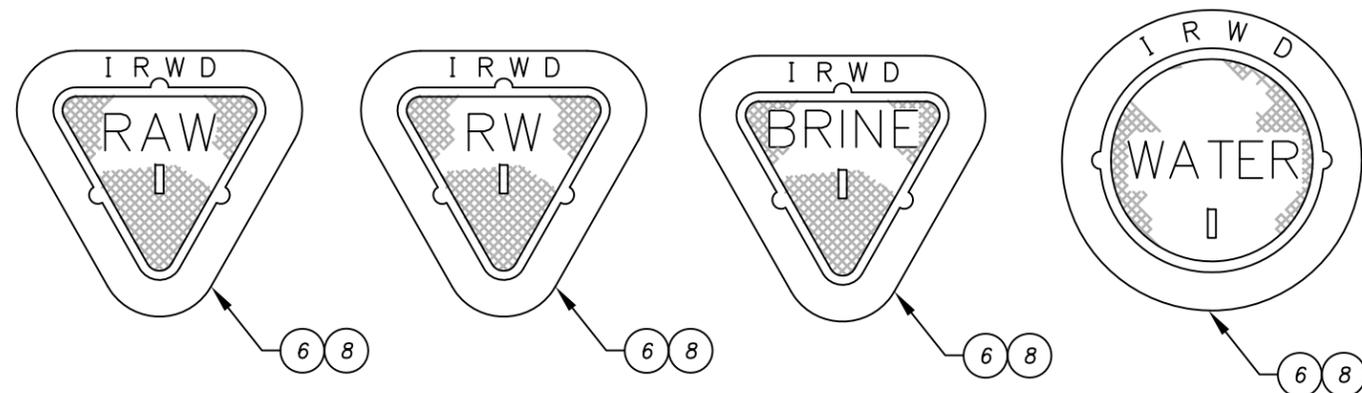
2010 REVISED STANDARD PLAN RSP ES-7A



- | ITEM | MATERIALS |
|------|--|
| 1 | CLASS "B" CONCRETE COLLAR. REINFORCE WITH W.W.F. 1.6 X 1.6 IN TURF BLOCK AND UNPAVED CONDITIONS. |
| 2 | VALVE BOX AND FRAME PER IRWD STD. SPEC. SECTION 15100. |
| 3 | ONE-PIECE 8" (SDR 35) PVC RISER PIPE. |
| 4 | MAIN LINE. |
| 5 | VALVE. |
| 6 | VALVE COVER TO BE IRON WITH LETTERS "IRWD" CAST THEREON. FOR DOMESTIC WATER LINES ADD "WATER", FOR RECYCLED WATER LINES ADD "RW", FOR RAW WATER SUPPLY LINES ADD "RAW", FOR BRINE WASTE LINES ADD "BRINE". |
| 7 | VALVE STEM EXTENSION PER IRWD STD. DWG. W-23. SEE NOTE 1. |
| 8 | VALVE COVER PER DETAIL HEREON. USE 6" LONG-SKIRTED CAST IRON LID FOR ROUND BOXES. |

NOTES:

1. PROVIDE VALVE STEM EXTENSION IF DEPTH TO VALVE NUT EXCEEDS 84". SEE IRWD STD. DWG. W-23.
2. SET TRIANGULAR COVERS SUCH THAT APEX OR TRIANGLE POINT ALONG AXIS OF PIPE, AWAY FROM NEAREST FITTING.
3. SEE IRWD STD. SPEC. SECTION 15100 FOR VALVE LID COVER.
4. TIE DOWN ALL VALVE CANS ON THE NEAREST CURB FACE BY MEANS OF A 4-INCH WHEEL GRINDER, SEE DETAIL ABOVE.
5. EXISTING VALVE CANS AND LIDS RAISED TO GRADE SHALL BE REMOVED AND REPLACED WITH NEW, SET, AND PAINTED PER IRWD STD. SPEC. SECTION 15100. SOME EXISTING VALVES MAY HAVE ACP RISER PIPE, WHEN ENCOUNTERED, THE ACP RISER PIPE SHALL BE REMOVED, ENCAPSULATED, DISPOSED OF PER REGULATIONS, AND REPLACED WITH NEW PVC AS SHOWN HEREON.
6. VALVE BOX MUST BE CONSTRUCTED AS SHOWN HEREON REGARDLESS OF CONSTRUCTION PHASE. NO INTERIM CONDITIONS WILL BE ACCEPTED.



VALVE BOX

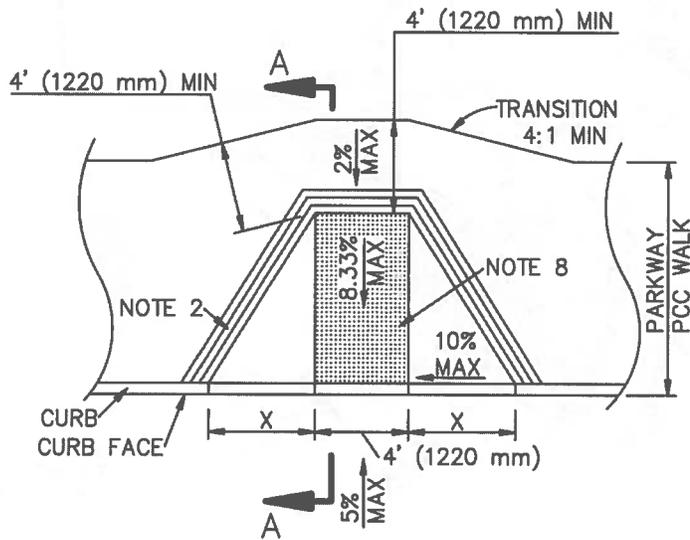
IRVINE RANCH WATER DISTRICT, ENGINEERING DEPARTMENT
 APPROVED BY:

 KEVIN L. BURTON R.M.E. M28832
 EXECUTIVE DIRECTOR, ENGINEERING AND WATER QUALITY

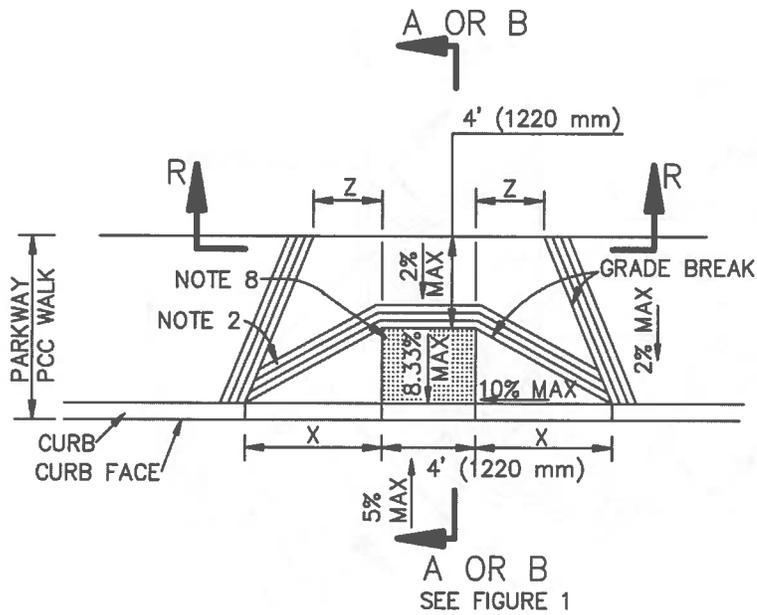
JANUARY 2015
 REVISION



**IRWD
 STD. DWG.
 W-22**
 SHEET 1 OF 1



TYPE 1



TYPE 2

CASE A

PARTS OF THIS STANDARD PLAN SHOW INSTALLATION FOR TYPICAL RETROFIT CONDITIONS, AND ARE NOT FULLY COMPLIANT WITH CALIFORNIA BUILDING CODE REQUIREMENTS FOR NEW DEVELOPMENT.

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

PROMULGATED BY THE
PUBLIC WORKS STANDARDS INC.
GREENBOOK COMMITTEE
1992
REV. 1996, 2000, 2005, 2009,
2013

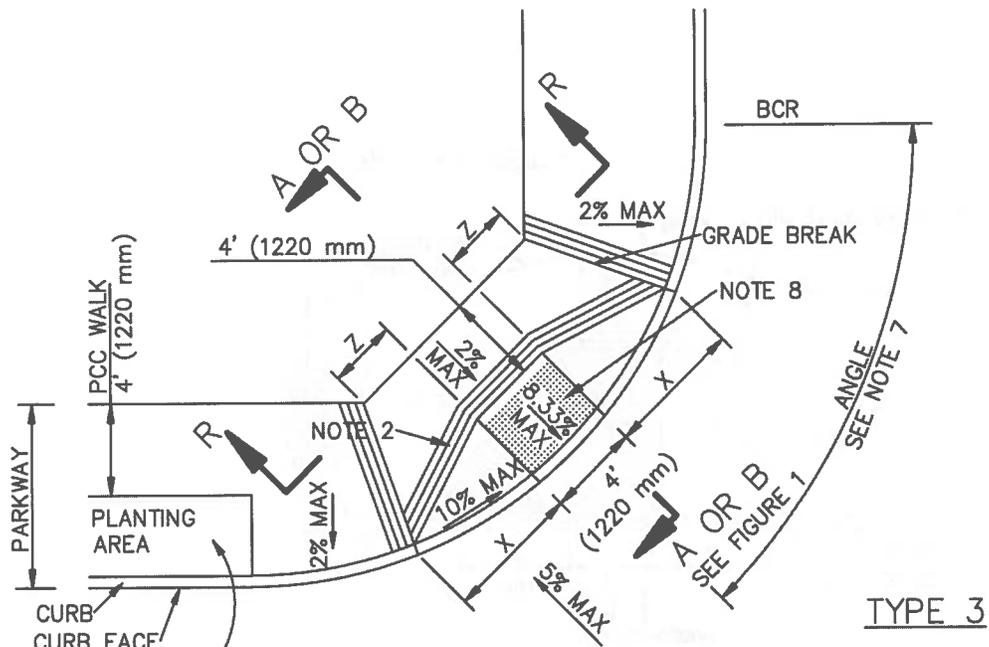
CURB RAMP

USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

STANDARD PLAN

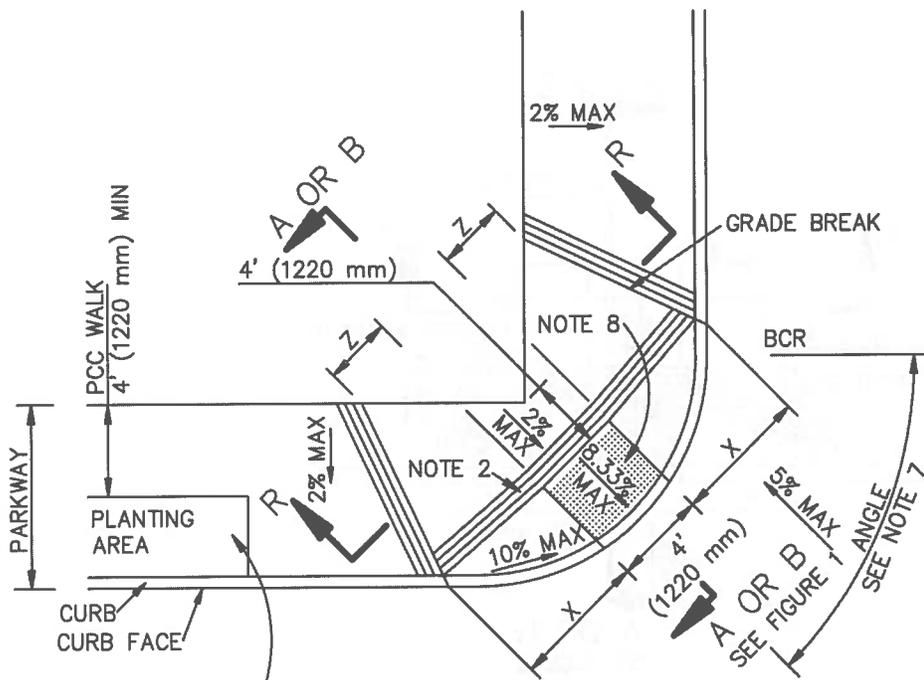
111-5

SHEET 1 OF 10



WHERE PLANTING AREA IS ADJACENT TO THE CURB RAMP, USE CASE A, TYPE 6

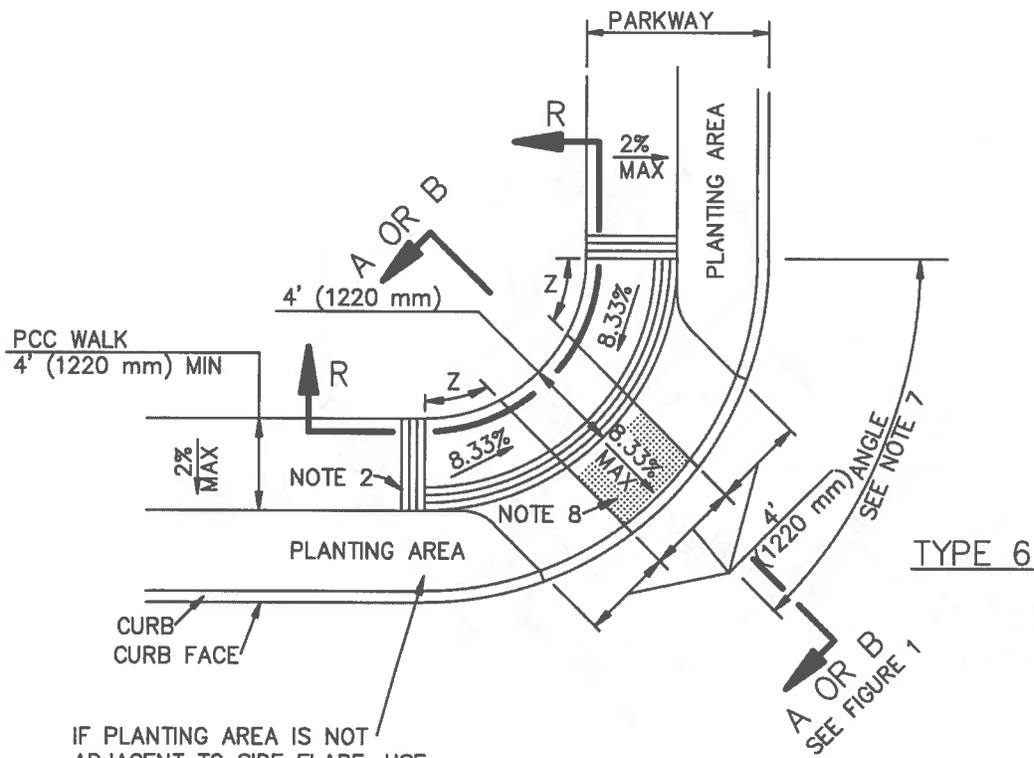
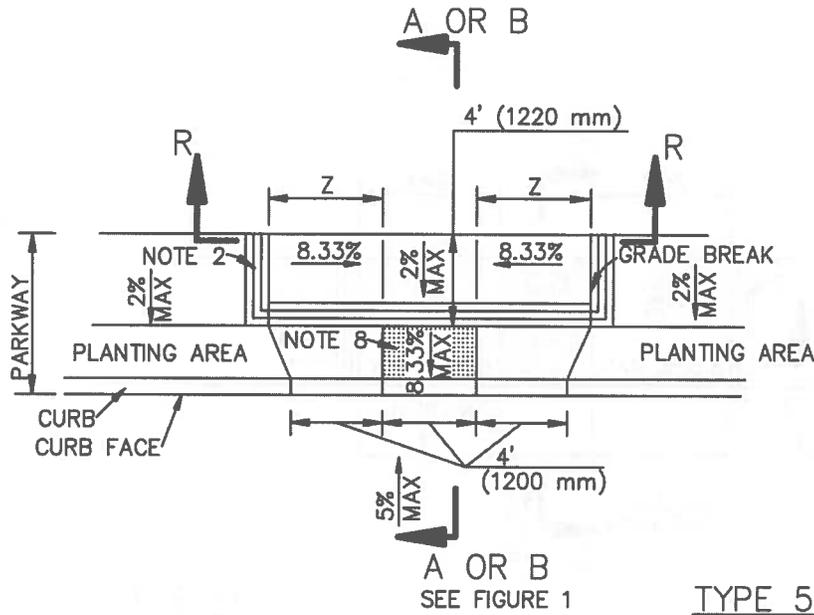
TYPE 3



WHERE PLANTING AREA IS ADJACENT TO THE CURB RAMP, USE CASE A, TYPE 6

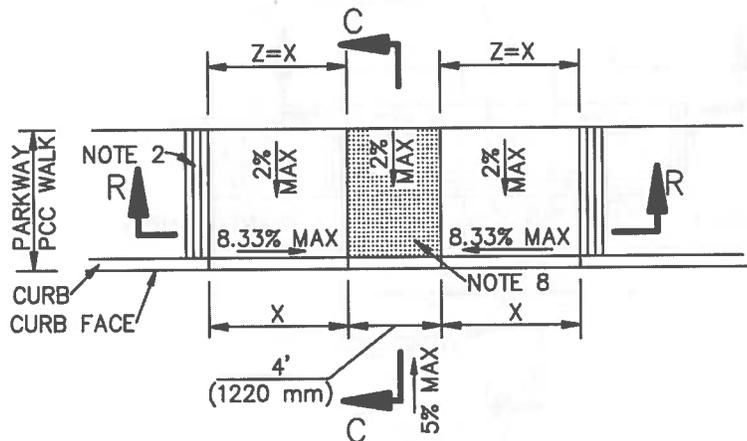
TYPE 4

CASE A

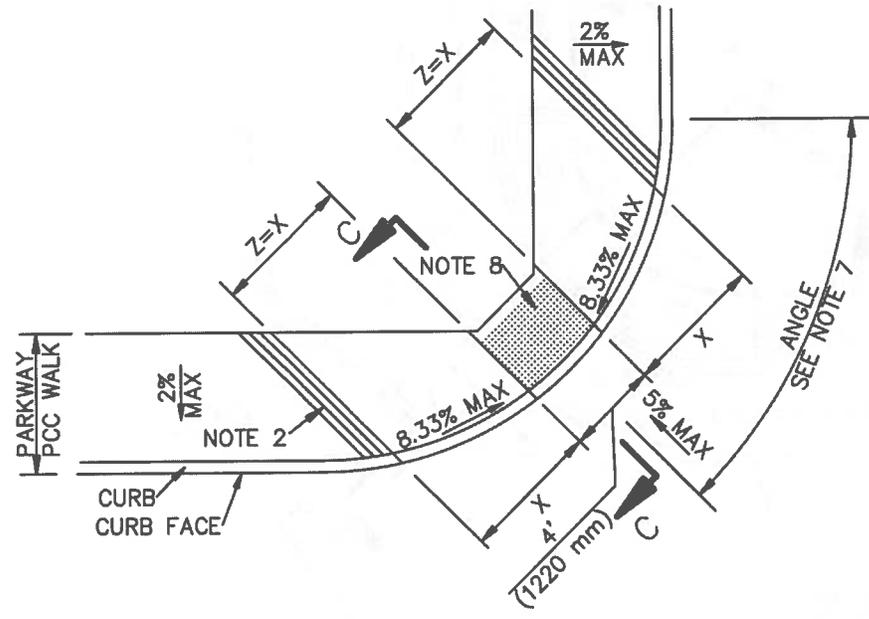


IF PLANTING AREA IS NOT
ADJACENT TO SIDE FLARE, USE
"X" PER TABLE 2 FOR THAT FLARE

CASE A



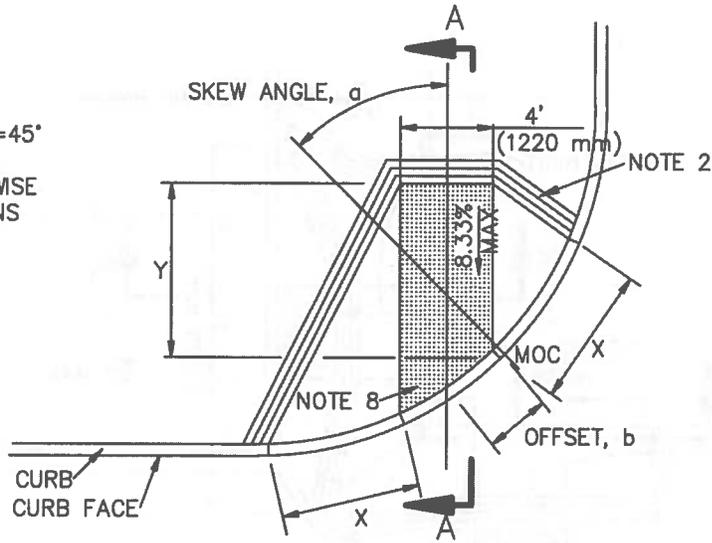
TYPE 1



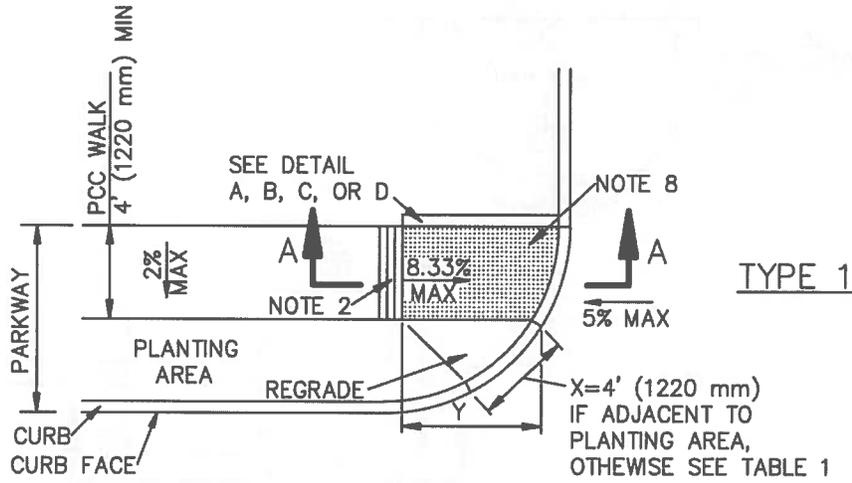
TYPE 2

CASE B

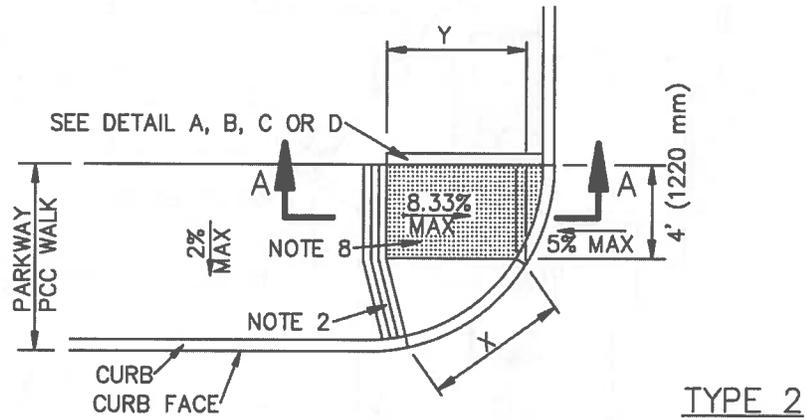
SKEW ANGLE $\alpha=45^\circ$
 OFFSET $b=0$
 UNLESS OTHERWISE
 NOTED ON PLANS



CASE C

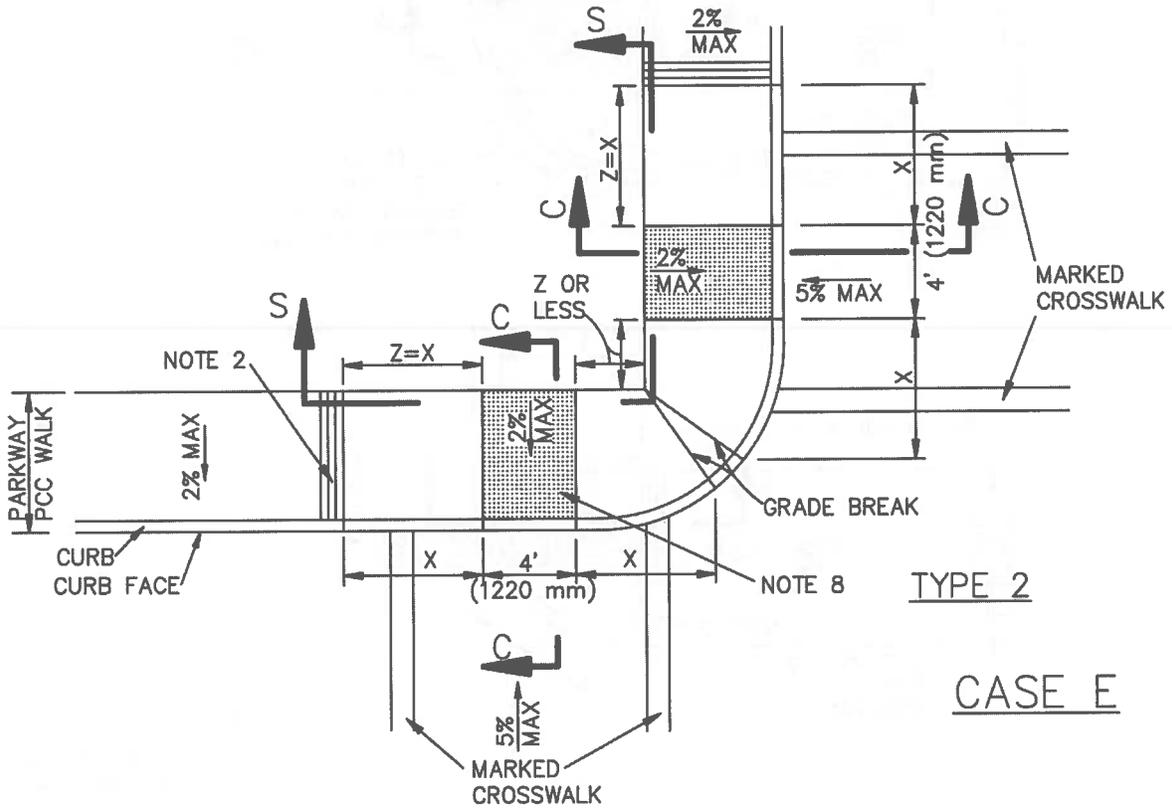
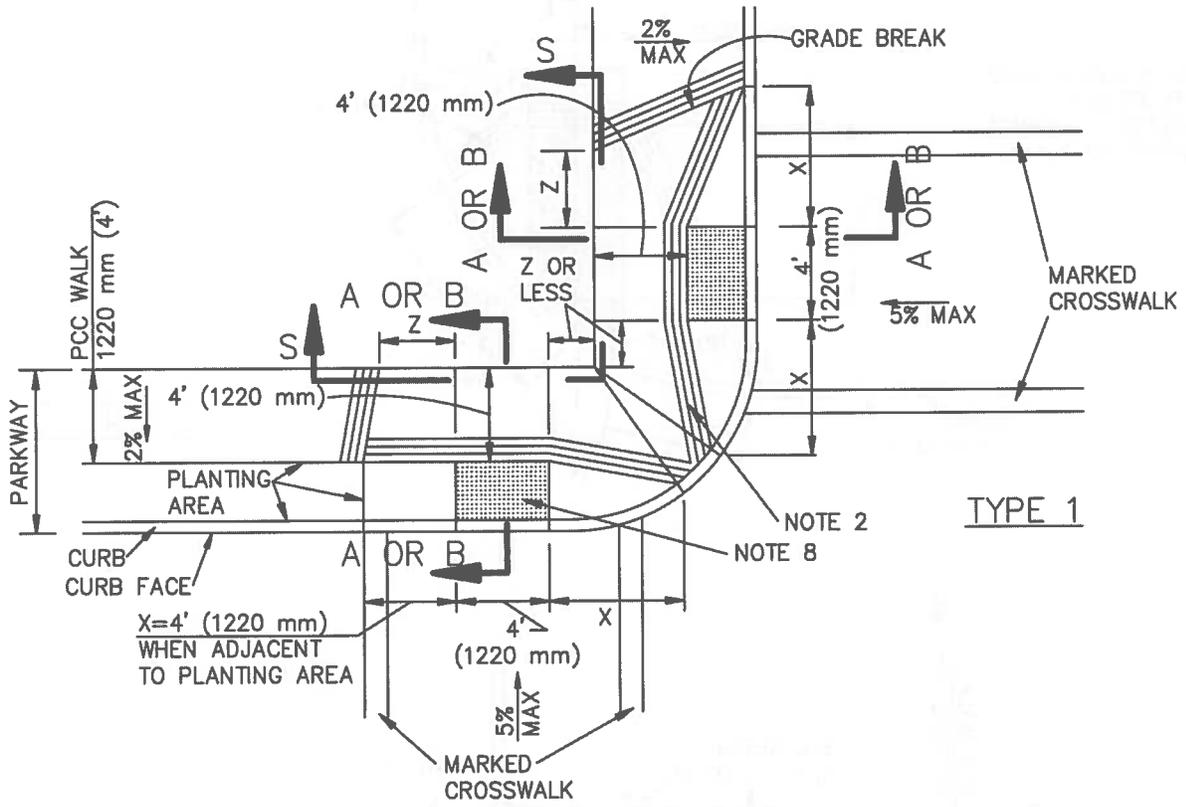


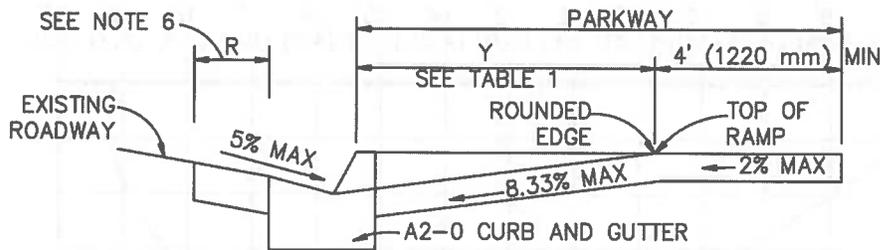
TYPE 1



TYPE 2

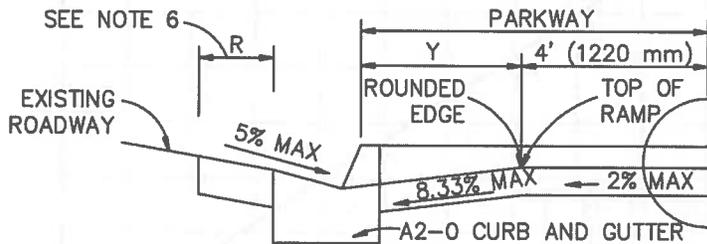
CASE D



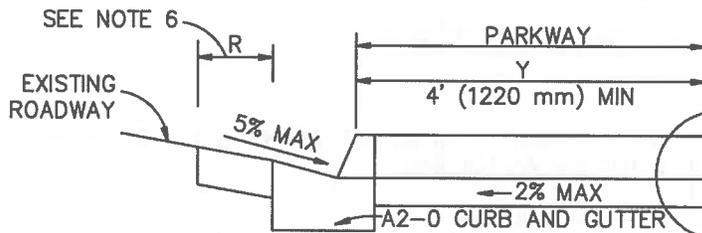


SECTION A-A

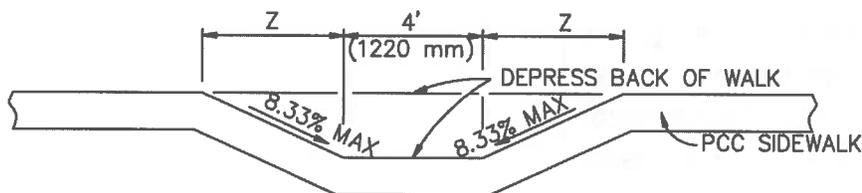
USE FIGURE 1 TO DETERMINE WHICH OF SECTIONS A-A, B-B OR C-C IS APPROPRIATE.



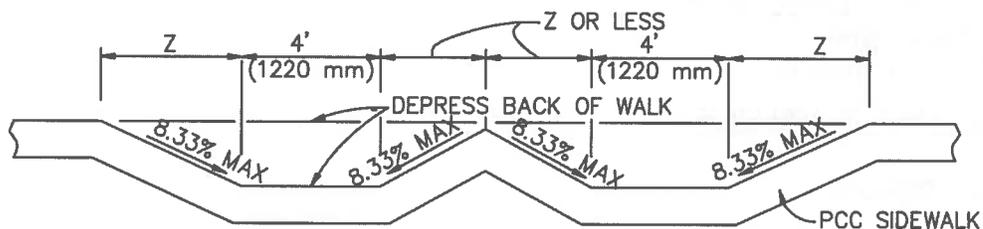
SECTION B-B



SECTION C-C



SECTION R-R



SECTION S-S

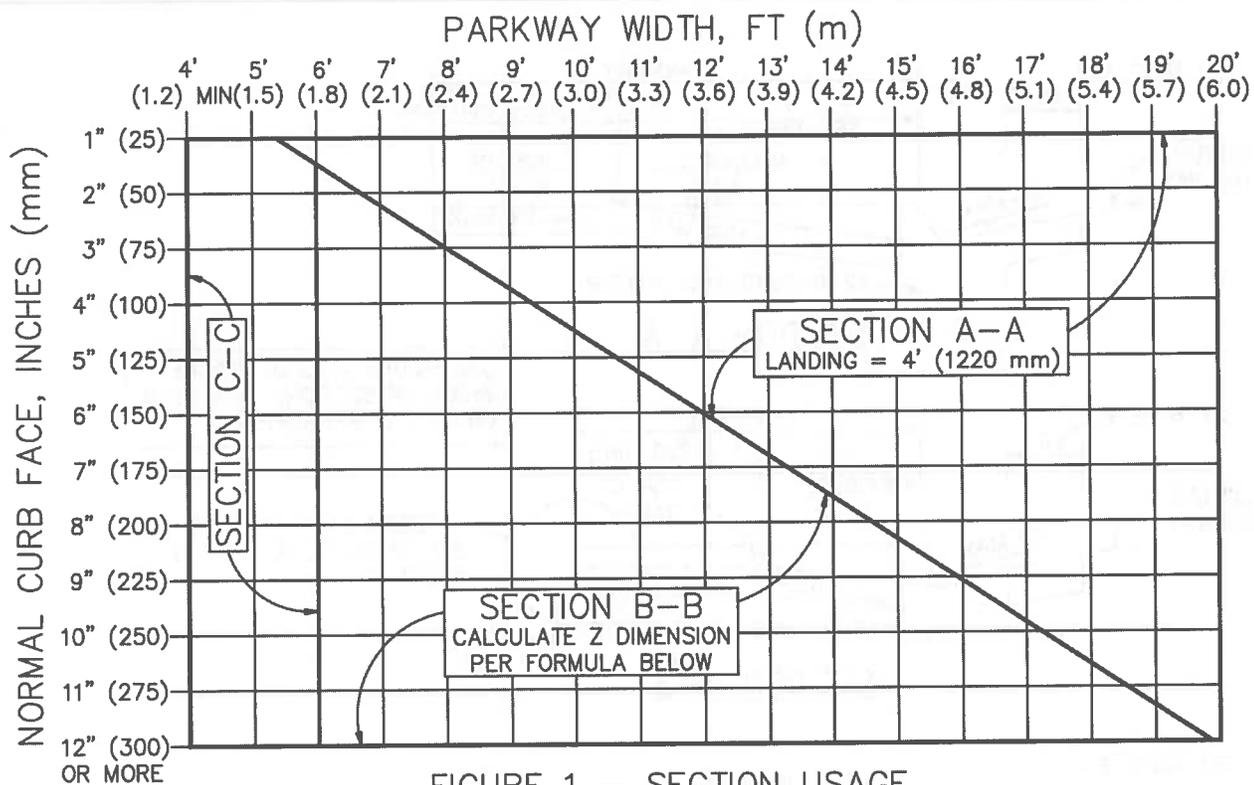


FIGURE 1 - SECTION USAGE

NORMAL CURB FACE, INCHES (mm)	X, FT (mm)	SECTION Y-Y Y, FT (mm)
2" (50)	4.00' (1220) MIN	2.63' (790)
3" (75)	4.00' (1220) MIN	3.95' (1185)
4" (100)	4.00' (1220) MIN	5.26' (1580)
5" (125)	4.17' (1275)	6.58' (1975)
6" (150)	5.00' (1525)	7.90' (2370)
7" (175)	5.83' (1775)	9.21' (2765)
8" (200)	6.67' (2035)	10.53' (3160)
9" (225)	7.50' (2285)	11.84' (3555)
10" (250)	8.33' (2540)	13.16' (3950)
11" (275)	9.17' (2795)	14.47' (4340)
12" (300)	10.00' (3050)	15.79' (4735)

WHERE FIGURE 1 SHOWS USE OF SECTION B-B, FIGURE Z DIMENSION AS FOLLOWS:

W = PARKWAY WIDTH
 L = LANDING WIDTH, 4' (1220 mm) TYP
 $Z = [(Y+L)-W] \times 0.760$

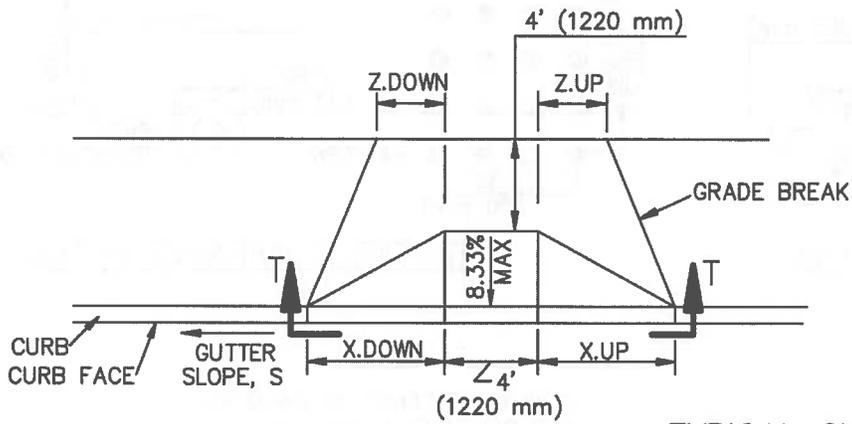
IF $(Y+L) < W$, THEN $Z = 0$

SEE SHEET 9 FOR STREET SLOPE ADJUSTMENT FACTORS, ALL STREETS

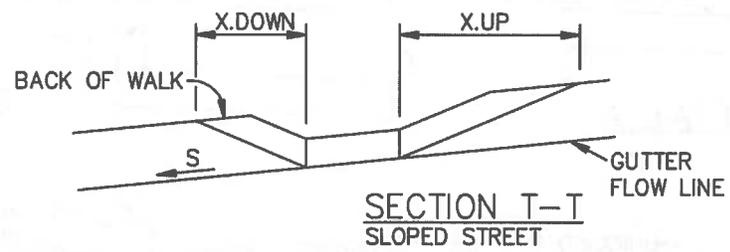
TABLE 1 - X AND Y VALUES

TABLE 1 REFERENCE FORMULAS:

$X = CF / 8.333\%$
 $Y = CF / (8.333\% - 2\% \text{ WALK CROSS SLOPE})$



TYPICAL CURB RAMP



FOR SLOPED STREETS, MULTIPLY THE DIMENSIONS PARALLEL TO THE STREET, X AND Z, UPSTREAM AND DOWNSTREAM OF THE RAMP, BY THE FACTORS IN THE FOLLOWING TABLE.

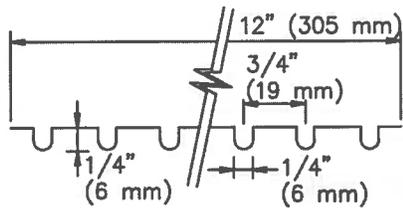
FOR EXAMPLE, $X.DOWN = X \times K.DOWN$

S	K.DOWN	K.UP
0%	1.000	1.000
0.2%	0.977	1.025
0.5%	0.943	1.064
1%	0.893	1.136
2%	0.806	1.316
3%	0.735	1.563
4%	0.676	1.923
5%	0.625	2.500

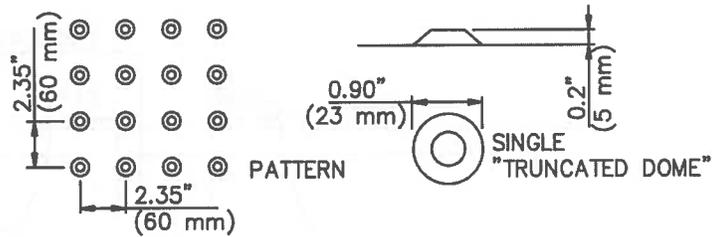
TABLE 2 - SLOPE ADJUSTMENTS

TABLE 2 REFERENCE FORMULAS:
 $K.DOWN = 8.333\% / (8.333\% + S)$
 $K.UP = 8.333\% / (8.333\% - S)$

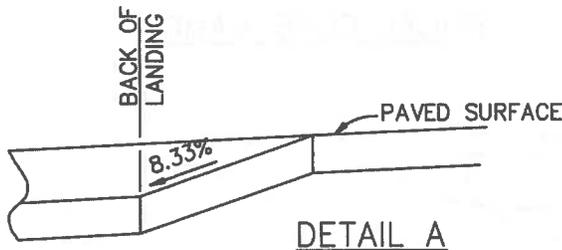
STREET SLOPE ADJUSTMENTS



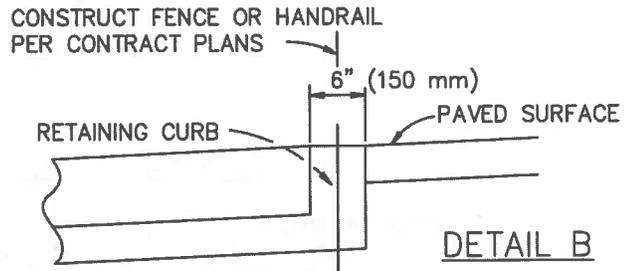
GROOVING DETAIL



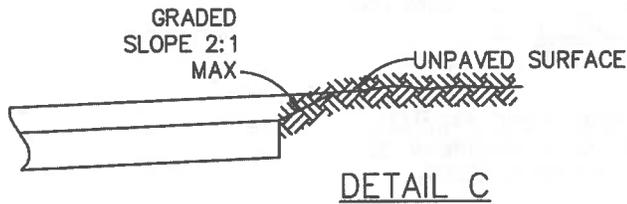
DETECTABLE WARNING DETAIL



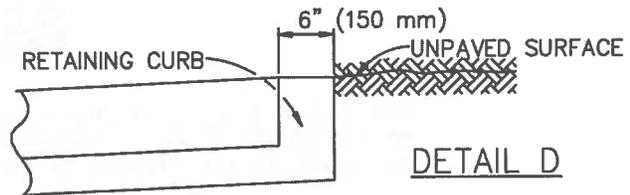
DETAIL A



DETAIL B



DETAIL C



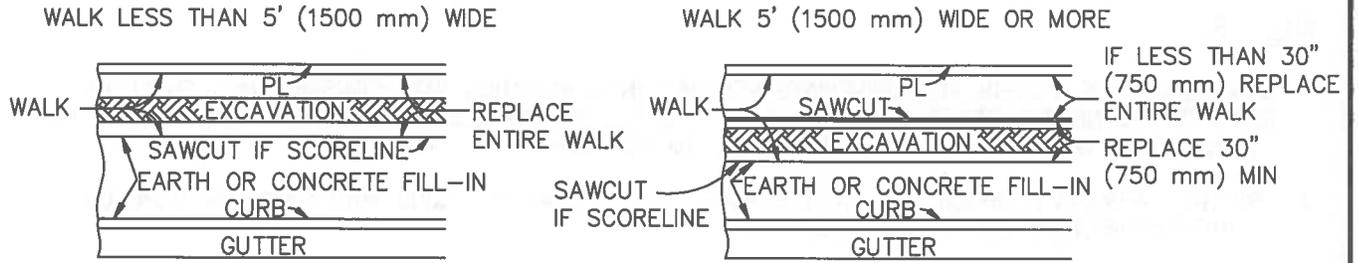
DETAIL D

GENERAL NOTES:

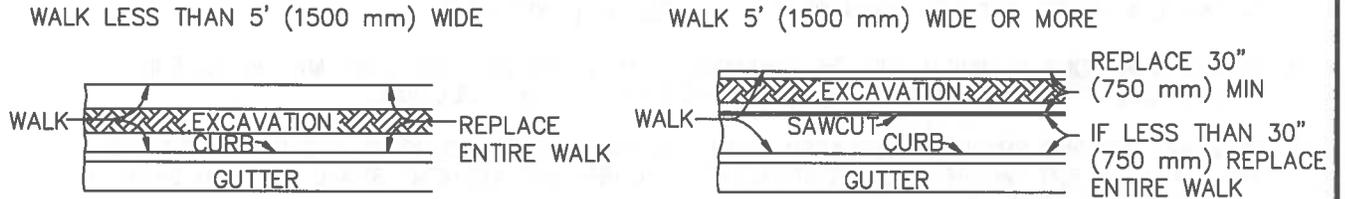
1. CONCRETE SHALL BE CLASS 520-C-2500 (310-C-17) CONFORMING TO SSPWC 201-1.1.2 AND SHALL BE 4" (100 mm) THICK.
2. THE RAMP SHALL HAVE A 12" (305 mm) WIDE BORDER WITH 1/4" (6 mm) GROOVES APPROXIMATELY 3/4" (19 mm) OC. SEE GROOVING DETAIL.
3. THE RAMP SURFACE SHALL HAVE A TRANSVERSE BROOMED SURFACE TEXTURE CONFORMING TO SSPWC 303-1.9.
4. USE DETAIL "A" OR "B" IF EXISTING SURFACE BEHIND LANDING IS PAVED.
5. USE DETAIL "C" OR "D" IF EXISTING SURFACE BEHIND LANDING IS UNPAVED.
6. R = 3' (900 mm) UNLESS OTHERWISE SHOWN ON PLAN. SEE SHEET 7.
7. ANGLE = $\Delta/2$ UNLESS OTHERWISE SHOWN ON PLAN.
8. CONSTRUCT DETECTABLE WARNING SURFACE PER DETAIL THIS SHEET. MATERIALS SHALL BE PER CONTRACT DOCUMENTS.

WALK OR FILL-IN REPLACEMENT FOR EXCAVATIONS MADE PARALLEL TO CURB OR PROPERTY LINE

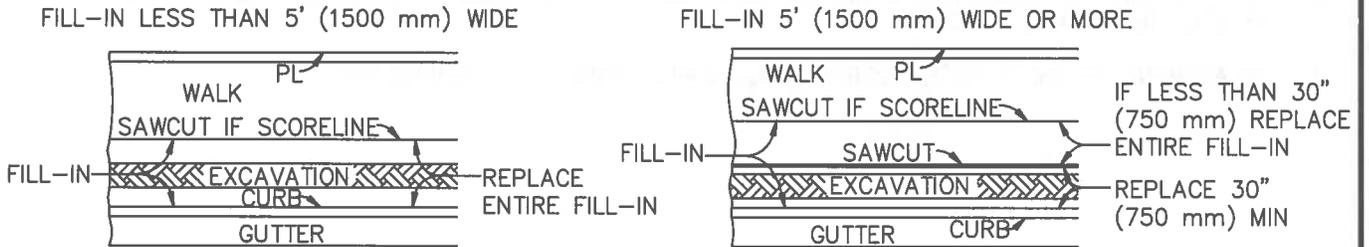
WALK ADJACENT TO PROPERTY LINE



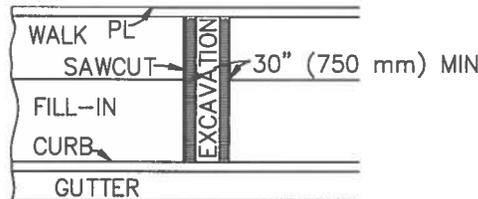
WALK ADJACENT TO CURB



FILL-IN REPLACEMENT



WALK OR FILL-IN REPLACEMENT FOR EXCAVATIONS MADE NORMAL TO CURB OR PROPERTY LINE



THESE REQUIREMENTS ALSO APPLY TO ENDS OF PARALLEL EXCAVATIONS.

IF AN EXCAVATION FALLS WITHIN 30" (750 mm) OF AN EXPANSION JOINT, CONSTRUCTION JOINT, WEAKENED PLANE JOINT, OR EDGE, THE CONCRETE SHALL BE REMOVED AND REPLACED TO THE JOINT OR EDGE.

IF AN EXCAVATION FALLS WITHIN 12" (300 mm) OF A SCORELINE, THE CONCRETE SHALL BE REMOVED AND REPLACED TO THE SCORELINE. THE SCORELINE SHALL BE SAWCUT BEFORE CONCRETE REMOVAL.

THE MINIMUM LENGTH OF REPLACEMENT IN BOTH CASES SHALL BE 30" (750 mm).

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

PROMULGATED BY THE
PUBLIC WORKS STANDARDS INC.
GREENBOOK COMMITTEE
1993
REV. 1996, 2009

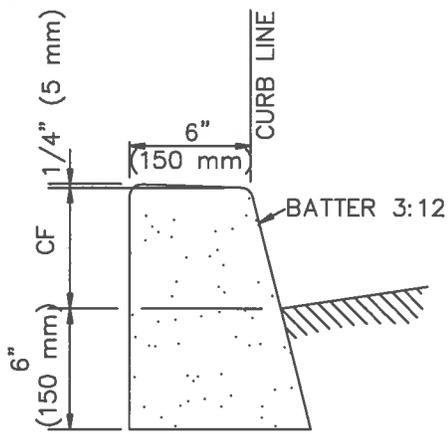
SIDEWALK & DRIVEWAY REPLACEMENT

USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

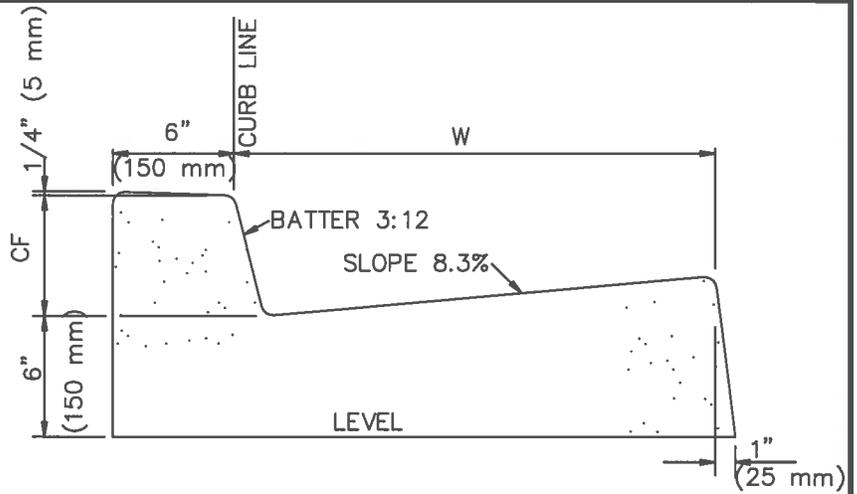
STANDARD PLAN

113-2

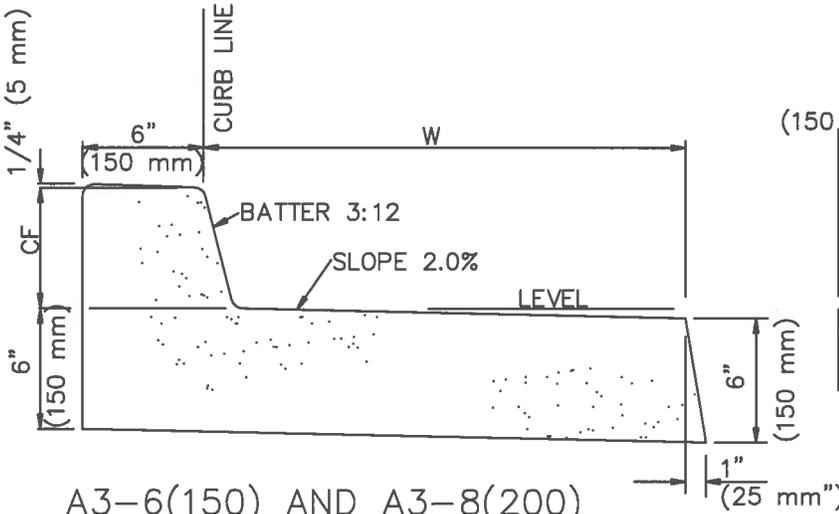
SHEET 1 OF 2



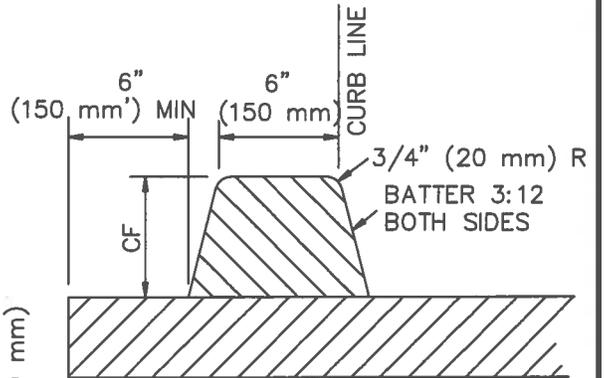
A1-6(150) AND
A1-8(200)



A2-6(150) AND A2-8(200)



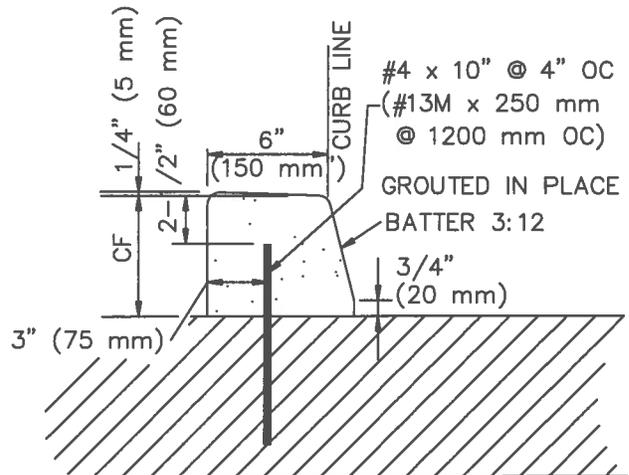
A3-6(150) AND A3-8(200)



D1-6(150) AND
D1-8(200)

NOTES:

1. THE LAST NUMBER IN THE DESIGNATION IS THE CURB FACE (CF) HEIGHT, INCHES (mm).
2. GUTTER WIDTH, W, IS 24" (600 mm) UNLESS OTHERWISE SPECIFIED.
3. TYPES A1, A2, A3 AND C1 SHALL BE CONSTRUCTED FROM PCC.
4. TYPE D1 CURB SHALL BE CONSTRUCTED FROM ASPHALT CONCRETE.
5. TYPE C1 CURB SHALL BE ANCHORED WITH STEEL DOWELS AS SHOWN OR WITH AN EPOXY APPROVED BY THE ENGINEER.
6. ALL EXPOSED CORNERS ON PCC CURBS AND GUTTERS SHALL BE ROUNDED WITH A 1/2" (15 mm) RADIUS.



C1-6(150) AND C1-8(200)

STANDARD PLAN FOR PUBLIC WORKS CONSTRUCTION

PROMULGATED BY THE
PUBLIC WORKS STANDARDS INC.
GREENBOOK COMMITTEE
1984
REV. 1996, 2009

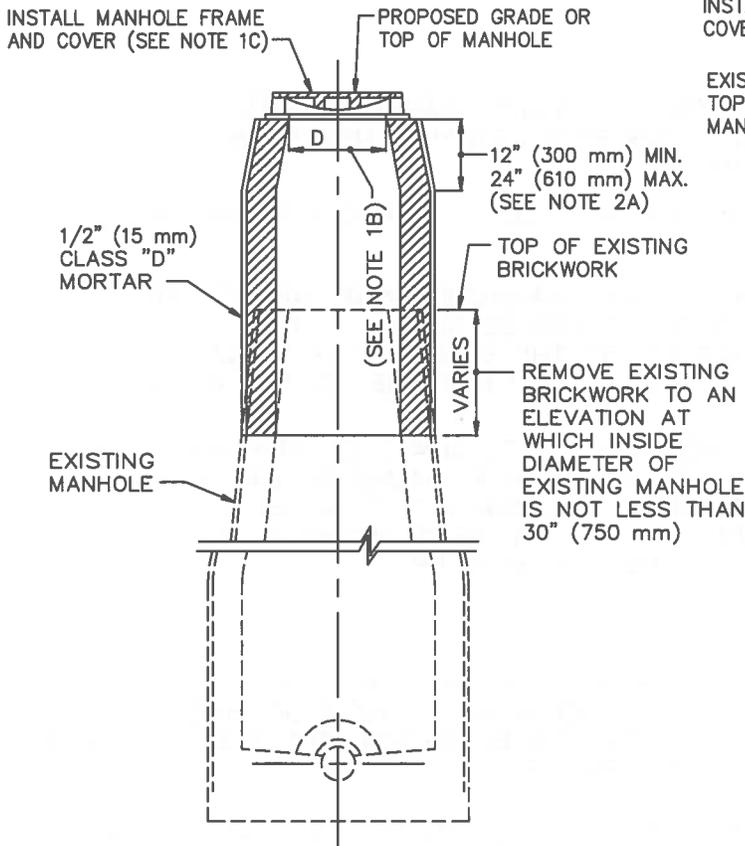
CURB AND GUTTER - BARRIER

STANDARD PLAN

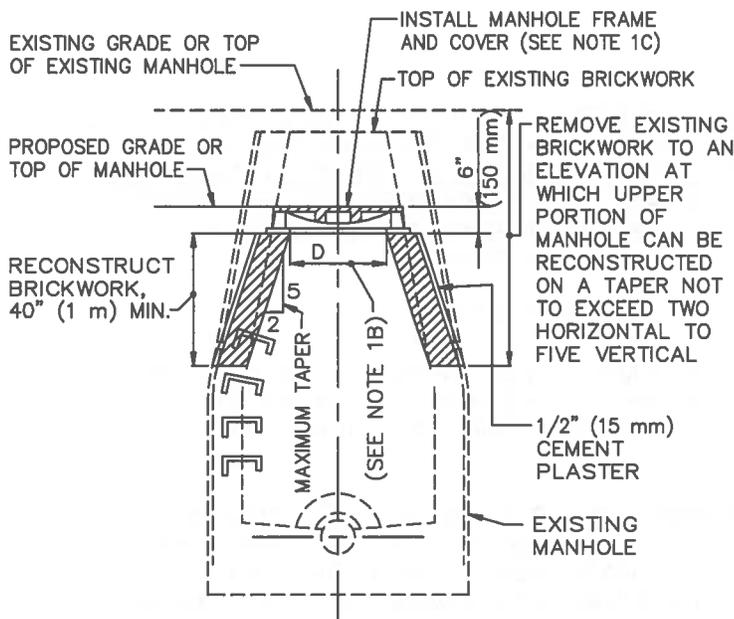
120-2

USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

SHEET 1 OF 1

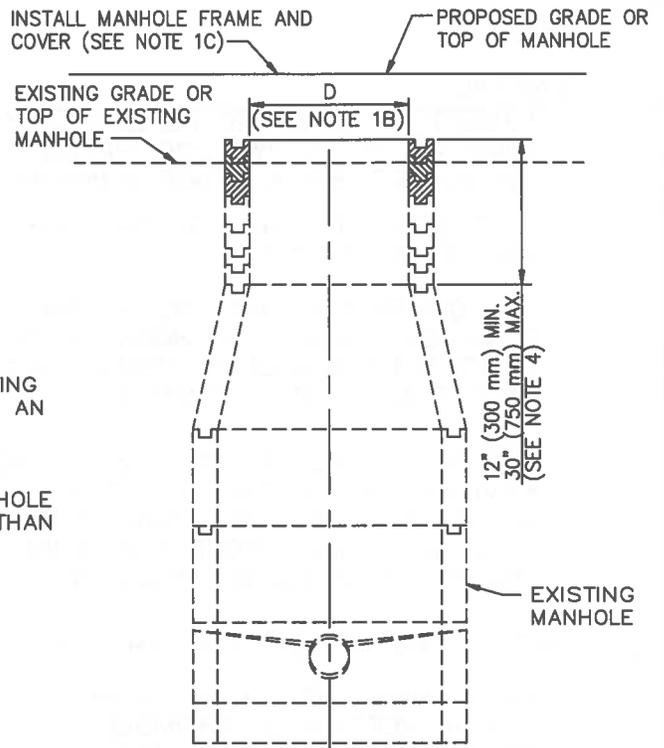


RAISING EXISTING BRICK MANHOLES

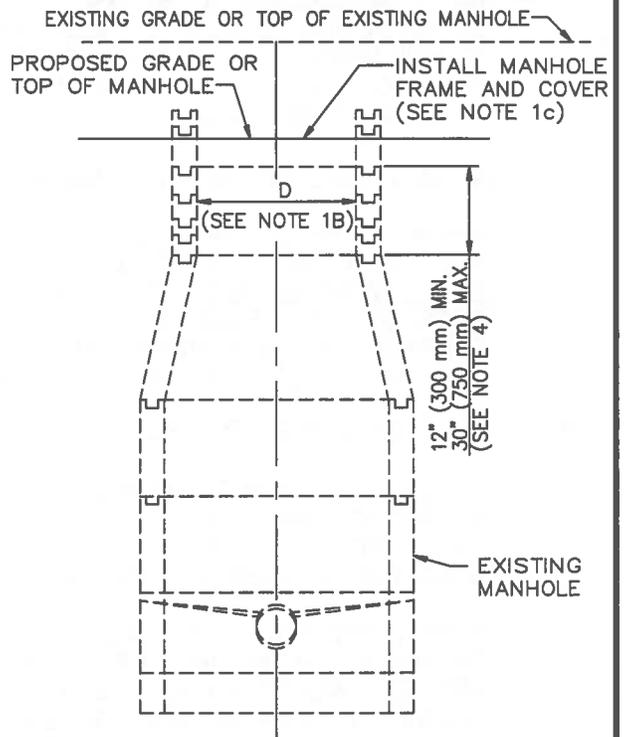


LOWERING EXISTING BRICK MANHOLES

BRICK MANHOLES



RAISING EXISTING PRECAST CONCRETE SEWER MANHOLES



LOWERING EXISTING PRECAST CONCRETE SEWER MANHOLES

PRECAST CONCRETE SEWER MANHOLES

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

PROMULGATED BY THE
PUBLIC WORKS STANDARD, INC.
GREENBOOK COMMITTEE
1984
REV. 1998, 2009

SEWER MANHOLE ADJUSTMENT

STANDARD PLAN

205-2

USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

SHEET 1 OF 3

NOTES:

1. GENERAL

- A. EXCEPT AS INDICATED HEREON OR ON THE PLANS, MANHOLES SHALL CONFORM TO: SPPWC 200, PRECAST CONCRETE SEWER MANHOLE AND SPPWC 203, BRICK SEWER MANHOLE.
- B. DIMENSION "D" SHALL BE THE SAME AS THE SIZE OF MANHOLE FRAME AND COVER TO BE USED.
- C. THE CONTRACTOR MAY REUSE THE EXISTING MANHOLE FRAME AND COVER, UNLESS DAMAGED DURING THE WORK OR WHEN OTHERWISE SHOWN IN THE CONTRACT DOCUMENTS. ITEMS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED WITH IDENTICAL NEW ITEMS AT NO EXPENSE TO THE AGENCY.
- D. EXISTING STEPS LOCATED WITHIN REMOVAL LIMITS SHALL BE REPLACED. WHEN REMOVAL OF EXISTING STEPS BEYOND THE MANHOLE REMOVAL LIMITS IS SHOWN ON THE PLANS, THE STEPS SHALL BE REMOVED TO A DEPTH OF 2" (50 mm) BEYOND THE INSIDE FACE OF THE BRICK MANHOLE AND THE HOLES SHALL BE FILLED WITH CLASS "D" MORTAR.

2. RAISING EXISTING BRICK MANHOLES

- A. BRICK MANHOLES TO BE RAISED LESS THAN 1' (300 mm) MAY BE EXTEND VERTICALLY, PROVIDED THAT AT A DEPTH OF 2 1/2' (750 mm) BELOW THE TOP OF THE MANHOLE AT ITS NEW ELEVATION, THE INSIDE DIAMETER OF THE MANHOLE IS 30" (750 mm) OR GREATER.
- B. BRICK MANHOLES TO BE RAISED LESS THAN 3 1/2" (90 mm) MAY BE RAISED BY APPLYING CLASS "D" MORTAR TO THE TOP OF THE EXISTING BRICKWORK. IF THE BRICK MANHOLE IS TO BE RAISED 3 1/2" (90 mm) OR MORE, A NEW COURSE OR COURSES OF BRICKWORK SHALL BE PLACED ON TOP OF THE EXISTING BRICKWORK.

3. LOWERING EXISTING BRICK MANHOLES

- A. WHERE A BRICK MANHOLE IS TO BE LOWERED LESS THAN 1' (300 mm), THE FRAME MAY BE RESET ON THE EXISTING BRICKWORK AND THE 40" (1 m) MINIMUM BRICKWORK RECONSTRUCTION OMITTED, PROVIDED THAT THE BASE OF THE FRAME DOES NOT OVERHANG THE BRICKWORK ON THE INSIDE SURFACE OF THE MANHOLE MORE THAN AN AVERAGE OF 1 1/2" (35 mm) IN ANY QUADRANT NOR MORE THAN 2" (50 mm) AT ANY POINT.

4. RAISING EXISTING PRECAST CONCRETE SEWER MANHOLES

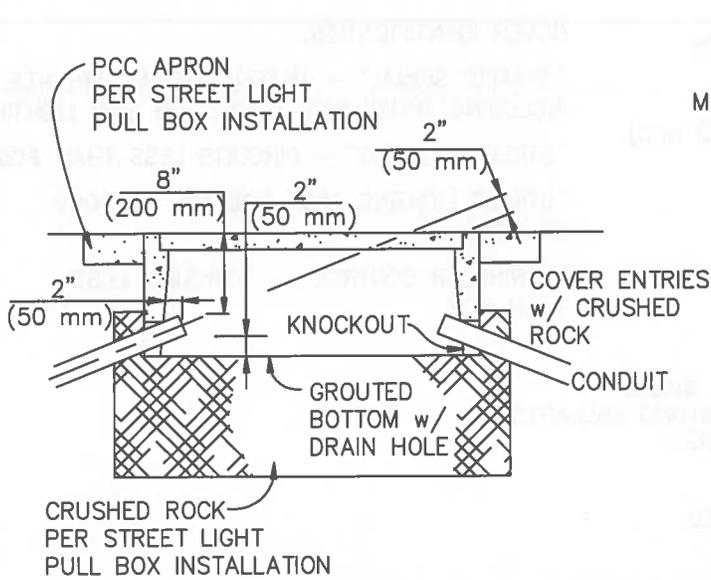
- A. PRECAST CONCRETE MANHOLES TO BE RAISED LESS THAN 3" (75 mm) MAY BE RAISED BY APPLYING CLASS "D" MORTAR TO THE TOP OF THE EXISTING MANHOLE, PROVIDED THE TOTAL HEIGHT OF MORTAR, EXISTING AND NEWLY APPLIED, DOES NOT EXCEED 3" (75 mm).
- B. WHERE THE PRECAST CONCRETE MANHOLE IS TO BE RAISED 3" (75 mm) OR MORE, OR WHERE THE TOTAL HEIGHT OF MORTAR, EXISTING AND NEWLY APPLIED, WOULD EXCEED 3" (75 mm), GRADE RINGS SHALL BE UTILIZED. CLASS "D" MORTAR MAY BE USED FOR FINAL ADJUSTMENT, BUT NOT MORE THAN 3" (75 mm) IN HEIGHT. WHERE RAISING THE MANHOLE WOULD RESULT IN THE UPPER SEGMENT OF THE SHAFT BEING MORE THAN 30" (750 mm) IN HEIGHT, REMOVE THE REDUCER AND THE UPPER SEGMENT OF THE SHAFT, INSTALL ADDITIONAL RINGS OR PIPE TO THE LOWER SEGMENT OF THE SHAFT, AND REINSTALL THE REDUCER AND GRADE RINGS AS REQUIRED.

5. LOWERING EXISTING PRECAST CONCRETE SEWER MANHOLES

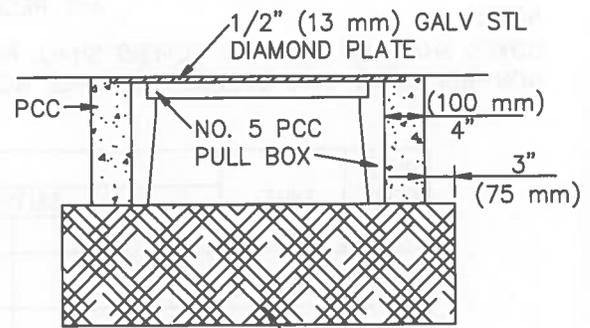
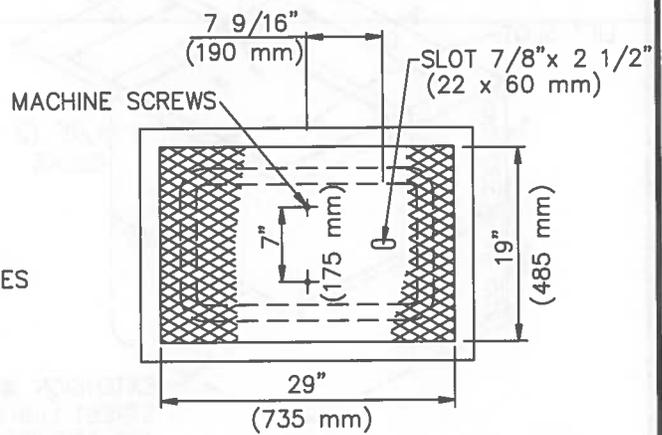
- A. REMOVE SUFFICIENT GRADE RINGS TO LOWER THE MANHOLES AS REQUIRED, APPLY CLASS "D" MORTAR TO A HEIGHT NOT EXCEEDING 3" (75 mm) FOR ADJUSTMENT TO FINAL GRADE.
- B. WHERE REMOVAL OF GRADE RINGS WOULD RESULT IN THE UPPER SEGMENT OF THE SHAFT BEING LESS THAN 12" (300 mm) IN HEIGHT, REMOVE THE REDUCER AND SUFFICIENT SECTIONS OF THE LOWER SEGMENT OF THE SHAFT AND REINSTALL ANY NECESSARY SEGMENT OF THE LOWER SHAFT, THE REDUCER, AND THE GRADE RINGS TO CONFORM TO THE REQUIREMENTS OF THIS PLAN.
- C. EXISTING GRADE RINGS NEED NOT BE REMOVED IF EXISTING MORTAR IS REMOVED, AND AT LEAST 1 1/2" (38 mm) OF MORTAR MAY BE PLACED ON TOP OF THE EXISTING GRADE RINGS TO RESEAT THE FRAME.

6. REPLACEMENT OF BRICK REDUCER WITH PRECAST CONCRETE REDUCER AND SHAFT
UNLESS OTHERWISE INDICATED ON THE PLANS, THE CONTRACTOR MAY INSTALL A PRECAST CONCENTRIC CONCRETE REDUCER, CONCRETE GRADE RINGS, AND CONCRETE PIPE IN LIEU OF RECONSTRUCTING A BRICK REDUCER, PROVIDED:

- A. THE MAXIMUM ID OF SEWER PIPE CONNECTED TO THE MANHOLE DOES NOT EXCEED 8" (200 mm).
- B. THE CONTRACTOR SECURES PRIOR APPROVAL FROM THE ENGINEER TO INSTALL THE CONCENTRIC REDUCER ONTO THE MANHOLE SHAFT. THE ENGINEER MAY, AS PART OF THE INSTALLATION REQUIREMENTS, REQUIRE THE CONTRACTOR TO COAT THE INSIDE OF THE REDUCER, RINGS, AND PIPE WITH AN APPROVED COATING.
- C. THE CONCRETE GRADE RINGS, THE CONCRETE REDUCER, AND ANY CONCRETE PIPE SHALL BE JOINED TOGETHER AND BEDDED ONTO THE EXISTING BRICK MANHOLE WITH CLASS "D" MORTAR. THE DEPTH, WIDTH, AND THICKNESS OF THE MORTAR SHALL BE OF SUFFICIENT DIMENSIONS TO PROPERLY AND ADEQUATELY JOIN AND BED THE COMPONENT PARTS.

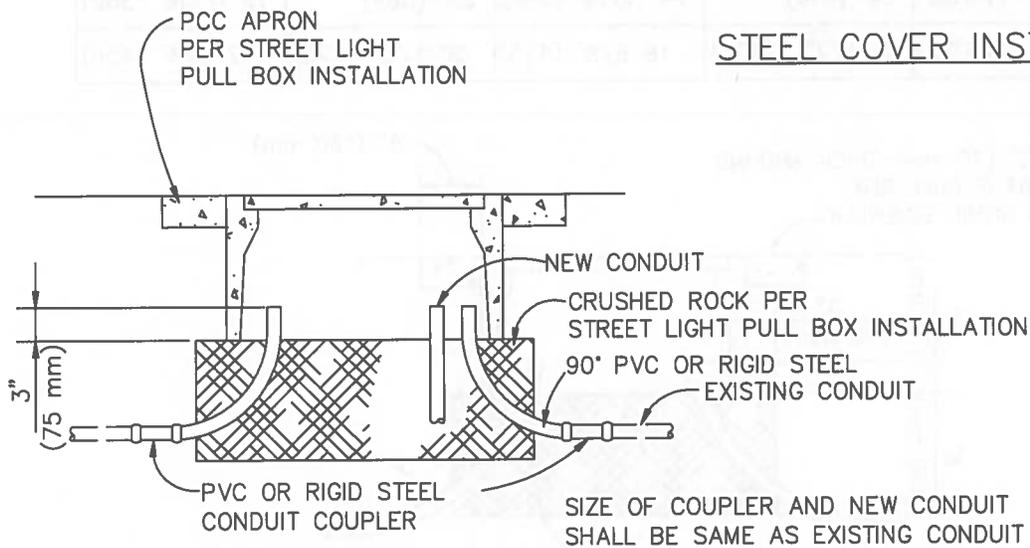


TRAFFIC SIGNAL
PULL BOX INSTALLATION

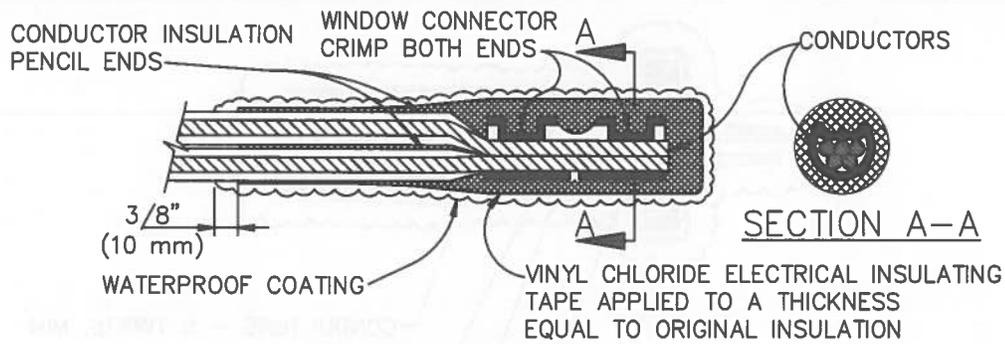


ATTACH STL PLATE TO PCC COVER WITH 2 BRASS MACHINE SCREWS, 1/4" (6 mm) 20 NC-2 FLAT HEAD, IN 1 1/4" (32 mm) HOLES w/ EXPANSION SHIELDS

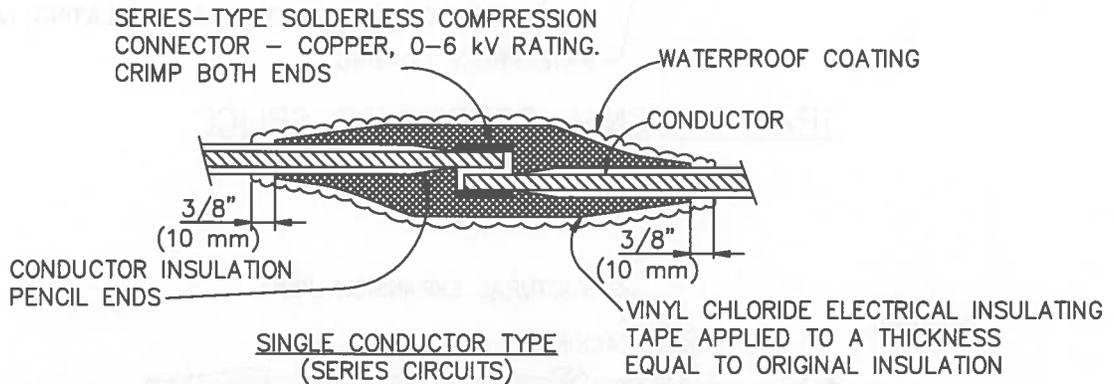
STEEL COVER INSTALLATION



STREET LIGHT CONDUIT INTERCEPT



**MULTIPLE CONDUCTOR TYPE
(MULTIPLE CIRCUITS)**

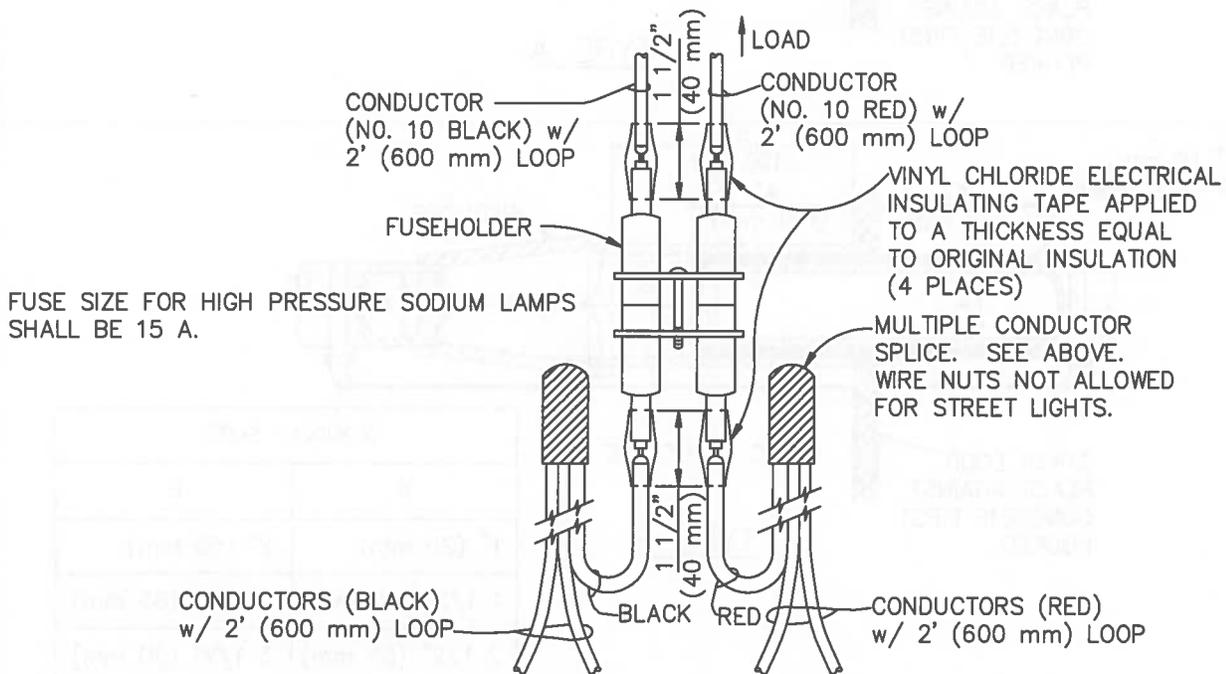


**SINGLE CONDUCTOR TYPE
(SERIES CIRCUITS)**

STREET LIGHTING WINDOW SPLICE CONNECTORS

NOTES:

1. WATERPROOF COATING SHALL BE SUBJECT TO ENGINEER'S APPROVAL.
2. WIRE NUTS SHALL NOT BE USED FOR STREET LIGHTING SPLICES.



FUSE SIZE FOR HIGH PRESSURE SODIUM LAMPS SHALL BE 15 A.

IN-LINE FUSE HOLDER

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

PROMULGATED BY THE
PUBLIC WORKS STANDARDS INC.
GREENBOOK COMMITTEE
2005
REV. 2009

WIRING SERVICE DETAILS

STANDARD PLAN

408-1

USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

SHEET 1 OF 2

**APPENDIX D
STANDARD PLANS**

APPENDIX D
STANDARD PLANS

END OF APPENDIX D

**APPENDIX E
FEDERAL WAGE RATES**

General Decision Number: CA160035 08/12/2016 CA35

Superseded General Decision Number: CA20150035

State: California

Construction Types: Building, Heavy (Heavy and Dredging) and Highway

County: Orange County in California.

BUILDING CONSTRUCTION PROJECTS; DREDGING PROJECTS (does not include hopper dredge work); HEAVY CONSTRUCTION PROJECTS (does not include water well drilling); HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/08/2016
1	01/15/2016
2	02/19/2016
3	02/26/2016
4	03/04/2016
5	04/01/2016
6	05/20/2016
7	07/08/2016
8	07/22/2016
9	08/12/2016

ASBE0005-002 07/01/2015

	Rates	Fringes
Asbestos Workers/Insulator (Includes the application of all insulating materials, protective coverings, coatings, and finishes to all types of mechanical systems).....	\$ 36.74	19.49
Fire Stop Technician		

PORTOLA PARKWAY RESURFACING PROJECT,
PW 2016.05B, STPL-5469 (017) FWR-1

APPENDIX E
FEDERAL WAGE RATES

APPENDIX E
FEDERAL WAGE RATES

Installer, Hardwood Floor Worker and acoustical installer.....	\$ 39.83	11.58
(2) Millwright.....	\$ 40.90	11.58
(3) Piledrivermen/Derrick Bargeman, Bridge or Dock Carpenter, Heavy Framer, Rock Bargeman or Scowman, Rockslinger, Shingler (Commercial).....	\$ 40.53	11.58
(4) Pneumatic Nailer, Power Stapler.....	\$ 37.60	11.58
(5) Sawfiler.....	\$ 37.44	11.58
(6) Scaffold Builder.....	\$ 28.55	11.58
(7) Table Power Saw Operator.....	\$ 37.45	11.58

FOOTNOTE: Work of forming in the construction of open cut sewers or storm drains, on operations in which horizontal lagging is used in conjunction with steel H-Beams driven or placed in pre- drilled holes, for that portion of a lagged trench against which concrete is poured, namely, as a substitute for back forms (which work is performed by piledrivers): \$0.13 per hour additional.

CARP0409-005 07/01/2015

	Rates	Fringes
Drywall		
DRYWALL INSTALLER/LATHER.....	\$ 40.40	15.03
STOCKER/SCRAPPER.....	\$ 10.00	7.17

CARP0409-008 08/01/2010

	Rates	Fringes
Modular Furniture Installer.....	\$ 17.00	7.41

ELEC0011-002 12/28/2015

COMMUNICATIONS AND SYSTEMS WORK

	Rates	Fringes
Communications System		
Installer.....	\$ 30.73	14.00
Technician.....	\$ 30.10	12.48

SCOPE OF WORK:

Installation, testing, service and maintenance of systems utilizing the transmission and/or transference of voice, sound, vision and digital for commercial, educational, security and entertainment purposes for the following: TV monitoring and surveillance, background-foreground music,

APPENDIX E
FEDERAL WAGE RATES

intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call systems, radio page, school intercom and sound, burglar alarms, fire alarm (see last paragraph below) and low voltage master clock systems in commercial buildings. Communication Systems that transmit or receive information and/or control systems that are intrinsic to the above listed systems; inclusion or exclusion of terminations and testings of conductors determined by their function; excluding all other data systems or multiple systems which include control function or power supply; excluding installation of raceway systems, conduit systems, line voltage work, and energy management systems. Does not cover work performed at China Lake Naval Ordnance Test Station. Fire alarm work shall be performed at the current inside wireman total cost package.

ELEC0441-001 02/09/2016

	Rates	Fringes
CABLE SPLICER.....	\$ 77.29	17.13
ELECTRICIAN.....	\$ 42.34	17.07

* ELEC0441-003 12/28/2015

COMMUNICATIONS & SYSTEMS WORK (excludes any work on Intelligent Transportation Systems or CCTV highway systems)

	Rates	Fringes
Communications System		
Installer.....	\$ 31.32	12.32
Technician.....	\$ 31.23	15.39

SCOPE OF WORK The work covered shall include the installation, testing, service and maintenance, of the following systems that utilize the transmission and/or transference of voice, sound, vision and digital for commercial, education, security and entertainment purposes for TV monitoring and surveillance, background foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call system, radio page, school intercom and sound, burglar alarms and low voltage master clock systems.

A. Communication systems that transmit or receive information and/or control systems that are intrinsic to the above listed systems SCADA (Supervisory control/data acquisition PCM (Pulse code modulation) Inventory control systems Digital data systems Broadband & baseband and carriers Point of sale systems VSAT data systems Data communication systems RF and remote control systems Fiber optic data

APPENDIX E
FEDERAL WAGE RATES

systems

B. Sound and Voice Transmission/Transference Systems
Background-Foreground Music Intercom and Telephone
Interconnect Systems Sound and Musical Entertainment
Systems Nurse Call Systems Radio Page Systems School
Intercom and Sound Systems Burglar Alarm Systems
Low-Voltage Master Clock Systems Multi-Media/Multiplex
Systems Telephone Systems RF Systems and Antennas and Wave
Guide

C. *Fire Alarm Systems-installation, wire pulling and
testing.

D. Television and Video Systems Television Monitoring and
Surveillance Systems Video Security Systems Video
Entertainment Systems Video Educational Systems CATV and
CCTV

E. Security Systems, Perimeter Security Systems, Vibration
Sensor Systems
Sonar/Infrared Monitoring Equipment, Access Control Systems,
Card Access Systems

*Fire Alarm Systems

1. Fire Alarms-In Raceways: Wire and cable pulling in
raceways performed at the current electrician wage rate and
fringe benefits.
2. Fire Alarms-Open Wire Systems: installed by the Technician.

ELEC0441-004 02/09/2016

	Rates	Fringes
ELECTRICIAN (TRANSPORTATION SYSTEMS, TRAFFIC SIGNALS & STREET LIGHTING)		
Cable Splicer/Fiber Optic		
Splicer.....	\$ 42.94	17.09
Electrician.....	\$ 42.34	17.07
Technician.....	\$ 31.76	16.75

SCOPE OF WORK: Electrical work on public streets, freeways,
toll-ways, etc, above or below ground. All work necessary
for the installation, renovation, repair or removal of
Intelligent Transportation Systems, Video Surveillance
Systems (CCTV), Street Lighting and Traffic Signal work
or systems whether underground or on bridges. Includes
dusk to dawn lighting installations and ramps for access to
or egress from freeways, toll-ways, etc.
Intelligent Transportation Systems shall include all systems
and components to control, monitor, and communicate with
pedestrian or vehicular traffic, included but not limited
to: installation, modification, removal of all Fiber optic
Video System, Fiber Optic Data Systems, Direct interconnect

APPENDIX E
FEDERAL WAGE RATES

and Communications Systems, Microwave Data and Video Systems, Infrared and Sonic Detection Systems, Solar Power Systems, Highway Advisory Radio Systems, highway Weight and Motion Systems, etc.

Any and all work required to install and maintain any specialized or newly developed systems. All cutting, fitting and bandaging of ducts, raceways, and conduits. The cleaning, rodding and installation of "fish and pull wires". The excavation, setting, leveling and grouting of precast manholes, vaults, and pull boxes including ground rods or grounding systems, rock necessary for leveling and drainage as well as pouring of a concrete envelope if needed.

JOURNEYMAN TRANSPORTATION ELECTRICIAN shall perform all tasks necessary to install the complete transportation system.

JOURNEYMAN TECHNICIAN duties shall consist of: Distribution of material at job site, manual excavation and backfill, installation of system conduits and raceways for electrical, telephone, cable television and communication systems. Pulling, terminating and splicing of traffic signal and street lighting conductors and electrical systems including interconnect, detector loop, fiber optic cable and video/data.

ELEC1245-001 06/01/2015

	Rates	Fringes
LINE CONSTRUCTION		
(1) Lineman; Cable splicer..\$ 52.85	52.85	15.53
(2) Equipment specialist (operates crawler tractors, commercial motor vehicles, backhoes, trenchers, cranes (50 tons and below), overhead & underground distribution line equipment).....\$ 42.21	42.21	14.32
(3) Groundman.....\$ 32.28	32.28	14.03
(4) Powderman.....\$ 47.19	47.19	14.60

HOLIDAYS: New Year's Day, M.L. King Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day and day after Thanksgiving, Christmas Day

ELEV0018-001 01/01/2015

	Rates	Fringes
ELEVATOR MECHANIC.....\$ 49.90	49.90	28.38

FOOTNOTE:

PAID VACATION: Employer contributes 8% of regular hourly

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rate as vacation pay credit for employees with more than 5 years of service, and 6% for 6 months to 5 years of service.
PAID HOLIDAYS: New Years Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.

ENGI0012-003 07/06/2015

	Rates	Fringes
OPERATOR: Power Equipment		
(All Other Work)		
GROUP 1.....	\$ 39.95	23.35
GROUP 2.....	\$ 40.73	23.35
GROUP 3.....	\$ 41.02	23.35
GROUP 4.....	\$ 42.51	23.35
GROUP 5.....	\$ 41.86	23.35
GROUP 6.....	\$ 41.83	23.35
GROUP 8.....	\$ 42.84	23.35
GROUP 9.....	\$ 42.19	23.35
GROUP 10.....	\$ 42.96	23.35
GROUP 11.....	\$ 42.31	23.35
GROUP 12.....	\$ 43.13	23.35
GROUP 13.....	\$ 43.23	23.35
GROUP 14.....	\$ 43.26	23.35
GROUP 15.....	\$ 43.34	23.35
GROUP 16.....	\$ 43.46	23.35
GROUP 17.....	\$ 43.63	23.35
GROUP 18.....	\$ 43.73	23.35
GROUP 19.....	\$ 43.84	23.35
GROUP 20.....	\$ 43.96	23.35
GROUP 21.....	\$ 44.13	23.35
GROUP 22.....	\$ 44.23	23.35
GROUP 23.....	\$ 44.34	23.35
GROUP 24.....	\$ 44.46	23.35
GROUP 25.....	\$ 44.63	23.35
OPERATOR: Power Equipment		
(Cranes, Piledriving & Hoisting)		
GROUP 1.....	\$ 41.30	23.35
GROUP 2.....	\$ 42.08	23.35
GROUP 3.....	\$ 42.37	23.35
GROUP 4.....	\$ 42.51	23.35
GROUP 5.....	\$ 42.73	23.35
GROUP 6.....	\$ 42.84	23.35
GROUP 7.....	\$ 42.96	23.35
GROUP 8.....	\$ 43.13	23.35
GROUP 9.....	\$ 43.30	23.35
GROUP 10.....	\$ 44.30	23.35
GROUP 11.....	\$ 45.30	23.35
GROUP 12.....	\$ 46.30	23.35
GROUP 13.....	\$ 47.30	23.35
OPERATOR: Power Equipment		
(Tunnel Work)		
GROUP 1.....	\$ 41.80	23.35

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GROUP 2.....	\$ 42.58	23.35
GROUP 3.....	\$ 42.87	23.35
GROUP 4.....	\$ 43.01	23.35
GROUP 5.....	\$ 43.23	23.35
GROUP 6.....	\$ 43.34	23.35
GROUP 7.....	\$ 43.46	23.35

PREMIUM PAY:

\$3.75 per hour shall be paid on all Power Equipment Operator work on the following Military Bases: China Lake Naval Reserve, Vandenberg AFB, Point Arguello, Seely Naval Base, Fort Irwin, Nebo Annex Marine Base, Marine Corp Logistics Base Yermo, Edwards AFB, 29 Palms Marine Base and Camp Pendleton

Workers required to suit up and work in a hazardous material environment: \$2.00 per hour additional. Combination mixer and compressor operator on gunite work shall be classified as a concrete mobile mixer operator.

SEE ZONE DEFINITIONS AFTER CLASSIFICATIONS

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Bargeman; Brakeman; Compressor operator; Ditch Witch, with seat or similar type equipment; Elevator operator-inside; Engineer Oiler; Forklift operator (includes loed, lull or similar types under 5 tons; Generator operator; Generator, pump or compressor plant operator; Pump operator; Signalman; Switchman

GROUP 2: Asphalt-rubber plant operator (nurse tank operator); Concrete mixer operator-skip type; Conveyor operator; Fireman; Forklift operator (includes loed, lull or similar types over 5 tons; Hydrostatic pump operator; oiler crusher (asphalt or concrete plant); Petromat laydown machine; PJU side dum jack; Screening and conveyor machine operator (or similar types); Skiploader (wheel type up to 3/4 yd. without attachment); Tar pot fireman; Temporary heating plant operator; Trenching machine oiler

GROUP 3: Asphalt-rubber blend operator; Bobcat or similar type (Skid steer); Equipment greaser (rack); Ford Ferguson (with dragtype attachments); Helicopter radioman (ground); Stationary pipe wrapping and cleaning machine operator

GROUP 4: Asphalt plant fireman; Backhoe operator (mini-max or similar type); Boring machine operator; Boxman or mixerman (asphalt or concrete); Chip spreading machine operator; Concrete cleaning decontamination machine operator; Concrete Pump Operator (small portable); Drilling machine operator, small auger types (Texoma super economatic or similar types - Hughes 100 or 200 or similar types - drilling depth of 30' maximum); Equipment greaser (grease truck); Guard rail post driver operator; Highline cableway signalman; Hydra-hammer-aero stomper; Micro Tunneling

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(above ground tunnel); Power concrete curing machine operator; Power concrete saw operator; Power-driven jumbo form setter operator; Power sweeper operator; Rock Wheel Saw/Trencher; Roller operator (compacting); Screed operator (asphalt or concrete); Trenching machine operator (up to 6 ft.); Vacuum or much truck

GROUP 5: Equipment Greaser (Grease Truck/Multi Shift).

GROUP 6: Articulating material hauler; Asphalt plant engineer; Batch plant operator; Bit sharpener; Concrete joint machine operator (canal and similar type); Concrete planer operator; Dandy digger; Deck engine operator; Derrickman (oilfield type); Drilling machine operator, bucket or auger types (Calweld 100 bucket or similar types - Watson 1000 auger or similar types - Texoma 330, 500 or 600 auger or similar types - drilling depth of 45' maximum); Drilling machine operator; Hydrographic seeder machine operator (straw, pulp or seed), Jackson track maintainer, or similar type; Kalamazoo Switch tamper, or similar type; Machine tool operator; Maginnis internal full slab vibrator, Mechanical berm, curb or gutter (concrete or asphalt); Mechanical finisher operator (concrete, Clary-Johnson-Bidwell or similar); Micro tunnel system (below ground); Pavement breaker operator (truck mounted); Road oil mixing machine operator; Roller operator (asphalt or finish), rubber-tired earth moving equipment (single engine, up to and including 25 yds. struck); Self-propelled tar pipelining machine operator; Skiploader operator (crawler and wheel type, over 3/4 yd. and up to and including 1-1/2 yds.); Slip form pump operator (power driven hydraulic lifting device for concrete forms); Tractor operator-bulldozer, tamper-scraper (single engine, up to 100 h.p. flywheel and similar types, up to and including D-5 and similar types); Tugger hoist operator (1 drum); Ultra high pressure waterjet cutting tool system operator; Vacuum blasting machine operator

GROUP 8: Asphalt or concrete spreading operator (tamping or finishing); Asphalt paving machine operator (Barber Greene or similar type); Asphalt-rubber distribution operator; Backhoe operator (up to and including 3/4 yd.), small ford, Case or similar; Cast-in-place pipe laying machine operator; Combination mixer and compressor operator (gunite work); Compactor operator (self-propelled); Concrete mixer operator (paving); Crushing plant operator; Drill Doctor; Drilling machine operator, Bucket or auger types (Calweld 150 bucket or similar types - Watson 1500, 2000 2500 auger or similar types - Texoma 700, 800 auger or similar types - drilling depth of 60' maximum); Elevating grader operator; Grade checker; Gradall operator; Grouting machine operator; Heavy-duty repairman; Heavy equipment robotics operator; Kalamazoo balliste regulator or similar type; Kolman belt loader and similar type; Le Tourneau blob compactor or similar type; Loader operator (Athey, Euclid, Sierra and similar types); Mobark Chipper or similar; Ozzie padder or

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similar types; P.C. slot saw; Pneumatic concrete placing machine operator (Hackley-Presswell or similar type); Pumpcrete gun operator; Rock Drill or similar types; Rotary drill operator (excluding caisson type); Rubber-tired earth-moving equipment operator (single engine, caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. up to and including 50 cu. yds. struck); Rubber-tired earth-moving equipment operator (multiple engine up to and including 25 yds. struck); Rubber-tired scraper operator (self-loading paddle wheel type-John Deere, 1040 and similar single unit); Self-propelled curb and gutter machine operator; Shuttle buggy; Skiploader operator (crawler and wheel type over 1-1/2 yds. up to and including 6-1/2 yds.); Soil remediation plant operator; Surface heaters and planer operator; Tractor compressor drill combination operator; Tractor operator (any type larger than D-5 - 100 flywheel h.p. and over, or similar-bulldozer, tamper, scraper and push tractor single engine); Tractor operator (boom attachments), Traveling pipe wrapping, cleaning and bending machine operator; Trenching machine operator (over 6 ft. depth capacity, manufacturer's rating); trenching Machine with Road Miner attachment (over 6 ft depth capacity): Ultra high pressure waterjet cutting tool system mechanic; Water pull (compaction) operator

GROUP 9: Heavy Duty Repairman

GROUP 10: Drilling machine operator, Bucket or auger types (Calweld 200 B bucket or similar types-Watson 3000 or 5000 auger or similar types-Texoma 900 auger or similar types-drilling depth of 105' maximum); Dual drum mixer, dynamic compactor LDC350 (or similar types); Monorail locomotive operator (diesel, gas or electric); Motor patrol-blade operator (single engine); Multiple engine tractor operator (Euclid and similar type-except Quad 9 cat.); Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Pneumatic pipe ramming tool and similar types; Prestressed wrapping machine operator; Rubber-tired earth-moving equipment operator (single engine, over 50 yds. struck); Rubber tired earth moving equipment operator (multiple engine, Euclid, caterpillar and similar over 25 yds. and up to 50 yds. struck), Tower crane repairman; Tractor loader operator (crawler and wheel type over 6-1/2 yds.); Woods mixer operator (and similar Pugmill equipment)

GROUP 11: Heavy Duty Repairman - Welder Combination, Welder - Certified.

GROUP 12: Auto grader operator; Automatic slip form operator; Drilling machine operator, bucket or auger types (Calweld, auger 200 CA or similar types - Watson, auger 6000 or similar types - Hughes Super Duty, auger 200 or similar types - drilling depth of 175' maximum); Hoe ram or similar with compressor; Mass excavator operator less tha 750 cu.

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yards; Mechanical finishing machine operator; Mobile form traveler operator; Motor patrol operator (multi-engine); Pipe mobile machine operator; Rubber-tired earth-moving equipment operator (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck); Rubber-tired self-loading scraper operator (paddle-wheel-auger type self-loading - two (2) or more units)

GROUP 13: Rubber-tired earth-moving equipment operator operating equipment with push-pull system (single engine, up to and including 25 yds. struck)

GROUP 14: Canal liner operator; Canal trimmer operator; Remote-control earth-moving equipment operator (operating a second piece of equipment: \$1.00 per hour additional); Wheel excavator operator (over 750 cu. yds.)

GROUP 15: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine-up to and including 25 yds. struck)

GROUP 16: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 17: Rubber-tired earth-moving equipment operator, operating equipment with push-pull system (multiple engine, Euclid, Caterpillar and similar, over 50 cu. yds. struck); Tandem tractor operator (operating crawler type tractors in tandem - Quad 9 and similar type)

GROUP 18: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, up to and including 25 yds. struck)

GROUP 19: Rotex concrete belt operator (or similar types); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 cu. yds. struck); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - multiple engine, up to and including 25 yds. struck)

GROUP 20: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar

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types in any combination, excluding compaction units - single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps, and similar types in any combination, excluding compaction units - multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 21: Rubber-tired earth-moving equipment operator, operating in tandem (scrapers, belly dumps and similar types in any combination, excluding compaction units - multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck)

GROUP 22: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, up to and including 25 yds. struck)

GROUP 23: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, Caterpillar, Euclid, Athey Wagon and similar types with any and all attachments over 25 yds. and up to and including 50 yds. struck); Rubber-tired earth-moving equipment operator, operating with the tandem push-pull system (multiple engine, up to and including 25 yds. struck)

GROUP 24: Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (single engine, over 50 yds. struck); Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar, over 25 yds. and up to 50 yds. struck)

GROUP 25: Concrete pump operator-truck mounted; Rubber-tired earth-moving equipment operator, operating equipment with the tandem push-pull system (multiple engine, Euclid, Caterpillar and similar type, over 50 cu. yds. struck)

CRANES, PILEDIVING AND HOISTING EQUIPMENT CLASSIFICATIONS

GROUP 1: Engineer oiler; Fork lift operator (includes loed, lull or similar types)

GROUP 2: Truck crane oiler

GROUP 3: A-frame or winch truck operator; Ross carrier operator (jobsite)

GROUP 4: Bridge-type unloader and turntable operator; Helicopter hoist operator

GROUP 5: Hydraulic boom truck; Stinger crane (Austin-Western or similar type); Tugger hoist operator (1 drum)

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GROUP 6: Bridge crane operator; Cretor crane operator; Hoist operator (Chicago boom and similar type); Lift mobile operator; Lift slab machine operator (Vagtborg and similar types); Material hoist and/or manlift operator; Polar gantry crane operator; Self Climbing scaffold (or similar type); Shovel, backhoe, dragline, clamshell operator (over 3/4 yd. and up to 5 cu. yds. mrc); Tugger hoist operator

GROUP 7: Pedestal crane operator; Shovel, backhoe, dragline, clamshell operator (over 5 cu. yds. mrc); Tower crane repair; Tugger hoist operator (3 drum)

GROUP 8: Crane operator (up to and including 25 ton capacity); Crawler transporter operator; Derrick barge operator (up to and including 25 ton capacity); Hoist operator, stiff legs, Guy derrick or similar type (up to and including 25 ton capacity); Shovel, backhoe, dragline, clamshell operator (over 7 cu. yds., M.R.C.)

GROUP 9: Crane operator (over 25 tons and up to and including 50 tons mrc); Derrick barge operator (over 25 tons up to and including 50 tons mrc); Highline cableway operator; Hoist operator, stiff legs, Guy derrick or similar type (over 25 tons up to and including 50 tons mrc); K-crane operator; Polar crane operator; Self erecting tower crane operator maximum lifting capacity ten tons

GROUP 10: Crane operator (over 50 tons and up to and including 100 tons mrc); Derrick barge operator (over 50 tons up to and including 100 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 50 tons up to and including 100 tons mrc), Mobile tower crane operator (over 50 tons, up to and including 100 tons M.R.C.); Tower crane operator and tower gantry

GROUP 11: Crane operator (over 100 tons and up to and including 200 tons mrc); Derrick barge operator (over 100 tons up to and including 200 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 100 tons up to and including 200 tons mrc); Mobile tower crane operator (over 100 tons up to and including 200 tons mrc)

GROUP 12: Crane operator (over 200 tons up to and including 300 tons mrc); Derrick barge operator (over 200 tons up to and including 300 tons mrc); Hoist operator, stiff legs, Guy derrick or similar type (over 200 tons, up to and including 300 tons mrc); Mobile tower crane operator (over 200 tons, up to and including 300 tons mrc)

GROUP 13: Crane operator (over 300 tons); Derrick barge operator (over 300 tons); Helicopter pilot; Hoist operator, stiff legs, Guy derrick or similar type (over 300 tons); Mobile tower crane operator (over 300 tons)

TUNNEL CLASSIFICATIONS

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GROUP 1: Skiploader (wheel type up to 3/4 yd. without attachment)

GROUP 2: Power-driven jumbo form setter operator

GROUP 3: Dinkey locomotive or motorperson (up to and including 10 tons)

GROUP 4: Bit sharpener; Equipment greaser (grease truck); Slip form pump operator (power-driven hydraulic lifting device for concrete forms); Tugger hoist operator (1 drum); Tunnel locomotive operator (over 10 and up to and including 30 tons)

GROUP 5: Backhoe operator (up to and including 3/4 yd.); Small Ford, Case or similar; Drill doctor; Grouting machine operator; Heading shield operator; Heavy-duty repairperson; Loader operator (Athey, Euclid, Sierra and similar types); Mucking machine operator (1/4 yd., rubber-tired, rail or track type); Pneumatic concrete placing machine operator (Hackley-Presswell or similar type); Pneumatic heading shield (tunnel); Pumpcrete gun operator; Tractor compressor drill combination operator; Tugger hoist operator (2 drum); Tunnel locomotive operator (over 30 tons)

GROUP 6: Heavy Duty Repairman

GROUP 7: Tunnel mole boring machine operator

ENGINEERS ZONES

\$1.00 additional per hour for all of IMPERIAL County and the portions of KERN, RIVERSIDE & SAN BERNARDINO Counties as defined below:

That area within the following Boundary: Begin in San Bernardino County, approximately 3 miles NE of the intersection of I-15 and the California State line at that point which is the NW corner of Section 1, T17N,m R14E, San Bernardino Meridian. Continue W in a straight line to that point which is the SW corner of the northwest quarter of Section 6, T27S, R42E, Mt. Diablo Meridian. Continue North to the intersection with the Inyo County Boundary at that point which is the NE corner of the western half of the northern quarter of Section 6, T25S, R42E, MDM. Continue W along the Inyo and San Bernardino County boundary until the intersection with Kern County, as that point which is the SE corner of Section 34, T24S, R40E, MDM. Continue W along the Inyo and Kern County boundary until the intersection with Tulare County, at that point which is the SW corner of the SE quarter of Section 32, T24S, R37E, MDM. Continue W along the Kern and Tulare County boundary, until that point which is the NW corner of T25S, R32E, MDM. Continue S following R32E lines to the NW corner of T31S, R32E, MDM. Continue W to the NW corner of T31S, R31E, MDM. Continue S to the SW corner of T32S, R31E, MDM. Continue W to SW corner of SE quarter of Section 34, T32S, R30E, MDM.

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Continue S to SW corner of T11N, R17W, SBM. Continue E along south boundary of T11N, SBM to SW corner of T11N, R7W, SBM. Continue S to SW corner of T9N, R7W, SBM. Continue E along south boundary of T9N, SBM to SW corner of T9N, R1E, SBM. Continue S along west boundary of R1E, SMB to Riverside County line at the SW corner of T1S, R1E, SBM. Continue E along south boundary of T1s, SBM (Riverside County Line) to SW corner of T1S, R10E, SBM. Continue S along west boundary of R10E, SBM to Imperial County line at the SW corner of T8S, R10E, SBM. Continue W along Imperial and Riverside county line to NW corner of T9S, R9E, SBM. Continue S along the boundary between Imperial and San Diego Counties, along the west edge of R9E, SBM to the south boundary of Imperial County/California state line. Follow the California state line west to Arizona state line, then north to Nevada state line, then continuing NW back to start at the point which is the NW corner of Section 1, T17N, R14E, SBM

\$1.00 additional per hour for portions of SAN LUIS OBISPO, KERN, SANTA BARBARA & VENTURA as defined below:

That area within the following Boundary: Begin approximately 5 miles north of the community of Cholame, on the Monterey County and San Luis Obispo County boundary at the NW corner of T25S, R16E, Mt. Diablo Meridian. Continue south along the west side of R16E to the SW corner of T30S, R16E, MDM. Continue E to SW corner of T30S, R17E, MDM. Continue S to SW corner of T31S, R17E, MDM. Continue E to SW corner of T31S, R18E, MDM. Continue S along West side of R18E, MDM as it crosses into San Bernardino Meridian numbering area and becomes R30W. Follow the west side of R30W, SBM to the SW corner of T9N, R30W, SBM. Continue E along the south edge of T9N, SBM to the Santa Barbara County and Ventura County boundary at that point which is the SW corner of Section 34. T9N, R24W, SBM, continue S along the Ventura County line to that point which is the SW corner of the SE quarter of Section 32, T7N, R24W, SBM. Continue E along the south edge of T7N, SBM to the SE corner to T7N, R21W, SBM. Continue N along East side of R21W, SBM to Ventura County and Kern County boundary at the NE corner of T8N, R21W. Continue W along the Ventura County and Kern County boundary to the SE corner of T9N, R21W. Continue North along the East edge of R21W, SBM to the NE corner of T12N, R21W, SBM. Continue West along the north edge of T12N, SBM to the SE corner of T32S, R21E, MDM. [T12N SBM is a thin strip between T11N SBM and T32S MDM]. Continue North along the East side of R21E, MDM to the Kings County and Kern County border at the NE corner of T25S, R21E, MDM, continue West along the Kings County and Kern County Boundary until the intersection of San Luis Obispo County. Continue west along the Kings County and San Luis Obispo County boundary until the intersection with Monterey County. Continue West along the Monterey County and San Luis Obispo County boundary to the beginning point at the NW corner of T25S, R16E, MDM.

\$2.00 additional per hour for INYO and MONO Counties and the

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Northern portion of SAN BERNARDINO County as defined below:

That area within the following Boundary: Begin at the intersection of the northern boundary of Mono County and the California state line at the point which is the center of Section 17, T10N, R22E, Mt. Diablo Meridian. Continue S then SE along the entire western boundary of Mono County, until it reaches Inyo County at the point which is the NE corner of the Western half of the NW quarter of Section 2, T8S, R29E, MDM. Continue SSE along the entire western boundary of Inyo County, until the intersection with Kern County at the point which is the SW corner of the SE 1/4 of Section 32, T24S, R37E, MDM. Continue E along the Inyo and Kern County boundary until the intersection with San Bernardino County at that point which is the SE corner of section 34, T24S, R40E, MDM. Continue E along the Inyo and San Bernardino County boundary until the point which is the NE corner of the Western half of the NW quarter of Section 6, T25S, R42E, MDM. Continue S to that point which is the SW corner of the NW quarter of Section 6, T27S, R42E, MDM. Continue E in a straight line to the California and Nevada state border at the point which is the NW corner of Section 1, T17N, R14E, San Bernardino Meridian. Then continue NW along the state line to the starting point, which is the center of Section 18, T10N, R22E, MDM.

REMAINING AREA NOT DEFINED ABOVE RECIEVES BASE RATE

ENGI0012-004 08/01/2015

	Rates	Fringes
OPERATOR: Power Equipment (DREDGING)		
(1) Leverman.....	\$ 49.50	23.60
(2) Dredge dozer.....	\$ 43.53	23.60
(3) Deckmate.....	\$ 43.42	23.60
(4) Winch operator (stern winch on dredge).....	\$ 42.87	23.60
(5) Fireman-Oiler, Deckhand, Bargeman, Leveehand.....	\$ 42.33	23.60
(6) Barge Mate.....	\$ 42.94	23.60

IRON0377-002 07/01/2016

	Rates	Fringes
Ironworkers:		
Fence Erector.....	\$ 28.33	20.64
Ornamental, Reinforcing and Structural.....	\$ 34.75	29.20

PREMIUM PAY:

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\$6.00 additional per hour at the following locations:

China Lake Naval Test Station, Chocolate Mountains Naval Reserve-Niland, Edwards AFB, Fort Irwin Military Station, Fort Irwin Training Center-Goldstone, San Clemente Island, San Nicholas Island, Susanville Federal Prison, 29 Palms - Marine Corps, U.S. Marine Base - Barstow, U.S. Naval Air Facility - Sealey, Vandenberg AFB

\$4.00 additional per hour at the following locations:

Army Defense Language Institute - Monterey, Fallon Air Base, Naval Post Graduate School - Monterey, Yermo Marine Corps Logistics Center

\$2.00 additional per hour at the following locations:

Port Hueneme, Port Mugu, U.S. Coast Guard Station - Two Rock

LABO0300-005 01/01/2016

	Rates	Fringes
Asbestos Removal Laborer.....	\$ 30.43	16.07

SCOPE OF WORK: Includes site mobilization, initial site cleanup, site preparation, removal of asbestos-containing material and toxic waste, encapsulation, enclosure and disposal of asbestos- containing materials and toxic waste by hand or with equipment or machinery; scaffolding, fabrication of temporary wooden barriers and assembly of decontamination stations.

LABO0345-001 07/03/2016

	Rates	Fringes
LABORER (GUNITE)		
GROUP 1.....	\$ 37.89	20.50
GROUP 2.....	\$ 36.94	20.50
GROUP 3.....	\$ 33.40	20.50

FOOTNOTE: GUNITE PREMIUM PAY: Workers working from a Bosn'n's Chair or suspended from a rope or cable shall receive 40 cents per hour above the foregoing applicable classification rates. Workers doing gunite and/or shotcrete work in a tunnel shall receive 35 cents per hour above the foregoing applicable classification rates, paid on a portal-to-portal basis. Any work performed on, in or above any smoke stack, silo, storage elevator or similar type of structure, when such structure is in excess of 75'-0" above base level and which work must be performed in whole or in part more than 75'-0" above base level, that

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work performed above the 75'-0" level shall be compensated for at 35 cents per hour above the applicable classification wage rate.

GUNITE LABORER CLASSIFICATIONS

GROUP 1: Rodmen, Nozzlemen

GROUP 2: Gunmen

GROUP 3: Reboundmen

LABO0652-001 07/04/2016

	Rates	Fringes
LABORER (TUNNEL)		
GROUP 1.....	\$ 38.09	19.07
GROUP 2.....	\$ 38.41	19.07
GROUP 3.....	\$ 38.87	19.07
GROUP 4.....	\$ 39.56	19.07
LABORER		
GROUP 1.....	\$ 32.34	19.07
GROUP 2.....	\$ 32.89	19.07
GROUP 3.....	\$ 33.44	19.07
GROUP 4.....	\$ 34.99	19.07
GROUP 5.....	\$ 35.34	19.07

LABORER CLASSIFICATIONS

GROUP 1: Cleaning and handling of panel forms; Concrete screeding for rough strike-off; Concrete, water curing; Demolition laborer, the cleaning of brick if performed by a worker performing any other phase of demolition work, and the cleaning of lumber; Fire watcher, limber, brush loader, piler and debris handler; Flag person; Gas, oil and/or water pipeline laborer; Laborer, asphalt-rubber material loader; Laborer, general or construction; Laborer, general clean-up; Laborer, landscaping; Laborer, jetting; Laborer, temporary water and air lines; Material hose operator (walls, slabs, floors and decks); Plugging, filling of shee bolt holes; Dry packing of concrete; Railroad maintenance, repair track person and road beds; Streetcar and railroad construction track laborers; Rigging and signaling; Scaler; Slip form raiser; Tar and mortar; Tool crib or tool house laborer; Traffic control by any method; Window cleaner; Wire mesh pulling - all concrete pouring operations

GROUP 2: Asphalt shoveler; Cement dumper (on 1 yd. or larger mixer and handling bulk cement); Cesspool digger and installer; Chucktender; Chute handler, pouring concrete, the handling of the chute from readymix trucks, such as walls, slabs, decks, floors, foundation, footings, curbs, gutters and sidewalks; Concrete curer, impervious membrane and form oiler; Cutting torch operator (demolition); Fine

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grader, highways and street paving, airport, runways and similar type heavy construction; Gas, oil and/or water pipeline wrapper - pot tender and form person; Guinea chaser; Headerboard person - asphalt; Laborer, packing rod steel and pans; Membrane vapor barrier installer; Power broom sweeper (small); Riprap stonepaver, placing stone or wet sacked concrete; Roto scraper and tiller; Sandblaster (pot tender); Septic tank digger and installer(lead); Tank scaler and cleaner; Tree climber, faller, chain saw operator, Pittsburgh chipper and similar type brush shredder; Underground laborer, including caisson bellower

GROUP 3: Buggymobile person; Concrete cutting torch; Concrete pile cutter; Driller, jackhammer, 2-1/2 ft. drill steel or longer; Dri-pak-it machine; Gas, oil and/or water pipeline wrapper, 6-in. pipe and over, by any method, inside and out; High scaler (including drilling of same); Hydro seeder and similar type; Impact wrench multi-plate; Kettle person, pot person and workers applying asphalt, lay-kold, creosote, lime caustic and similar type materials ("applying" means applying, dipping, brushing or handling of such materials for pipe wrapping and waterproofing); Operator of pneumatic, gas, electric tools, vibrating machine, pavement breaker, air blasting, come-alongs, and similar mechanical tools not separately classified herein; Pipelayer's backup person, coating, grouting, making of joints, sealing, caulking, diapering and including rubber gasket joints, pointing and any and all other services; Rock slinger; Rotary scarifier or multiple head concrete chipping scarifier; Steel headerboard and guideline setter; Tamper, Barko, Wacker and similar type; Trenching machine, hand-propelled

GROUP 4: Asphalt raker, lute person, ironer, asphalt dump person, and asphalt spreader boxes (all types); Concrete core cutter (walls, floors or ceilings), grinder or sander; Concrete saw person, cutting walls or flat work, scoring old or new concrete; Cribber, shorer, lagging, sheeting and trench bracing, hand-guided lagging hammer; Head rock slinger; Laborer, asphalt- rubber distributor boot person; Laser beam in connection with laborers' work; Oversize concrete vibrator operator, 70 lbs. and over; Pipelayer performing all services in the laying and installation of pipe from the point of receiving pipe in the ditch until completion of operation, including any and all forms of tubular material, whether pipe, metallic or non-metallic, conduit and any other stationary type of tubular device used for the conveying of any substance or element, whether water, sewage, solid gas, air, or other product whatsoever and without regard to the nature of material from which the tubular material is fabricated; No-joint pipe and stripping of same; Prefabricated manhole installer; Sandblaster (nozzle person), water blasting, Porta Shot-Blast

GROUP 5: Blaster powder, all work of loading holes, placing and blasting of all powder and explosives of whatever type,

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regardless of method used for such loading and placing;
Driller: All power drills, excluding jackhammer, whether
core, diamond, wagon, track, multiple unit, and any and all
other types of mechanical drills without regard to the form
of motive power; Toxic waste removal

TUNNEL LABORER CLASSIFICATIONS

GROUP 1: Batch plant laborer; Changehouse person; Dump
person; Dump person (outside); Swamper (brake person and
switch person on tunnel work); Tunnel materials handling
person; Nipper; Pot tender, using mastic or other materials
(for example, but not by way of limitation, shotcrete, etc.)

GROUP 2: Chucktender, cabletender; Loading and unloading
agitator cars; Vibrator person, jack hammer, pneumatic
tools (except driller); Bull gang mucker, track person;
Concrete crew, including rodder and spreader

GROUP 3: Blaster, driller, powder person; Chemical grout jet
person; Cherry picker person; Grout gun person; Grout mixer
person; Grout pump person; Jackleg miner; Jumbo person;
Kemper and other pneumatic concrete placer operator; Miner,
tunnel (hand or machine); Nozzle person; Operating of
troweling and/or grouting machines; Powder person (primer
house); Primer person; Sandblaster; Shotcrete person; Steel
form raiser and setter; Timber person, retimber person,
wood or steel; Tunnel Concrete finisher

GROUP 4: Diamond driller; Sandblaster; Shaft and raise work

* LAB00652-003 07/01/2016

	Rates	Fringes
Brick Tender.....	\$ 30.52	18.56

LAB01184-001 07/04/2016

	Rates	Fringes
Laborers: (HORIZONTAL DIRECTIONAL DRILLING)		
(1) Drilling Crew Laborer...	\$ 33.65	13.95
(2) Vehicle Operator/Hauler.	\$ 33.82	13.95
(3) Horizontal Directional Drill Operator.....	\$ 35.67	13.95
(4) Electronic Tracking Locator.....	\$ 37.67	13.95
Laborers: (STRIPING/SLURRY SEAL)		
GROUP 1.....	\$ 34.86	17.03
GROUP 2.....	\$ 36.16	17.03
GROUP 3.....	\$ 38.17	17.03
GROUP 4.....	\$ 39.91	17.03

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LABORERS - STRIPING CLASSIFICATIONS

GROUP 1: Protective coating, pavement sealing, including repair and filling of cracks by any method on any surface in parking lots, game courts and playgrounds; carstops; operation of all related machinery and equipment; equipment repair technician

GROUP 2: Traffic surface abrasive blaster; pot tender - removal of all traffic lines and markings by any method (sandblasting, waterblasting, grinding, etc.) and preparation of surface for coatings. Traffic control person: controlling and directing traffic through both conventional and moving lane closures; operation of all related machinery and equipment

GROUP 3: Traffic delineating device applicator: Layout and application of pavement markers, delineating signs, rumble and traffic bars, adhesives, guide markers, other traffic delineating devices including traffic control. This category includes all traffic related surface preparation (sandblasting, waterblasting, grinding) as part of the application process. Traffic protective delineating system installer: removes, relocates, installs, permanently affixed roadside and parking delineation barricades, fencing, cable anchor, guard rail, reference signs, monument markers; operation of all related machinery and equipment; power broom sweeper

GROUP 4: Striper: layout and application of traffic stripes and markings; hot thermo plastic; tape traffic stripes and markings, including traffic control; operation of all related machinery and equipment

LABO1414-001 08/05/2015

	Rates	Fringes
LABORER		
PLASTER CLEAN-UP LABORER....	\$ 30.16	17.11
PLASTER TENDER.....	\$ 32.71	17.11

Work on a swing stage scaffold: \$1.00 per hour additional.

PAIN0036-001 07/01/2015

	Rates	Fringes
Painters: (Including Lead Abatement)		
(1) Repaint (excludes San Diego County).....	\$ 27.29	12.83
(2) All Other Work.....	\$ 30.72	12.83

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REPAINT of any previously painted structure. Exceptions:
work involving the aerospace industry, breweries,
commercial recreational facilities, hotels which operate
commercial establishments as part of hotel service, and
sports facilities.

PAIN0036-008 10/01/2015

	Rates	Fringes
DRYWALL FINISHER/TAPER.....	\$ 36.18	16.82

PAIN0036-015 06/01/2016

	Rates	Fringes
GLAZIER.....	\$ 41.70	21.13

FOOTNOTE: Additional \$1.25 per hour for work in a condor,
from the third (3rd) floor and up Additional \$1.25 per
hour for work on the outside of the building from a swing
stage or any suspended contrivance, from the ground up

PAIN1247-002 01/01/2016

	Rates	Fringes
SOFT FLOOR LAYER.....	\$ 29.85	14.01

PLAS0200-009 08/05/2015

	Rates	Fringes
PLASTERER.....	\$ 38.44	13.77

PLAS0500-002 07/01/2016

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 33.30	23.33

PLUM0016-001 07/01/2015

	Rates	Fringes
PLUMBER/PIPEFITTER		

Plumber and Pipefitter
All other work except
work on new additions and
remodeling of bars,
restaurant, stores and
commercial buildings not
to exceed 5,000 sq. ft.
of floor space and work

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on strip malls, light commercial, tenant improvement and remodel work.....	\$ 45.96	20.71
Work ONLY on new additions and remodeling of bars, restaurant, stores and commercial buildings not to exceed 5,000 sq. ft. of floor space.....	\$ 44.54	19.73
Work ONLY on strip malls, light commercial, tenant improvement and remodel work.....	\$ 35.16	18.06

PLUM0345-001 07/01/2014

	Rates	Fringes
PLUMBER		
Landscape/Irrigation Fitter.....	\$ 29.27	19.75
Sewer & Storm Drain Work....	\$ 33.24	17.13

* ROOF0036-002 08/01/2015

	Rates	Fringes
ROOFER.....	\$ 35.07	14.40

FOOTNOTE: Pitch premium: Work on which employees are exposed to pitch fumes or required to handle pitch, pitch base or pitch impregnated products, or any material containing coal tar pitch, the entire roofing crew shall receive \$1.75 per hour "pitch premium" pay.

SFCA0669-008 01/01/2016

DOES NOT INCLUDE SAN CLEMENTE ISLAND, THE CITY OF SANTA ANA, AND THAT PART OF ORANGE COUNTY WITHIN 25 MILES OF THE CITY LIMITS OF LOS ANGELES:

	Rates	Fringes
SPRINKLER FITTER.....	\$ 35.57	20.27

SFCA0709-003 07/01/2015

SAN CLEMENTE ISLAND, THE CITY OF SANTA ANA, AND THAT PART OF ORANGE COUNTY WITHIN 25 MILES BEYOND THE CITY LIMITS OF LOS ANGELES:

Rates	Fringes
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SPRINKLER FITTER (Fire).....\$ 42.93 24.04

SHEE0105-003 07/01/2016

LOS ANGELES (South of a straight line drawn between Gorman and Big Pines)and Catalina Island, INYO, KERN (Northeast part, East of Hwy 395), MONO ORANGE, RIVERSIDE, AND SAN BERNARDINO COUNTIES

	Rates	Fringes
SHEET METAL WORKER		
(1) Commercial - New Construction and Remodel work.....	\$ 41.86	26.88
(2) Industrial work including air pollution control systems, noise abatement, hand rails, guard rails, excluding aritechtrual sheet metal work, excluding A-C, heating, ventilating systems for human comfort...	\$ 41.86	26.88

TEAM0011-002 07/01/2015

	Rates	Fringes
TRUCK DRIVER		
GROUP 1.....	\$ 28.24	25.24
GROUP 2.....	\$ 28.39	25.24
GROUP 3.....	\$ 28.52	25.24
GROUP 4.....	\$ 28.71	25.24
GROUP 5.....	\$ 28.74	25.24
GROUP 6.....	\$ 28.77	25.24
GROUP 7.....	\$ 29.02	25.24
GROUP 8.....	\$ 29.27	25.24
GROUP 9.....	\$ 29.47	25.24
GROUP 10.....	\$ 29.77	25.24
GROUP 11.....	\$ 30.27	25.24
GROUP 12.....	\$ 30.70	25.24

WORK ON ALL MILITARY BASES:

PREMIUM PAY: \$3.00 per hour additional.

[29 palms Marine Base, Camp Roberts, China Lake, Edwards AFB, El Centro Naval Facility, Fort Irwin, Marine Corps Logistics Base at Nebo & Yermo, Mountain Warfare Training Center, Bridgeport, Point Arguello, Point Conception, Vandenberg AFB]

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Truck driver

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GROUP 2: Driver of vehicle or combination of vehicles - 2 axles; Traffic control pilot car excluding moving heavy equipment permit load; Truck mounted broom

GROUP 3: Driver of vehicle or combination of vehicles - 3 axles; Boot person; Cement mason distribution truck; Fuel truck driver; Water truck - 2 axle; Dump truck, less than 16 yds. water level; Erosion control driver

GROUP 4: Driver of transit mix truck, under 3 yds.; Dumpcrete truck, less than 6-1/2 yds. water level

GROUP 5: Water truck, 3 or more axles; Truck greaser and tire person (\$0.50 additional for tire person); Pipeline and utility working truck driver, including winch truck and plastic fusion, limited to pipeline and utility work; Slurry truck driver

GROUP 6: Transit mix truck, 3 yds. or more; Dumpcrete truck, 6-1/2 yds. water level and over; Vehicle or combination of vehicles - 4 or more axles; Oil spreader truck; Dump truck, 16 yds. to 25 yds. water level

GROUP 7: A Frame, Swedish crane or similar; Forklift driver; Ross carrier driver

GROUP 8: Dump truck, 25 yds. to 49 yds. water level; Truck repair person; Water pull - single engine; Welder

GROUP 9: Truck repair person/welder; Low bed driver, 9 axles or over

GROUP 10: Dump truck - 50 yds. or more water level; Water pull - single engine with attachment

GROUP 11: Water pull - twin engine; Water pull - twin engine with attachments; Winch truck driver - \$1.25 additional when operating winch or similar special attachments

GROUP 12: Boom Truck 17K and above

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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FEDERAL WAGE RATES

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those

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FEDERAL WAGE RATES

classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

END OF APPENDIX E